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FOREWORD

This volume is one of a set of five giving key characteristics of Earth-to-Venus trajectories during the period 1964–1970. This period is divided into five 120-day launch intervals spaced about 19.2 months apart. During each interval, trajectory characteristics are given for flight times of from 70 to 220 days in 2-day steps. Thus each volume contains 9,120 trajectories.

The applicability of these books may be extended by noting the 8-year cyclic recurrence of Earth–Venus trajectories. Thus trajectories in 1972 are very nearly identical to 1964 trajectories; 1973 trajectories are very nearly identical to 1965 trajectories, etc. Simply by updating the trajectories by 8 years, the results may be reapplied.

It is intended that these books provide trajectory and guidance analysts with data, in volume, so that they may perform preliminary design studies, conduct investigations of the properties of ballistic interplanetary trajectories, and make interplanetary guidance and orbit determination analyses. While not exact, these trajectories are sufficiently accurate to be quite useful for the above purposes.

In generating such a large amount of data, it is impossible to check the correctness of each number. Should the reader detect any errors, the authors would appreciate being advised.

Companion volumes (Ref. 1) give the characteristics of Earth-Mars trajectories during the period 1964-1977.

I. INTRODUCTION

This report presents the results of extensive machine computations of three-dimensional ballistic interplanetary trajectories. The analytic model used to represent these trajectories is based upon two-body, inverse-square, force field mechanics. A brief explanation of the model is presented in Section II.

Basically, the trajectories are calculated in two distinct parts: (1) the heliocentric transfer ellipse and (2) the launch - planet - centered escape trajectories. Following these trajectories, differential corrections or error coefficients and guidance and tracking parameters are given.

A. Heliocentric Conic Computation

The heliocentric trajectory is obtained by specifying the launch date and flight time only. Given these, the positions of the launch planet on the launch date and the target planet on the arrival date may be obtained by interrogating the ephemerides. By assuming the planets to be massless, a unique heliocentric trajectory may then be computed which passes through the centers of the launch and target planets. Though this assumption may at first seem gross, experience has proved it to be perfectly reasonable for this purpose. After the solution has been obtained by an iterative procedure, the orbital elements, heliocentric position, and velocity vectors at launch and arrival are computed. Other heliocentric quantities of engineering interest are also computed.

B. Planetocentric Conic Computation

After the heliocentric orbit is obtained, the launch and arrival hyperbolic-excess velocity vectors are computed by subtracting the velocity vectors of the launch and target planets from the heliocentric launch and arrival velocity vectors of the probe. The launch hyperbolic-excess vector is, in fact, the most important result of these computations because it yields the energy and direction of fire required to achieve interplanetary transfer.

Further computations are done to exhibit properties of the near-Earth portion of the trajectories. Given the launch hyperbolic-excess vector, a launch site (Cape Canaveral), a launch azimuth, and certain properties of a typical interplanetary boost vehicle, and assuming a 100-nm parking orbit, quantities such as launch time, injection position and velocity vectors, parking orbit coast time, and injection time are computed. In essence, then, approximate trajectories are obtained from the launch pad to the target. The terminal portions of the trajectories are assumed to impact vertically on the target planet.

C. Differential Corrections

To augment the trajectory parameters, differential corrections or error coefficients relating variations in the launch hyperbolic-excess velocity vector to variations in target miss and flight time are computed. Actually, the variables at launch in these coefficients are the square of the hyperbolic-excess speed, or vis viva energy C_3 , and the declination and right ascension of a unit vector S, collinear with the outgoing asymptote of the escape hyperbola. The target variables are the components of the impact parameter B, defined below, and the flight time. These coefficients are obtained by a numerical differencing technique developed by William Kizner of IPL.

Based upon these error coefficients, guidance and tracking parameters are calculated as described below.

D. Mid-Course Guidance

Interplanetary guidance is currently being accomplished by determining the orbit of the probe from radio tracking data and then applying one or more impulsive velocity corrections to null the predicted target error. The guidance task closely parallels the trajectory problem, for it is convenient to define the following guidance "phases":

- 1. Planetocentric phase, in which, after the launch vehicle has placed the probe on its escape hyperbola, the orbital elements of this trajectory are determined and the hyperbolic-excess velocity is corrected to the desired value.
- 2. Heliocentric phase, in which additional velocity corrections may be made to correct any error in orbit determination and/or maneuver execution in phase 1.
- 3. Approach phase, in which the probe is in the sphere of influence of the planet and the final vernier corrections may be made to trim the results of phase 2.

The preflight analysis of phase-1 guidance is primarily concerned with the statistical problem of determining how much propellant to carry aboard the spacecraft in order to correct a "three-sigma" injection guidance error. These studies are well-documented elsewhere (Ref. 2-4) and will not be discussed here. Suffice it to say that correcting the hyperbolic-excess velocity is a reasonably good approximation to nulling the miss components at the planet. Such an analysis need only be concerned with the planetocentric phase of flight.

The analysis of the heliocentric phase is more complicated, since maneuvers there depend upon errors in applying the first midcourse maneuver (phase 1). In order to understand the effect of phase 1 errors, or to specify a tolerance on them, it is convenient to ask how a unit error in hyperbolic-excess velocity maps to miss at the target. This unit velocity error can be thought of as due to uncertainties in phase-1 maneuver execution and orbit determination. Conceptually, this analysis can be accomplished by letting a unit velocity error trace out a sphere at the tip of the hyperbolic-excess velocity vector and observing the semimajor and semiminor axes of the miss ellipse at the target (only two miss components are normally of interest). Mathematically, this is done by simply forming a matrix of the differential corrections, multiplying this matrix by its own transpose, diagonalizing the resulting symmetric matrix, and observing that the two diagonal terms are the desired semimajor and semiminor axes of the unit error ellipse.1 It is easy to show that if the coordinate system chosen to describe the target error is collinear with these axes, the rows of the resulting differential correction matrix (which are gradient vectors) are orthogonal, and their norms are the magnitudes of the error-ellipse axes.

The approach guidance phase is not conveniently treated with this kind of analysis, and is not discussed further. Here, it can be assumed that the approach maneuvers are always negligibly small.

E. Orbit Determination

A spacecraft boosted toward Mars or Venus by the current generation of launch vehicles requires the accuracy obtainable using Earth-based radio guidance in order to accomplish most planet-oriented experiments. The steps in radio guidance are:

1. Track the transponder signal from the spacecraft from several stations located at a spread of latitudes to determine the orbit of the spacecraft.

- 2. Calculate the velocity changes required to alter the orbit to pass through the desired region at the target. The maneuver is then applied with a small rocket motor; the pointing direction and burning time (of the velocity increment) are calculated to perfectly correct the orbit if both the estimate of the orbit and the application of the maneuver are without error.
- Track the spacecraft after the first maneuver for a sufficient interval to form a new estimate of the perturbed orbit.

This process of tracking and maneuvering may be repeated several times to achieve high accuracies at the target. There is, however, a limit to the process imposed by our uncertainties in the actual location of the target planet as well as the unpredictable forces acting on the spacecraft.

For extremely high accuracy at the target planet, onboard measurements must be used in conjunction with the Earth-based tracking in order to further reduce the above-mentioned uncertainties. It is not the function of this report to discuss on-board measurement systems but rather to describe the capabilities of current Earth-based radio guidance techniques when applied to interplanetary trajectories.

An adequate description of the accuracy to which orbits may be determined and maneuvers executed for the case of several corrective maneuvers is beyond the scope of this report. The results presented here may be strictly interpreted as corresponding to the accuracy capabilities for a single mid-course maneuver occurring anywhere between 1 and 14 days after injection. The relative contribution to the target uncertainty caused by orbit determination errors and mid-course execution errors depends directly upon the size of the correction required on a particular flight. For this reason, then, two error sources are considered separately. While our results do correspond to the single maneuver case, they are very valuable in providing a general description of the way in which these errors vary over the selected set of trajectories. Such utilization of the results is discussed later herein.

F. Accuracy of Computations

Extensive accuracy studies were performed to verify the adequacy of these trajectories for preliminary design use. Both Mars and Venus trajectories were computed on the JPL precision-integrating trajectory program using

¹It should be apparent to readers familiar with statistical concepts that this is equivalent to mapping a three-dimensional gaussian distribution of velocity errors, with unit standard deviation along each axis, to a two-dimensional gaussian distribution of position errors at the target.

initial conditions obtained from the approximate trajectories contained herein. Of 56 Mars cases run, 29 missed the target by less than 500,000 km; 16 missed by between 500,000 and 1,000,000 km; and 5 missed by between 1,000,000 and 1,500,000 km. The worst case missed by 3,500,000 km. For the flight time errors, 16 varied between 1 and 2 days; 14 varied between 2 and 3 days; and 9 were greater than 3 days. The worst case was 7.2 days. No systematic properties of these errors were noted except that they appear to get worse for the higher-energy trajectories.

For Venus, the accuracy was considerably better, averaging 322,000-km miss error and 0.67-day flight time errors. Based on these comparisons, the model used to generate the trajectories contained herein is considered to be adequate and the results suitable for preliminary mission design studies. These results are very useful for initializing the precision trajectory search program.

When used for the stated purposes, these trajectories provide an excellent source of data obtained at considerably less time and expense than precision cases.

II. ANALYTICAL MODEL FOR INTERPLANETARY TRAJECTORIES

The analytical model consists of three distinct phases of two-body motion: (1) an escape hyperbola near the launch planet, (2) elliptical² motion under the attraction of the Sun, and (3) terminal hyperbolic motion near the target planet.

A. Heliocentric Motion

Solution of the heliocentric elliptic motion is obtained first under the following assumptions:

- The launch and target planets move in orbits about the Sun as given in the national ephemerides. Their velocity components are obtained by using two-body conic formulas, mean orbital elements, and their tabular positions as listed in the ephemerides.
- 2. The launch and target planets are massless. Thus the only force acting on the probe is that of the Sun.
- 3. The position of the probe at launch into the heliocentric orbit is the center of the massless launch planet. Its position at arrival on the heliocentric orbit is the center of the massless target planet.

Thus for solution to the heliocentric phase of motion, the attractions of the launch and target planets are temporarily disregarded. The primary result to be obtained from the solution of the heliocentric transfer problem is the hyperbolic-excess velocity vector relative to the launch planet.

1. Determination of Planar Orientation

Since the launch and arrival positions of the probe are assumed to be the centers of the launch and target planets, they can immediately be determined, given the launch and arrival³ times, by consulting the ephemeris. Further, the orientation of the heliocentric transfer plane can immediately be found. Let \mathbf{R}_L be the Sun-launch planet position vector at launch time T_L , and let \mathbf{R}_p be the Sun-target planet position vector at arrival time T_p (Fig. 1). Then, planar orientation is found from the unit normal W to the plane as follows:

$$\mathbf{W} = \frac{\mathbf{R}_L \times \mathbf{R}_p}{\mathbf{R}_L \, \mathbf{R}_p \sin \Psi} \tag{1}$$

² Hyperbolic heliocentric motion is not considered herein.

³Or, for convenience, the launch date and flight time can be specified.

Fig. 1. Heliocentric transfer geometry

where the angle Ψ is defined below. The inclination i to the ecliptic plane can be found by

$$\cos i = \mathbf{W} \cdot \mathbf{K}' \tag{2}$$

where K' is a unit vector pointing in the direction of the ecliptic north pole.

2. In-Plane Relations

The heliocentric central angle Ψ (Fig. 1) is also readily determined by utilizing the positions of the launch and target planets. This angle may be obtained from

$$\cos \Psi = \frac{\mathbf{R}_L \cdot \mathbf{R}_p}{|\mathbf{R}_L| |\mathbf{R}_p|} \tag{3}$$

$$\sin \Psi = \operatorname{sgn} \left[(\mathbf{R}_L \times \mathbf{R}_p) \cdot \mathbf{K'} \right] (1 - \cos^2 \Psi)^{1/4} \tag{4}$$

The velocity vector V of the spacecraft anywhere along its path may be obtained from

$$\mathbf{V} = \frac{V}{R} \left[(\mathbf{W} \times \mathbf{R}) \cos \Gamma + \mathbf{R} \sin \Gamma \right] \tag{5}$$

Here, **R** is the heliocentric position vector, $R = |\mathbf{R}|$, and V is the heliocentric speed obtained from

$$V = \sqrt{(GM_s)\left(\frac{2}{R} - \frac{1}{a}\right)} \tag{6}$$

and the path angle Γ is found from

$$\sin \Gamma = \left[\sqrt{\frac{R}{(1 - e^2)(2a - R)}} \right] e \sin v \tag{7}$$

In Eq. (6) and (7), GM_s is the universal gravitational constant times the mass of the Sun (= 2.959122083 \times 10⁻⁴ au³/day²), a and e are the semimajor axis and eccentricity of the transfer ellipse, respectively, and v is the true anomaly of the probe given by

$$\cos v = \frac{a(1 - e^2) - R}{eR} \tag{8}$$

3. Lambert's Theorem

Now there are two unknowns in Eq. (5)–(8) which prevent their immediate evaluation. These two unknowns are the semimajor axis a and the eccentricity e. The determination of these quantities is the main problem. Battin (Ref. 5) has shown that the eccentricity is actually a function of the semimajor axis. Thus it is first necessary to determine a. The semimajor axis is related to the time of flight T_F by Lambert's Theorem, which states: The transfer time between any two points on an ellipse is a function of the sum of the distances of each point from the focus, the distance between the points, and the semimajor axis of the ellipse. Functionally, the theorem is stated as

$$T_F = T_F (R_L + R_n, C, a) \tag{9}$$

where the distance C between the launch planet at launch time and the target planet at arrival time is shown in Fig. 2 and is obtained from

$$C = |\mathbf{R}_n - \mathbf{R}_L| \tag{10}$$

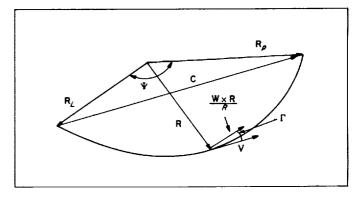


Fig. 2. In-plane transfer geometry

Since the time of flight T_F and the launch and arrival positions R_L and R_p are knowns, only the semimajor axis

In this report, we are interested only in transfers which have the same rotational motion about the Sun as the planets; thus, $0 \le i \le \pi/2$.

remains to be found by iterative solution of Eq. (9). After the semimajor axis a is obtained, the heliocentric velocities of the probe at launch and arrival time V_L and V_p may be evaluated from Eq. (5) under the conditions $R = R_L$ and $R = R_p$. The path angles Γ_L , Γ_p and true anomalies v_L , v_p at launch and arrival times may also be evaluated from Eq. (8) and (7) under the same conditions.

Finally, the desired end result, the hyperbolic-excess velocity \mathbf{V}_{hL} relative to the launch planet may be found (Fig. 3) by

$$\mathbf{V}_{hL} = \mathbf{V}_L - \mathbf{V}_{i} \tag{11}$$

where V_1 is the velocity of the launch planet at launch time.

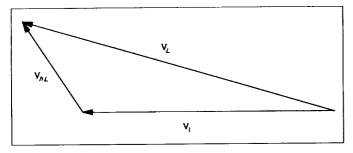


Fig. 3. Determination of the hyperbolic-excess velocity vector \mathbf{V}_{hL}

B. Launch Planet Escape Hyperbola

The key result from the solution of heliocentric transfer is the hyperbolic-excess velocity vector \mathbf{V}_{hL} at launch. The reason for the importance of this vector is that it tells the direction in which the probe must be traveling relative to the launch planet when just leaving its gravitational influence. There are an infinite number of escape trajectories (all hyperbolas) which can have the same hyperbolic-excess velocity vector. However, only a portion of these are practical for use when related to existing launch sites and boost vehicle constraints. For example, it would be ridiculously costly in payload—and impractical—to shoot a vehicle straight up. Criteria for selection of a family of feasible escape trajectories are given below.

1. Assumptions

The solution of the escape phase of motion is obtained under the following assumptions: (1) The probe is acted on only by the gravitational force of the launch planet, and (2) the oblateness effects of the launch planet are neglected. The direction of the asymptote of the escape hyperbola is found by normalizing the hyperbolic-excess vector \mathbf{V}_{hL} . The injection energy 6 \mathbf{C}_3 of the escape hyperbola is found by squaring the hyperbolic-excess speed, or

$$C_3 = V_{hL}^2 \tag{12}$$

Thus, in contrast to the heliocentric problem, the launch planet is now "massy," while the influence of the Sun is neglected. However, the hyperbolic-excess velocity vectors found by solving the heliocentric problem are used as a starting point to solve the escape problem.

2. Size and Shape of the Escape Hyperbola

As previously stated, only some of the infinite number of escape trajectories are practical. Two of the practical aspects of a set of trajectories are the sizes and shapes of the hyperbolas.

Size is basically determined by the energy C_3 , which in turn is a function of boost vehicle capability. For boost vehicles in use (or shortly to be available) at this writing, values of energy less than or equal to $25 \text{ km}^2/\text{sec}^2$ are considered reasonable. The larger the value of energy that the booster is required to deliver, the smaller the payload and launch period over which the vehicle may be fired.

The shape of the hyperbola is determined by its eccentricity, which is a function of both the energy and perifocal distance according to

$$e = 1 + \frac{R_p C_3}{GM} \tag{13}$$

where R_p is the perifocal distance and GM is the universal gravitational constant times the mass of the launch planet. From Eq. (13) it can be seen that for a fixed perifocal distance the eccentricity increases linearly with the energy. The value of perifocal distance is not arbitrary, but depends strongly on the boost vehicle trajectory. It has been shown (Ref. 6) that in the great majority of cases it is necessary and desirable to use a circular parking orbit as part of the preinjection phase of the escape trajectory. It is further an interesting fact that the altitude of the parking orbit determines the perifocal distance. If h is the parking orbit altitude and R_0 is the launch planet's radius, then, to an extremely close degree of approximation,

$$R_n = R_0 + h \tag{14}$$

⁵The details of quadrant choice for these angles are found in Ref. 5.

 $^{^{5}}C_{3}$ is actually twice the total energy per unit mass, i.e., the vis viva integral.

or the perifocal distance is equal to the launch-planetcentered radius of the parking orbit. In Ref. 6 it also has been shown that the lowest possible parking orbit (80–100 nm) allows greatest payload capability. Thus, using 100 nm for the parking orbit altitude, a practical value of perifocal distance is 6560 km. The perifocal distance will vary only slightly about this value for other parking orbit altitudes, or even for direct-ascent-type preinjection trajectories. Therefore, both the size and shape are essentially determined by the energy alone, which is found from Eq. (12). Given the size and shape of the escape hyperbola, its planar orientation must be determined, and this can be done by considering two vectors: (1) the direction of the hyperbolic-excess vector, denoted by a unit vector \mathbf{S} , and (2) a unit vector \mathbf{R}_L^1 directed from the center of the launch planet to the launch site. The vehicle's flight plane will essentially be determined by these two vectors, as shown in Fig. 4. A unit normal W to the launch-planet-centered flight plane is determined by

$$\mathbf{W} = \frac{\mathbf{R}_L^1 \times \mathbf{S}}{|\mathbf{R}_L^1 \times \mathbf{S}|} \tag{15}$$

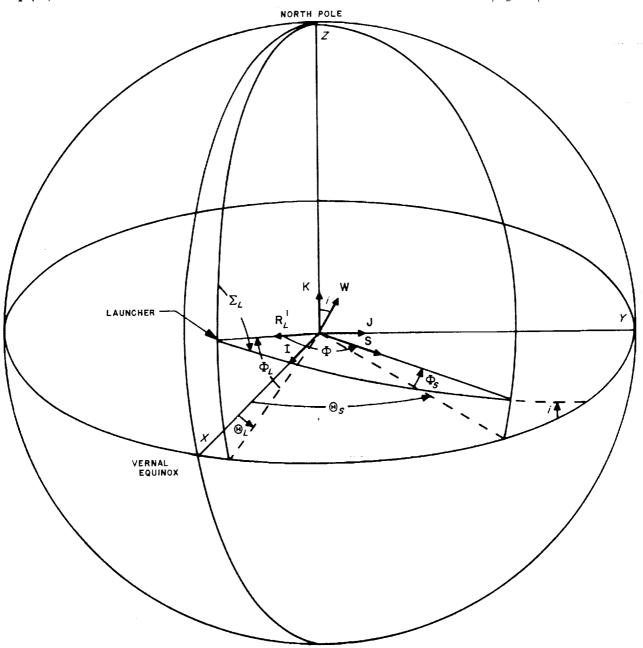


Fig. 4. Vehicle flight plane

with the constraint that the Z component of W is always positive.

Since \mathbf{R}_L^1 is a function of time, according to the rotation rate of the launch planet, the planar orientation must continually change. In effect, this says that the launch azimuth is a continuous function of launch time.

A detailed description of the geometrical aspects of the launch planet ascent trajectory is not given here but may be found in Ref. 6.

C. Differential Corrections

The calculation of differential corrections for interplanetary trajectories may be accomplished in several ways and depends on choice of independent and dependent variables. In this report, a numerical differencing scheme is used. Basically, the independent variables—the injection energy C_3 , declination Φ_8 , and right ascension Θ_8 of the outgoing asymptote S of the escape hyperbola—are varied, one at a time, to produce variations in the dependent variables—the components of the impact parameter B and the time-of-flight T_F .

The impact parameter **B** is defined as a vector originating at the center of the target planet and directed perpendicular to the incoming asymptote of the target-centered approach hyperbola (Fig. 5). The impact parameter **B** is resolved into two components which lie in a

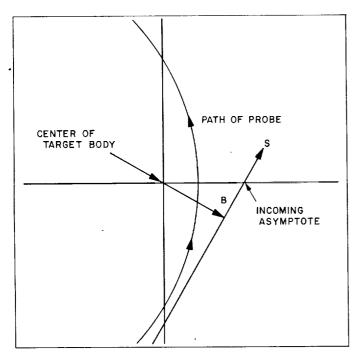


Fig. 5. Impact parameter B

plane normal to the incoming asymptote S. The orientations of the reference axes in this plane are arbitrary, but one is usually selected to lie in a fixed plane. Thus, define a unit vector T, lying in the *ecliptic* plane according to

$$\mathbf{T} = \frac{\mathbf{S} \times \mathbf{K'}}{|\mathbf{S} \times \mathbf{K'}|} \tag{16}$$

ļ

where K' is a unit normal vector to the ecliptic plane. The remaining axis is then given by a unit vector R, defined by

$$\mathbf{R} = \mathbf{S} \times \mathbf{T} \tag{17}$$

Figure 6 illustrates the orientation of the R, S, T target coordinates.

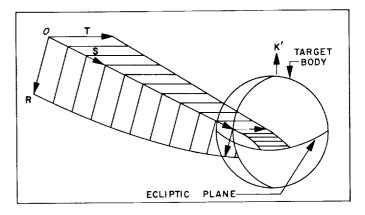


Fig. 6. The R, S, T target coordinate system

The impact parameter **B** lies in the **R-T** plane and has miss components $\mathbf{B} \cdot \mathbf{T}$ and $\mathbf{B} \cdot \mathbf{R}$. $\mathbf{B} \cdot \mathbf{T} = \mathbf{B} \cdot \mathbf{R} = 0$ denotes vertical impact on the target. Thus, $\mathbf{B} \cdot \mathbf{T}$, $\mathbf{B} \cdot \mathbf{R}$, and T_F are the three target-dependent variables. If Q_i represents a set of generalized independent variables, such as injection position and velocity or other convenient variables, then the partial derivatives $\partial \mathbf{B} \cdot \mathbf{T}/\partial Q_i$, $\partial \mathbf{B} \cdot \mathbf{R}/\partial Q_i$, $\partial T_F/\partial Q_i$ are first-order differential corrections or error coefficients relating miss at the target and flight time errors to the independent variables.

A convenient set of independent variables for interplanetary trajectories is the $vis\ viva$ injection energy C_3 , the declination Φ_8 , and the right ascension Θ_8 of the asymptote of the escape hyperbola. These variables essentially describe the launch hyperbolic-excess velocity vector since

$$\mathbf{V}_{hL} = (C_3)^{1/2} (\cos \Phi_S \cos \Theta_S, \cos \Phi_S \sin \Theta_S, \sin \Phi_S) \quad (18$$

As stated above, the differential corrections are calculated by a numerical differencing method which uses

quantities obtained from the conic trajectory. The basic idea is to compute a varied or perturbed trajectory and then difference it with the reference case. Let primed quantities denote variables on the perturbed trajectory. A small variation ΔV_{hL} in the hyperbolic-excess velocity vector is equivalent to a small variation ΔV_L in the launch heliocentric velocity vector. The launch heliocentric velocity on the perturbed trajectory is, then,

$$\mathbf{V}_L' = \mathbf{V}_L + \Delta \mathbf{V}_{hL} \tag{19}$$

where

$$\begin{split} \Delta\mathbf{V}_{hL} &= (C_3) \frac{1}{2} \, \Delta\Phi_{\mathcal{S}} \, \big[-\sin\Phi_{\mathcal{S}} \, \cos\Theta_{\mathcal{S}}, \, -\sin\Phi_{\mathcal{S}} \, \sin\Theta_{\mathcal{S}}, \, \cos\Phi_{\mathcal{S}} \big] \;\;, \\ & (C_3) \frac{1}{2} \, \Delta\Theta_{\mathcal{S}} \, \big[\, -\cos\Phi_{\mathcal{S}} \, \sin\Theta_{\mathcal{S}}, \, \cos\Phi_{\mathcal{S}} \, \cos\Theta_{\mathcal{S}}, \, 0 \big], \\ & \frac{-\Delta C_3}{2 \, (C_3) \frac{1}{2}} \, \big[\cos\Phi_{\mathcal{S}} \cos\Theta_{\mathcal{S}}, \, \cos\Phi_{\mathcal{S}} \sin\Theta_{\mathcal{S}}, \, \sin\Phi_{\mathcal{S}} \big] \end{split}$$

where $\Delta\Phi_8$, $\Delta\Theta_8$ are small angular variations (0.2 deg), and the energy variation is $\Delta C_3 = 0.005 C_3$.

The semimajor axis a' is obtained from

$$a' = \frac{R_L}{2 - \frac{V_L'^2 R_L}{GM}} \tag{20}$$

The radial rate \dot{R}_{L}' is

$$\dot{R}_L' = \frac{\mathbf{V}_L' \cdot \mathbf{R}_L}{\mathbf{R}_L} \tag{21}$$

The semilatus rectum p' and eccentricity e' are

$$p' = \frac{R_L^2 \left(V_L'^2 - \dot{R}_L'^2 \right)}{GM_S} \tag{22}$$

$$e' = \left(1 - \frac{p'}{a'}\right)^{\frac{1}{2}} \tag{23}$$

The eccentric anomaly at launch E'_L is

$$\sin E_L' = \frac{R_L \dot{R}_L'}{e' (a'GM_S)^{1/2}}$$
(24)

 $\cos E_L' = \frac{1}{e'} \left(1 - \frac{R_L}{a'} \right)$

The mean anomaly at launch M'_L is obtained from

$$M_L' = E_L' - e' \sin E_L' \tag{25}$$

The mean orbital rate n' is

$$n' = \frac{(GM_8)^{\frac{1}{2}}}{a'^{3/2}} \tag{26}$$

The mean anomaly at the target M'_{ν} is

$$M_{\nu}' = n' T_F + M_L' \tag{27}$$

The eccentric anomaly at the target E'_p is obtained from the expansion

$$E'_{p} = E_{p} + \left(\frac{1}{1 - e'\cos E_{p}}\right) \Delta M - \frac{1}{2} \left[\frac{e'\sin E_{p}}{(1 - e'\cos E_{p})^{3}}\right] \Delta M^{2} + \frac{1}{6} \left[\frac{3 e'\sin E_{p})^{2} - (1 - e'\cos E_{p})(e'\cos E_{p})}{(1 - e'\cos E_{p})^{5}}\right] \Delta M^{3}$$
if

 $\cos E_n \ge 0$

or

$$E'_{p} = E_{p} + \frac{e \cos E_{p} - 1 + \sqrt{(e \cos E_{p} - 1)^{2} + (2e \sin E_{p}) \Delta M}}{e \sin E_{p}}$$
(29)

if

$$\cos E_p < 0$$

where

$$\Delta M = M'_n - (E_n - e' \sin E_n)$$

The true anomalies at launch and the target v'_L and v'_p are found from

$$\cos v_L' = \frac{p' - R_L}{e' R_L} \tag{30}$$

 $0 < v_L' < \pi$ if \dot{R}_L' is positive

 $\pi < v_L' < 2\pi$ if \dot{R}_L' is negative

$$\cos v_p' = \frac{\cos E_p' - e'}{1 - e' \cos E_p'}$$

$$\sin v_p' = \frac{(1 - e'^2)^{\frac{1}{2}} \sin E_p'}{1 - e' \cos E_p'}$$
(31)

The heliocentric central angle Ψ' is

$$\Psi' = v_p' - v_L' \tag{32}$$

The angular momentum h' is

$$\mathbf{h'} = \mathbf{R}_L \times \mathbf{V}_L' \tag{33}$$

The heliocentric position vector at the target is

$$\mathbf{R}_{p}^{\prime} = R_{p}^{\prime} \left(\frac{\mathbf{R}_{L}}{R_{L}} \cos \Psi^{\prime} + \frac{\mathbf{h}^{\prime} \times \mathbf{R}_{L}}{h^{\prime} R_{L}} \sin \Psi^{\prime} \right) \tag{34}$$

where

$$R'_{p} = a' (1 - e' \cos E'_{p})$$
 (35)

A vector in the direction of perihelion with magnitude e' is

$$\mathbf{\epsilon'} = \frac{\mathbf{V}_L' \times \mathbf{h'}}{GM_S} - \frac{\mathbf{R}_L}{\mathbf{R}_L} \tag{36}$$

The heliocentric velocity at the target is

$$\mathbf{V}_{p}' = \frac{\mathbf{h}'}{p'} \times \left(\frac{\mathbf{R}_{p}'}{R_{p}} + \mathbf{\epsilon}'\right) \tag{37}$$

The hyperbolic-excess velocity at the target is

$$\mathbf{V}_{hp}' = \mathbf{V}_{p}' - \mathbf{V}_{2} \tag{38}$$

The difference between the heliocentric position vectors on the perturbed and reference trajectories is

$$\Delta \mathbf{R}_p' = \mathbf{R}_p' - \mathbf{R}_p \tag{39}$$

The impact parameter B is

$$\mathbf{B} = -\frac{(\Delta \mathbf{R}_p' \cdot \mathbf{V}_{hp}') \, \mathbf{V}_{hp}'}{\mathbf{V}_{hp}'^2} + \Delta \mathbf{R}_p'$$

The flight time error is

$$\Delta T_F = \frac{\Delta \mathbf{R}_p' \cdot \mathbf{V}_{hp}'}{V_{hp}'^2} \tag{40}$$

The partial derivatives are formed by dividing $\Delta\Theta_s$, $\Delta\Phi_s$, and ΔC_3 into the miss components $\mathbf{B} \cdot \mathbf{T}$, $\mathbf{B} \cdot \mathbf{R}$, and flight time error ΔT_F . In addition to the component partials, the quantity $\partial B/\partial Q_i$ is defined by

$$\frac{\partial B}{\partial Q_i} = \left[\left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial Q_i} \right)^2 + \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial Q_i} \right)^2 \right]^{\frac{1}{2}} \tag{41}$$

The three partials, $\partial B/\partial \Theta_8$, $\partial B/\partial \Phi_8$, $\partial B/\partial C_3$, are important measures of the error sensitivity of a trajectory.

The effect of uncertainty in the knowledge of the astronomical unit-to-kilometer conversion factor on target miss and flight time may be determined by the following formulae,

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial a u} = \frac{-2C_3}{a u} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial a u} = \frac{-2C_3}{a u} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3}$$
(42)

from whence

$$\frac{\partial B}{\partial au} = \frac{2C_3}{au} \frac{\partial B}{\partial C_2} \tag{43}$$

and

$$\frac{\partial T_F}{\partial au} = \frac{-2C_3}{au} \frac{\partial T_F}{\partial C_3} \tag{44}$$

where *au* is the astronomical unit-to-kilometer conversion factor.

The effect of solar radiation pressure acting on the probe may also be evaluated as follows: In Eq. (19) let $\Delta V_{hL} = 0$, but in Eq. (20), (22), (24), (26), (36), vary GM_8 by adding an increment ΔGM_s . This procedure gives rise to a varied trajectory from which the impact parameter B and flight time error ΔT_F may be obtained. The partials $\partial B/\partial GM_S$ and $\partial T_F/\partial GM_S$ may then be calculated. Since the acceleration caused by solar radiation pressure acts opposite to the gravitational attraction of the Sun, radiation pressure has the effect of decreasing the Sun's gravitational attraction, or decreasing GMs. A decrease, $\Delta GM_8 = -2.4 \times 10^6 \, \mathrm{km^3/sec^2}$ corresponds to the solar radiation pressure acting on a 300-kg spacecraft having a perfectly reflecting area of 3.6 square meters. Thus the miss, always being a positive number, is obtained by $\Delta B_{sp} = 2.4 \times 10^6 \, \partial B / \partial G M_s$, and the corresponding flight time error is $\Delta T_{F_{sp}} = -2.4 \times 10^6 \, \partial T_F / \partial GM_s$, which is sign sensitive.

D. Mid-Course Execution Accuracy

The effect of mid-course execution errors on target accuracy can be rather simply described if it is assumed that the guidance maneuver is made on the asymptote of the escape hyperbola and that the velocity errors are spherically distributed (that is, the three-dimensional statistical distribution of velocity errors is composed of three orthogonal, independent velocity errors, each with the same variance). The mapping of these errors to the target (Fig. 7) results in a three-dimensional ellipsoid of position errors, which is the "one-sigma ellipsoid." The semiaxes are the respective standard deviations of the position errors. As pointed out above, this ellipsoid can be thought of as the locus of target errors that results from a unit velocity error at the mid-course point tracing out a sphere.

Let the differential corrections discussed above be expressed in matrix form as

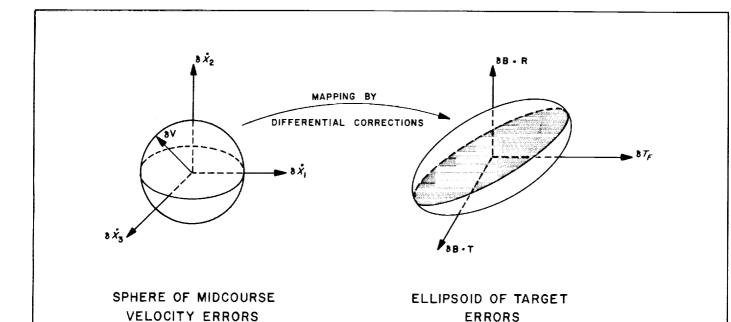


Fig. 7. The mapping of mid-course execution error

$$K = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}} \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{3}} \\ \frac{\partial T_{F}}{\partial \Phi_{S}} & \frac{\partial T_{F}}{\partial \Theta_{S}} & \frac{\partial T_{F}}{\partial C_{3}} \end{bmatrix}$$
(45)

Now define a Cartesian coordinate system X_1, X_2, X_3 such that

$$\delta \dot{X}_{1} = V_{hL} \delta \Phi_{S}$$

$$\delta \dot{X}_{2} = - (V_{hL} \cos \Phi_{S}) \delta \Theta_{S}$$

$$\delta \dot{X}_{3} = \delta V_{hL} = \frac{\delta C_{3}}{2V_{hL}}$$
(46)

Then a new matrix F can be formed,

$$F = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{1}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{2}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{3}} \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{1}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{3}} \\ \frac{\partial T_{F}}{\partial \dot{X}_{1}} & \frac{\partial T_{F}}{\partial \dot{X}_{2}} & \frac{\partial T_{F}}{\partial \dot{X}_{3}} \end{bmatrix}$$
(47)

where

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{2}} = \frac{-1}{V_{hL} \cos \Phi_{S}} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{3}} = 2V_{hL} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{1}} = \frac{1}{V_{hL}} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} = \frac{-1}{V_{hL} \cos \Phi_{S}} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} = 2V_{hL} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{S}}$$
(48)

 $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_1} = \frac{1}{V_{hL}} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{\mathrm{N}}}$

$$\begin{split} \frac{\partial T_F}{\partial \dot{X}_1} &= \frac{1}{V_{hL}} \frac{\partial T_F}{\partial \Phi_S} \\ \\ \frac{\partial T_F}{\partial \dot{X}_2} &= \frac{-1}{V_{hL} \cos \Phi_S} \frac{\partial T_F}{\partial \Theta_S} \\ \\ \frac{\partial T_F}{\partial \dot{X}_3} &= 2V_{hL} \frac{\partial T_F}{\partial C_3} \end{split}$$

Let the spherical distribution of midcourse velocity errors be described in the X_1, X_2, X_3 system as

$$\delta \dot{X}_{1}^{2} + \delta \dot{X}_{2}^{2} + \delta \dot{X}_{3}^{2} = \sigma_{v}^{2} \tag{49}$$

where σ_v will be taken equal to 0.1 meters/sec. The resultant one-sigma ellipsoid of target errors is described by the quadratic form,

$$\delta \mathbf{M} \Lambda^{-1} \delta \mathbf{M}^T = \mathbf{I} \tag{50}$$

where

$$\Lambda = \sigma_v^2 F F^T = \begin{bmatrix} \lambda_{11} & \lambda_{12} & \lambda_{13} \\ & \lambda_{22} & \lambda_{23} \\ \text{symmetric} & \lambda_{33} \end{bmatrix}$$
 (51)

and

$$\delta \mathbf{M} = (\delta \mathbf{B} \cdot \mathbf{T}, \delta \mathbf{B} \cdot \mathbf{R}, \delta T_F)$$

The elements of the Λ matrix are:

The elements of the
$$\Lambda$$
 matrix are:
$$\lambda_{11} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_S} \right)^2 + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_S} \right)^2 + 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \right)^2 \right]$$

$$+ 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \right)^2 \left[\frac{1}{C_3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_S} \right) \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_S} \right) + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_S} \right) \right]$$

$$\times \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S} \right) + 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \right) \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3} \right) \right]$$

$$\lambda_{13} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_S} \right) \left(\frac{\partial T_F}{\partial \Phi_S} \right) + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_S} \right) \left(\frac{\partial T_F}{\partial \Theta_S} \right) + 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \right) \left(\frac{\partial T_F}{\partial C_3} \right) \right]$$

$$\lambda_{22} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_S} \right)^2 + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S} \right)^2 + 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_S} \right)^2 \right]$$

$$\lambda_{33} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial T_F}{\partial \Phi_g} \right)^2 + \frac{1}{C_3 \cos^2 \Phi_g} \left(\frac{\partial T_F}{\partial \Theta_g} \right)^2 + 4C_3 \left(\frac{\partial T_F}{\partial C_3} \right)^2 \right]$$

The quantities in the Λ matrix can be interpreted as standard deviations (sigmas) and correlation coefficients (rhos) according to

$$\sigma_{T} = (\lambda_{11}) \frac{1}{2}$$

$$\sigma_{R} = (\lambda_{22}) \frac{1}{2}$$

$$\sigma_{F} = (\lambda_{33}) \frac{1}{2}$$

$$\rho_{RT} = \frac{\lambda_{12}}{(\lambda_{11} \lambda_{22}) \frac{1}{2}}$$

$$\rho_{TF} = \frac{\lambda_{13}}{(\lambda_{11} \lambda_{33}) \frac{1}{2}}$$

$$\rho_{RF} = \frac{\lambda_{23}}{(\lambda_{22} \lambda_{33}) \frac{1}{2}}$$
(53)

Then the A matrix becomes

$$\Lambda = \begin{bmatrix} \sigma_T^2 & \rho_{RT} \, \sigma_R \, \sigma_T & \rho_{TF} \, \sigma_F \, \sigma_T \\ & & & & & & \\ \sigma_R^2 & & \rho_{RF} \, \sigma_R \, \sigma_F \end{bmatrix}$$
symmetric
$$\sigma_F^2$$
 (54)

It is often of interest when describing only miss components to consider

$$\sigma_R = (\sigma_R^2 + \sigma_T^2)^{\frac{1}{2}} \tag{55}$$

and to diagonalize the upper 2×2 portion of the Λ (the miss component elements) to get

$$\Lambda^* = L\Lambda L^T = \begin{bmatrix} \sigma_1^2 & 0 & \rho_{13} \sigma_1 \sigma_3 \\ & & & \\ & \sigma_2^2 & \rho_{23} \sigma_2 \sigma_3 \\ & & \\ \text{symmetric} & & \sigma_3^2 \end{bmatrix}$$
(56)

where the matrix L is given by

$$L = \begin{bmatrix} \cos \theta & \sin \theta & 0 \\ -\sin \theta & \cos \theta & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
 (57)

The angle θ is positive when turned counterclockwise from the T axis, and has been chosen such that $\sigma_1 \ge \sigma_2$. This is accomplished by

$$\theta = \frac{1}{2} \tan^{-1} \left[\frac{2\rho_{RT}}{\left(\frac{\sigma_T}{\sigma_R} \right) - \left(\frac{\sigma_R}{\sigma_T} \right)} \right]$$
 (58)

where θ is in first quadrant if ρ_{RT} is positive and θ is in second quadrant if ρ_{RT} is negative. Notice that $\sigma_3 = \sigma_F$. The two-dimensional error ellipse described by σ_1 , σ_2 , and θ is the projection of all points of the three-dimensional ellipsoid of position errors (discussed in Section IIE) onto the T-R plane, as shown in Fig. 8.

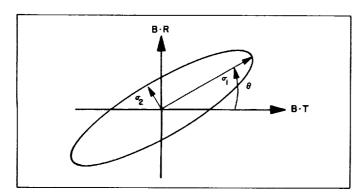


Fig. 8. Projection of three-dimensional error ellipsoid on the T-R plane

E. Orbit Determination Accuracy

In this section the analytic model used for describing orbit determination accuracy (tracking error) for interplanetary trajectories is discussed, and the factors upon which the tracking error depends are reviewed. The dominant error sources are defined for the easterly launchings from Cape Canaveral using tracking coverage supplied by NASA's Deep Space Instrumentation Facility (DSIF). Probable generalization to other situations is suggested. Finally, the method of describing target errors is presented along with all formulae relating the tracking errors to the target error parameters chosen.

1. Method of Describing Orbit Determination Accuracy

As discussed in Section IID, the uncertainties in our knowledge of an interplanetary trajectory are well described in terms of the direction and magnitude of the geocentric hyperbolic-excess velocity vector, \mathbf{V}_{hL} . Figure 9 defines the right-handed Cartesian coordinate system we have adopted for describing uncertainties in \mathbf{V}_{hL} . The X_3 axis is along \mathbf{V}_{hL} ; the X_1 axis is in the direction of a positive differential change in asymptote declination Φ_{8} ; and the X_2 axis completes the system.

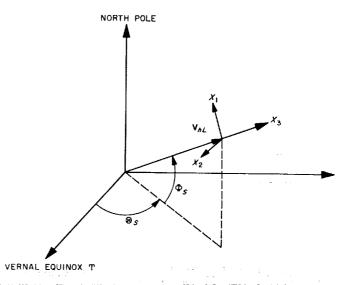


Fig. 9. Orientation of the X_i Cartesian coordinate system to describe uncertainties in the hyperbolic-excess velocity vector V_{hL}

Let $\hat{\mathbf{X}}$ represent the vector of velocity *errors* in the X_i system just described; $\hat{\mathbf{X}} = (\delta \dot{X}_1, \delta \dot{X}_2, \delta \dot{X}_3)^T$, where T indicates the transpose. The average of any function of $\dot{\mathbf{X}}$, $f(\dot{\mathbf{X}})$, over an *ensemble* of randomly generated tracking runs may assist in describing our statistical knowledge of $\dot{\mathbf{X}}$ based on tracking noise, station location, and physical constant uncertainties. The ensemble average is usually written $Ef(\dot{\mathbf{X}})$ or as $f(\dot{\mathbf{X}})$. When $\dot{\mathbf{X}}$ has a Gaussian (normal) probability density function, the distribution can be described completely by specifying $E\dot{\mathbf{X}}$ and $E[(\dot{\mathbf{X}} - \ddot{\mathbf{X}})(\dot{\mathbf{X}} - \ddot{\mathbf{X}})^T]$, the mean and covariance of $\dot{\mathbf{X}}$, respectively.

When all parameters influencing our knowledge of $\dot{\mathbf{X}}$ have been considered, $E\dot{\mathbf{X}}$ should be zero and then the description of our uncertainties in $\dot{\mathbf{X}}$ can be adequately given by Covar $\dot{\mathbf{X}}$, defined above. For convenience, the symbol $\Lambda_{\dot{\mathbf{X}}}$, for Covar $\dot{\mathbf{X}}$, is introduced.

$$\Lambda_{\dot{\mathbf{X}}} = \operatorname{Covar} \dot{\mathbf{X}} = E \left[(\dot{\mathbf{X}} - \ddot{\mathbf{X}}) (\dot{\mathbf{X}} - \ddot{\dot{\mathbf{X}}})^T \right]$$
 (59)

Note that

$$\Lambda_{\dot{\mathbf{X}}} = \begin{pmatrix} \mathbf{\tilde{X}}_{1}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{1}^{\dot{\mathbf{X}}} & \mathbf{\tilde{X}}_{1}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{2}^{\dot{\mathbf{X}}} & \mathbf{\tilde{X}}_{1}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{3}^{\dot{\mathbf{X}}} \\ \mathbf{\tilde{X}}_{2}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{1}^{\dot{\mathbf{X}}} & \mathbf{\tilde{X}}_{2}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{2}^{\dot{\mathbf{X}}} & \mathbf{\tilde{X}}_{2}^{\dot{\mathbf{X}}} \mathbf{\tilde{X}}_{3}^{\dot{\mathbf{X}}} \end{pmatrix}$$
(60)

is a 3×3 real symmetric matrix. The diagonal terms are the variances of the three components, and the off-diagonal terms measure the correlation between the three components.

Before describing how $\Lambda_{\dot{\mathbf{x}}}$ has been "mapped" into target error uncertainties, a discussion is given of the dependence of $\Lambda_{\dot{\mathbf{x}}}$ upon the relevant factors describing near-Earth tracking as well as the typical errors assumed in preparing the estimates given in this report.

2. Accuracy of Near-Earth Tracking

By expressing the accuracy of near-Earth tracking in terms of $\dot{\mathbf{X}}$ and its associated covariance $\Lambda_{\dot{\mathbf{X}}}$, the dependence upon almost all trajectory parameters has been eliminated. The remaining relevant trajectory parameters are listed in Table 1.

Table 1. Trajectory parameters influencing tracking accuracy

1. Launch site	
2. Launch azimuth $\Sigma_L \ldots \ldots$, . Depends on launch time.
3. Injection region	Depends on time in parking orbit; short or long coast less than 1 revolution is current practice.
4. Declination of V _{hL} , Φ _S	Depends on target position at arrival date and injection energy, C ₃ .
5. Magnitude of $V_{hL} = V_{hL} = (C_3)^{\frac{1}{2}}$	

Note the limited number of trajectory parameters on which $\Lambda_{\hat{x}}$ depends. Table 2 summarizes the key tracking station parameters which influence accuracy in the geocentric tracking phase.

The first three factors listed in Table 2 define the tracking configuration, whereas the last three are station performance factors. Usually, tracking accuracy studies are carried out with the tracking configuration relatively fixed, and the influence of the station performance factors are determined.

The final source of tracking error is uncertainty in physical constants. The influence of GM-Earth errors is somewhat smaller than the above-mentioned errors and should be reduced to negligible contribution in the next two years. Sections IIC and IIIC describe how the uncertainty in the astronomical unit affects the target error; this error

Table 2. Tracking station parameters influencing tracking accuracy

1. Station locationsA	spread of latitudes is very desirable.
Total tracking time Tracking data types	nge R, range rate Å, and angles are most commonly taken.
	lay is measured from the injection region as well as station acqui- sition delays.
	pressed in terms of equivalent uncorrelated noise at a given sampling rate.
	portant when high data accuracies are available. Longitude errors usually are most important.

can be important for very long flights, but should also be reduced to a negligible contribution in the next two years. Errors in the target's mass cause minor variations in flight time T_F and negligible effect on **B**. The last important target error source currently recognized is the uncertainty in the effect of the standard solar radiation pressure on spacecraft trajectory. The source of uncertainty is that effective reflecting area (largely solar panels) is not perfectly known. Techniques for the accurate measurement of this quantity are currently under development. Our studies show that unless this error is held below 5% it will be the dominant error source on many of our flights. Sections IIC and IIIC describe the calculation of the standard solar radiation pressure on a typical spacecraft deriving electrical power from the Sun.

The tracking accuracies reported here are representative of those available from tracking with the DSIF stations in South Africa, Australia, and the United States. Launch azimuths between 90 and 114 deg east of north were considered. Data accuracies of 0.02 m/sec in R and 0.05 deg in angle sampled every 10 minutes were assumed; no range measurements were assumed. Station location errors were assumed to be uncorrelated with standard deviations of 0.001 deg in latitude, 0.0005 deg in longitude, and 30 meters in radius. Each station was allowed 10 minutes to acquire the spacecraft transponder, and tracking was simulated in the first 24 hours so that at least one pass was available to each station. The transfer of transmitting assignment from one station to another (simultaneous transmission was not allowed) followed a pattern which has been found to be near-optimum.

The $\Lambda_{\vec{X}}$ matrix used in these calculations was assumed to be independent of the trajectory parameters listed in Table 1. This approximation is good for the range of energies and asymptotic declinations considered to be

most feasible. In the future these approximations will be refined as necessary. The $\Lambda_{\mathbf{X}}^{\star}$ used for orbit determination accuracy in this report is given in Section IIIE. The target accuracies calculated here are typical for any reasonable multistation tracking configuration, with the data types and accuracies corresponding to this conservative representation of DSIF capabilities.

3. Calculation of Target Errors

The representation of tracking accuracy in the geocentric phase in terms of $\Lambda_{\dot{\mathbf{X}}}$, the covariance of the \mathbf{V}_{hL} in a particular rectangular coordinate system, was developed earlier in this section. In order to express the effect of these uncertainties in \mathbf{V}_{hL} in terms of target error, two steps must be performed. First, a set of coordinates \mathbf{M}_1 at the target planet for expressing the errors (\mathbf{M}_1 cannot exceed 3 dimensions) must be chosen. (A convenient set with desirable linearity properties is the \mathbf{T} - \mathbf{R} - \mathbf{S} system defined previously.) The matrix U_1 , which maps $\dot{\mathbf{X}}$ to the desired \mathbf{M}_1 , is then determined.

$$\mathbf{M}_{1} = U_{1}\dot{\mathbf{X}} = \begin{pmatrix} \delta \mathbf{B} \cdot \mathbf{T} \\ \delta \mathbf{B} \cdot \mathbf{R} \\ \delta \mathbf{S} \end{pmatrix} \tag{61}$$

The covariance of M_1 is given by

$$\operatorname{Covar}\left[\mathbf{M}_{1}\right] = \mathbf{M}_{1}\mathbf{M}_{1}^{T} = U_{1}\Lambda_{X}U_{1}^{T} = \Lambda_{\mathbf{M}_{1}} \tag{62}$$

The determination of U_1 for the coordinates chosen follows the lines of Section IID. It is presumed that the K-matrix is given, where

$$K = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}} \\ \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{3}} \\ \\ \frac{\partial T_{F}}{\partial \Phi_{S}} & \frac{\partial T_{F}}{\partial \Theta_{S}} & \frac{\partial T_{F}}{\partial C_{3}} \end{bmatrix}$$
(45)

By postmultiplying K by

$$A = \begin{bmatrix} \frac{1}{V_{hL}} & 0 & 0\\ 0 & \frac{-1}{V_{hL}\cos\Phi_{S}} & 0\\ 0 & 0 & 2V_{hL} \end{bmatrix}$$
 (63)

the F matrix is obtained.

$$F = KA \tag{47}$$

The F matrix must now be adjusted to transform into the T-R-S coordinates used for M_1 . This transformation B is simply

$$B = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & -V_{hp} \end{bmatrix}$$
 (64)

since $\delta S = -V_{hp} \delta T_L$. Thus our U_1 matrix is given by

$$U_1 = B(KA) = BF \tag{65}$$

Now the mapping given in Eq. (62) to obtain $\Lambda_{\mathbf{M}_1}$ is applied. Since all of the coordinates of \mathbf{M}_1 have the same dimensions (length squared), the one-sigma ellipsoid described by the quadratic form

$$\delta \mathbf{M}_1 \Lambda_{\mathbf{M}_1}^{-1} \delta \mathbf{M}_1^T = 1 \tag{66}$$

has physical significance. The three principal axes of this ellipsoid are the square roots of the 3-eigenvalues of the Λ_{M_1} matrix. The formulas used are standard and are not reproduced here. The projection of the three-dimensional ellipsoid on to the T-R plane is an ellipse. Its major and minor semiaxes and orientation of the major axis are calculated by the same procedure used in Section IID. It is often convenient to write Λ_{M_1} in an alternate form:

$$\Lambda_{\mathbf{M}_{1}} = \begin{bmatrix} \sigma_{T}^{2} & \rho_{RT}\sigma_{T}\sigma_{R} & \rho_{TS}\sigma_{T}\sigma_{S} \\ \rho_{RT}\sigma_{R}\sigma_{T} & \sigma_{R}^{2} & \rho_{RS}\sigma_{R}\sigma_{S} \\ \rho_{TS}\sigma_{S}\sigma_{T} & \rho_{RS}\sigma_{S}\sigma_{R} & \sigma_{S}^{2} \end{bmatrix}$$
(67)

It can be seen that $\Lambda_{\mathbf{M}_1}$ is completely described by σ_T , σ_R , σ_S , ρ_{TS} , ρ_{RS} , ρ_{TR} , because of its symmetry.

III. EXPLANATION OF TRAJECTORY TABLES

Tabular listings of pertinent quantities of the heliocentric and planetocentric trajectories, differential corrections, guidance, and orbit determination parameters are given at 1-day launch date intervals and 2-day flight time intervals over the selected launch period. The launch period is selected to encompass the minimum energy transfer dates obtained from Ref. 7 and 8. A summary of the characteristics of these trajectories is given in Ref. 7.

Each trajectory begins with a header giving launch date, flight time (in days), and arrival date. All the heliocentric transfer trajectories are calculated assuming launch into the heliocentric orbit at 0 hours of the launch date and arrival at 0 hours of the arrival date. Later, however, when the launch-planet ascent trajectories are computed, the actual launch times during the launch day for each launch azimuth are given.

Each page lists four trajectories, each of which is divided into five basic print groups: HELIOCENTRIC CONIC, PLANETOCENTRIC CONIC, DIFFERENTIAL CORRECTIONS, MID-COURSE EXECUTION ACCURACY, and ORBIT DETERMINATION ACCURACY. Each quantity is assigned an identifying alphabetic symbol of no more than three letters. The definitions of the symbols and quantities they represent are given below. All pertinent quantities are referenced to the mean equinox and equator, or ecliptic, of *launch* date.

A. Heliocentric Conic Group

The HELIOCENTRIC CONIC group gives the characteristics of the heliocentric transfer ellipse, such as the position and velocity vectors at launch and arrival, some orbital elements, and other quantities of engineering interest. The printout array is as follows:

HELIOCENTRIC CONIC DISTANCE

RL LAL LOL VL GAL AZL HCA SMA ECC INC V1
RP LAP LOP VP GAP AZP TAL TAP RCA APO V2
RC GL GP ZAL ZAP ETS ZAE ETE ZAC ETC CLP

After the words HELIOCENTRIC CONIC, the heliocentric arc DISTANCE traveled by the spacecraft from launch to arrival is printed. The quantities are defined as follows (all angles are in deg; distances are in millions of km; speeds are in km/sec):

Line 1

AZL, Σ_L

ΗСΑ, Ψ

SMA, a

 $RL, R_L = |R_L|$ the heliocentric

the heliocentric radius of the launch planet at 0 hours of the launch date.

LAL, β_L the celestial latitude of the launch planet at 0 hours of the launch date.

LOL, λ_L the celestial longitude of the launch planet at 0 hours of the launch date.

VL, $V_L = |V_L|$ the heliocentric speed of the probe at 0 hours of the launch date.

GAL, Γ_L the path angle of the probe at 0 hours of the launch date, i.e., the complement of the angle between the position and velocity vectors, \mathbf{R}_L and \mathbf{V}_L , defined by

$$\sin \Gamma_L = \frac{\mathbf{R}_L \cdot \mathbf{V}_L}{\mathbf{R}_L \, \mathbf{V}_L} \qquad -\frac{\pi}{2} \le \Gamma_L \le \frac{\pi}{2}$$

the azimuth angle of the probe at 0 hours of the launch date, i.e., the angle, measured in a plane perpendicular to the radius vector \mathbf{R}_L , between the projection of the ecliptic north and the projection of the velocity vector \mathbf{V}_L on the plane perpendicular to \mathbf{R}_L , defined by

$$\cos \Sigma_L = \frac{V_L \cdot \Psi^1}{V_L \cos \Gamma_L} \qquad 0 \le \Sigma_L \le 2\pi$$

$$\sin \Sigma_L = \frac{(\mathbf{R}_L \times \mathbf{V}_L) \cdot \mathbf{\Psi}^1}{|\mathbf{R}_L \times \mathbf{V}_L|}$$

where $\Psi^1 = (\mathbf{K}' - \mathbf{R}_L^1 \sin \beta_L) \sec \beta_L$, where the superscript 1 denotes a unit vector.

the heliocentric central angle, or angle between the position vector \mathbf{R}_L , of the launch planet at 0 hours of the launch date and the position vector \mathbf{R}_p , of the target planet at 0 hours of the arrival date. This angle is defined by Eq. (3) and (4) and illustrated in Fig. 1.

the semimajor axis of the heliocentric transfer ellipse.

XXI

near-target trajectory and are used in determining the

aiming point for interplanetary flyby trajectories. Con-

sider the target-centered geometry of Fig. 10.

RC, R_c

ECC, e	the eccentricity of the heliocentric transfer ellipse.	GL, γ_L	the angle between the launch hyperbolic-excess velocity vector \mathbf{V}_{hL} and its
INC, i	the inclination of the heliocentric transfer ellipse.		projection on the orbital plane of the launch planet, defined by
$VI, V_1 = V_1 $	the heliocentric speed of the launch planet at 0 hours of the launch date.		$\sin \gamma_L = \frac{\mathbf{W}_1 \cdot \mathbf{V}_{hL}}{\mathbf{V}_{hL}} \qquad -\frac{\pi}{2} \le \gamma_L \le \frac{\pi}{2}$
Line 2			where W ₁ is a unit normal to the
$RP, R_p = R_p $	the heliocentric radius of the target planet at 0 hours of the arrival date.		launch planet's orbital plane. This angle is useful in describing the direction in which the probe leaves the
LAP, β_p	the celestial latitude of the target planet at 0 hours of the arrival date.		launch planet.
LOP, λ_p	the celestial longitude of the target planet at 0 hours of the arrival date.	GP, γ_p	the angle between the incoming arrival hyperbolic-excess velocity vector V_{hp} , and its projection on the target
$VP, V_p = V_p $	the heliocentric speed of the probe at 0 hours of the arrival date.		planet's orbital plane, defined by
GAP, Γ_p	the path angle of the probe at 0 hours of the arrival date, defined the same as Γ_L except that \mathbf{R}_p and \mathbf{V}_p are substituted for \mathbf{R}_L and \mathbf{V}_L .		$\sin \gamma_p = \frac{\mathbf{W}_2 \cdot \mathbf{V}_{hp}}{\mathbf{V}_{hp}} \qquad -\frac{\pi}{2} \leq \gamma_p \leq \frac{\pi}{2}$ where \mathbf{W}_2 is a unit normal to the target
AZP, Σ_p	the azimuth angle of the probe at 0 hours of the arrival date, defined the same as Σ_L except that \mathbf{R}_p and \mathbf{V}_p are substituted for \mathbf{R}_L and \mathbf{V}_L .		planet's orbital plane. This angle is useful in determining whether the probe is approaching from above or below the target planet. If γ_p is positive, the probe approaches from below
TAL, v_L	the true anomaly of the probe in the heliocentric transfer ellipse at 0 hours of the launch date.	ZAL, ζ_L	—if negative, from above. the angle between the outgoing launch
TAP, \boldsymbol{v}_p	the true anomaly of the probe in the heliocentric transfer ellipse at 0 hours of the arrival date.		asymptote (or hyperbolic-excess velocity vector) and the launch <i>heliocentric</i> radius vector \mathbf{R}_L at launch time. This is the Sun-launch-planet-probe angle
RCA, R_{cA}	the perihelion distance of the helio- centric transfer ellipse. This distance is printed even though the probe may not transit perihelion.		and is a good approximation to the launch-planet-probe-Sun angle as the probe leaves the launch planet. It is an important quantity in the design of
APO, R_A	the aphelion distance of the heliocen- tric transfer ellipse. This distance is printed even though the probe may not transit aphelion.		attitude control systems which use the Sun and launch planet as optical references. The quantity ζ_L is defined as follows:
$\mathbf{V2},\mathbf{V_2} = \mathbf{V}_2 $	the heliocentric speed of the target planet at 0 hours of the arrival date.		$\cos \zeta_L = \frac{\mathbf{V}_{hL} \cdot \mathbf{R}_L^1}{\mathbf{V}_{hL}} \qquad 0 \le \zeta_L \le \pi$
Line 3			uantities, all angles, have the same gen-
DC D	de communication distance on die	erai definition. I	They are important in the design of the

the communication distance, or dis-

tance between the launch and target

planets at 0 hours of the arrival date.

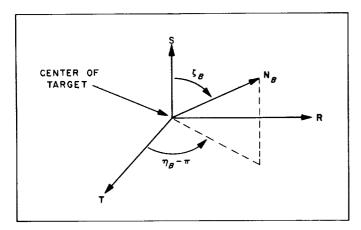


Fig. 10. Generalized geometry for aiming point angles

In this diagram, the reference coordinate system is the same target R, S, T system defined in Section IIC. A unit vector N_B (subscript B for body) is directed from the target center to another celestial body. The angular quantity ζ_B is the angle subtended at the target center between the incoming asymptote S and the target–celestial body line N_B . Thus

$$\cos \zeta_B = \mathbf{S} \cdot \mathbf{N}_B = \frac{\mathbf{V}_{hp} \cdot \mathbf{N}_B}{\mathbf{V}_{hp}} \qquad 0 \le \zeta_B \le \pi$$

since

$$S = \frac{V_{hn}}{V_{hp}}$$

The angle η_B is the supplement of the angle between the T direction and the projection of N_B on the R-T plane, defined by

$$\sin \eta_B = \frac{-\mathbf{R} \cdot \mathbf{N}_B}{\sin \zeta_B} \qquad 0 \le \eta_B \le 2\pi$$

$$\cos \eta_B = \frac{-\mathbf{T} \cdot \mathbf{N}_B}{\sin \zeta_B}$$

These quantities are computed for three celestial bodies: the Sun (ζ_s and η_s), the Earth (ζ_E and η_E), and the star Canopus (ζ_c and η_c). Thus,

ZAP, ζ_s (or ζ_p) the Sun-target-probe angle. Actually, this angle should be symbolized ZAS, but, for historical reasons, is not. This angle is useful in that it indicates the direction of the probe's approach to

the target. If $\zeta_s < \pi/2$, the probe approaches from the target planet's dark side. If $\zeta_s > \pi/2$, it approaches from the light side.

ETS, η_s defined as above.

ZAE, ζ_E

the Earth-target-probe angle. This angle is useful in locating the Earth as the probe approaches the target.

ETE, η_E defined as above.

ZAC, ζ_c the Canopus-target-probe angle.

ETC, η_c defined as above.

CLP, σ_p the angle between the projection of the incoming asymptote S on the target planet's orbital plane and the target–Sun line at arrival time, defined by

$$\cos \sigma_p = -\mathbf{R}_p^1 \cdot \mathbf{S}_{pr} \quad -\pi \leq \sigma_p \leq \pi$$

$$\sin \sigma_p = -\mathbf{S}_{pr} \cdot (\mathbf{W}_2 \times \mathbf{R}_p^1)$$

where S_{pr} is the projection of S on the target's orbital plane given by

$$S_{pr} = \frac{S - W_2 (S \cdot W_2)}{|S - W_2 (S \cdot W_2)|}$$

Recall that W₂ is the unit normal vector to the target's orbital plane. This angle is illustrated in Fig. 11.

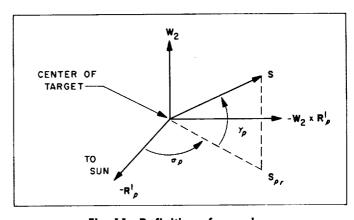


Fig. 11. Definition of σ_p and γ_p

B. Planetocentric Conic Group

The second group, PLANETOCENTRIC CONIC, gives the characteristics of primarily the launch-planet ascent trajectories, but also includes the hyperbolic-excess vector at the target. Injection conditions are given for three launch azimuths, assuming both short and long parking orbits. As explained in Ref. 6, there may be two launch times per day for each launch azimuth, resulting in a short and long parking orbit. The injection conditions for each set are given in geocentric space-fixed spherical coordinates and, by assuming a 100-nm parking orbit altitude and typical boost vehicle trajectory characteristics, the longitude of injection is calculated, along with the latitude and longitude of ignition of final burn out of the parking orbit.

A special case may arise when the declination of the outgoing asymptote of the escape hyperbola is greater than the launch site latitude (Cape Canaveral). In this case, owing to geometrical restrictions, it may not be possible to fire in a symmetrical band of azimuths about due east, as explained in Ref. 6. This band of restricted azimuths may eliminate part or all of the selected launch azimuths, 90, 100, and 110 deg. When this happens, only those trajectories with permissible azimuths are printed, in addition to the limiting azimuths, or the most northerly and southerly azimuths, that are possible.

The ascent trajectory profile is as shown in Fig. 12. Its characteristics are defined as follows:

- Φ₁ the arc subtended at Earth's center during ascent from launch into parking orbit.
- t_1 the time from launch to parking-orbit injection.
- Φ₂ the arc subtended at Earth's center during final burn out of the parking orbit, to injection.
- t_2 the time of final burn.
- k_{\bullet} the inverse parking orbital rate, equal to $1/\dot{\Phi}_c$.
- v_1 the true anomaly in the hyperbolic orbit at injection.
- R_p the perifocal distance of the escape hyperbola, taken equal to the Earth-centered radius of the parking orbit.

- ϕ_L the longitude of the launch site.
- θ_L the latitude of the launch site.

The values of these quantities for all trajectories contained herein are:

 $\Phi_i = 17 \deg$

 $t_1 = 500 \, \text{sec}$

 $\Phi_2 = 8 \deg$

 $t_2 = 100 \, \text{sec}$

 $k_{i} = 14.689 \sec/\deg$

 $v_1 = 3.7 \deg$

 $R_{p} = 6560 \, \text{km}$

 $\phi_L = 28.317 \deg$

 $\theta_L = 279.457 \deg$

An inherent assumption here is that these quantities are relatively invariant with injection energy. This is a reasonable assumption and will affect the injection coordinates only slightly.

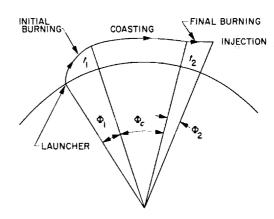


Fig. 12. Ascent trajectory profile

The print array for the PLANETOCENTRIC CONIC group is:

C3 VHL DLA RAL RAD VEL PTH VHP DPA RAP ECC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

or midnight. In this case, the

launch date may be advanced to

the following day for times after

midnight, or it may be retarded to the previous day for times

before midnight, whichever the

reader wishes.

The quantities are defined as follows (all angles are in deg; distances are in km; speeds are in km/sec, launchinjection (L-I)time and parking orbit coast time (PO CST TIM) are in sec; launch time and injection time are in hr, min, and sec, GMT):

Line 1

ne r			reader wisnes.
C3, C_3	the vis viva integral (Moulton),	L-I TIME, t_{LI}	the launch-to-injection time.
	or twice the total energy per unit mass, expressed in km^2/sec^2 and defined by $C_3 = V_{hL}^2$.	INJ LAT, φ	the injection latitude (or declination Φ).
$\mathrm{VHL}, \mathrm{V}_{hL}$	the launch hyperbolic-excess speed.	INJ LONG, θ	the injection longitude, measured positive east of Greenwich, $0 \le \theta \le 2\pi$.
DLA, $\Phi_{\mathcal{S}}$	the declination of the outgoing asymptote of the escape hyper-	INJ RT ASC, ⊖	the injection right ascension.
	bola defined in Eq. (18).	INJ AZMTH, Σ	the injection azimuth, or angle
RAL, Θ_8	the right ascension of the outgoing asymptote of the escape hyperbola defined in Eq. (18).		between the projection of the velocity vector V, on the local horizontal plane and the projection of true north on this plane,
$RAD, R = \mathbf{R} $	the launch-planet-centered injection radius.		measured positive east of true north.
VEL, V = V	the inertial injection speed.	INJ TIME, T_I	the injection time. The same
РТН, г	the injection path angle defined by		comment applies to this quantity regarding launch date as applied to the launch time. However,
	$\sin \Gamma = \frac{\mathbf{V} \cdot \mathbf{R}}{\mathbf{V}\mathbf{R}} \qquad -\frac{\pi}{2} \leq \Gamma \leq \frac{\pi}{2}$		both times must be consistent. For example, if launch time is
VHP, V_{hp}	the hyperbolic-excess speed at the target.		on the previous day, injection time may fall on the launch date
$\mathrm{DPA,}\ \Phi_{\mathit{Sp}}$	the declination of the incoming asymptote at the target. The ref-		shown, or it may be on the following day.
	erence coordinate system here is vernal equinox, Earth equatorial, mean of <i>launch</i> date	PO CST TIM, t_c	the coast time in the parking orbit, in sec.
RAP, Θ_{Sp}	the right ascension of the incoming asymptote at the target. Same	INJ 2 LAT, ϕ_2	the latitude of the start of final burn out of the parking orbit.
	reference coordinates as for Φ_{Sp} .	INJ 2 LONG, θ_2	the longitude of the start of final
ECC, e	the eccentricity of the escape hyperbola.		burn out of the parking orbit, $0 \le \theta_2 \le 2\pi$.
		The quantities T	D. A. O. V. D. V. forms a consistent act

Line 2

LNCH AZMTH, Σ_L the launch azimuth measured in a plane tangent to the surface of the launch planet at the launch site, positive east of true north.

LNCH TIME, T_L the launch time. For the range of launch azimuths given herein, launch time may cross 0 hours,

The quantities T_I , R, Φ , Θ , V, Γ , Σ form a consistent set of injection conditions; i.e., they are the time and the space-fixed spherical coordinates which can be used to initialize an integrating trajectory program.

C. Differential Corrections Group

The DIFFERENTIAL CORRECTIONS group is comprised of sixteen error coefficients relating variations in

injection energy C_3 , declination Φ_8 , and right ascension Θ_8 , of the outgoing asymptote of the escape hyperbola, the astronomical unit, and solar radiation pressure to variations in the miss components $\mathbf{B} \cdot \mathbf{T}$, $\mathbf{B} \cdot \mathbf{R}$, and the flight time. These coefficients are very useful in gaging the error sensitivity of an interplanetary trajectory. The printout array for this group is as follows:

DIFFERENTIAL CORRECTIONS

TDE	TRA	TC3	BAU
RDE	RRA	RC3	FAU
FDE	FRA	FC3	BSP
BDE	BRA	BC3	FSP

The symbols are defined as follows:

Line 1

- TDE, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_s}$ the partial derivative of the T component of the impact parameter B, with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- TRA, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_s}$ the partial derivative of the T component of the impact parameter \mathbf{B} , with respect to the right ascension of the launch escape asymptote Θ_s , in megakilometers/deg.
- TC3, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3}$ the partial derivative of the T component of the impact parameter \mathbf{B} , with respect to the injection energy C_3 , in megakilometers/km²/sec².
- BAU, $\frac{\partial \mathbf{B}}{\partial au}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the astronomical unit-to-kilometer conversion factor. This derivative is dimensionless and indicates the target miss caused by an uncertainty in the value of the astronomical unit.

Line 2

- RDE, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_s}$ the partial derivative of the R component of the impact parameter B, with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- RRA, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S}$ the partial derivative of the R component of the impact parameter B, with respect to the right ascension of the launch

escape asymptote Θ_s , in megakilometers/deg.

- RC3, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3}$ the partial derivative of the R component of the impact parameter B, with respect to the injection energy C_3 , in megakilometers/km²/sec².
- FAU, $\frac{\partial T_F}{\partial au}$ the partial derivative of the flight time T_F , with respect to the astronomical unit-to-kilometer conversion factor. This derivative has dimensions of sec/km and indicates the error in flight time caused by an uncertainty in the value of the astronomical unit.

Line 3

- FDE, $\frac{\partial T_F}{\partial \Phi_S}$ the partial derivative of flight time T_F , with respect to the declination of the launch escape asymptote Φ_S , in days/deg.
- FRA, $\frac{\partial T_F}{\partial \Theta_S}$ the partial derivative of flight time T_F , with respect to the right ascension of the launch escape asymptote Θ_S , in days/deg.
- FC3, $\frac{\partial T_F}{\partial C_3}$ the partial derivative of flight time T_F , with respect to the injection energy C_3 , in days/km²/sec².
- BSP, ΔB_{sp} the target miss (in km) caused by solar radiation pressure acting on a 300-kg spacecraft having an effective perfectly reflecting area of 3.6 square meters.

PLENETHER ALLEGINES OF THE RESIDENCE

Line 4

- BDE, $\frac{\partial \mathbf{B}}{\partial \Phi_s}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- BRA, $\frac{\partial \mathbf{B}}{\partial \Theta_s}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the right ascension of the launch escape asymptote Θ_s , in megakilometers/ deg.
- BC3, $\frac{\partial \mathbf{B}}{\partial C_3}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the injection energy C_3 , in megakilometers/km²/sec².
- FSP, $\Delta T_{F_{sp}}$ the flight time error (in sec) caused by solar radiation pressure acting on a 300-kg spacecraft having an effective perfectly reflecting area of 3.6 square meters.

D. Mid-Course Execution Accuracy Group

The MID-COURSE EXECUTION ACCURACY group gives the parameters of the "one-sigma" three-dimensional ellipsoid of target errors, resulting from a spherically distributed mid-course guidance execution error with σ_v equal to 0.1 m/sec (see Eq. 49). It is assumed here that a single mid-course guidance maneuver is applied during the time the spacecraft is essentially traveling radially outward from the launch planet. This time is approximately from several hours to several days after launch and is a practical period in which to perform a mid-course maneuver. These quantities are quoted in the useful **R**, **S**, **T** coordinate system discussed above.

The print array for this group is:

MID-COURSE EXECUTION ACCURACY

SGT	SGR	SG3
RRT	RRF	RTF
SGB	R23	R13
SG1	SG2	THA

The quantities are defined as follows:

Line 1

SGT, σ_T the standard deviation of position errors along the T axis, in km.

SGR, σ_R the standard deviation of position errors along the R axis, in km.

SG3, σ_3 the standard deviation of flight time errors, in sec.

Line 2

RRT, ρ_{RT} the linear correlation coefficient relating position errors in the **R** and **T** directions (dimensionless).

RRF, ρ_{RF} the linear correlation coefficient relating position errors in the R direction and flight-time errors (dimensionless).

RTF, ρ_{TF} the linear correlation coefficient relating position errors in the T direction and flight-time errors (dimensionless).

Line 3

SGB, σ_B the square root of the sum of the squares of σ_R and σ_T .

R23, ρ_{23} the linear correlation coefficient of σ_2 and σ_3 (= σ_F). The same remarks apply to this number as to ρ_{13} , except that the σ_2 direction replaces the σ_1 direction.

R13, ρ_{13} the linear correlation coefficient relating σ_1 and σ_3 (= σ_F). This number statistically relates position errors in the σ_1 direction to flight time errors. If $\rho_{13} = 1$, then a position error in the σ_1 direction will always be accompanied by a flight-time error which is linearly related to that position error; ρ_{13} is dimensionless.

Line 4

SG1, σ_1 the semimajor axis of the error ellipse formed by projecting the three-dimensional error ellipsoid onto the T-R plane (Fig. 8), in km.

SG2, σ_2 the semiminor axis of this error ellipse (Fig. 8), in km.

THA, θ the angle between the T axis and the direction of the σ_1 axis, measured in the T-R plane as shown in Fig. 8, in deg.

E. Orbit Determination Accuracy Group

The ORBIT DETERMINATION ACCURACY group is comprised of 12 numbers which describe the uncertainty in target coordinates due to tracking errors described in Section IIE. The printout array for this group is as follows:

ORBIT DETERMINATION ACCURACY

ST	SR	SS
CRT	CRS	CST
LSA	MSA	SSA
ELI	EL2	ALF

The first two lines describe the covariance of M_1 by the method described in Section IIE (Eq. 67):

Line 1

ST, σ_T the standard deviation of errors in the coordinate $\mathbf{B} \cdot \mathbf{T}$, in km.

SR, σ_R the standard deviation of errors in the coordinate $\mathbf{B} \cdot \mathbf{R}$, in km.

SS, σ_8 the standard deviation of errors in S, in km.

Line 2

CRT, ρ_{RT} the linear correlation coefficient relating errors in $\mathbf{B} \cdot \mathbf{R}$ to errors in $\mathbf{B} \cdot \mathbf{T}$, dimensionless.

CRS, ρ_{RS} the linear correlation coefficient relating errors in **B** · **R** to errors in **S**, dimensionless.

CST, ρ_{Ts} the linear correlation coefficient relating errors in **B** · **T** to errors in S, dimensionless.

The third line contains the three semiaxes of the one-sigma position ellipsoid described by $\mathbf{M}_1 \Lambda^{-1} \mathbf{M}^T = 1$.

Line 3

LSA, $\sqrt{\varepsilon_{max}}$ the largest semiaxis of the position ellipsoid, in km. (ε_{max} is the largest eigenvalue of Λ_{M_1} , in km².)

MSA, $\sqrt{\epsilon_{mid}}$ the middle semiaxis of the position ellipsoid, in km. (ϵ_{mid} is the second-largest, or middle, eigenvalue of Λ_{M_1} , in km².)

SSA, $\sqrt{\varepsilon_{min}}$ the smallest semiaxis of the position ellipsoid, in km. (ε_{min} is the smallest eigenvalue of Λ_{M_1} , in km².)

The fourth line describes the projection of the above position ellipsoid on the T-R plane. This projection is an ellipse with major and minor semiaxes and orientation as described below:

Line 4

EL1 the major semiaxis of the target error ellipsoid projected onto the T-R plane, in km.

EL2 the minor semiaxis of the target error ellipsoid projected onto the T-R plane, in

ALF, α the angle measured counterclockwise from the T-axis to the major semiaxis direction, in deg $(0 \ge \alpha \ge 180 \text{ deg})$.

The $\Lambda_{\mathbf{X}}^{\boldsymbol{\cdot}}$ matrix used in generating the results for this report is

$$\Lambda_{\hat{\mathbf{X}}} = \begin{pmatrix} 100 \times 10^{-10} & 0 & 0 \\ 0 & 9 \times 10^{-10} & 0 \\ 0 & 0 & .09 \times 10^{-10} \end{pmatrix} \left(\frac{km}{sec}\right)^{2}$$

In all cases LSA >> SSA, so that the information contained in lines 3 and 4 of the printout is very useful in visualizing the error ellipsoid. The general shape of the ellipsoid is a thin elliptical "pancake." When MSA << LSA, the "pancake" degenerates to approach a pencil shape. By inspecting the "shadow" of the pancake or pencil shape on the T-R plane, its orientation may be visualized.

If it is desired to estimate the flight time T_F , this can easily be done by the relation

$$\sigma_{F} = rac{1}{V_{hn}} \, \sigma_{S}$$

The correlation coefficients between T_F and $\mathbf{B} \cdot \mathbf{T}$ are those given by CST; those between T_F and $\mathbf{B} \cdot \mathbf{R}$ are given by CRS.

IV. CONSTANTS

Constants used in trajectory calculations at the Jet Propulsion Laboratory are given in Ref. 9. For purposes of ready reference those constants used in the calculations contained herein are given below.

Gravitational Constants

1. Sun

 $GM_S = 2.959122083 \times 10^{-4} \text{ au}^3/\text{day}^2$

2. Earth

 $GM_E = 3.986032 \times 10^5 \, \text{km}^3/\text{sec}^2$

Astronomical Unit-to-Kilometer Conversion Factor

 $1 \text{ au} = 149.599 \times 10^6 \text{ km}$

Earth's Rotation Rate

 $\omega_E = 4.1780742 \times 10^{-3} \text{ deg/sec}$

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Earth-Venus Trajectories, 1967

Launch date interval: June 29 to August 7, 1967

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ARRIVAL DATE SEP 7 1967

LAUNCH DATE JUN 29 1967

DISTANCE 170.745 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 24.469 GAL -4.48 AZL 93.56 MCA 72.15 SMA 115.75 ECC .32252 INC 3.5631 VI 29.294
RP 108.79 LAP -3.39 LOP 348.70 VP 35.962 GAP -18.51 AZP 91.09 TAL 189.53 TAP 261.68 RCA 78.42 APO 153.08 V2 34.834
RC 44.099 GL -15.90 GP -3.71 ZAL 110.75 ZAP 5.27 ETS 135.03 ZAE 157.32 ETE 21.38 ZAC 93.76 ETC 13.68 CLP 3.75 PLANETOCENTRIC CONTC C3 30.614 VHL 5.533 DLA -8.75 RAL 160.01 RAD 6568.2 VEL 12.328 PTH 2.22 VMP 11.319 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 26.66 4 42 17 2044.08 14 27 52 5237.77 5 59 22 1795.40 15 53 28 4961.68 114.24 5 16 21 1444.1 -11 .70 -15.10 30.97 90.00 79.92 15 55 10 4637.8 235.91 31.75 90.00 26.60 1195.4 -12.73 26.09 6 29 18 115.42 100.00 -16.29 12.11 78.77 17 16 10 4361.7 26.05 100.00 27.89 215.34 31.48 118.69 7 24 47 75.57 18 30 3 -15.45 349.66 1012.1 110.00 6 57 55 1612.10 17 11 25 4717.75 -19.43 356.51 24.41 4117.7 29.03 110.00 31.33 195.91 30.5A MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 394.1 SR 390.7 SS 301.4 CRT -.8463 CRS -.9737 CST .9393 LSA 612.0 MSA 154.8 SSA 18.7 SGT 743.8 SGR 426.2 SG3 73.9 RRT -.0724 RRF .0805 RTF -.6662 .2940 BAU .1252 TOE .3433 TRA -.5407 TC3 ROE -.3748 RRA -.1424 RC3 .0846 FAU .02533 SGB 857.2 R23 -.0089 R13 .6670 SG1 744.7 SG2 424.5 THA 176.48 FOE -.2953 FRA .0967 FC3 -.7164 BSP 2019 BDE .5082 BRA .5592 BC3 .3059 FSP -171 ELI 533.2 EL2 153.8 ALF 135.30 ARRIVAL DATE SEP 9 1967 LAUNCH DATE JUN 29 1967 FLIGHT TIME 72.00 **DISTANCE 177.467** HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 24.766 GAL -4.50 AZL 93.49 MCA 75.32 SMA 117.24 ECC .30645 INC 3.4928 V1 29.294
RP 108.76 LAP -3.38 LOP 351.88 VP 36.173 GAP -17.37 AZP 90.89 TAL 190.33 TAP 265.65 RCA 81.32 APO 153.17 V2 34.842
RC 44.820 GL -16.56 GP -3.92 ZAL 112.18 ZAP 4.29 ETS 113.74 ZAE 155.46 ETE 18.87 ZAC 92.68 ETC 13.66 CLP 1.76 PLANETOCENTRIC CONIC C3 27.862 VHL 5.278 DLA -8.77 RAL 158.35 RAD 6568.1 VEL 12.216 PTH 2.20 VHP 10.675 DPA 2.03 RAP 173.91 ECC 1.4585 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 35 47 2019.94 14 21 5 5214.76 5 52 51 1771.29 15 46 42 4938.64 6 51 22 1588.05 17 4 40 4694.64 5 9 27 23.49 -10.98 22.53 1419.9 90.00 -14.42 29.52 114.64 15 48 O 226.06 90.00 26.32 234.29 28.33 79.15 4614.A 24.55 1171.3 3.73 100.00 -15.58 10.67 22.92 115.84 6 22 22 -11.97 77.96 17 9 0 119.19 7 17 50 205.43 100.00 27.57 213.70 28.05 4338.6 25.63 988.1 -14.61 348.30 110.00 -18.64 355.10 21.25 119.19 74.65 18 22 54 185.87 110.00 30.92 194.23 27.11 4094.6 28.51 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 408.1 SR 393.8 SS 315.4

CRT -.8563 CRS -.9792 CST .9362

LSA 630.1 MSA 153.9 SSA 19.7

EL1 546.4 EL2 151.9 ALF 136.20 SGT 771.4 SGR 428.5 SG3 82.6 RRT -.0816 RRF .0934 RTF -.6824 TDE .3418 TRA -.5146 TC3 .3519 BAU .1351 RDE -.3604 RRA -.1348 RC3 .0879 FAU .02712 FOE -.3132 FRA .0750 FC3 -.8428 BSP 2092 BOE .4967 BRA .5319 BC3 .3628 FSP -194 SG8 882.4 R23 -.0132 R13 .6833 SG1 772.6 SG2 426.4 THA 176.26 ARRIVAL DATE SEP 11 1967 FLIGHT TIME 74.00 LAUNCH DATE JUN 29 1967 DISTANCE 184.203 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.036 GAL -4.54 AZL 93.42 MCA 78.49 SMA 118.66 ECC .29174 INC 3.4244 VI 29.294
RP 108.74 LAP -3.36 LOP 355.06 VP 36.367 GAP -16.29 AZP 90.68 TAL 191.19 TAP Z69.68 RCA 84.04 APO 153.28 V2 34.851
RC 45.690 GL -17.16 GP -4.15 ZAL 113.69 ZAP 4.16 ETS 85.61 ZAE 153.75 ETE 16.67 ZAC 91.64 ETC 13.65 CLP -.28 PLANETOCENTRIC CONIC C3 25.534 VHL 5.053 DLA -8.71 RAL 156.62 RAD 6568.0 VEL 12.121 PTH 2.17 VHP 10.062 DPA 1.36 RAP 174.86 ECC 1.4202 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 28 25 2000.18 14 14 39 5191.22 5 45 31 1751.43 15 40 14 4915.21 6 44 7 1567.97 16 58 8 4671.43 -10.38 114.94 5 1 45 78.38 15 41 10 20.38 1400.2 114.94 21.39 -13.86 28.34 90.00 224.46 26.00 232.64 24.97 4591.2 24.14 90.00 -11.35 2.60 9.50 19.82 116.17 6 14 43 1151.4 100.00 -14.98 212.04 77.16 17 2 9 203.84 100.00 27.23 24.67 4315.2 25.18 119,58 7 10 15 73,75 18 15 59 -13.89 27.97 -17.97 353.93 18.18 968.0 347.18 110.00 4071.4 184.28 30.49 192.56 23.70 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TDE .3427 TRA -.4866 TC3 .4146 BAU .1448 RDE -.3475 RRA -.1280 RC3 .0895 FAU .02918 FDE -.3330 FRA .0487 FC3 -.9893 BSP 2151 BOE .4880 BRA .5032 BC3 .4242 FSP -222 SCT 798.9 SCR 430.1 SC3 92.5 RRT -.0967 RRF .1089 RTF -.6981 SCB 907.3 R23 -.0144 R13 .6992 ST 423.3 SR 396.4 SS 329.6 CRT -.8681 CRS -.9842 CST .9340 LSA 649.1 MSA 152.2 SSA 20.7 EL1 560.6 EL2 148.6 ALF 137.16 SG1 800.4 SG2 427.2 THA 175.83 LAUNCH DATE JUN 29 1967 FLIGHT TIME 76.00 ARRIVAL DATE SEP 13 1967 DISTANCE 190.949 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.283 GAL -4.59 AZL 93.36 MCA 81.66 SMA 119.99 ECC .27833 INC 3.3575 V1 29.294
RP 108.71 LAP -3.32 LOP 358.24 VP 36.547 GAP -15.26 AZP 90.49 TAL 192.11 TAP 273.77 RCA 86.59 APO 153.39 VZ 34.860
RC 46.700 GL -17.70 GP -4.41 ZAL 115.26 ZAP 5.00 ETS 61.09 ZAE 152.20 ETE 14.73 ZAC 90.65 ETC 13.66 CLP -2.37 PLANETOCENTRIC CONIC C3 23.568 VHL 4.855 DLA -8.58 RAL 154.85 RAD 6568.0 VEL 12.039 PTH 2.15 VMP 9.478 DPA .69 RAP 175.74 ECC 1.3879 LNCH AZHTH LNCH TIME L-I TIME 90.00 4 20 19 1984.79 90.00 14 8 39 5167.25 100.00 5 37 30 1735.81 INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 17.37 -9.91 1384.8 -13.41 27.43 115.17 4 53 24 20.50 23.70 25.66 230.96 21.69 77.61 15 34 46 4567.2 222.84 6 6 26 1135.8 -10.85 1.70 -14.51 8.58 16.83 116.42 16 55 41 210.37 21.38 76.35 4291.5 24.71 202.23 100.00 15 34 9 4891.46 26.86 7 2 6 18 9 22 6 36 15 1551.85 16 51 54 4648.18 -17.42 353.00 119.88 951.9 -13.32 346.29 15.21 110.00 30.04 190.90 20.38 72.86 4048.2 27.40 182.71 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 437.3 SR 398.8 SS 344.2 CRT -.8806 CR6 -.9885 CST .9322 LSA 667.7 MSA 149.8 SSA 21.7 SCT 828.4 SGR 431.1 SG3 103.7 RRT -.1134 RRF .1275 RTF -.7199 SGB 933.9 R23 -.0163 R13 .7212 TOE .3436 TRA -.4556 TC3 .4899 BAU .1569 ROE -.3359 RRA -.1220 RC3 .0889 FAU .03154 FOE -.3550 FRA .0171 FC3-1.1586 BSP 2356 BOE .4805 BRA .4716 BC3 .4979 FSP -255 EL1 574.1 EL2 144.0 ALF 137.99

FLIGHT TIME 70.00

SG1 830.4 SG2 427.3 THA 175.40

LAUNCH DATE JUN 29 1967

ARRIVAL CATE SEP 15 1967

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DISTANCE 197.700
   MELIOCENTRIC CONIC
    RL 152.08 LAL "-.00 LOL 276.59 VL 25.508 GAL -4.64 A7L 93.29 MCA 84.84 SMA 121.24 ECC .26616 INC 3.2916 V1 29.294
RP 108.68 LAP -3.28 LOP 1.42 VP 36.712 GAP -14.27 A7P 90.30 TAL 193.07 TAP 277.90 RCA 88.97 APO 153.51 V2 34.870
RC 47.841 GL -18.17 GP -4.69 7AL 116.87 7AP 6.52 ETS 45.31 7AE 150.84 ETE 12.96 7AC 89.74 ETC 13.68 CLP -4.53
   PLANETOCENTRIC CONTC
    C3 21.909 VHL 4.681 DLA -8.37 RAL 153.07 RAD 6567.9 VEL 11.970 PTH 2.13 VHP 8.924 DPA
                                                                                                                                             .02 RAP 176.55 ECC 1.3606
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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115.34 4 44 52

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116.60 5 57 38

75.56 16 49 41

120.11 6 53 33

72.00 18 3 8
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15 28 33 4867.49
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16 46 3 4624.97
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26.82
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       110.00
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       110.00
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                                                                      189.27
                                                                                        17.18
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 854.5 SCR 431.4 SC3 116.3

RRT -.1310 RRF .1483 RTF -.7345

SGB 957.2 R23 -.0203 R13 .7361

SGI 857.0 SG2 426.5 THA 174.96
                                                                                                                                  ST 447.9 SR 400.9 SS 357.7
CRT -.8906 CRS -.9918 CST .9289
LSA 683.2 MSA 148.3 SSA 22.8
    TOE .3420 TRA -.4271 TC3 .5608 BAU .1662
    RDE -.3256 RRA -.1168 RC3 .0857 FAU .03418
    FDE -.3777 FRA -.0188 FC3-1.3505 BSP 2458
BDE .4722 BRA .4428 BC3 .5673 FSP -291
                                                                                                                                   EL1 584.7 EL2 139.7 ALF 138.56
                                                                                                                                               ARRIVAL DATE SEP 17 1967
                                                                               FLIGHT TIME 80.00
LAUNCH DATE JUN 29 1967
                                                                               DISTANCE 204.452
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.712 GAL -4.71 AZL 93.23 MCA 88.01 SMA 122.41 ECC .25515 INC 3.2264 V1 29.294
RP 108.64 LAP -3.22 LOP 4.60 VP 36.864 GAP -13.33 AZP 90.11 TAL 194.06 TAP 282.07 RCA 91.18 APO 153.64 V2 34.881
RC 49.103 GL -18.57 GP -5.01 ZAL 118.50 ZAP 8.40 ETS 35.74 ZAE 149.70 ETE 11.33 ZAC 88.90 ETC 13.71 CLP -6.75
   PLANETOCENTRIC CONIC
    C3 20.509 VHL 4.529 DLA -8.10 RAL 151.30 RAD 6567.8 VEL 11.912 PTH 2.12 VHP 8.396 DPA -.66 RAP 177.29 ECC 1.3375 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 2 27 1966.43 -12.88 26.35 11.73 115.44 4 35 13 1366.4 -9.35 19.45
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5 19 52 1716.64
15 23 29 4843.39
6 19 11 1530.93
16 40 40 4601.87
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        90.00
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       110.00
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       110.00
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                                                                      187.65
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                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 879.9 SGR 431.4 SG3 130.6

RRT -.1518 RRF .1728 RTF -.7482

SGB 980.0 R23 -.0249 R13 .7502

SG1 883.1 SG2 424.9 THA 174.46
                                                                                                                            ST 456.9 SR 402.6 SS 371.2

CRT -.9000 CRS -.9941 CST ..9253

LSA 697.4 MSA 147.2 SSA 23.8

EL1 593.8 EL2 135.0 ALF 139.01
    TDE .3400 TRA -.3990 TC3 .6335 BAU .1751 RDE -.3164 RRA -.1125 RC3 .0794 FAU .03718
    FDE -.4026 FRA -.0602 FC3-1.5695 BSP 2562
BDE .4645 BRA .4146 BC3 .6384 FSP -333
                                                                                                                                               ARRIVAL DATE SEP 19 1967
                                                                              FLIGHT TIME 82.00
LAUNCH DATE JUN 29 1967
                                                                              DISTANCE 211.202
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.897 GAL -4.78 AZL 93.16 MCA 91.19 SMA 123.50 ECC .24524 INC 3.1614 VI 29.294 RP 108.61 LAP -3.16 LOP 7.78 VP 37.003 GAP -12.42 AZP 89.93 TAL 195.07 TAP 286.27 RCA 93.21 APO 153.78 V2 34.891 RC 50.476 GL -18.89 GP -5.37 ZAL 120.12 ZAP 10.52 ETS 29.67 ZAE 148.78 ETE 9.78 ZAC 88.15 ETC 13.75 CLP -9.06
   PLANETOCENTRIC CONIC
    C3 19.330 VHL 4.397 DLA -7.77 RAL 149.57 RAD 6567.8 VEL 11.862 PTH 2.10 VHP 7.895 DPA -1.34 RAP 177.93 ECC 1.3181
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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74.01 16 39 19
120.36 6 35 41
70.35 17 52 6
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3978.9 25.61
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       110.00
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                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 903.0 SGR 431.0 SG3 146.8
RRT -.1758 RRF .2012 RTF -.7603
SG8 1000.6 R23 -.0306 R13 .7628
SG1 907.0 SG2 422.4 THA 173.87
                                                                                                                                 ST 463.2 SR 404.1 SS 384.1
CRT -.9085 CRS -.9955 CST .9211
LSA 709.5 MSA 146.5 SSA 24.8
    TOE .3369 TRA -.3713 TC3 .7048 BAU .1830

ROE -.3083 RRA -.1091 RC3 .0696 FAU .04059

FOE -.4293 FRA -.1083 FC3-1.8180 BSP 2654

BOE .4567 BRA .3870 BC3 .7083 FSP -380
                                                                                                                                  EL1 600.8 EL2 130.2 ALF 139.28
                                                                               FLIGHT TIME 84.00
                                                                                                                                               ARRIVAL DATE SEP 21 1967
LAUNCH DATE JUN 29 1967
                                                                              DISTANCE 217.946
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.064 GAL -4.84 AZL 93.10 HCA 94.37 SMA 124.50 ECC .23635 INC 3.0961 V1 29.294
RP 108.38 LAP -3.09 LOP 10.97 VP 37.131 GAP -11.56 AZP 89.76 TAL 196.09 TAP 290.47 RCA 95.08 APO 153.93 V2 34.903
RC 51.950 GL -19.12 GP -5.77 ZAL 121.72 ZAP 12.82 ETS 25.58 ZAE 148.09 ETE 8.29 ZAC 87.50 ETC 13.81 CLP -11.47
   PLANETOCENTRIC CONIC
    C3 18.335 VHL 4.282 DLA -7.39 RAL 147.90 RAD 6567.7 VEL 11.820 PTH 2.09 VHP 7.420 DPA -2.02 RAP 178.47 ECC 1.3017
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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74.59 15 14 44
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                                     4556.21
       110.00
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                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 923.3 SGR 430.6 SG3 165.2
RRT -.2034 RRF .2341 RTF -.7707
                                                                                                                           ST 466.7 SR 405.3 SS 396.6
CRT -.9160 CRS -.9959 CST .9161
LSA 719.2 MSA 146.7 SSA 25.7
EL1 605.3 EL2 125.4 ALF 139.39
    TOE .3326 TRA -.3445 TC3 .7731 BAU .1900 ROE -.3012 RRA -.1066 RC3 .0558 FAU .04446
    FOE -.4579 FRA -.1632 FC3-2.0995 BSP 2737
BOE .4487 BRA .3606 BC3 .7751 FSP -435
                                                                          SGB 1018.7 R23 -.0374 R13 .7739
                                                                         SG1 928.5 SG2 419.2 THA 173.19
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FLIGHT TIME 78.00

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ARRIVAL DATE SEP 23 1967
LAUNCH DATE JUN 29 1967
                                                                        FLIGHT TIME 86.00
   HELIOCENTRIC CONIC
                                                                        DISTANCE 224.682
    RL 152.08 LAL -.00 LOL 276.59 VL 26.214 GAL -4.91 A7L 93.03 MCA 97.56 SMA 125.43 ECC .22840 INC 3.0303 V1 29.294
RP 108.54 LAP -3.00 LOP 14.16 VP 37.247 GAP -10.73 AZP 89.60 TAL 197.11 TAP 294.66 RCA 96.78 APO 154.08 VZ 34.914
RC 53.515 GL -19.28 GP -6.22 ZAL 123.28 ZAP 15.28 ETS 22.68 ZAE 147.65 ETE 6.80 ZAC 86.97 ETC 13.87 CLP -13.99
   PLANETOCENTRIC CONIC
    C3 17.494 VHL 4.183 OLA -6.95 RAL 146.32 RAD 6567.7 VEL 11.785 PTH 2.08 VHP 6.970 DPA -2.70 RAP 178.90 ECC 1.2879
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.45. 4 6 22

73.88 15 11 20

116.76 5 20 12

72.54 16 31 27

120.38 6 17 41

68.82 17 43 20
                                                                                                                        1365.7
                                                                            4.46
                                                                                                                                       -9.33
        90.00
                     3 33 37 1965.71
                                                  -12.86
                                                                 26.30
                                                                                                                                                          19.41
        90.00
                   13 47 16
                                  5044.17
                                                   23.60
                                                                222.54
                                                                                 7.39
                                                                                                                           4444.2
                                                                                                                                            21.16
                                                                                                                                                         214.72
       100.00
                                                                                                                                         -10.15
                    4 51 38 1714.02
                                                  -13.85
                                                                  7.30
                                                                                 3.96
                                                                                                                          1114.0
       100.00
                   15 11 56
                                 4771.10
                                                   24.65
                                                                202.11
                                                                                 7.04
                                                                                                                           4171.1
                                                                                                                                          22.03
                                                                                                                                                         194.29
                   5 52 17 1524.13
16 27 46 4533.75
       110.00
                                                                                                                            924.1
                                                                                                                                                         344.76
                                                  -16.48
                                                                351.41
                                                                                 2.48
                                                                                                                                         -12.32
                                                                                                                                                         175.22
                                                                                                                          3933.8
       110.00
                                                   27.48
                                                                182.99
                                                                                  5.94
                                                                                                                                         24.35
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TOE .3272 TRA -.3187 TC3 .8370 BAU .1960
ROE -.2949 RRA -.1052 RC3 .0374 FAU .04887
                                                                   SGT 940.5 SGR 430.4 SG3 186.1
RRT -.2355 RRF .2727 RTF -.7798
SGB 1034.3 R23 -.0458 R13 .7838
                                                                                                                       ST 467.8 SR 406.3 SS 409.2
CRT -.9225 CRS -.9953 CST .9105
LSA 727.2 MSA 147.6 SSA 26.5
    FDE -.4893 FRA -.2261 FC3-2.4184 BSP 2813
BDE .4405 BRA .3356 BC3 .8378 FSP -497
                                                                    SG1 947.3 SG2 415.3 THA 172.38
                                                                                                                        EL1 607.7 EL2 120.7 ALF 139.35
                                                                                                                                   ARRIVAL DATE SEP 25 1967
                                                                        FLIGHT TIME 88.00
  HELIOCENTRIC CONIC
                                                                        DISTANCE 231.406
   RL 152.08 LAL -.00 LOL 276.59 VL 26.349 GAL -4.98 A7L 92.96 MCA 100.74 SMA 126.27 ECC .22134 INC 2.9635 V1 29.294 RP 108.50 LAP -2.91 LOP 17.34 VP 37.354 GAP -9.94 AZP 89.45 TAL 198.10 TAP 298.84 RCA 98.32 APO 154.22 V2 34.926 RC 55.163 GL -19.35 GP -6.72 ZAL 124.77 ZAP 17.90 ETS 20.55 ZAE 147.47 ETE 5.29 ZAC .86.57 ETC 13.93 CLP -16.63
   PLANETOCENTRIC CONIC
    C3 16.782 VHL 4.097 DLA -6.48 RAL 144.82 RAD 6567.7 VEL 11.754 PTH
                                                                                                  2.07 VHP 6.545 DPA
                                                                                                                               -3.38 RAP 179.18 ECC 1.2762
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             115.37 3.56.52
73.18 15 8.37
116.69 5.10.55
71.84 16.28.30
120.33 6.8.55
68.10 17.39.53
                  3 24 1 1971.17
13 44 58 5019.54
                                                  -13.02
       90.00
                                                                 26.63
                                                                                 2.40
                                                                                                                         1371.2
                                                                                                                                            20.60
        90.00
                                                  23.12
                                                                220.90
                                                                                  5.06
                                                                                                                            4419.5
                  4 42 16 1718.71
15 9 23 4747.24
5 43 28 1527.13
16 24 41 4511.58
                                                                  7.57
                                                                                                                            1118.7
       100.00
                                                  -13.99
                                                                                 1.91
                                                                                                                                          -10.30
                                                                200.51
                                                                                                                            4147.2
                                                                                                                                                          192.76
      100.00
                                                  24.16
                                                                                  4.71
                                                                                                                                          21.45
                                                                                                                                          -12.43
      110.00
                                                  -16.58
                                                                351.58
                                                                                   .45
                                                                                                                            927.1
                                                                                                                                                         344.93
                                                                                                                         3911.6
                                                                                                                                         23.71
      110.00
                                                  26.92
                                                                181.50
                                                                                 3.59
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
    TDE .3202 TRA -.2947 TC3 .8933 BAU .2004
RDE -.2893 RRA -.1048 RC3 .0140 FAU .05386
                                                                    SGT 953.0 SGR 430.8 SG3 209.7
RRT -.2717 RRF .3167 RTF -.7867
                                                                                                                       ST 465.3 SR 407.0 SS 421.0
CRT -.9276 CRS -.9938 CST .9038
LSA 732.3 MSA 149.5 SSA 27.1
    FDE -.5225 FRA -.2972 FC3-2.7787 BSP 2873
BDE .4315 BRA .3128 BC3 .8934 FSP -569
                                                                   SGB 1045.9 R23 -.0562 R13 .7920
                                                                    SG1 961.8 SG2 410.8 THA 171.42
                                                                                                                       EL1 607.1 EL2 116.5 ALF 139.12
                                                                                                                                  ARRIVAL DATE SEP 27 1967
LAUNCH DATE JUN 29 1967
                                                                        FLIGHT TIME 90.00
                                                                        DISTANCE 238.117
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.470 GAL -5.04 AZL 92.90 HCA 103.93 SMA 127.04 ECC .21508 INC 2.8951 V1 29.294
RP 108.46 LAP -2.81 LOP 20.53 VP 37.450 GAP -9.17 AZP 89.30 TAL 199.06 TAP 302.99 RCA 99.72 APO 154.37 V2 34.938
RC 56.885 GL -19.34 GP -7.28 ZAL 126.19 ZAP 20.68 ETS 18.92 ZAE 147.55 ETE 3.71 ZAC 86.33 ETC 14.00 CLP -19.41
   PLANETOCENTRIC CONIC
    C3 16.176 VHL 4.022 DLA -5.97 RAL 143.44 RAD 6567.6 VEL 11.729 PTH 2.07 VMP 6.144 DPA -4.06 RAP 179.32 ECC 1.2662
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             115.26 3 47 50
72.51 15 6 36
72.58 5 1 53
                                                                                                                         1378.8
                   3 14 37 1978.83
13 43 20 4995.05
                                                  -13.24
                                                                 27.08
                                                                                  .53
                                                                                                                                                          20.16
                                                  22.63
                                                                219.27
                                                                                 2.93
                                                                                                                           4395.1
                                                                                                                                           20.02
                  4 33 8 1725.56
15 7 31 4723.56
                                                  -14.20
                                                                  7.97
                                                                                  .04
                                                                                                                           1125.6
                                                                                                                                         -10.52
                                                                                               71.16 16 26 14
                                                                                2.57
                                                                                                                                                         191.25
                                                  23.65
                                                                198.94
                                                                                                                           4123.6
                                                                                                                                         20.85
                  5 34 53 1532.18
16 22 14 4489.70
      110.00
                                                  -16.75
                                                                351.87
                                                                              358.61
                                                                                              120.24
                                                                                                          6 0 26
                                                                                                                            932.2
                                                                                                                                       -12.61
23.06
                                                                                                                                                         345.21
                                                                                               67.40 17 37 4
                                                                                 1.43
                                                  26.36
                                                                180.05
                                                                                                                           3889.7
                                                                                                                                                         172.44
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 960.0 SGR 432.5 SG3 236.4
RRT -.3124 RRF .3671 RTF -.7915
SGB 1053.0 R23 -.0693 R13 .7985
                                                                                                                      ST 459.6 SR 407.5 SS 432.5
    TOE .3115 TRA -.2728 TC3 .9403 BAU .2034
    RDE - .2843 RRA - .1056 RC3 - .0150 FAU .05952
                                                                                                                       CRT -.9313 CRS -.9916 CST .8958
LSA 735.1 MSA 152.4 SSA 27.5
    FOE - .5578 FRA - .3774 FC3-3.1853 BSP 2912
    BOE .4217 BRA .2925 BC3 .9404 FSP
                                                                    SG1 971.5 SG2 406.0 THA 170.27
                                                                                                                       EL1 603.7 EL2 113.0 ALF 138.69
                                                     -650
LAUNCH DATE JUN 29 1967
                                                                        FLIGHT TIME 92.00
                                                                                                                                  ARRIVAL DATE SEP 29 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 244.811
   RL 152.08 LAL -.00 LOL 276.59 VL 26.577 GAL -5.09 AZL 92.82 MCA 107.12 SMA 127.74 ECC .20956 INC 2.8249 VI 29.294
RP 108.43 LAP -2.70 LOP 23.73 VP 37.538 GAP -8.44 AZP 89.17 TAL 199.97 TAP 307.09 RCA 100.97 APO 154.51 V2 34.951
RC 58.673 GL -19.25 GP -7.91 ZAL 127.52 ZAP 23.64 ETS 17.64 ZAE 147.91 ETE 2.01 ZAC 86.25 ETC 14.06 CLP -22.35
  PLANETOCENTRIC CONIC
   C3 15.657 VHL 3.957 DLA -5.43 RAL 142.18 RAD 6567.6 VEL 11.706 PTH 2.06 VMP 5.768 DPA -4.74 RAP 179.28 ECC 1.2577
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            INJ AZMTH INJ TIME

115.12 3 38 38

71.86 15 5 15

116.45 4 53 11

70.51 16 24 39

120.12 5 52 18

66.74 17 34 55
                                                                                                                         1388.4
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                                                                            358,85
                                                                                                                                                          20.71
       90.00
                    3 5 30 1988.38
                                                  -13.52
                                                                 27.64
       90.00
                  13 42 25
                                  4970.70
                                                   22.12
                                                                217.66
                                                                                .99
                                                                                                                            4370.7
                                                                                                                                            19.44
       100.00
                    4 24 17 1734.25
                                                  -14.47
                                                                  8.48
                                                                               358.37
                                                                                                                           1134.3
                                                                                                                                          -10.80
                                                                                                                           4100.1
                                                                                                                                            20.25
      100.00
                  15 6 19
                                  4700.06
                                                   23.12
                                                                197.39
                                                                                  .62
                                                                                                                                                         189.77
                  5 26 39 1539.00
16 20 27 4468.08
                                                                               356.96
                                                                                                                            939.0
      110.00
                                                  -16.99
                                                                352.26
                                                                                                                                          -12.86
                                                                                                                                                         345.58
      110.00
                                                   25.79
                                                                178.63
                                                                               359.48
                                                                                                                            3868.1
                                                                                                                                           22.41
                                                                                                                                                         171.10
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                   SCT 963.9 SGR 436.4 SC3 267.1
RRT -.3603 RRF .4251 RTF -.7958
SGB 1058.0 R23 -.0838 R13 .8051
    TOE .3031 TRA -.2518 TC3 .9807 BAU .2056
                                                                                                                       ST 453.0 SR 408.0 SS 445.2
                                                                                                                     CRT -.9345 CRS -.9888 CST .8877
LSA 738.1 MSA 156.0 SSA 27.7
    ROE -.2799 RRA -.1078 RC3 -.0506 FAU .06600
   FOE -.5976 FRA -.4694 FC3-3.6495 BSP 2977
BOE .4126 BRA .2739 BC3 .9820 FSP -747
                                                                                                                     EL1 599.7 EL2 109.7 ALF 138.20
                                                                   SG1 979.2 SG2 400.7 THA 168.84
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ARRIVAL DATE OCT 1 1967

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LAUNCH DATE JUN 29 1967
                                                                           DISTANCE 251.488
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.672 GAL -5.14 A7L 92.75 MCA 110.31 SMA 128.37 ECC .20472 INC 2.7521 VI 29.294
RP 108.39 LAP -2.58 LOP 26.92 VP 37.617 GAP -7.74 A7P 89.04 TAL 200.83 TAP 311.14 RCA 102.09 APO 154.64 V2 34.964
RC 60.521 GL -19.09 GP -8.63 7AL 128.77 ZAP 26.80 ETS 16.60 ZAE 148.53 ETE .12 ZAC 86.37 ETC 14.11 CLP -25.47
   PLANETOCENTRIC CONIC
    C3 15.208 VHL 3.900 DLA -4.87 RAL 141.06 RAD 6567.6 VEL 11.687 PTH 2.06 VHP 5.416 DPA -5.42 RAP 179.05 ECC 1.2503
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 56 44 1999.49 -13.84 28.30 357.35 114.95 3 30 4 1399.5 -10.36 21.35 90.00 13 42 10 4946.46 21.60 216.08 359.24 71.23 15 4 37 4346.5 18.84 208.49
                                                                                                               4 44 52
                                 1744.48
4676.70
                                                                                                                                   1144.5
                                                                                                                                                -11.12
                                                                                                                                                                    2.20
       100.00
                      4 15 47
                                                    -14.77
                                                                      9.09
                                                                                   356.89
                                                                                                    116.28
                                                                                                     69.87 16 23 45
                                                                                                                                   4076.7
                                                                                                                                                  19.64
                   15 5 48
                                                    22.58
                                                                    195.87
                                                                                   358.87
                                                                                                     119.97 5 44 34
66.10 17 33 25
                                                                                                                                   947.3
                                                                                                                                                   -13.15
                                 1547.28
4446.67
                                                                                                    119.97
       110.00
                      5 18 47
                                                    -17.27
                                                                    352.73
                                                                                   355.50
                                                                                                                                   3846.7
                                                                                                                                                                  169.79
       110.00
                  16 19 18
                                                    25.20
                                                                    177.24
                                                                                   357 71
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 956.5 SGR 443.2 SG3 301.0
RRT - 4084 RRF 487 RTF - 7949
SGB 1054.2 R23 - 1047 R13 .8080
SGI 977.0 SG2 396.1 THA 167.13
                                                                                                                              ST 440.6 SR 408.3 SS 455.8
CRT -.9349 CRS -.9854 CST .8762
LSA 736.2 MSA 160.8 SSA 27.8
    TOE .2909 TRA -.2356 TC3 1.0026 BAU .2047
    ROE - .2758 RRA - .1112 RC3 - .0932 FAU .07318
    FOE -.6370 FRA -.5698 FC3-4.1662 BSP 2974
                                                                                                                               EL1 590.9 EL2 108.1 ALF 137.33
    BOE .4009 BRA .2605 BC3 1.0070 FSP
                                                          -852
                                                                                                                                           ARRIVAL DATE OCT 3 1967
                                                                             FLIGHT TIME 96.00
LAUNCH DATE JUN 29 1967
                                                                            DISTANCE 258.146
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.756 GAL -5.19 AZL 92.68 HCA 113.51 SHA 128.92 ECC .20048 INC 2.6761 V1 29.294
RP 108.35 LAP -2.45 LOP 30.12 VP 37.688 GAP -7.06 AZP 88.93 TAL 201.62 TAP 315.13 RCA 103.08 APO 154.77 V2 34.977
RC 62.420 GL -18.86 GP -9.43 ZAL 129.91 ZAP 30.17 ETS 15.73 ZAE 149.43 ETE 357.97 ZAC 86.69 ETC 14.14 CLP -28.79
   PLANETOCENTRIC CONIC
    C3 14.813 VHL 3.849 DLA -4.29 RAL 140.06 RAD 6567.6 VEL 11.670 PTH 2.05 VHP 5.088 DPA -6.10 RAP 178.61 ECC 1.2438 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 356.05
                                                                                                                                 1411.9
                                                                                                   114.76
                                                                                                                  3 21 54
                                                                                                                                                                    22.07
                      2 48 22 2011.93
                                                     -14.19
                                                                     29.04
                                                                                                               15 4 39
                                                                                                      70.62
                                                                                                                                    4322.3
                                                                                    357.68
                    13 42 37
                                  4922.27
                                                      21.06
                                                                    214.51
                                                                                                                  4 36 58
                     4 7 42 1756.02
15 5 58 4653.42
                                                                                                                                   1156.0
                                                                                                                                                                     2.86
                                                                                    355.59
                                                                                                     116.10
                                                    -15.12
                                                                      9.77
                                                                                                      69.27 16 23 32
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                   15 5 58
                                                    22.03
                                                                     194.36
                                                                                    357.31
                                                                                                                  5 37 17
                                                                                                                                                                   346.56
                                                                                                     119.79
                                                                                                                                    956.8
                                                                                                                                                  -13.50
                     5 11 20 1556.80
                                                    -17.59
                                                                     353.28
                                                                                    354.23
                                                                                                              17 32 35
                                                                                                                                                 21.09
                                                                                                                                    3825.4
                                                                                    356.13
                                                                                                      65.49
                    16 18 50
                                    4425.40
                                                     24.61
                                                                    175.87
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 425.2 SR 408.5 SS 466.1

CRT -.9330 CRS -.9819 CST .8622

LSA 732.4 MSA 166.4 SSA 27.7
                                                                       SGT 940.6 SGR 454.4 SG3 339.1
RRT -.4577 RRF .5553 RTF -.7901
SGB 1044.6 R23 -.1313 R13 .8090
     TOE .2772 TRA -.2232 TC3 1.0091 BAU .2019
     ROE -.2722 RRA -.1160 RC3 -.1441 FAU .08123
    FOE -.6782 FRA -.6803 FC3-4.7470 BSP 2949
BDE .3885 BRA .2516 BC3 1.0194 FSP -971
                                                                         SG1 968.0 SG2 392.5 THA 165.01
                                                                                                                               FL1 579.7 EL2 107.8 ALF 136.23
                                                                                                                                          ARRIVAL DATE OCT 5 1967
                                                                             FLIGHT TIME 98.00
LAUNCH DATE JUN 29 1967
                                                                            DISTANCE 264.782
    RL 152.08 LAL -.00 LOL 276.59 VL 26.828 GAL -5.22 AZL 92.60 MCA 116.70 SMA 129.41 ECC .19679 INC 2.5964 V1 29.294
RP 108.51 LAP -2.32 LOP 33.31 VP 37.752 GAP -6.41 AZP 88.83 TAL 202.33 TAP 319.04 RCA 103.95 APO 154.88 V2 34.990
RC 64.367 GL -18.56 GP -10.33 ZAL 130.96 ZAP 33.76 ETS 14.97 ZAE 150.60 ETE 355.43 ZAC 87.25 ETC 14.14 CLP -32.32
   PLANETOCENTRIC CONIC
    C3 14.462 VHL 3.803 DLA -3.68 RAL 139.21 RAD 6567.6 VEL 11.655 PTH 2.05 VHP 4.786 DPA -6.78 RAP 177.92 ECC 1.2380
     ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 40 25 2025.54
13 43 46 4897.99
4 0 2 1768.69
15 6 50 4630.07
5 4 20 1567.41
16 19 1 4404.12
                                                                                                                                               -11.15
                                                                                 354.92
                                                                                                  114.55
                                                                                                                                                                   22.86
                                                                                                                  3 14 11
                                                                                                                                  1425.5
         90.00
                                                    -14.58
                                                                     29.85
                                                                                                    70.03 15 5 24
115.68 4 29 31
68.67 16 24 0
                                                                                                                                    4298.0
                                                                                                                                                   17.60
                                                                                                                                                                  205.48
                                                      20.50
                                                                     212.94
                                                                                   356.31
         90.00
                                                                                                                                                                   3.58
                                                                                                                                   1168.7
                                                                                                                                                  -11.89
                                                    -15.50
                                                                     10.52
                                                                                   354.48
                                                                                                                                   4030.1
                                                                                                                                                   18.37
                                                                                                                                                                  185.42
                                                      21.46
                                                                     192.86
                                                                                   355.92
       100.00
                                                                                                                 5 30 28
                                                                                                                                    967.4
                                                                                                                                                                  347.15
                                                                                                              5 30 ac.
17 32 25
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                                                     -17.95
                                                                     353.90
                                                                                   353.13
       110.00
                                                                                                                                                  20.42
                                                                                                                                                                  167.21
                                                                                                                                   3804.1
                                                                                                     64.90
                                                      24.00
                                                                     174.52
                                                                                   354.74
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY.
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 917.0 SCR 471.9 SC3 381.9
RRT -.5070 RRF .6259 RTF -.7819
SCB 1031.3 R23 -.1627 R13 .8098
                                                                                                                              ST 408.3 SR 408.9 SS 476.9
     TOE .2629 TRA -.2137 TC3 1.0013 BAU .1976
                                                                                                                               CRT -.9293 CR5 -.9782 CST .8458
LSA 728.6 MSA 172.6 SSA 27.5
     ROE -. 2689 RRA -. 1227 RC3 -. 2050 FAU .09025
     FOE -.7218 FRA -.8029 FC3-5.4027 BSP 2932
BOE .3760 BRA .2464 BC3 1.0221 FSP -1110
                                                                         SG1 954.4 SG2 390.8 THA 162.31
                                                                                                                               EL1 567.6 EL2 108.7 ALF 134.95
                                                                                                                                           ARRIVAL DATE OCT 7 1967
                                                                             FLIGHT TIME 100.00
LAUNCH DATE JUN 29 1967
                                                                             01STANCE 271.398
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.891 GAL -5.25 AZL 92.51 HCA 119.90 SMA 129.84 ECC .19359 INC 2.5119 VI 29.294 RP 108.27 LAP -2.18 LOP 36.51 VP 37.809 GAP -5.78 AZP 88.75 TAL 202.96 TAP 322.86 RCA 104.70 APO 154.98 V2 35.003 RC 66.356 GL -18.18 GP -11.35 ZAL 131.90 ZAP 37.61 ETS 14.27 ZAE 152.02 ETE 352.37 ZAC 88.05 ETC 14.10 CLP -36.10
   PLANETOCENTRIC CONIC
     C3 14.143 VHL 3.761 DLA -3.05 RAL 138.50 RAD 6567.6 VEL 11.642 PTH 2.04 VHP 4.509 DPA -7.47 RAP 176.99 ECC 1.2328
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 32 53 2040.20 -14.99 30.73 353.98 114.31 3 6 53 1440.2 -11.58 23.71 90.00 13 45 38 4873.47 19.93 211.38 355.11 69.46 15 6 51 4273.5 16.95 203.97
                                                                                                     115.65
                                                                                                                 4 22 31
                                                                                                                                    1182.4
                                                                                                                                                   -12.32
                                                      -15.90
                                                                     11.33
                                                                                    353.53
        100.00
                      3 52 48
                                   1782.40
                                                                                    354.72
                                                                                                     68.10 16 25 10
119.37 5 24 6
                                                                                                                                                    17.71
                                                                                                                                                                   183.98
                                                                                                                                    4006.5
                   15 8 24 4606.51
4 57 47 1578.98
16 19 54 4382.69
                    15 8 24
                                                     20.87
                                                                     191.36
       100.00
                                                                                                                                     979.0
                                                                                                                                                   -14.29
                                                                                                                                                                   347.80
                                                                     354.57
                                                     -18.34
                                                                                    352.21
        110.00
                                                                                                      64.32 17 32 57
                                                                                                                                    3782.7
                                                                                                                                                   19.73
                                                                                                                                                                   165.93
                                                     23.38
                                                                     173.17
                                                                                    353.52
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 385.7 SR 409.0 SS 483.9

CRT -.9202 CRS -.9745 CST .8221

LSA 719.3 MSA 179.5 SSA 27.3

EL1 550.9 EL2 112.1 ALF 133.17
                                                                       SCT 878.7 SGR 496.6 SG3 428.0
RRT -.5449 RRF .6942 RTF -.7637
SGB 1009.3 R23 -.2043 R13 .8071
     TOE .2447 TRA -.2111 TC3 .9674 BAU .1902
     RDE - .2656 RRA - .1307 RC3 - .2761 FAU . .09997
     FOE -.7607 FRA -.9298 FC3-6.1194 BSP 2843
                                                                        SG1 929.4 SG2 393.7 THA 158.93
     BOE .3611 BRA .2482 BC3 1.0061 FSP -1257
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FLIGHT TIME 94.00

ARRIVAL DATE OCT 9 1967

LAUNCH DATE JUN 29 1967

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CISTANCE 277.990
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.945 GAL -5.27 A7L 92.42 MCA 123.10 SMA 130.21 ECC .19084 INC 2.4218 V1 29.294 RP 108.22 LAP -2.03 LOP 39.71 VP 37.860 GAP -5.18 A7P 88.68 TAL 203.50 TAP 326.61 RCA 105.36 APO 155.06 V2 35.016 RC 68.382 GL -17.74 GP -12.48 TAL 132.74 TAP 41.70 ETS 13.60 TAE 153.66 ETE 348.56 TAC 89.12 ETC 14.00 CLP -40.12
   PLANETOCENTRIC CONIC
    C3 13.847 VML 3.721 DLA -2.40 RAL 137.93 RAD 6567.5 VEL 11.629 PTH 2.04 VMP 4.257 DPA
                                                                                                                                  -8.17 RAP 175.77 ECC 1.2279
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                114.04
                                                                                                              3 0 0
                                                                                                                             1455.9
                                                                                                                                             -12.05
                    2 25 44
13 48 14
                                                                  31.6A
                                                                                 353.20
        90.00
                                   2055.91
                                                   -15.43
                                                                                                  68.89 15 9 3
                                                                                                                               4248.5
        90.00
                                   4848.47
                                                    19.32
                                                                  209.79
                                                                                 354.07
                                                                                                  115.39 4 15 55
67.53 16 27 4
                   3 45 58 1797.11
15 10 42 4582.50
                                                                                                                               1197.1
                                                                                                                                              -12.78
                                                                                 352.76
                                                                                                 115.39
       100.00
                                                   -16.34
                                                                   12.21
                                                                                                                                             17.03
                                                                                 353.68
                                                                                                                               3982.5
       100.00
                                                    20.25
                                                                  189.84
                                                                                                119.12 5 10 .
75 17 34 11
                                                                                                                                             -14.73
19.01
                                                                                                                                991.5
                                                                                                                                                             348.50
       110.00
                    4 51 39 1591.50
16 21 30 4360.88
                                                  -18.75
                                                                  355.30
                                                                                 351.46
                                                                                                                             3760.9
       110.00
                    16 21 30
                                                    22.73
                                                                  171.81
                                                                                 352.47
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 828.2 SCR 530.6 SC3 477.7
RRT - .5677 RRF .7581 RTF - .7336
SCB 983.6 R23 - .2521 R13 .8043
                                                                                                                          ST 360.4 SR 409.1 SS 488.8

CRT -.9052 CRS -.9710 CST .7902

LSA 707.5 MSA 186.9 SSA 27.0
    TOE .2247 TRA -.2139 TC3 .9089 BAU .1810
    RDE -.2623 RRA -.1404 RC3 -.3597 FAU .11041
FDE -.7957 FRA-1.0619 FC3-6.9029 BSP 2730
BDE .3454 BRA .2559 BC3 .9775 FSP -1417
                                                                      SG1 897.2 SG2 403.3 THA 154.51
                                                                                                                          EL1 532.3 EL2 117,7 ALF 131.01
                                                                                                                                      ARRIVAL DATE OCT 11 1967
LAUNCH DATE JUN 29 1967
                                                                          FLIGHT TIME 104,00
                                                                          DISTANCE 284.560
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.991 GAL -5.28 AZL 92.32 MCA 126.31 SMA 130.53 ECC .18848 INC 2.3249 V1 29.294
RP 108.18 LAP -1.87 LOP 42.92 VP 37.904 GAP -4.59 AZP 88.62 TAL 203.95 TAP 330.26 RCA 105.92 APO 155.13 V2 35.029
RC 70.443 GL -17.22 GP -13.75 ZAL 133.49 ZAP 46.07 ETS 12.91 ZAE 155.47 ETE 343.73 ZAC 90.47 ETC 13.82 CLP -44.41
   PLANETOCENTRIC CONIC
                                                                                                    2.04 VHP 4.033 OPA -8.89 RAP 174.27 ECC 1.2233
    C3 13.567 VHL 3.683 OLA -1.71 RAL 137.51 RAD 6567.5 VEL 11.617 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 18 56 2072.75 -15.89 32.70 352.58 113.75 2 53 29 1472.8 -12.55 25.62
                                                                                                 68.32 15 12 2
115.10 4 9 42
66.97 16 29 45
118.84 5 12 39
63.19 17 36 10
                  13 51 39 4822.67
3 39 29 1812.93
15 13 47 4557.73
4 45 54 1605.00
                                                                                                                               4222.7
                                                                                                                                                              200.67
        90.00
                                                    18.68
                                                                  208.17
                                                                                 353.20
                                                                                                                                              15.57
                                                                                                                               1212.9
                                                                                                                                              -13.28
                                                                                                                                                                6.14
       100.00
                                                    -16.80
                                                                   13.16
                                                                                 352.15
                                                                                                 115.10
                                                                                                                               3957.7
                                                                                                                                              16.31
                                                                                                                                                              181.04
       100.00
                                                    19.60
                                                                  188.29
                                                                                 352.80
                                                                                                                               1005.0
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                                                                                                                                                              349.26
       110.00
                                                   -19.20
                                                                  356.10
                                                                                 350.87
                                                                                                 118.84
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                                                                                                                               3738.4
                                                                                                                                               18.27
      110.00
                   16 23 51
                                  4338.42
                                                    22.04
                                                                  170.43
                                                                                 351.58
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 334.6 SR 409.3 SS 492.6

CRT -.8825 CRS -.9679 CST .7485

LSA 695.4 MSA 194.5 SSA 26.6

EL1 513.6 EL2 125.4 ALF 128.52
    TOE .2042 TRA -.2216 TC3 .8270 BAU .1715
                                                                      SCT 768.8 SCR 576.5 SC3 531.1
RRT -.5688 RRF .8152 RTF -.6871
SCB 960.9 R23 -.2975 R13 .8061
    RDE -.2591 RRA -.1520 RC3 -.4582 FAU .12156
    FDE -.8272 FRA-1.1983 FC3-7.7572 BSP 2635
BDE .3299 BRA .2687 BC3 .9455 FSP -1596
                                                                     SG1 863.1 SG2 422.3 THA 148.58
                                                                                                                                     ARRIVAL DATE OCT 13 1967
                                                                         FLIGHT TIME 106.00
LAUNCH DATE JUN 29 1967
                                                                         DISTANCE 291,106
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 27.02R GAL -5.28 AZL 92.22 MCA 129.51 SMA 130.79 ECC .18647 INC 2.2194 VI 29.294
RP 108.14 LAP -1.71 LOP 46.12 VP 37.943 GAP -4.03 AZP 88.59 TAL 204.31 TAP 333.82 RCA 106.40 APO 155.17 VZ 35.042
RC 72.534 GL -16.61 GP -15.15 ZAL 134.13 ZAP 50.69 ETS 12.17 ZAE 157.33 ETE 337/49 ZAC 92.09 ETC 13.53 CLP -48.98
   PLANETOCENTRIC CONIC
                                        -.98 RAL 137.23 RAD 6567.5 VEL 11.605 PTH 2.03 VMP 3.837 DPA -9.62 RAP 172.47 ECC 1.2188
    C3 13.295 VHL 3.646 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              INJ AZMII.
113,42 2 47 ...
67,76 15 15 51
77 4 3 49
                   2 12 26 2090.90
13 55 56 4795.71
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                                                   -16.39
                                                                  33.80
                                                                               352.13
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                                                                                                                               4195.7
        90.00
                                                    17.99
                                                                  206.49
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                     3 33 19
                                   1829.99
                                                   -17.29
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       100.00
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       100.00
                   15 17 43 4531.86
                                                   18.90
                                                                 186.68
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17.48
       110.00
                    4 40 31 1619.64
16 27 1 4314.98
                                                   -19.68
                                                                  356.96
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       110.00
                                                   21.32
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ST 305.3 SR 408.2 SS 488.7
CRT -.8434 CRS -.9645 CST .6845
LSA 676.0 MSA 202.5 SSA 26.3
                                                                      SCT 697.8 SGR 633.2 SG3 584.5
RRT -.5259 RRF .8619 RTF -.6050
SGB 942.2 R23 -.3282 R13 .8167
    TOE .1805 TRA -.2374 TC3 .7090 BAU .1618
    ROE -.2549 RRA -.1647 RC3 -.5711 FAU .13266
    FOE -.8414 FRA-1.3236 FC3-8.6387 BSP 2506
                                                                                                                         EL1 491.2 EL2 136.3 ALF 125.37
                                                                      SG1 824.8 SG2 455.6 THA 140.24
    BOE .3123 BRA .2889 BC3 .9104 FSP -1768
                                                                                                                                      ARRIVAL DATE OCT 15 1967
                                                                          FLIGHT TIME 108.00
                                                                          DISTANCE 297.628
    RL 152.08 LAL -.00 LOL 276.59 VL 27.059 GAL -5.27 AZL 92.10 HCA 132.72 SMA 131.00 ECC .18477 INC 2.1037 V1 29.294
RP 108.10 LAP -1.55 LOP 49.33 VP 37.977 GAP -3.49 AZP 88.57 TAL 204.56 TAP 337.28 RCA 106.79 APO 155.20 V2 35.056
RC 74.652 GL -15.91 GP -16.70 ZAL 134.68 ZAP 55.56 ETS 11.32 ZAE 159.10 ETE 329.40 ZAC 93.97 ETC 13.12 CLP -53.81
   PLANETOCENTRIC CONIC
                                        -.20 RAL 137.09 RAD 6567.5 VEL 11.594 PTH 2.03 VHP 3.670 DPA -10.39 RAP 170.37 ECC 1.2144
    C3 13.026 VHL 3.609 DLA
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.05 2 41 17
67.19 15 20 38
114.41 3 58 10
65.83 16 37 41
118.18 5 2 39
62.05 17 42 35
                                                                                                                                             -13.65
                                                                                                                              1510.7
                    2 6 6 2110.70
14 1 11 4767.08
                                                                                 351.83
        90.00
                                                   -16.92
                                                                   35.01
                                                                                                                               4167.1
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        90.00
                                                    17.25
                                                                  204.72
                                                                                 351.90
                                                                                                                               1248.6
                     3 27 21
                                                                                                                                              -14.37
       100.00
                                   1848.61
                                                   -17.81
                                                                   15.33
                                                                                 351.42
                                                                                                                                                              177.87
       100.00
                    15 22 37
                                   4504.39
                                                    18.14
                                                                  185.00
                                                                                 351.49
                                                                                                                               3904.4
                                                                                                                                              14.73
                                                                                                                               1035.7
                                                                                                                                             -16.27
                                                                                                                                                             350.99
      110.00
                   4 35 23 1635.66
16 31 4 4290.11
                                                  -20.19
                                                                  357.92
                                                                                 350.18
                                                                                                                                             16.63
                                                                                                                               3690.1
      110.00
                                                    20.53
                                                                  167.49
                                                                                 350.26
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 626.9 SGR 702.8 SG3 637.4
RRT -.4208 RRF .8991 RTF -.4682
SGB 941.8 R23 -.3002 R13 .8533
                                                                                                                           ST 277.0 SR 406.0 SS 479.7
    TOE .1560 TRA -.2593 TC3 .5579 BAU .1561
                                                                                                                          CRT -.7818 CRS -.9610 CST .5922
LSA 653.1 MSA 210.8 SSA 26.1
    ROE -.2499 RRA -.1785 RC3 -.7013 FAU .14357
FOE -.8397 FRA-1.4365 FC3-9.5423 BSP 2431
    BOE .2946 BRA .3149 BC3 .8961 FSP -1944
                                                                     SG1 797.3 SG2 501.3 THA 127.39
                                                                                                                          EL1 468.1 EL2 149.8 ALF 121.70
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FLIGHT TIME 102.00

ARRIVAL DATE OCT 17 1967

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LAUNCH DATE JUN 29 1967
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 304.127
    RL 152.08 LAL -.00 LOL 276.59 VL 27.083 GAL -5.26 AZL 91.98 MCA 135.93 SMA 131.17 ECC .18335 INC 1.9753 VI 29.294
RP 108.06 LAP -1.37 LOP 52.53 VP 38.006 GAP -2.96 AZP 88.58 TAL 204.72 TAP 340.65 RCA 107.12 APO 155.21 VZ 35.069
RC 76.795 GL -15.09 GP -18.40 ZAL 135.14 ZAP 60.64 ETS 10.35 ZAE 160.53 ETE 319.07 ZAC 96.10 ETC 12.55 CLP 558.89
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 59 50 2132.64 -17.50 36.36 351.70 112.62 2 35 23 1532.6 -14.28 29.16
                                                .65 RAL 137.11 RAD 6567.5 VEL 11.582 PTH 2.03 VHP 3.534 OPA -11.21 RAP 168.01 ECC 1.2099
                                    4736.11
1869.28
4474.70
1653.48
4263.27
                                                                         202.83
                                                                                          351.48
                                                                                                            66.60
                                                                                                                         15 26 30
                                                                                                                                             4136.1
                                                                                                                                                               13.12
                                                                                                                                                                               195.71
         90.00
                     14 .7 34
                                                         16.42
                                                                                        351.30
                                                                                                                                                            -14.99
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                                                         -18.39
                                                                          16.59
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                       3 21 29
       100.00
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       100.00
                    15 28 37
                                                                                                            117.78 4 57 59
61.46 17 47 13
                                                                                                                                             1053.5
                                                                                                                                                             -16.88
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                       4 30 26
                                                         -20.76
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                                                                                          350.08
       110.00
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                     16 36 9
                                                        19.66
                                                                         165.89
                                                                                          349.82
       110.00
  DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    TOE .1325 TRA -.2863 TC3 .3734 BAU .1584

ROE -.2437 RRA -.1933 RC3 -.8506 FAU .15383

FDE -.8205 FRA-1.5310 FC-10.4410 BSP 2472

BDE .2774 BRA .3455 BC3 .9289 FSP -2118
                                                                             SGT 572.1 SGR 786.3 SG3 687.9
RRT -.2281 RRF .9278 RTF -.2503
SGB 972.4 R23 -.1549 R13 .9156
                                                                                                                                        ST 253.4 SR 402.3 SS 465.6

CRT -.6906 CRS -.9572 CST .4657

LSA 627.7 MSA 219.5 SSA 25.8
                                                                                                                                         EL1 445.8 EL2 165.4 ALF 117.63
                                                                              5G1 806.7 SG2 542.9 THA 107.60
                                                                                                                                                      ARRIVAL DATE OCT 19 1967
                                                                                   FLIGHT TIME 112.00
LAUNCH DATE JUN 29 1967
                                                                                  01STANCE 310.601
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 27.100 GAL -5.23 AZL 91.83 MCA 139.14 SMA 131.29 ECC .18217 INC 1.8309 V1 29.294
RP 108.02 LAP -1.20 LOP 55.74 VP 38.031 GAP -2.46 AZP 88.61 TAL 204.79 TAP 343.93 RCA 107.37 APO 155.21 V2 35.082
RC 78.958 GL -14.13 GP -20.26 ZAL 135.51 ZAP 65.90 ETS 9.19 ZAE 161.29 ETE 306.57 ZAC 98.43 ETC 11.81 CLP -64.19
   PLANETOCENTRIC CONIC
                                                                                                                 2.02 VHP 3.429 OPA -12.10 RAP 165.39 ECC 1.2054
                                              1.61 RAL 137.28 RAD 6567.5 VEL 11.570 PTH
    C3 12.479 VHL 3.533 DLA
    C3 12.479 VHL 3,533 DLA 1.61 RAL 137.28 RAD 6567.5 VEL 11.570 PTH 2.02 VHP 3,429 OPA -12.10 RAP 165.39 ECC 1.2054 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 35 29 2157.44 -18.14 37.90 351.75 112.12 2 29 26 1557.4 -14.98 30.64 90.00 14 15 18 4701.95 15.49 200.75 351.20 65.99 15 33 40 4102.0 12.11 193.70 100.00 3 15 34 1892.65 -19.03 18.03 351.35 113.50 3 47 7 1292.7 -15.69 10.83 100.00 15 35 54 4441.97 16.36 181.22 350.78 64.63 16 49 56 3842.0 12.81 174.23 110.00 4 25 31 1673.68 -21.40 .21 350.16 117.31 4 53 25 1073.7 -17.57 353.17 110.00 16 42 26 4233.71 18.69 164.15 349.52 60.85 17 53 0 3633.7 14.66 157.35 OLIFFERNIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 235.4 SR 394.1 SS 439.3

CRT -.5550 CRS -.9513 CST .2865

LSA 592.2 MSA 228.7 SSA 25.8
                                                                              SGT 557.8 SGR 879.5 SG3 730.1
RRT .0677 RRF .9485 RTF .0624
SGB 1041.5 R23 .0445 R13 .9475
    TOE .1088 TRA -.3199 TC3 .1463 BAU .1713
    ROE -.2345 RRA -.2073 RC3-1.0165 FAU .16225
    FDE -. 7666 FRA-1.5859 FC-11.2561 BSP 2637
                                                                                                                                        EL1 420.8 EL2 183.4 ALF 112.93
                                                                               SG1 880.9 SG2 555.7 THA 85.91
     BDE .2585 BRA .3812 BC3 1.0270 FSP -2258
                                                                                                                                                     ARRIVAL DATE OCT 21 1967
LAUNCH DATE JUN 29 1967
                                                                                   FLIGHT TIME 114.00
                                                                                  DISTANCE 317.051
    RL 152.08 LAL -.00 LOL 276.59 VL 27.112 GAL -5.19 AZL 91.67 MCA 142.36 SMA 131.37 ECC .18122 INC 1.6664 VI 29.294 RP 107.98 LAP -1.02 LOP 58.96 VP 38.051 GAP -1.97 AZP 88.68 TAL 204.76 TAP 347.12 RCA 107.57 APO 155.18 VZ 35.094 RC 81.189 GL -12.99 GP -22.28 ZAL 135.80 ZAP 71.25 ETS 7.82 ZAE 161.09 ETE 292.82 ZAC 100.90 ETC 10.86 CLP -69.67
   PLANETOCENTRIC CONIC
     C3 12.195 VML 3.492 DLA 2.69 RAL 137.62 RAD 6567.5 VEL 11.558 PTH 2.02 VHP 3.358 DPA -13.09 RAP 162.58 ECC 1.2007
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           -15.78
                      1 46 46 2186.18
14 24 42 4663.44
3 9 22 1919.77
15 44 47 4405.09
                                                                                                         111.51
                                                                                                                                          1586.2
                                                                                        351.98
                                                                                                                          2 23 12
                                                                           39.69
                                                         -18.87
         90.00
                                                                                                            65.36 15 42 25
112.90 3 41 22
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                                                                          198.44
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         90.00
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                                                                           19.71
        100.00
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        100.00
                      4 20 29 1697.16
16 50 9 4200.46
                                                                                                            116.75 4 48 46
60.20 18 0 10
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13.48
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                                                         -22.13
                                                                             1.64
                                                                                          350.43
                                                                                                                                             1097.2
        110.00
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                                                                                                                                             3600.5
                                                                          162.21
                                                                                          349.39
                                                         17.58
        110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 227.9 SR 380.8 SS 403.5
                                                                               SGT 609.6 SGR 983.4 SG3 762.6
     TDE .0883 TRA -.3569 TC3 -.1190 BAU .1968
                                                                                                                                        CRT - .3876 CRS - .9421 CST .0717
LSA 549.5 MSA 238.8 SSA 26.0
EL1 394.8 EL2 202.6 ALF 107.93
                                                                              RRT .3818 RRF .9636 RTF .3852
SGB 1157.0 R23 .1524 R13 .9516
     RDE -.2219 RRA -.2201 RC3-1.2012 FAU .16845
     FDE -.6814 FRA-1.6000 FC-11.9579 BSP 2988
BDE .2389 BRA .4193 BC3 1.2071 FSP -2372
                                                                               SG1 1022.2 SG2 542.0 THA 71.23
                                                                                                                                                      ARRIVAL DATE OCT 23 1967
                                                                                   FLIGHT TIME 116.00
LAUNCH DATE JUN 29 1967
                                                                                  DISTANCE 323.478
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 27.119 GAL -5.14 AZL 91.48 HCA 145.57 SMA 131.42 ECC .18046 INC 1.4759 VI 29.294
RP 107.94 LAP -.83 LOP 62.17 VP 38.067 GAP -1.49 AZP 88.78 TAL 204.65 TAP 350.22 RCA 107.70 APO 155.14 V2 35.107
RC 83.336 GL -11.63 GP -24.48 ZAL 136.00 ZAP 76.62 ETS 6.19 ZAE 159.74 ETE 279.47 ZAC 103.45 ETC 9.68 CLP -75.27
   PLANETOCENTRIC CONIC
                                              3.95 RAL 138.13 RAD 6567.5 VEL 11.545 PTH 2.02 VHP 3.321 OPA -14.23 RAP 159.61 ECC 1.1959
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 23 2220.43 -19.71 41.85 352.44 110.75 2 16 23 1620.4 -16.71 34.46
                                                                                                                         15 53 11
                                                                                                                                               4018.9
                                                                                                                                                                 9.61
                      14 36 12 4618.94
3 2 35 1952.09
                                                          13.13
                                                                          195.80
                                                                                           351.14
                                                                                                              64.68
         90.00
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                                                                           21.74
                                                                                           352.06
                                                                                                             112.15
                                                                                                                          3 35 7
                                                                                                                                               1352.1
                                                                                                                                                               -17.42
        100.00
                                                                                                              63.31 17 8 24
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                                                                          176.51
                                                                                           350.71
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                      15 55 42
                                     4362.52
                                                          13.99
        100.00
                                                                                                             116.04 4 43 49
59.51 18 9 4
                                                                                                                                              1125.2
                                                                                                                                                               -19.29
                                                                                                                                                                               356.18
                        4 15 4
                                                                            3.38
                                                                                           350.92
                                      1725.21
                                                         -22.98
        110.00
                                                                                                                                                                12.10
                                                                                                                                              3562.2
                                     4162.16
                                                          16.27
                                                                          160.02
                                                                                           349.42
                      16 59 42
        110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 232.3 SR 360.5 SS 358.1
CRT -.2213 CR5 -.9257 CST -.1473
                                                                             SCT 729.5 SCR 1097.3 SG3 783.0

RRT .6158 RRF .9744 RTF .6216

SCB 1317.6 R23 .1895 R13 .9561

SCI 1210.2 SC2 521.1 THA 62.14
     TOE .0735 TRA -.3953 TC3 -.4208 BAU .2335
     ROE -.2049 RRA -.2309 RC3-1.4055 FAU .17189
FDE -.5636 FRA-1.5692 FC-12.5024 BSP 3513
BDE .2177 BRA .4577 BC3 1.4672 FSP -2451
                                                                                                                                         LSA 498.7 MSA 250.5 SSA 26.4
                                                                                                                                         EL1 366.3 EL2 222.9 ALF 103.00
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FLIGHT TIME 110.00

ST 375.2 SR 138.9 SS 229.5 CRT .3258 CRS -.3386 CST -.9749

LSA 440.3 MSA 130.3 SSA 43.7 EL1 378.3 EL2 130.2 ALF 7.81

JPL TM 33-99

FLIGHT TIME 118.00 ARRIVAL DATE OCT 25 1967 LAUNCH CATE JUN 29 1967 DISTANCE 329.881 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 27.121 GAL -5.09 ATL 91.25 MCA 148.79 SMA 131.43 ECC .17987 INC 1.2512 V1 29.294
RP 107.91 LAP -.65 LOP 65.39 VP 38.080 GAP -1.03 AZP 88.93 TAL 204.44 TAP 353.24 RCA 107.79 APO 155.07 V2 35.119
RC 85.546 GL -9.97 GP -26.89 TAL 136.11 ZAP 81.90 ETS 4.26 TAE 157.30 ETE 267.99 TAC 105.98 ETC 8.25 CLP -80.91 PLANETOCENTRIC CONIC C3 11.602 VHL 3.406 DLA 5.47 RAL 138.85 RAD 6567.4 VEL 11.532 PTH 2.01 VHP 3.322 DPA -15.57 RAP 156.55 ECC 1.1909 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 353.16 109.76 1662.5 -17.82 1 30 50 2262.51 14 50 30 4566.14 2 8 33 16 6 36 90.00 -20.70 44.54 63.97 90.00 11.57 192.70 351.41 3966.1 7.98 185.87 2 54 46 1991.81 16 9 16 4312.06 3 27 58 1391.8 -18.53 16.82 100.00 -21.60 24.27 352.80 111.18 100.00 12.42 173.58 350.97 62.59 17 21 8 3712.1 8.65 166.82 1159.7 115.11 4 38 15 58.78 18 20 12 4 8 55 1759.72 17 11 35 4116.92 110.00 -23.99 5.54 351.69 -20.40 358.23 157.46 349.66 3516.9 10.45 110.00 14.69 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 904.4 SGR 1215.2 SG3 785.6 RRT .7580 RRF .9820 RTF .7628 SGB 1514.8 R23 .2002 R13 .9617 SGI 1429.4 SG2 501.5 THA 55.79 ST 247.0 SR 328.0 SS 298.9 CRT -.0862 CRS -.8883 CST -.3622 TDE .0664 TRA -.4335 TC3 -.7612 BAU .2782 RDE -.1804 RRA -.2368 RC3-1.6244 FAU .17148 FDE -.4015 FRA-1.4767 FC-12.7961 BSP 4162 LSA 432.9 MSA 264.3 SSA 27.5 EL1 329.6 EL2 244.9 ALF 98.35 BDE .1922 BRA .4939 BC3 1.7939 FSP -2465 FLIGHT TIME 120.00 ARRIVAL DATE OCT 27 1967 **DISTANCE 336.261** RL 152.08 LAL -.00 LOL 276.59 VL 27.118 GAL -5.02 AZL 90.98 MCA 152.01 SMA 131.41 ECC .17945 INC .9802 V1 29.294
RP 107.87 LAP -.46 LOP 68.60 VP 38.089 GAP -.58 AZP 89.13 TAL 204.15 TAP 356.17 RCA 107.83 APO 155.00 V2 35.131
RC 87.767 GL -7.90 GP -29.57 ZAL 136.11 ZAP 86.99 ETS 2.00 ZAE 153.96 ETE 258.94 ZAC 108.41 ETC 6.54 CLP -86.54 PLANETOCENTRIC CONIC C3 11.297 VHL 3.361 DLA 7.33 RAL 139.82 RAD 6567.4 VEL 11.519 PTH 2.01 VHP 3.364 DPA -17.19 RAP 153.42 ECC 1.1859 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 20 22 2316.09 15 8 39 4501.50 2 45 14 2042.39 16 26 28 4250.42 4 1 30 1803.68 -19.18 -21.90 48.02 354.23 108.42 1 58 58 1716.1 40.40 90.00 9.61 188.97 351.95 63.24 16 23 40 3901.5 5.94 182.21 90.00 27.54 353.89 109.87 3 19 16 1442.4 -19.89 19.96 100.00 -22.81 61.84 17 37 19 113.87 4 31 34 170.05 351.50 3650.4 6.62 163.37 100.00 10.47 -25.23 113.87 1203.7 -21.79 110.00 8,36 352.83 .90 58.00 18 34 23 17 26 41 4061.91 3461.9 8.41 147.98 110.00 154.41 350.16 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE .0720 TRA -.4672 TC3-1.1325 BAU .3293 SGT 1113.3 SGR 1341.4 SG3 772.1 ST 271.4 SR 282.3 SS 237.5 RRT .8379 RRF .9874 RTF .8414 SGB 1743.2 R23 .1991 R13 .9675 RDE -.1475 RRA -.2381 RC3-1.8631 FAU .16749 CRT -.0058 CRS -.7953 CST -.5792 FDE -.2080 FRA-1.3373 FC-12.8356 BSP 4931 LSA 364.6 MSA 275.7 SSA 29.6 SG1 1673.8 SG2 487.0 THA 51.30 EL1 282.4 EL2 271.3 ALF 94.13 BDE .1642 BRA .5244 BC3 2.1803 FSP -2438 FLIGHT TIME 122.00 ARRIVAL DATE OCT 29 1967 LAUNCH DATE JUN 29 1967 DISTANCE 342.618 RL 152.08 LAL -.00 LOL 276.59 VL 27.111 GAL -4.94 AZL 90.64 MCA 155.24 SMA 131.37 ECC .17916 INC .6450 V1 29.294
RP 107.83 LAP -.27 LOP 71.82 VP 38.095 GAP -.15 AZP 89.41 TAL 203.78 TAP 359.02 RCA 107.83 APO 154.90 V2 35.143 -5.26 GP -32.59 ZAL 135.97 ZAP 91.75 ETS 359.33 ZAE 149.90 ETE 252.18 ZAC 110.65 ETC RC 89.996 GL PLANETOCENTRIC CONIC C3 11.001 VHL 3.317 OLA 9.71 RAL 141.08 RAD 6567.4 VEL 11.506 PTH 2.00 VHP 3.453 OPA -19.20 RAP 150.26 ECC 1.1810 LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 106.49 -20.87 355.81 1 6 43 2387.14 15 32 25 4419.50 -23.35 1 46 30 1787.1 90.00 52.72 62.51 16 46 4 107.98 3 7 59 61.08 17 58 31 15 32 25 352.89 3819.5 177.60 90.00 7.06 184.29 2 32 50 2109.38 16 48 59 4172.49 100.00 -24.29 31.97 355.49 1509.4 -21.60 24.20 100.00 7.93 165.66 352.42 3572.5 4.01 16 48 59 112.09 4 22 58 57.20 18 52 54 110.00 1861.82 1261.8 -23.54 3 51 56 -26.78 12.17 354.48 17 46 21 3392.8 5.81 110.00 3992.81 10.21 150.65 351.04 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 308.9 SR 216.2 SS 194.0 CRT .0600 CRS -.5320 CST -.8500 SGT 1344.1 SGR 1468.9 SG3 737.8 TOE .0955 TRA -.4932 TC3-1.5316 BAU .3838 RDE -.1007 RRA -.2306 RC3-2.1127 FAU .15905 FDE .0276 FRA-1.1387 FC-12.5171 BSP 5749 RRT .8836 RRF .9913 RTF .8859 SGB 1991.1 R23 .1956 R13 .9720 LSA 357.5 MSA 225.4 SSA 34.2 BDE .1388 BRA .5445 BC3 2.6095 FSP -2333 SG1 1932.7 SG2 478.4 THA 47.87 EL1 309.4 EL2 215.4 ALF FLIGHT TIME 124,00 ARRIVAL DATE OCT 31 1967 LAUNCH DATE JUN 29 1967 HELIOCENTRIC CONIC DISTANCE 348.951 RL 152.08 LAL -.00 LOL 276.59 VL 27.101 GAL -4.85 AZL 90.22 MCA 158.46 SMA 131.29 ECC .17901 INC .2148 VI 29.294
RP 107.80 LAP -.08 LOP 75.05 VP 38.098 GAP .27 AZP 89.80 TAL 203.34 TAP 1.80 RCA 107.79 APO 154.80 V2 35.154
RC 92.232 GL -1.78 GP -36.10 ZAL 135.61 ZAP 96.03 ETS 356.20 ZAE 145.22 ETE 247.31 ZAC 112.62 ETC 2.09 CLP -97.47 PLANETOCENTRIC CONIC C3 10.741 VHL 3,277 OLA 12.83 RAL 142.76 RAD 6567.4 VEL 11.495 PTH 2.00 VHP 3.601 DPA -21.74 RAP 147.05 ECC 1.1768 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 103.56 0 47 31 2486.33 -25.10 59.46 358.15 1 28 58 1886.3 16 4 59 4310.53 3.60 178.15 354.46 61.89 17 16 49 3710.5 90.00 2 15 30 38,30 357.87 105.12 2 52 12 1602.6 -23.77 100.00 2202.60 -26.10 100.00 17 19 41 4069.49 4.50 159.93 353.96 60.42 18 27 31 3469.5 3 38 41 1942.30 -28.72 17.62 356.95 109.39 4 11 3 1342.3 110.00 18 12 59 3902.55 6.84 145.82 352.52 56.43 19 18 2 3302.6 2.38 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS

TDE .1461 TRA -.5059 TC3-1.9452 BAU .4408 RDE -.0359 RRA -.2133 RC3-2.3750 FAU .14672 FDE .2892 FRA -.9004 FC-11.8257 BSP .6633 BDE .1504 BRA .5491 BC3 3.0700 FSP .2179

SGT 1585.5 SGR 1604.3 SG3 685.5

RRT .9104 RRF .9941 RTF .9124 SGB 2255.5 R23 .1905 R13 .9758 SGI 2204.5 SG2 477.3 THA 45.37

ARRIVAL DATE NOV 2 1967 FLIGHT TIME 126.00 LAUNCH DATE JUN 29 1967 015TANCE 355.262 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 27.087 GAL -4.75 AZL 89.64 MCA 161.68 SMA 131.20 ECC .17898 INC .3542 V1 29.294
RP 107.77 LAP .11 LOP 78.27 VP 38.098 GAP .68 AZP 90.34 TAL 202.82 TAP 4.50 RCA 107.71 APO 154.68 V2 35.165
RC 94.474 GL 2.95 GP -40.31 ZAL 134.84 ZAP 99.66 ETS 352.49 ZAE 139.90 ETE 243.93 ZAC 114.19 ETC 359.20 CLP-102.72 PLANETOCENTRIC CONIC C3 10.583 VHL 3.253 DLA 17.08 RAL 145.04 RAD 6567.4 VEL 11.488 PTH 2.00 VHP 3.832 DPA -25.01 RAP 143.68 ECC 1.1742 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 17 39 2635.32 -27.06 69.92 1.75 98.67 1 1 35 2035.3 -25.58 61.56 98.67 1 1 35 61.71 18 2 18 100.38 2 27 49 60.11 19 10 0 104.97 3 52 58 55.88 19 54 13 0 17 39 2635.32 3555.5 -5.17 162.85 16 53 3 4155.52 1 48 48 2341.40 169.50 357.21 -1.40 90.00 1741.4 -26.47 39.71 48.08 1.53 100.00 -28.19 3324.7 -4.37 145.44 18 4 35 3924.66 3 18 38 2060.34 18 51 15 3778.49 151.97 356.65 -.40 100.00 1460.3 -28.73 17.58 25.99 . 7.8 110.00 -31.10 3178.5 133.11 355.07 -2.36 139.31 110.00 2.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 504.5 SR 152.7 S5 363.4

CRT .9538 CRS -.9024 CST -.9631

LSA 633.3 MSA 84.0 SSA 41.6

EL1 525.3 EL2 44.1 ALF 16.22 SGT 1831.4 SGR 1740.9 SG3 611.8 RRT .9265 RRF .9960 RTF .9286 SGB 2526.8 R23 .1860 R13 .9786 SG1 2480.1 SG2 483.9 THA 43.43 TOE .2386 TRA -.4981 TC3-2.3487 BAU .4981 ROE .0593 RRA -.1790 RC3-2.6223 FAU .12989 FOE .5803 FRA -.6200 FC-10.6257 BSP 7515 BDE .2459 BRA .5293 BC3 3.5204 FSP -1946 ARRIVAL DATE NOV 4 1967 FLIGHT TIME 128.00 LAUNCH DATE JUN 29 1967 HELIOCENTRIC CONIC DISTANCE 361.548 RL 152.08 LAL -.00 LOL 276.59 VL 27.070 GAL -4.64 AZL 88.84 HCA 164.91 SMA 131.08 ECC .17906 INC 1.1622 V1 29.294
RP 107.73 LAP .30 LOP 81.50 VP 38.096 GAP 1.08 AZP 91.12 TAL 202.23 TAP 7.13 RCA 107.61 APO 154.55 V2 35.175
RC 96.719 GL 9.64 GP -45.52 ZAL 133.25 ZAP 102.40 ETS 348.08 ZAE 133.79 ETE 241.67 ZAC 115.26 ETC 355.69 CLP-107.84 PLANETOCENTRIC CONIC C3 10.695 VHL 3.270 DLA 23.08 RAL 148.31 RAD 6567.4 VEL 11.493 PTH 2.00 VHP 4.192 DPA -29.26 RAP 139.96 ECC 1.1760 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4.192 DPA -29.26 RAP 139.96 ECC 1.1760 89.36 24 5 11 63.19 19 20 57 -28.10 80.06 23 16 56 18 15 56 88.72 7.40 2294.3 -28.31 90.00 2894.33 3300.8 -12.99 148.23 155.13 2.56 -9.47 90.00 3900.80 0 59 52 2575.15 19 19 37 3695.21 -29.32 1975.1 56.46 7.38 91.54 1 42 47 -29.86 65.22 100.00 20 21 13 3095.2 -11.89 132.56 1.83 61.13 139.29 100.00 3695.21 -8.10 3 21 26 1649.5 -32.24 31.19 7.06 96.92 110.00 2 43 56 2249.54 19 52 2 3593.58 -33.56 40.17 56.13 20 51 56 2993.6 -9.34 123.34 129.65 359.88 110.00 -4.93 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2082.6 SGR 1886.3 SG3 519.9 RRT .9361 RRF .9974 RTF .9394 SGB 2809.9 R23 .1804 R13 .9811 SGI 2765.1 SG2 499.8 THA 41.98 ST 750.0 SR 361.8 SS 561.3 CRT .9837 CRS -.9964 CST -.9713 TOE .4000 TRA -.4584 TC3-2.6848 BAU .5559 ROE .2002 RRA -.1217 RC3-2.8114 FAU .10931 FOE .8726 FRA -.3235 FC3-8.8880 BSP 8454 BDE .4473 BRA .4743 BC3 3.8875 FSP -1665 LSA 997.8 MSA 111.6 SSA 17.1 EL1 830.6 EL2 58.8 ALF 25.53 ARRIVAL DATE NOV 6 1967 FLIGHT TIME 130,00 LAUNCH DATE JUN 29 1967 DISTANCE 367.810 RL 152.08 LAL -.00 LOL 276.59 VL 27.050 GAL -4.52 AZL 87.60 HCA 168.13 SMA 130.94 ECC .17924 INC 2.3959 VI 29.294
RP 107.70 LAP .49 LOP 84.72 VP 38.091 GAP 1.47 AZP 92.35 TAL 201.56 TAP 9.69 RCA 107.47 APO 154.41 V2 35.185
RC 98.967 GL 19.36 GP -52.17 ZAL 129.92 ZAP 103.87 ETS 342.77 ZAE 126.55 ETE 240.11 ZAC 115.64 ETC 351.30 CLP-113.01 PLANETOCENTRIC CONIC C3 11.563 VHL 3.400 DLA 31.75 RAL 153.44 RAD 6567.4 VEL 11.530 PTH 2.01 VHP 4.791 DPA -34.84 RAP 135.42 ECC 1.1903 C3 11.363 VHL 3.400 DLA 31.75 RAL 153.44 RAD 6567.4 VEL 11.530 PTH 2.01 VHP 4.791 DPA -34.84 RAP 135.42 ECC 1.1903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.99 19 9 25 3790.38 -25.02 154.15 14.52 69.78 20 12 35 3190.4 -27.54 146.10 105.01 23 4 23 3036.86 -25.01 98.39 14.52 69.78 20 12 35 3190.4 -27.53 90.34 105.01 23 4 23 3036.86 -25.02 154.15 14.52 69.78 20 12 35 3190.4 -27.53 90.34 105.01 23 4 23 3036.86 -25.01 98.39 14.52 69.78 20 12 35 3190.4 -27.53 90.34 105.00 1 17 25 2636.54 -32.68 70.12 16.93 79.37 2 1 22 2036.5 -33.80 61.06 110.00 21 59 29 3238.70 -17.80 110.22 10.92 60.32 22 53 28 2638.7 -21.61 103.16 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .9409 RRF .9981 RTF .9468 SGB 3093.6 R23 .1756 R13 .9828 SGI 3048.6 SGZ 525.8 THA 40.48 TOE .6917 TRA -.3615 TC3-2.7981 BAU .6094
ROE .4236 RRA -.0192 RC3-2.7769 FAU .08450
FOE 1.1450 FRA -.0191 FC3-6.3267 BSP 9362
BOE .8111 BRA .3620 BC3 3.9422 FSP -1312 ST 1186.6 SR 716.1 SS 800.5 .9858 CRS -.9999 CST -.9843 CRT LSA 1594.5 MSA 137.9 SSA 7.3 EL1 1382.1 EL2 103.4 ALF 30.94 ARRIVAL DATE NOV 8 1967 FLIGHT TIME 132.00 LAUNCH DATE JUN 29 1967 DISTANCE 374.041 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 27.028 GAL -4.39 AZL 85.47 HCA 171.34 SMA 130.78 ECC .17952 INC 4.5309 VI 29.294
RP 107.67 LAP .68 LOP 87.95 VP 38.084 GAP 1.84 AZP 94.48 TAL 200.83 TAP 12.17 RCA 107.31 APO 154.26 V2 35.195
RC 101.218 GL 33.45 GP -60.92 ZAL 123.25 ZAP 103.58 ETS 336.15 ZAE 117.60 ETE 238.49 ZAC 115.06 ETC 345.47 CLP-118.88 PLANETOCENTRIC CONIC C3 14.920 VML 3.863 DLA 43.92 RAL 162.70 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 5.915 OPA -42.15 RAP 128.99 ECC 1.2455 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 54.91 18 0 36 4156.79 -31.95 187.71 32.36 58.09 19 9 53 3556.8 -35.90 179.74 58.08 2 17 20 2180.6 -35.89 73.56 32.35 1 31 0 2780.61 -31.94 81.53 125.09 -35.90 179.74 19 9 53 3556.8 58.09 -31.95 187.71 32.36 54.91 18 0 36 4156.79 73.56 2 17 20 2180.6 -35.89 1 31 0 2780.61 18 0 36 4156.79 1 31 0 2780.61 58.08 32.35 -31.94 81.53 125.09 179.74 19 9 53 3556.8 -35.90 58.09 18 0 36 -31.95 187.71 32.36 54.91 MID-COURSE EXECUTION ACCURACY 73.56 2180.6 -35.89 81.53 -31.94 125.09 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2646.5 SGR 2097.6 SG3 280.8 ST 1873.6 SR 1153.3 SS 998.7 TOE 1.2611 TRA -.1463 TC3-2.3917 BAU .6520 ROE .7736 RRA .1685 RC3-2.2281 FAU .05689 FOE 1.3123 FRA .2522 FC3-3.3011 BSP 10314 RRT .9408 RRF .9980 RTF .9530 SGB 3377.0 R23 .1712 R13 .9841 SGI 3329.3 SG2 565.4 THA 38.00 CRT .9903 CRS -.9999 CST -.9918 LSA 2410.9 MSA 159.4 SSA 3.5 ELI 2195.9 EL2 136.8 ALF 31.50 BOF 1.4795 BRA .2231 BC3 3.2688 FSP -921

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ARRIVAL CATE NOV 10 1967
                                                                       FLIGHT TIME 134.00
LAUNCH DATE JUN 29 1967
                                                                       DISTANCE 380.226
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 27.003 GAL -4.24 AZL 80.86 HCA 174.53 SMA 130.61 ECC .17985 INC 9.1440 VI 29.294
RP 107.65 LAP .87 LOP 91.19 VP 38.074 GAP 2.20 AZP 99.10 TAL 200.02 TAP 14.55 RCA 107.12 APO 154.10 V2 35.204
RC 103.470 GL 51.59 GP -72.72 ZAL 112.00 ZAP 100.91 ETS 325.81 ZAE 105.76 ETE 233.63 ZAC 113.24 ETC 335.38 CLP-129.56
   PLANETOCENTRIC CONIC
    C3 29.830 VHL 5.462 QLA 57.60 RAL 182.41 RAD 6568.2 VEL 12.297 PTH 2.21 VHP 8.546 DPA -51.38 RAP 117.42 ECC 1.4909
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
37.49 18 23 15 4454.24 -31.65 217.82 69.39 39.01 19 37 29 3854.2 -37.72 211.88
                  3 45 35 2814.59
18 23 15 4454.24
3 45 35 2814.59
18 23 15 4454.24
3 45 35 2814.59
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                                                                                                                           2214.6
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      142.51
                                                 -31.64
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       142.51
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       37.49
                                                 -31.65
                                                                217.82
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                                                -31.64
                                                                 84.67
                                                                               69.37
      142.51
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 3085.5 SGR 1914.8 SG3 157.3
RRT .9249 RRF .9921 RTF .9628
SGB 3631.3 R23 .1652 R13 .9855
SGI 3576.6 SG2 628.3 THA 30.91
                                                                                                                      ST 2636.4 SR - 1208.6 SS 966.5
CRT .9852 CRS - .9983 CST - .9936
    TDE 2.5002 TRA .4494 TC3-1.2509 BAU .6333
RDE 1.1094 RRA .5526 RC3 -.9781 FAU .02865
                                                                                                                      LSA 3050.2 MSA 203.5 SSA
                                                                                                                                                             1.8
    FDE 1.2192 FRA .4721 FC3 -.8314 BSP 10947
BDE 2.7353 BRA .7122 BC3 1.5879 FSP -516
                                                                                                                      EL1 2894.1 EL2 188.4 ALF 24.42
                                                                                                                                  ARRIVAL DATE NOV 12 1967
                                                                       FLIGHT TIME 136.00
LAUNCH DATE JUN 29 1967
                                                                       DISTANCE 386.252
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.976 GAL -4.05 AZL 64.10 HCA 177.59 SMA 130.42 ECC .18011 INC25.8976 V1 29.294
RP 107.62 LAP 1.05 LOP 94.42 VP 38.063 GAP 2.52 AZP 115.88 TAL 199.05 TAP 16.64 RCA 106.93 APO 153.91 V2 35.212
RC 105.723 GL 65.12 GP -81.72 ZAL 98.69 ZAP 95.57 ETS 246.26 ZAE 86.29 ETE 158.73 ZAC 110.63 ETC 253.96 CLP 132.40
   PLANETOCENTRIC CONIC
    C3 167.848 VHL 12.956 DLA 60.93 RAL 213.00 RAD 6570.8 VEL 17.005 PTH 2.92 VHP 18.692 DPA -59.64 RAP 85.30 ECC 3.7623
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2763.4 SGR 2549.1 SG3 72.3
RRT -.9515 RRF -.9615 RTF .9993
                                                                                                                       ST 1390.6 SR 1820.2 SS 710.0
    TOE 2.6475 TRA 2.7470 TC3 -.0431 BAU .0985
                                                                                                                      CRT -.9673 CRS .9758 CST -.9993
LSA 2379.9 MSA 295.0 SSA .6
    ROE-3.9152 RRA-2.0549 RC3 -.0083 FAU .00129
    FOE .8559 FRA .8189 FC3 -.0066 BSP 10964
                                                                    SGB 3759.6 R23 -.1085 R13 -.9940
                                                                                                                      EL1 2273.1 EL2 282.4 ALF 127.13
    BDE 4.7263 BRA 3.4305 BC3 .0439 FSP -225
                                                                    SG1 3714.0 SG2 583.4 THA 137.43
                                                                                                                                 ARRIVAL DATE NOV 14 1967
                                                                       FLIGHT TIME 138.00
LAUNCH DATE JUN 29 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 393.304
   RL 152.08 LAL -.00 LOL 276.59 VL 26.947 GAL -4.06 AZL 139.09 MCA 181.63 SMA 130.22 ECC .18179 INC49.0918 VI 29.294
RP 107.60 LAP 1.23 LOP 97.66 VP 38.049 GAP 3.11 AZP 40.92 TAL 198.85 TAP 20.49 RCA 106.55 APO 153.90 V2 35.220
RC 107.975 GL -59.73 GP 71.64 ZAL 94.77 ZAP 94.38 ETS 172.09 ZAE 70.51 ETE 257.04 ZAC 84.39 ETC 156.24 CLP 104.03
   PLANETOCENTRIC CONIC
    C3 553.237 VHL 23.521 DLA -51.46 RAL 143.89 RAD 6572.5 VEL 25.972 PTH 3.37 VHP 28.756 DPA 63.69 RAP 321.49 ECC10.1049
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 638.8 SR 3173.0 SS 1648.9

CRT - 9682 CRS - 9999 CST 9641
                                                                   SGT 1011.5 SGR 3513.3 SG3 62.0
    TOE 2.4478 TRA 1.9515 TC3 -.0621 BAU 1.6089
                                                                   RRT -.8676 RRF .9984 RTF -.8416
SGB 3656.0 R23 -.0839 R13 .9961
    RO-12.9407 RRA-3.0744 RC3 .2085 FAU-.02427 FDE-2.7113 FRA -.5520 FC3 .0380 BSP 9790 BDE13.1702 BRA 3.6415 BC3 .2175 FSP -170
                                                                                                                      LSA 3628.8 MSA 161.2 SSA
                                                                                                                                                             1.4
                                                                                                                      EL1 3232.8 EL2 156.7 ALF 101.06
                                                                   SG1 3623.4 SG2 487.6 THA 104.29
                                                                                                                                  APRIVAL DATE NOV 16 1967
LAUNCH DATE JUN 29 1967
                                                                        FLIGHT TIME 140.00
                                                                       DISTANCE 399.116
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.917 GAL -3.82 AZL 108.14 MCA 184.53 SMA 130.01 ECC .18200 INC18.1441 V1 29.294
RP 107.58 LAP 1.41 LOP 100.89 VP 38.034 GAP 3.36 AZP 71.91 TAL 197.64 TAP 22.17 RCA 106.35 APO 153.68 V2 35.227
RC 110.226 GL -63.34 GP 74.31 ZAL 101.35 ZAP 103.31 ETS 65.81 ZAE 97.40 ETE 152.98 ZAC 86.66 ETC 53.02 CLP-148.37
  PLANETOCENTRIC CONIC
    C3 87.576 VHL 9.358 DLA -49.51 RAL 130.66 RAD 6569.7 VEL 14.454 PTH 2.63 VHP 10.209 DPA 75.42 RAP 239.66 ECC 2.4413
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFÉRENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ST 3031.7 SR 778.5 SS 1186.4
CRT -.9569 CRS .9753 CST -.9974
LSA 3339.6 MSA 227.5 SSA 1.2
EL1 3122.4 EL2 219.4 ALF 166.13
                                                                  SGT 3867.8 SGR 797.9 SG3 134.9
RRT -.6597 RRF -.7745 RTF .9858
    TOE-4,8070 TRA-2.5711 TC3 -.3463 BAU .4122
    RDE 1.2697 RRA -.1438 RC3 .0630 FAU .01715
                                                                  SGB 3949.2 R23 .1443 R13 -.9891
SGI 3904.3 SG2 594.1 THA 172.07
    FDE-2.1649 FRA -.8071 FC3 -.1696 BSP 12125
BDE 4.9719 BRA 2.5751 BC3 .3520 FSP -423
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FLIGHT TIME 142.00
                                                                                                                                    ARRIVAL CATE NOV 18 1967
LAUNCH DATE JUN 29 1967
                                                                         DISTANCE 405.207
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.884 CAL -3.62 AZL 101.88 MCA 187.71 SMA 129.79 ECC .18269 INC11.8762 V1 29.294
RP 107.56 LAP 1.58 LOP 104.13 VP 38.017 GAP 3.69 AZP 78.23 TAL 196.62 TAP 24.33 RCA 106.08 APO 153.50 VZ 35.233
    RC 112.475 GL -57.59 GP 59.45 ZAL 105.52 ZAP 112.37 ETS 46.82 ZAE 110.34 ETE 139.14 ZAC 91.86 ETC 35.21 CLP-138.48
   PLANETOCENTRIC CONIC
    C3 42.780 VHL 6.541 DLA -43.63 RAL 132.83 RAD 6568.6 VEL 12.812 PTH 2.33 VHP 6.715 DPA 67.47 RAP 195.38 ECC 1.7040
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                     MID-COURSE EXECUTION ACCURACY
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  DIFFERENTIAL CORRECTIONS
                                                                     SCT 3700.8 SCR 1435.5 SC3 242.5
RRT - .9212 RRF - .9866 RTF .9700
SCB 3969.4 R23 .1916 R13 - .9805
SCI 3934.5 SC2 525.3 THA 159.96
                                                                                                                         ST 2646.0 SR 1287.5 S5 1341.6
CRT -.9854 CRS .9983 CST -.9936
LSA 3226.5 MSA 220.5 SSA 1.9
    TOE-2.9116 TRA-1.9362 TC3 -.9964 BAU .6092
   ROE 1.4627 RRA .3468 RC3 .3767 FAU .04185
FOE-2.6074 FRA -.9894 FC3 -.8469 BSP 12239
BOE 3.2584 BRA 1.9670 BC3 1.0652 FSP -770
                                                                                                                         EL1 2936.0 EL2 197.5 ALF 154.26
                                                                                                                                     ARRIVAL DATE NOV 20 1967
                                                                         FLIGHT TIME 144.00
                                                                         DISTANCE 411.320
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.851 CAL -3.43 A7L 99.27 HCA 190.92 SMA 129.56 ECC .18353 INC 9.2677 VI 29.294
RP 107.54 LAP 1.75 LOP 107.37 VP 37.999 CAP 4.02 A7P 80.90 TAL 195.59 TAP 26.51 RCA 105.78 APO 153.34 VZ 35.239
RC 114.720 GL -52.70 GP 47.94 ZAL 107.76 ZAP 120.11 ETS 41.61 ZAE 118.71 ETE 141.06 ZAC 96.14 ETC 30.84 CLP-138.49
  PLANETOCENERIC CONIC
                                                                                                   2.21 VHP 5.507 DPA 58.00 RAP 180.27 ECC 1.4846
    C3 29.447 VHL 5.426 DLA -39.28 RAL 135.82 RAD 6568.2 VEL 12.281 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                     RID-COORSE ERECUTION ACCORACT
SGT 3777.4 SGR 1301.2 SG3 335.2
RRI -.9293 RRF -.9913 RTF .9645
SGB 3995.2 R23 .2210 R13 -.9735
SGI 3968.9 SG2 457.5 THA 162.00
                                                                                                                         ST 2567.8 SR 1115.5 SS 1455.0
CRT -.9857 CRS ..9991 CST -.9920
    TOE-2.3458 TRA-1.6502 TC3-1.6137 BAU .6687
    RDE 1.0514 RRA .2637 RC3 .5304 FAU .06174
                                                                                                                         CSA 3147.8 MSA 215.7 SSA
    FDE-2.8675 FRA-1.0370 FC3-1.8151 BSP 12356
                                                                                                                         EL1 2794.3 EL2 172.7 ALF 156.72
    BOE 2.5707 BRA 1.6711 BC3 1.6987 FSP -- 1073
                                                                                                                                    ARRIVAL DATE NOV 22 1967
                                                                         FLIGHT TIME 146.00
LAUNCH DATE JUN 29 1967
                                                                        DISTANCE 417.427
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.816 GAL -3.22 AZL 97.84 HCA 194.16 SMA 129.33 ECC .18448 INC 7.8369 V1 29.294
RP 107.52 LAP 1.91 LOP 110.62 VP 37.979 GAP 4.36 AZP 82.40 TAL 194.52 TAP 28.68 RCA 105.47 APO 153.18 V2 35.244
RC 116.961 GL -48.95 GP 39.24 TAL 108.78 ZAP 126.38 ETS 38.24 TAE 124.03 ETE 145.36 TAC 99.12 ETC 28.14 CLP-139.98
   PLANETOCENTRIC CONIC
    C3 23.433 VHL 4.841 DLA -36.21 RAL 138.64 RAD 6568.Q VEL 12.034 PTH 2.15 VHP 5.005 DPA 50.09 RAP 173.66 ECC 1.3857
    C3 23.433 VHL 4.841 DLA -36.21 RAL 138.64 RAU 0308.0 VEL 12.135 TH 211 TIME PO CST TIM INJ 2 LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 66.42 5 19 43 1468.31 23.51 9.49 12.16 118.37 5 44 12 868.3 27.11 2.00
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   DIFFERENTIAL CORRECTIONS
                                                                     SCT 3925.1 SCR 1106.2 SC3 399.5
RRT -.9291 RRF -.9902 RTF ..9624
SCB 4078.0 R23 .2347 R13 -.9688
SCI 4058.7 SC2 395.6 THA 165.18
                                                                                                                         ST 2563.2 SR 925.8 SS 1510.7

CRT -.9853 CRS ..9993 CST -.9910

LSA 3108.7 MSA 212.2 SSA 3.5
    TOE-2.0928 TRA-1.4908 TC3-2.1880 BAU .7081
    RDE .7791 RRA .1831 RC3 .5667 FAU .07534
FOE-2.9278 FRA -.9887 FC3-2.7835 BSP 12813
                                                                                                                         EL1 2721.2 EL2 149.1 ALF 160.35
    BOE 2.2331 BRA 1.5020 BC3 2.2603 FSP -1314
                                                                         FLIGHT TIME 148.00
                                                                                                                                     ARRIVAL DATE NOV 24 1967
LAUNCH DATE JUN 29 1967
                                                                         DISTANCE 423.527
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 26.780 GAL -3.01 AZL 96.93 MCA 197.39 SMA 129.08 ECC .18553 INC 6.9294 V1 29.294 RP 107.51 LAP 2.07 LOP 113.86 VP 37.957 GAP 4.69 AZP 83.38 TAL 193.43 TAP 30.82 RCA 105.13 APO 153.03 V2 35.248 RC 119.197 GL -46.06 GP 32.87 ZAL 108.96 ZAP 131.43 ETS 35.51 ZAE 127.26 ETE 149.91 ZAC 100.97 ETC 25.97 CLP-141.83
   PLANETOCENTRIC CONIC
    C3 20.075 VHL 4.480 OLA -34.07 RAL 141.28 RAD 6567.8 VEL 11.894 PTH 2.11 VHP 4.793 DPA 43.82 RAP 170.36 ECC 1.3304 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                    MID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2536.2 SR 749.9 SS 1481.3
CRT -.9838 CRS .9993 CST -.9897
                                                                     SGT 3985.3 SGR 888.3 SG3 419.0

RRT -.9164 RRF -.9841 RTF ..9575

SGB 4083.1 R23 ..2493 R13 -.9621
    TDE-1.9224 TRA-1.3380 TC3-2.6344 BAU .7197
    RDE .5850 RRA .1084 RC3 .5008 FAU .07915
FDE-2.7813 FRA -.7979 FC3-3.4133 BSP 12342
BDE 2.0094 BRA 1.3424 BC3 2.6815 FSP -1303
                                                                                                                         LSA 3024.0 MSA 210.7 SSA 4.5
                                                                                                                         EL1 2641.6 EL2 129.0 ALF 163.74
                                                                      SG1 4068.2 SG2 348.3 THA 168.37
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ARRIVAL DATE NOV 26 1967 FLIGHT TIME 150.00 LAUNCH DATE JUN 29 1967 HELIOCENTRIC CONIC **DISTANCE 429.608** RL 152.08 LAL -.00 LOL 276.59 VL 26.742 GAL -2.78 AZL 96.30 HCA 200.63 SMA 128.83 ECC .18669 INC 6.2995 VI 29.294
RP 107.50 LAP 2.22 LOP 117.11 VP 37.935 GAP 5.01 AZP 84.10 TAL 192.30 TAP 32.93 RCA 104.78 APO 152.89 V2 35.252
RC 121.426 GL -43.78 GP 27.66 ZAL 108.58 ZAP 135.58 ETS 33.22 ZAE 129.15 ETE 154.09 ZAC 101.97 ETC 24.14 CLP-143.74 PLANETOCENTRIC CONIC C3 17.944 VHL 4.236 DLA -32.58 RAL 143.82 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 4.723 DPA 38.83 RAP 168.69 ECC 1.2953 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 11.88 6 42 5 73.18 6 20 43 1281.86 23.12 354.69 113.62 681.9 26.11 346.94 12 15 55 106.82 10 40 15 5739.83 23.13 271.01 11.69 113.60 5139.8 26.12 263.26 6 20 43 1281.86 11.88 113.62 6 42 5 681.9 73.18 23.12 354.69 271.01 11.89 113.60 12 15 55 5139.8 263.26 106.82 10 40 15 5739.83 23.13 9 41 2 8.26 120.40 9 51 37 16.44 303.56 110.00 634.62 106.90 13 49 42 4835.1 110.00 5435.07 30 - 17 250.40 32.18 14.79 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4137.4 SGR 745.3 SG3 434.6 RRT -.9063 RRF -.9744 RTF ..9566 SGB 4204.0 R23 ..2426 R13 -.9596 SG1 4192.5 SG2 310.9 THA 170.68 ST 2572.5 SR 637.0 SS 1472.5 CRT -.9837 CRS .9994 CST -.9893 LSA 3024.7 MSA 207.4 SSA 5.5 TDE-1.8489 TRA-1.2417 TC3-3.0987 BAU .7508 RDE .4702 RRA .0719 RC3 .4380 FAU .08215 F0E-2.6566 FRA -.6594 FC3-3.9632 BSP 12890 BDE 1.9078 BRA 1.2438 BC3 3.1295 FSP -1382 EL1 2647.8 EL2 111.3 ALF 166.28 ARRIVAL DATE NOV 28 1967 LAUNCH DATE JUN 29 1967 FLIGHT TIME 152.00 DISTANCE 435.673 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 26.704 GAL -2.55 AZL 95.83 HCA 203.87 SMA 128.58 ECC .18797 INC 5.8342 V1 29.294
RP 107.49 LAP 2.36 LOP 120.35 VP 37.910 GAP 5.34 AZP 84.66 TAL 191.14 TAP 35.02 RCA 104.41 APO 152.75 V2 35.255
RC 123.648 GL -41.92 GP 23.77 ZAL 107.76 ZAP 139.06 ETS 31.29 ZAE 130.18 ETE 157.69 ZAC 102.32 ETC 22.55 CLP-145.63 PLANETOCENTRIC CONIC C3 16.474 VHL 4.059 DLA -31.56 RAL 146.33 RAD 6567.7 VEL 11.741 PTH 2.07 VHP 4.729 DPA 34.80 RAP 167.97 ECC 1.2711 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 46 0 1214.43 10 34 58 5767.79 75.45 22.95 349.48 12.72 112.28 7 6 15 514.4 25.77 341.67 112.27 12 11 6 22.96 273.06 12.73 5167.8 25.78 104.55 6 46 0 12.72 7 6 15 614.4 25.77 341.67 75.45 1214.43 22.95 349.48 112.28 112.27 12 11 6 10 34 58 5767.79 273.06 12.73 5167.8 25.78 265.26 104.55 22.96 9 29 17 684.37 14.70 8.34 121.21 9 40 41 84.4 18.73 299.57 110.00 306.37 103.38 14 19 58 4745.8 12 50 52 5345.84 33.27 235.03 110.00 31.75 243.94 15.91 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4270.2 SGR 629.0 SG3 435.4 RRT -.8882 RRF -.9576 RTF ..9552 SGB 4316.2 R23 ..2292 R13 -.9573 ST 2613.3 SR 552.1 SS 1448.0 CRT -.9840 CRS .9995 CST -.9889 TDE-1.8057 TRA-1.1467 TC3-3.5121 BAU RDE .3907 RRA .0463 RC3 .3604 FAU .08191 FDE-2.5032 FRA -.5035 FC3-4.3043 8SP 13281 LSA 3031.3 MSA 204.1 SSA 6.5 SG1 4306.7 SG2 286.5 THA 172.51 BDE 1.8475 BRA 1.1476 BC3 3.5306 FSP -1391 EL1 2669.2 EL2 96.2 ALF 168.24 ARRIVAL DATE NOV 30 1967 FLIGHT TIME 154.00 LAUNCH DATE JUN 29 1967 **DISTANCE 441.723** RL 152.08 LAL -.00 LOL 276.59 VL 26.665 GAL -2.30 AZL 95.47 HCA 207.12 SHA 128.32 ECC .18935 INC 5.4745 V1 29.294
RP 107.48 LAP 2.49 LOP 123.60 VP 37.885 GAP 5.66 AZP 85.12 TAL 189.95 TAP 37.07 RCA 104.02 APO 152.62 V2 35.257 RC 125.861 GL -40.37 GP 20.71 7AL 106.62 7AP 142.05 ETS 29.65 7AE 130.70 ETE 160.72 7AC 102.20 ETC 21.18 CLP-147.46 PLANETOCENTRIC CONIC C3 15.403 VML 3.925 OLA -30.89 RAL 148.85 RAD 6567.6 VEL 11.696 PTH 2.06 VMP 4.780 OPA 31.47 RAP 167.86 ECC 1.2535 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 7 7 41 1162.54 10 33 23 5789.16 7 27 3 562.5 22.87 345.53 13.99 111.35 25.57 77.11 274.64 14.00 111.34 12 9 52 5189.2 25.58 265.79 102.89 22.88 337.69 7 7 41 1162.54 22.87 345.53 13.99 111.35 7 27 3 562.5 25.57 77.11 10 33 23 5789.16 22.88 274.64 14.00 111.34 12 9 52 25.58 266.79 102.69 121.56 9 39 14 101.12 14 40 59 707.79 13.87 307.68 9.28 107.8 300.94 110.00 9 27 27 13 12 47 239.92 17.17 4691.9 33.72 230.89 110.00 5291.91 32.53 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4393.5 SGR 540.1 SG3 428.1 RRT -.8611 RRF -.9310 RTF ..9537 SGB 4426.5 R23 ..2096 R13 -.9551 ST 2662.3 SR 490.3 SS 1419.5 CRT -.9850 CRS .9996 CST -.9886 TOE-1.7851 TRA-1.0514 TC3-3.8876 BAU .8027 ROE .3356 RRA .0298 RC3 .2820 FAU .07992 FOE-2.3500 FRA -.3497 FC3-4.4920 BSP 13646 LSA 3050.1 MSA 200.5 SSA 7.6 SG1 4418.1 SG2 273.1 THA 173.93 BOE 1.8164 BRA 1.0518 BC3 3.8978 FSP -1370 EL1 2705.8 EL2 83.1 ALF 169.71 LAUNCH DATE JUN 29 1967 FLIGHT TIME 156.00 ARRIVAL DATE DEC 2 1967 **DISTANCE 447.756** HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 26.626 GAL -2.05 AZL 95.19 MCA 210.36 SMA 128.06 ECC .19085 INC 5.1864 V1 29.294 RP 107.48 LAP 2.62 LOP 126.85 VP 37.859 GAP 5.99 AZP 85.52 TAL 188.74 TAP 39.10 RCA 103.62 APO 152.50 V2 35.258 RC 128.066 GL -39.02 GP 18.26 ZAL 105.19 ZAP 144.66 ETS 28.28 ZAE 130.89 ETE 163.23 ZAC 101.71 ETC 19.98 CLP-149.21 PLANETOCENTRIC CONIC C3 14.595 VHL 3.820 OLA -30.49 RAL 151.41 RAD 6567.6 VEL 11.661 PTH 2.05 VHP 4.860 DPA 28.65 RAP 168.17 ECC 1.2402 TR.19 7 25 45 1125.65 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 15.61 110.73 22.88 342.77 7 44 31 525.7 25.50 334.89 110.71 12 12 28 101.81 10 35 46 5801.94 22.89 275.60 15.61 5201.9 25.51 267.73 7 44 31 525.7 25.50 334.89 78.19 7 25 45 1125.65 22.88 342.77 15.61 110.73 110.71 12 12 28 5201.9 25.51 267.73 101.81 10 35 46 5801.94 22.89 275.60 15.61 13.53 10.77 121.69 9 43 6 117.2 17.63 301.48 717.18 308.20 99.68 14 57 10 13 29 32 5258.41 32.95 237.40 18.70 4658.4 33.93 228.30 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2719.8 SR 446.1 SS 1392.0 CRT -.9868 CRS .9997 CST -.9885 LSA 3081.5 MSA 196.2 SSA 8.7 TOE-1.7816 TRA -.9546 TC3-4.2316 BAU .8267 SGT 4511.5 SGR 474.9 SG3 416.9 RDE .2974 RRA .0201 RC3 .2085 FAU .07702 RRT -.8238 RRF -.8928 RTF .9525

SGB 4536.4 R23 .1859 R13 -.9534 SG1 4528.5 SG2 268.2 THA 175.03

EL1 2755.2 EL2 71.4 ALF 170.80

FDE-2.2080 FRA -.2072 FC3-4.5685 BSP 14019 BDE 1.8063 BRA .9548 BC3 4.2367 FSP -1338

ARRIVAL DATE DEC 4 1967

LAUNCH DATE JUN 29 1967

DISTANCE 453.771 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 26.586 GAL -1.78 AZL 94.95 HCA 213.61 SMA 127.80 ECC .19247 INC 4.9491 VI 29.294 RP 107.48 LAP 2.74 LOP 130.10 VP 37.831 GAP 6.31 AZP 85.87 TAL 187.50 TAP 41.11 RCA 103.20 APO 152.39 V2 35.259 RC 130.261 GL -37.82 GP 16.26 ZAL 103.54 ZAP 147.00 ETS 27.13 ZAE 130.89 ETE 165.32 ZAC 100.94 ETC 18.93 CLP-150.88 PLANETOCENTRIC CONIC C3 13.975 VHL 3.738 DLA -30.30 RAL 154.04 RAD 6567.6 VEL 11.634 PTH 2.04 VHP 4.960 DPA 26.21 RAP 168.80 ECC 1.2300 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 25.53 110.32 7 58 44 110.31 12 18 55 17.52 7 58 44 503.0 7 40 21 1103.03 10 42 10 5805.37 7 40 21 1103.03 22.97 78.74 341.11 5205.4 25.54 268.00 275.89 17.52 22.98 17.52 110.32 7 58 44 503.0 25.53 333.22 22.97 341.11 110.31 12 18 55 121.70 9 50 36 98.82 15 10 22 5205.4 25.54 268.00 17.52 10 42 10 5805.37 275.89 22.98 101.26 117.6 301.51 17.62 12.67 110.00 9 38 38 717.57 13.52 308.22 34.02 226.77 13 43 3 5238.82 20.52 4638.8 110.00 33.16 235.91 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4619.5 SCR 428.3 SC3 402.7 RRT -.7752 RRF -.8419 RTF .9510 SCB 4639.3 R23 .1617 R13 -.9517 SCI 4631.4 SCZ 269.9 THA 175.88 ST 2781.8 SR 414.4 SS 1364.1 CRT -.9891 CRS ..9997 CST -.9885 TDE-1.7894 TRA -.8518 TC3-4.5418 BAU .8490 .2703 RRA .0145 RC3 .1412 FAU .07349 LSA 3119.9 MSA 191.8 SSA 9.8 FOE-2.0756 FRA -.0715 FC3-4.5529 BSP 14325 BDE 1.8097 BRA .8520 BC3 4.5440 FSP -1288 EL1 2811.8 EL2 60.5 ALF 171.62 ARRIVAL DATE DEC 6 1967 FLIGHT TIME 160.00 **DISTANCE 459.769** HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 26.545 GAL -1.50 AZL 94.75 HCA 216.85 SMA 127.53 ECC .19422 INC 4.7492 V1 29.294 RP 107.48 LAP 2.85 LOP 133.35 VP 37.802 GAP 6.63 AZP 86.20 TAL 186.23 TAP 43.09 RCA 102.76 APO 152.30 V2 35.259 RC 132.447 GL -36.73 GP 14.61 ZAL 101.68 ZAP 149.11 ETS 26.16 ZAE 130.77 ETE 167.05 ZAC 99.93 ETC 18.01 CLP-152.47 PLANETOCENTRIC CONIC 2.04 VHP 5.073 OPA C3 13.498 VHL 3.674 DLA -30.27 RAL 156.76 RAD 6567.5 VEL 11.614 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 51 56 1093.11 10 52 17 5800.09 8 10 9 493.1 25.65 332.52 340.44 19.70 110.09 23.13 78.84 110.09 8 10 9 110.08 12 26 57 110.09 8 10 9 110.08 12 26 57 121.62 10 0 49 98.41 15 21 35 5200.1 25.66 267.64 19.70 275.56 101.16 23.14 7 51 56 10 52 17 493:1 25.65 332.52 340.44 19.70 78.84 1093.11 23.13 5200.1 25.66 267.64 19.70 275.56 101.16 5800.09 23.14 111.7 17.81 301.17 13.73 14.91 110.00 9 48 58 711.71 307.90 4629.5 34.06 226.05 22.61 110.00 235.20 13 54 25 5229.49 33.26 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4729.7 SGR 398.2 SG3 388.5 RRT -.7194 RRF -.7816 RTF .9500 ST 2853.0 SR 392.9 SS 1340.8 CRT -.9917 CRS .9993 CST -.9886 TDE-1.8097 TRA -.7462 TC3-4.8289 BAU .8715 RDE .2519 RRA .0125 RC3 .0827 FAU .06993 FDE-1.9603 FRA .0488 FC3-4.4855 BSP 14698 SGB 4746.4 R23 .1379 R13 -.9505 SG1 4738.4 SG2 276.0 THA 176.52 LSA 3171.2 MSA 186.7 SSA 10.9 EL1 2879.5 EL2 50.1 ALF 172.22 BDE 1.8271 BRA .7463 BC3 4.8296 FSP -1247 ARRIVAL DATE DEC 8 1967 FLIGHT TIME 162.00 LAUNCH DATE JUN 29 1967 DISTANCE 465.748 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 26.504 GAL -1.20 AZL 94.58 MCA 220.10 SMA 127.27 ECC .19610 INC 4.5774 VI 29.294
RP 107.48 LAP 2.95 LOP 136.60 VP 37.773 GAP 6.95 AZP 86.50 TAL 184.95 TAP 45.05 RCA 102.31 APO 152.22 V2 35.258
RC 134.624 GL -35.69 GP 13.23 TAL 99.64 ZAP 151.03 ETS 25.37 ZAE 130.59 ETE 168.50 ZAC 98.75 ETC 17.18 CLP-154.00 PLANETOCENTRIC CONIC C3 13.137 VHL 3.625 DLA -30.36 RAL 159.58 RAD 6567.5 VEL 11.598 PTH 2.03 VHP 5.198 DPA 22.12 RAP 170.72 ECC 1.2162 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 109.99 8 19 28 109.98 12 41 54 109.99 8 19 28 109.98 12 41 54 109.98 12 41 54 121.47 10 13 15 98.35 15 31 26 22.13 8 19 28 493.3 25.84 332.59 8 1 15 1093.32 340.53 78.58 23.33 266.81 5188.1 25.85 11 5 26 274.75 22.14 5788,14 23.34 493.3 25.84 332.59 340.53 22.13 8 1 15 1093.32 23.33 274.75 22.14 5188.1 25.85 266.81 11 5 26 5788.14 23.34 101.42 307.32 17.45 101.3 18 16 300.56 10 1 33 701.32 14.10 4628.1 34.06 225.94 235.09 24.98 14 4 17 5228.14 33.27 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4832.5 SGR 379.8 SG3 373.6 RRT -.6591 RRF -.7154 RTF .9492 SGB 4847.4 R23 .1165 R13 -.9495 ST 2926.1 SR 378.5 SS 1317.7 CRT -.9943 CRS .9984 CST -.9889 TOE-1.8366 TRA -.6330 TC3-5.0834 BAU .8929 RDE .2394 RRA .0126 RC3 .0316 FAU .06626 FOE-1.8544 FRA .1603 FC3-4.3664 BSP 15025 LSA 3226.2 MSA 181.4 SSA 12.0 SG1 4839.0 SG2 285.2 THA 177.02 EL1 2950.2 EL2 40.2 ALF 172.67 BOE 1.8521 BRA .6332 BC3 5.0835 FSP -1198 FLIGHT TIME 164.00 ARRIVAL DATE DEC 10 1967 LAUNCH DATE JUN 29 1967 DISTANCE 471.709 RL 152.08 LAL -.00 LOL 276.59 VL 26.463 GAL -.90 A7L 94.43 MCA 223.35 SMA 127.00 ECC .19813 INC 4.4273 V1 29.294 RP 107.48 LAP 3.04 LOP 139.85 VP 37.742 GAP 7.27 A7P 86.78 TAL 183.64 TAP 46.98 RCA 101.84 APO 152.16 V2 35.256 RC 136.791 GL -34.69 GP 12.07 7AL 97.44 ZAP 152.81 ETS 24.72 ZAE 130.37 ETE 169.72 ZAC 97.40 ETC 16.45 CLP-155.45 PLANETOCENTRIC CONIC C3 12.878 VHL 3.589 DLA -30.53 RAL 162.50 RAD 6567.5 VEL 11.587 PTH 2.03 VHP 5.330 DPA 20.35 RAP 171.93 ECC 1.2119 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 26.07 24.81 8 27 29 110.01 501.0 341.19 8 9 8 1100.96 23.56 24.81 109.99 12 57 2 5171.9 26.08 265.67 273.63 11 20 50 5771.89 23.57 8 27 29 501.0 26.07 333.24 110.01 24.81 1100.96 23.56 341.19 8 27 29 12 57 2 78.07 8 9 8 5171.9 26.08 265.67 24.81 109.99 273.63 101.93 11 20 50 5771.89 23.57 121.26 10 27 30 98.57 15 40 20 87.7 18.62 299.77 20.26 121.26 306.56 10 16 2 687.68 14.58 27.60 4633.2 34.05 226.33 14 13 7 5233.17 235.48 33.22 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4935.4 SGR 371.0 SG3 359.4 RRT -.6003 RRF -.6499 RTF .9485 SGB 4949.3 R23 .0981 R13 -.9488 ST 3004.6 SR 370.1 SS 1298.1 CRT -.9965 CRS .9968 CST -.9892 TOE-1.8719 TRA -.5134 TC3-5.3091 BAU .9140 RDE .2317 RRA .0141 RC3 -.0115 FAU .06271 LSA 3289.1 MSA 175.9 SSA 13.1 FDE-1.7621 FRA .2623 FC3-4.2158 BSP 15376 BDE 1.8862 BRA .5136 BC3 5.3091 FSP -1156 SG1 4940.4 SG2 296.4 THA 177.41 EL1 3027.1 EL2 30.6 ALF 173.00

FLIGHT TIME 158.00

ARRIVAL DATE DEC 12 1967

LAUNCH DATE JUN 29 1967

DISTANCE 477.650 HELTOCENTRIC CONTC. RL 152.08 LAL -.00 LOL 276.59 VL 26.421 GAL -.58 AZL 94.29 HCA 226.59 SMA 126.73 ECC .20031 INC 4.2942 VI 29.294
RP 107.49 LAP 3.12 LOP 143.10 VP 37.711 GAP 7.60 AZP 87.05 TAL 182.31 TAP 48.90 RCA 101.34 APO 152.12 V2 35.254
RC 138.949 GL -33.70 GP 11.08 ZAL 95.10 ZAP 154.47 ETS 24.21 ZAE 130.14 ETE 170.74 ZAC 95.93 ETC 15.80 CLP-156.85 PLANETOCENTRIC CONIC C3 12.709 VHL 3.565 DLA -30.78 RAL 165.53 RAD 6567.5 VEL 11.580 PTH 2.03 VHP 5.471 DPA 18.70 RAP 173.26 ECC 1.2092 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8 16 23 1113,43 11 37 45 5753,78 8 16 23 1113,43 11 37 45 5753,78 110.11 8 34 57 110.09 13 13 39 27.71 26.33 334.26 342.23 8 34 57 513.4 23.81 272.37 27.71 5153.8 26.34 264.40 23.82 23.81 342.23 27.71 110.11 8 34 57 513.4 26.33 334.26 110.09 13 13 39 121.02 10 43 16 99.02 15 48 38 27.71 5153.8 26.34 264.40 23.82 272.37 10 32 5 671.80 15.14 305.67 23.32 71.8 19.14 298.83 14 21 14 5243.40 33.11 236.26 30.46 4643.4 34.00 227.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5031.7 SCR 368.5 SC3 345.1 RRT -.5458 RRF -.5882 RTF .9483 SCB 5045.1 R23 .0820 R13 -.9485 SCI 5035.7 SC2 308.6 THA 177.70 ST 3080.6 SR 365.8 SS 1276.6 CRT -.9982 CRS .9945 CST -.9896 TDE-1.9106 TRA -.3867 TC3-5.4977 BAU .9342 RDE .2275 RRA .0167 RC3 -.0477 FAU .05921 FOE-1.6751 FRA .3542 FC3-4.0330 BSP 15712 BOE 1.9241 BRA .3870 BC3 5.4979 FSP -1113 LSA 3350.3 MSA 170.1 SSA 14.2 EL1 3102.1 EL2 22.1 ALF 173.24 ARRIVAL DATE DEC 14 1967 LAUNCH DATE JUN 29 1967 FLIGHT TIME 168.00 HELIOCENTRIC CONIC DISTANCE 483.571 RL 152.08 LAL -.00 LOL 276.59 VL 26.379 GAL -.25 AZL 94.17 HCA 229.84 SMA 126.46 ECC .20265 INC 4.1747 VI 29.294
RP 107.50 LAP 3.19 LOP 146.35 VP 37.678 GAP 7.93 AZP 87.30 TAL 180.97 TAP 50.80 RCA 100.84 APO 152.09 V2 35.251
RC 141.095 GL -32.71 GP 10.23 ZAL 92.63 ZAP 156.02 ETS 23.82 ZAE 129.91 ETE 171.61 ZAC 94.36 ETC 15.21 CLP-158.19 PLANETOCENTRIC CONIC C3 12.627 VHL 3.554 OLA -31.06 RAL 168.66 RAO 6567.5 VEL 11.576 PTH 2.02 VHP 5.618 DPA 17.16 RAP 174.69 ECC 1.2078 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8 23 34 1128.86 11 55 35 5735.58 8 23 34 1128.86 11 55 35 5735.58 30.83 110.28 8 42 23 110.26 13 31 10 26.59 24.05 528.9 335.51 343.49 263.12 103.34 11 55 35 24.06 271.10 30.84 5135.6 26.60 110.28 8 42 23 110.26 13 31 10 120.74 11 0 20 99.65 15 56 32 24.05 343,49 30.83 528.9 26.59 335.51 11 55 35 24.06 271.10 30.84 5135.6 26.60 263.12 103.34 10 49 25 15.74 54.6 19.70 297.82 654.58 304.70 26.62 14 28 55 4657.9 33.93 228.25 5257.85 32.95 237.35 33.54 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5122.8 SGR 370.6 SG3 331.3 RRT -.4985 RRF -.5337 RTF .9481 SGB 5136.1 R23 .0683 R13 -.9483 ST 3153.6 SR 364.9 SS 1254.3 CRT -.9990 CRS .9913 CST -.9900 LSA 3409.4 HSA 164.6 SSA 15.2 TOE-1.9525 TRA -.2500 TC3-5.6477 BAU .9535 ROE .2262 RRA .0196 RC3 -.0768 FAU .05584 FDE-1.5944 FRA .4415 FC3-3.8286 BSP 16030 BDE 1.9655 BRA .2507 BC3 5.6482 FSP -1073 SG1 5126.1 SG2 321.1 THA 177.93 EL1 3174.6 EL2 16.3 ALF 173.41 ARRIVAL DATE DEC 16 1967 LAUNCH DATE JUN 29 1967 FLIGHT TIME 170.00 DISTANCE 489.470 RL 152.08 LAL -.00 LOL 276.59 VL 26.337 GAL .10 AZL 94.07 MCA 233.08 SMA 126.20 ECC .20516 INC 4.0661 V1 29.294
RP 107.51 LAP 3.25 LOP 149.60 VP 37.645 GAP 8.26 AZP 87.56 TAL 179.60 TAP 52.69 RCA 100.31 APO 152.09 V2 35.247
RC 143.232 GL -31.70 GP 9.50 ZAL 90.05 ZAP 157.47 ETS 23.56 ZAE 129.68 ETE 172.35 ZAC 92.68 ETC 14.68 CLP-159.48 PLANETOCENTRIC CONIC C3 12.631 VHL 3.554 OLA -31.37 RAL 171.90 RAD 6567.5 VEL 11.577 PTH 2.02 VHP 5.771 OPA 15.70 RAP 176.21 ECC 1.2079 C3 12.631 VML 3.554 OLA -31.37 RAL 171.90 RAO 6567.5 VEL 11.577 PM 2.02 VMP 5.71 UPA 15.70 RAP 176.21 ECC 12.279

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.90 8 31 9 1145.72 24.28 344.85 34.17 110.50 8 50 14 545.7 26.85 336.87 104.10 12 13 49 5718.82 24.29 269.92 34.17 110.50 8 50 14 545.7 26.85 261.94 104.10 12 13 49 5718.82 24.29 269.92 34.17 110.49 13 49 8 5118.8 26.85 261.94 110.00 11 7 46 656.91 16.36 303.69 30.15 120.44 11 18 23 36.9 20.28 296.76 110.00 14 36 22 5275.63 32.74 238.70 36.83 100.42 16 4 18 4675.6 33.83 229.63 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 3208.5 SR 364.9 SS 1217.6 CRT -.9989 CRS .9869 CST -.9901 LSA 3447.3 MSA 160.6 SSA 16.2 SGT 5194.8 SGR 374.0 SG3 315.7 RRT -.4547 RRF -.4818 RTF .9469 SGB 5208.2 R23 .0555 R13 -.9470 TOE-1.9884 TRA -.1001 TC3-5.7448 BAU .9702 ROE .2262 RRA .0221 RC3 -.1011 FAU .05227 FDE-1.5024 FRA .5296 FC3-3.5827 BSP 16149 SG1 5197.6 SG2 332.9 THA 178.12 EL1 3229.1 EL2 17.1 ALF 173.52 BOE 2.0012 BRA .1026 BC3 5.7457 FSP -1002 ARRIVAL DATE DEC 18 1967 FLIGHT TIME 172.00 LAUNCH DATE JUN 29 1967 DISTANCE 495.348 RL 152.08 LAL -.00 LOL 276.59 VL 26.294 GAL .46 AZL 93.97 MCA 236.33 SMA 125.93 ECC .20785 INC 3.9665 VI 29.294 RP 107.53 LAP 3.30 LOP 152.85 VP 37.611 GAP 8.59 AZP 87.80 TAL 178.23 TAP 54.56 RCA 99.75 APO 152.10 V2 35.243 RC 145.356 GL -30.66 GP 8.86 ZAL 87.38 ZAP 158.85 ETS 23.40 ZAE 129.47 ETE 172.99 ZAC 90.93 ETC 14.20 CLP-160.72 PLANETOCENTRIC CONIC C3 12.720 VHL 3.567 OLA -31.68 RAL 175.23 RAD 6567.5 VEL 11.580 PTH 2.03 VHP 5.931 OPA 14.30 RAP 177.81 ECC 1.2093 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.17 8 39 21 1163.16 24.47 346.25 37.70 110.77 8 58 44 563.2 27.07 338.26 104.83 12 32 11 5704.40 24.48 268.91 37.70 110.76 14 7 15 5104.4 27.08 260.93 24.47 346.25 37.70 110.77 B 58 44 563.2 27.07 338.26 75.17 8 39 21 1163.16 110.76 14 7 15 120.14 11 37 11 101.29 16 12 7 268.91 27.08 260.93 12 32 11 5704.40 24.48 37.70 5104.4 11 26 52 619.64 14 43 51 5295.92 16.95 302.71 33.87 19.6 20.83 295.73 33.70 32.48 240.22 40.31 4695.9 231.20 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3284.4 SR 371.1 SS 1206.7 CRT -.9979 CRS .9825 CST -.9907 LSA 3515.2 MSA 155.7 SSA 17.2 EL1 3305.2 EL2 24.1 ALF 173.57 SCT 5284.8 SGR 383.2 SG3 304.2 RRT - .4266 RRF - .4512 RTF .9474 SG8 5298.7 R23 .0501 R13 - .9475 SG1 5287.3 SG2 346.4 THA 178.22 TDE-2.0429 TRA .0525 TC3-5.8054 BAU .9874 RDE .2308 RRA .0253 RC3 -.1179 FAU .04910 FDE-1.4497 FRA .6013 FC8-3.3421 BSP 16534 BDE 2.0559 BRA .0583 BC3 5.8066 FSP -978

FLIGHT TIME 166.00

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FLIGHT TIME 174.00
                                                                                                                                                           ARRIVAL DATE DEC 20 1967
LAUNCH DATE JUN 29 1967
                                                                                     DISTANCE 501.202
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.252 GAL .84 AZL 93.87 HCA 239.57 SMA 125.66 ECC .21074 INC 3.8741 V1 29.294
RP 107.54 LAP 3.34 LOP 156.10 VP 37.577 GAP 8.94 AZP 88.04 TAL 176.84 TAP 56.41 RCA 99.18 APO 152.15 V2 35.237
RC 147.469 GL -29.59 GP 8.29 TAL 84.63 TAP 160.16 ETS 23.36 TAE 129.26 ETE 173.53 TAC 89.11 ETC 13.78 CLP-161.91
   PLANETOCENTRIC CONIC
     C3 12.899 VHL 3.591 DLA -31.97 RAL 178.64 RAD 6567.5 VEL 11.588 PTH 2.03 VHP 6.098 DPA 12.95 RAP 179.47 ECC 1.2123
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.07 14 25 15
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                      8 48 23 1180.49
12 50 22 5693.06
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         74.50
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                                                             24.62
        105.50
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         74.50
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119.85 11 56 24
102.21 16 20 13
                      12 50 22 5693.06
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                                                             24.62
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        105.50
        110.00
                      11 46 20
                                          603.75
                                                             17.49
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                      14 51 35 5317.80
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                                                            32.18
                                                                            241.86
                                                                                               43.97
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 3332.0 SR 376.6 SS 1176.1

CRT -.9959 CRS .9767 CST -.9910

LSA 3550.2 MSA 152.5 SSA 18.0

EL1 3353.1 EL2 33.9 ALF 173.58
    TDE-2.0857 TRA .2192 TC3-5.8124 BAU 1.0026

RDE .2359 RRA .0278 RC3 -.1298 FAU .04590

FDE-1.3783 FRA .6742 FC3-3.0810 BSP 16779

BDE 2.0990 BRA .2209 BC3 5.8138 FSP -938
                                                                                SCT 5354.6 SGR 391.2 SG3 290.9

RRT - 4016 RRF - 4211 RTF .9471

SGB 5368.9 R23 .0426 R13 - .9472

SGI 5356.9 SG2 358.1 THA 178.31
                                                                                                                                                            ARRIVAL DATE DEC 22 1967
                                                                                      FLIGHT TIME 176.00
LAUNCH DATE JUN 29 1967
                                                                                      DISTANCE 507.031
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.08 LOL 276.59 VL 26.210 GAL 1.24 AZL 93.79 HCA 242.81 SMA 125.40 ECC .21385 INC 3.7876 VI 29.294
RP 107.56 LAP 3.37 LOP 159.35 VP 37.542 GAP 9.28 AZP 88.27 TAL 175.44 TAP 58.25 RCA 98.58 APO 152.22 V2 35.231
RC 149.570 GL -28.49 GP 7.80 ZAL 81.82 ZAP 161.41 ETS 23.44 ZAE 129.07 ETE 174.01 ZAC 87.23 ETC 13.39 CLP-163.07
   PLANETOCENTRIC CONIC
    C3 13.172 VHL 3.629 DLA -32.23 RAL 182.11 RAD 6567.5 VEL 11.600 PTH 2.03 VHP 6.271 DPA 11.65 RAP 181.18 ECC 1.2168 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.92 8 58 19 1197.23 24.69 348.93 45.28 111.41 9 18 16 597.2 27.38 340.96
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111.39 14 42 54
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                      13 8
                                         5685.35
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        106.08
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111.39 14 42 54
119.59 13 43 47
103.15 16 28 49
                       8 58 19 1197.23
13 8 9 5685.35
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         73.92
        106.08 13 8 9
110.00 12 5 49
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                                         5878.36
                                                             17.94
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                                                                             243.52
                                                                                                47.80
                                                                                                                                                                       33.32
                                                                                                                                                                                       234.61
        110.00
                      14 59 49
                                         5340.26
                                                             31-84
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                SCT 5431.6 SCR 400.3 SC3 279.3

RRT -.3856 RRF -.4010 RTF .9479

SCB 5446.4 R23 .0365 R13 -.9480

SCI 5433.8 SC2 369.2 THA 178.36
                                                                                                                                              ST 3375.7 SR 384.4 SS 1149.2

CRT -.9931 CRS .9707 CST -.9914

LSA 3583.4 MSA 149.6 SSA 18.7
     TDE-2.1322 TRA .3918 TC3-5.7857 BAU 1.0191
     RDE .2432 RRA .0301 RC3 -.1354 FAU .04311
FDE-1.3173 FRA .7377 FC3-2.8336 BSP 17093
BDE 2.1461 BRA .3930 BC3 5.7873 FSP -908
                                                                                                                                               EL1 3397.2 EL2 44.9 ALF 173.55
                                                                                                                                                           ARRIVAL DATE DEC 24 1967
                                                                                      FLIGHT TIME 178.00
LAUNCH DATE JUN 29 1967
                                                                                     DISTANCE 512.834
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 26.167 GAL 1.65 A7L 93.71 MCA 246.06 SMA 125.14 ECC .21717 INC 3.7061 VI 29.294
RP 107.58 LAP 3.39 LOP 162.60 VP 37.506 GAP 9.64 A7P 88.49 TAL 174.03 TAP 60.08 RCA 97.96 APO 152.31 V2 35.225
RC 151.657 GL -27.35 GP 7.36 ZAL 78.98 ZAP 162.60 ETS 23.64 ZAE 128.89 ETE 174.41 ZAC 85.29 ETC 13.05 CLP-164.19
    PLANETOCENTRIC CONIC
     C3 13.545 VHL 3.680 DLA -32.45 RAL 185.63 RAD 6567.5 VEL 11.616 PTH 2.04 VHP 6.451 DPA 10.38 RAP 182.94 ECC 1.2229
     LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.44 9 9 14 1213.03 24.70 350.15 49.29 111.75 9 29 27 613.0 27.43 342.19 106.56 13 25 19 5681.70 24.71 267.28 49.29 111.74 15 0 0 5081.7 27.44 259.33 73.44 9 9 14 1213.03 24.70 350.15 49.29 111.75 9 29 27 613.0 27.43 342.19
                                                                                                              111.75 9 29 27
111.74 15 0 0
111.75 9 29 27
111.74 15 0 0
111.75 9 29 27
111.74 15 0 0
119.40 14 2 41
104.05 16 38 12
                                                                                                                                                                                      259.33
                      13 25 19 5681.70
12 24 53 5868.48
15 8 50 5362.29
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                                                             24.71
                                                                            267.28
                                                                                                49.29
        106.56
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        110.00
                                                             18.28
                                                                             278.35
                                                                                                45.99
                                                                                                                                                   4762.3
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                                                                                                                                                                                       236.29
                                                             31.49
                                                                             245.15
                                                                                                51.77
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5491.3 SGR 409.1 SG3 267.3
RRT -.3733 RRF -.3849 RTF .9460
SGB 5506.6 R23 .0316 R13 -.9481
SGI 5493.5 SG2 379.4 THA 178.40
                                                                                                                                              ST 3397.6 SR 392.5 SS 1115.0
CRT - .9893 CRS .9636 CST - .9916
LSA 3594.2 MSA 148.8 SSA 19.1
     TOE-2.1712 TRA .5803 TC3-5.6969 BAU 1.0319
     RDE .2519 RRA .0314 RC3 -.1376 FAU .04020
     FDE-1.2524 FRA .8026 FC3-2.5691 BSP 17258
BDE 2.1857 BRA .5811 BC3 5.6986 FSP -868
                                                                                                                                               EL1 3419.7 EL2 56.8 ALF 173.48
                                                                                                                                                            ARRIVAL DATE DEC 26 1967
                                                                                      FLIGHT TIME 180.00
LAUNCH DATE JUN 29 1967
                                                                                      DISTANCE 518.608
    RL 152.08 LAL -.00 LOL 276.59 VL 26.125 GAL 2.08 AZL 93.63 HCA 249.30 SMA 124.88 ECC .22075 INC 3.6286 V1 29.294
RP 107.60 LAP 3.39 LOP 165.85 VP 37.469 GAP 10.00 AZP 88.72 TAL 172.61 TAP 61.90 RCA 97.31 APO 152.44 VZ 35.217
RC 153.730 GL -26.18 GP 6.97 ZAL 76.11 ZAP 163.75 ETS 23.97 ZAE 128.72 ETE 174.77 ZAC 83.31 ETC 12.74 CLP-165.29
    PLANETOCENTRIC CONIC
     C3 14.028 VHL 3.745 DLA -32.62 RAL 189.17 RAD 6567.6 VEL 11.637 PTH 2.04 VHP 6.639 DPA
                                                                                                                                                       9.14 RAP 184.75 ECC 1.2309
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               112.10 9 41 29
112.09 15 16 29
                                                                                                                                                                    27.40
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                       9 21 1 1227.96
13 41 47 5682.11
                                                                                              53.42
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                                                             24.63
                                                                             351.26
          73.08
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112.09 15 16 29
119.30 14 20 46
104.86 16 48 39
                       9 21 1 1227.96
13 41 47 5682.11
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                                                                                                53.42
          73.08
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                                                              24.64
                                                                             267.28
                                                                                                53.42
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                                                                                                                                                                       27.41
        106.92
                       12 43 3 5863.38
15 18 56 5382.73
                                                              18.45
                                                                             278.05
                                                                                                50.22
                                                                                                                                                    5263.4
                                                                                                                                                                                       270.93
        110.00
                                                                             246.64
                                                                                                                                                    4782.7
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                                                                                                                                                                                       237.84
                                                                                                55.88
                                                             31.14
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 3411.9 SR 401.8 SS 1082.5

CRT -. 9850 CRS .9562 CST -. 9919

LSA 3598.9 MSA 148.9 SSA 19.4

EL1 3434.8 EL2 68.9 ALF 173.38
                                                                                SGT 5556.5 SGR 418.0 SG3 256.3

RRT -.3672 RRF -.3760 RTF .9487

SGB 5572.2 R23 .0279 R13 -.9488

SGI 5558.6 SG2 388.7 THA 178.41
      TOE-2.2117 TRA .7754 TC3-5.5756 BAU 1.0460
     ROE .2624 RRA .0322 RC3 -.1351 FAU .03757
FOE-1.1945 FRA .8608 FC3-2.3188 BSP 17506
      BOE 2.2272 BRA .7761 BC3 5.5773 FSP -836
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LAUNCH DATE JUN 29 1967 FLIGHT TIME 182.00 ARRIVAL DATE DEC 28 1967 HELIOCENTRIC CONIC DISTANCE 524.351 RL 152.08 LAL -.00 LOL 276.59 VL 26.083 CAL 2.53 AZL 93.55 MCA 252.53 SMA 124.62 ECC .22459 INC 3.5544 VI 29.294
RP 107.63 LAP 3.39 LOP 169.09 VP 37.433 CAP 10.38 AZP 88.93 TAL 171.18 TAP 63.72 RCA 96.63 APO 152.61 V2 35.210
RC 155.789 GL -24.98 CP 6.63 ZAL 73.24 ZAP 164.85 ETS 24.44 ZAE 128.57 ETE 175.07 ZAC 81.29 ETC 12.47 CLP-166.35 PLANETOCENTRIC CONIC C3 14.630 VHL 3.825 DLA -32.73 RAL 192.72 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 6.835 DPA 7.92 RAP 186.59 ECC 1.2408 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 9 33 42 1241.80 13 57 23 5686.87 9 33 42 1241.80 13 57 23 5686.87 12 59 53 5864.17 15 30 22 5400.53 72.86 57.64 27.29 344.34 24.46 352.24 112.45 9 54 23 641.8 112.44 15 32 10 107.14 24.47 267.57 57.65 5086.9 27.30 259.67 72.86 24.46 352.24 57.64 112.45 9 54 23 641.8 27.29 344.34 112.45 9 54 23 112.44 15 32 10 119.32 14 37 37 105.57 17 0 23 107.14 24.47 267.57 57.65 5086.9 27.30 259.67 110.00 18.42 278.09 54.49 5264.2 22.18 270.98 110.00 239.18 30.82 247.93 60.11 4800.5 32.65 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5613.9 SGR 426.4 SC3 245.5 RRT - .3646 RRF - .3708 RTF .9494 SGB 5630.1 R23 .0246 R13 - .9495 SGI 5616.1 SG2 396.9 THA 178.41 ST 3408.5 SR 411.1 SS 1046.4 CRT -.9799 CRS .9482 CST -.9921 TOE-2.2468 TRA .9825 TC3-5.4101 BAU 1.0585 ROE .2742 RRA .0319 RC3 -.1296 FAU .03503 FDE-1.1364 FRA .9167 FC3-2.0727 BSP 17728 BDE 2.2634 BRA .9830 BC3 5.4116 FSP -805 LSA 3585.9 MSA 150.7 SSA 19.5 EL1 3432.2 EL2 81.5 ALF 173.26 LAUNCH DATE JUN 29 1967 FLIGHT TIME 184.00 ARRIVAL DATE DEC 30 1967 DISTANCE 530.061 RL 152.08 LAL -.00 LOL 276.59 VL 26.041 GAL 3.01 AZL 93.48 MCA 255.77 SMA 124.36 ECC .22871 INC 3.4829 VL 29.294
RP 107.65 LAP 3.38 LOP 172.33 VP 37.395 GAP 10.77 AZP 89.14 TAL 169.75 TAP 65.52 RCA 95.92 APO 152.80 V2 35.201
RC 157.834 GL -23.77 GP 6.31 ZAL 70.39 ZAP 165.92 ETS 25.08 ZAE 128.43 ETE 175.34 ZAC 79.24 ETC 12.24 CLP-167.38 PLANETOCENTRIC CONIC C3 15.364 VHL 3.920 DLA -32.77 RAL 196.24 RAD 6567.6 VEL 11.694 PTH 2.06 VHP 7.040 DPA 6.73 RAP 188.46 ECC 1.2529 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 9 47 12 1254.40 14 11 58 5696.16 9 47 12 1254.40 14 11 58 5696.16 13 15 1 5871.72 15 43 20 5414.88 112.79 10 8 7 112.78 15 46 54 112.79 10 8 7 112.78 15 46 54 112.78 15 46 54 119.47 14 52 52 106.12 17 13 35 61.93 72.77 24.21 353.09 654.4 27.08 345.23 107.23 24.22 268.17 61.94 5096.2 27.09 260.30 72.77 24.21 353.09 61.93 654.4 27.08 345.23 107.23 24.22 268.17 61.94 5096.2 27.09 260.30 110.00 18.17 278.53 58.76 5271.7 271.45 21.95 4814.9 110.00 30.56 248.96 64,46 32.46 240.26 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5665.9 SCR 434.1 SC3 235.2 RRT -.3654 RRF -.3693 RTF .9500 SCB 5682.5 R23 .0220 R13 -.9501 TDE-2.2773 TRA 1.2021 TC3-5.2058 BAU 1.0696 ST 3389.5 SR 420.5 SS 1008.7 CRT -.9741 CRS .9394 CST -.9922 LSA 3557.9 MSA 154.2 SSA 19.4 RDE .2874 RRA .0305 RC3 -.1216 FAU .03257 FOE-1.0799 FRA .9712 FC3-1.8355 BSP 17927 BDE 2.2953 BRA 1.2025 BC3 5.2072 FSP -775 SG1 5668.2 SG2 403.9 THA 178.39 EL1 3414.2 EL2 94.4 ALF 173.10 LAUNCH DATE JUN 29 1967 FLIGHT TIME 186,00 ARRIVAL DATE JAN I 1968 DISTANCE 535.734 RL 152.08 LAL -.00 LOL 276.59 VL 25.999 GAL 3.50 AZL 93.41 MCA 259.01 SMA 124.11 ECC .23314 INC 3.4134 VI 29.294
RP 107.68 LAP 3.35 LOP 175.58 VP 37.358 GAP 11.17 AZP 89.35 TAL 168.31 TAP 67.32 RCA 95.17 APO 153.04 VZ 35.192
RC 159.863 GL -22.54 GP 6.04 ZAL 67.57 ZAP 166.94 ETS 25.90 ZAE 128.29 ETE 175.57 ZAC 77.15 ETC 12.04 CLP-168.40 PLANETOCENTRIC CONIC C3 16.244 VHL 4.030 DLA -32.74 RAL 199.72 RAD 6567.7 VEL 11.731 PTH 2.07 VHP 7.255 DPA 5.55 RAP 190.37 ECC 1.2673 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.83 10 1 25 1265.99 23.85 353.82 66.27 113.13 10 22 31 666.0 26.77 345.99 107.17 14 25 30 5709.80 23.86 269.05 66.27 113.12 16 0 40 5109.8 26.78 261.23 72.83 10 1 25 1265.99 23.85 353.82 66.27 113.13 10 22 31 666.0 26.77 345.99 107.17 14 25 30 5709.80 23.86 269.05 66.27 113.13 10 22 31 666.0 26.77 345.99 107.17 14 25 30 5709.80 23.86 269.05 66.27 113.12 16 0 40 5109.8 26.78 261.23 10.00 13 28 13 5886.44 17.67 279.39 62.98 119.75 15 6 19 5286.4 21.49 272.34 110.00 15 57 53 5425.39 30.36 249.71 68.90 106.53 17 28 18 4825.4 32.32 241.05 DISFERSIVAL CORRECTIONS ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 5709.2 SCR 440.9 SC3 225.2 RRT -,3683 RRF -.3702 RTF .9504 SCB 5726.2 R23 .0197 R13 -.9505 SCI 5711.6 SC2 409.8 THA 178.36 ST 3352.2 SR 429.2 SS 968.7 CRT -.9675 CRS .9296 CST -.9923 TDE-2.3002 TRA-1.4365 TC3-4.9636 BAU 1.0782 RDE .3018 RRA .0279 RC3 -.1120 FAU .03015 FOE-1.0234 FRA 1.0251 FC3-1.6067 BSP 18050 LSA 3512.0 MSA 159.4 SSA 19.1 BOE 2.3199 BRA 1.4368 BC3 4.9648 FSP -742 EL1 3377.9 EL2 107.7 ALF 172.93 LAUNCH DATE JUN 29 1967 FLIGHT TIME 188.00 ARRIVAL DATE JAN 3 1968 **DISTANCE 541.367** RL 152.08 LAL -.00 LOL 276.59 VL 25.957 GAL 4.02 AZL 93.35 MCA 262.24 SMA 123.86 ECC .23792 INC 3.3454 V1 29.294
RP 107.71 LAP 3.31 LOP 178.82 VP 37.320 GAP 11.58 AZP 89.55 TAL 166.88 TAP 69.12 RCA 94.39 APO 153.32 V2 35.183
RC 161.876 GL -21.31 GP 5.78 ZAL 64.80 ZAP 167.93 ETS 26.94 ZAE 128.16 ETE 175.78 ZAC 75.04 ETC 11.87 CLP-169.39 PLANETOCENTRIC CONIC C3 17.286 VHL 4.158 OLA -32.65 RAL 203.13 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 7.481 DPA 4.40 RAP 192.30 ECC 1.2845 C3 17.286 VHL 4.158 OLA -32.65 RAL 203.13 RAO 6567.7 VEL 11.776 PTH 2.08 VHP 7.481 DPA 4.40 RAP 192.30 ECC 1.2845
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.02 10 16 17 1276.31 23.40 354.40 70.62 113.44 10 37 34 676.3 26.37 346.63
106.98 14 37 50 5728.04 23.41 270.24 70.65 113.43 16 13 18 5128.0 26.38 262.46
73.02 10 16 17 1276.31 23.40 354.40 70.62 113.44 10 37 34 676.3 26.37 346.63
106.98 14 37 50 5728.04 23.41 270.24 70.63 113.43 16 13 18 5128.0 26.38 262.46
110.00 13 39 27 620.15 16.93 302.74 67.14 120.15 13 49 47 20.1 20.81 295.76
110.00 16 13 51 5432.20 30.22 250.20 73.42 106.79 17 44 23 4832.2 32.22 241.55 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5752.4 SGR 447.1 SG3 215.9 RRT -.3743 RRF -.3745 RTF .9512 SGB 5769.7 R23 .0179 R13 -.9512 ST 3305.5 SR 437.6 SS 930.2 CRT -.9603 CRS .9195 CST -.9923 TOE-2.3211 TRA 1.6808 TC3-4.7024 BAU 1.0870 ROE .3174 RRA .0241 RC3 -.1008 FAU .02792 FOE -.9711 FRA 1.0756 FC3-1.3983 BSP 18228 LSA 3457.7 MSA 165.7 SSA 18.6 BDE 2.3427 BRA 1.6810 BC3 4.7035 FSP -714 5G1 5754.8 SG2 414.5 THA 178.32 EL1 3332.2 EL2 121.0 ALF 172.75

ARRIVAL DATE JAN 5 1968

LAUNCH DATE JUN 29 1967

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DISTANCE 546.956
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.915 GAL 4.57 AZL 93.28 MCA 265.47 SMA 123.61 ECC .24306 INC 3.2785 V1 29.294
RP 107.74 LAP 3.27 LOP 182.05 VP 37.281 GAP 12.01 AZP 89.74 TAL 165.44 TAP 70.91 RCA 93.56 APO 153.65 V2 35.172
RC 163.875 GL -20.08 GP 5.56 ZAL 62.09 ZAP 168.90 ETS 28.25 ZAE 128.04 ETE 175.96 ZAC 72.91 ETC 11.74 CLP-170.37
   PLANETOCENTRIC CONIC
     C3 18.511 VHL 4.302 OLA -32.49 RAL 206.45 RAD 6567.7 VEL 11.828 PTH 2.09 VHP 7.719 DPA
                                                                                                                                                               3.26 RAP 194.25 ECC 1.3046
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.36 10 31 43 1285.51 22.86 354.85 74.97 113.74 10 53 9 685.5 25.87 347.13 106.64 14 48 55 5750.72 22.88 271.72 74.98 113.73 16 24 46 5150.7 25.88 264.00 73.36 10 31 43 1285.51 22.86 354.85 74.97 113.74 10 53 9 685.5 25.87 347.13
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113.73 16 24 46
120.64 13 59 39
106.93 18 1 34
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13 46 50 648.29
16 30 58 5435.94
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        106.64
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        110.00
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                                                                                250.46
                                                                                                    77.99
        110.00
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 3246.8 SR 445.0 SS 891.9
CRT -.9524 CRS .9085 CST -.9924
                                                                                     SCT 5789.5 SGR 452.4 SG3 206.9

RRT - .3821 RRF - .3808 RTF .9519

SGB 5807.1 R23 .0164 R13 - .9520

SGI 5792.0 SG2 417.9 THA 178.28
     TOE-2.3370 TRA 1.9386 TC3-4.4197 BAU 1.0940
     ROE .3341 RRA .0191 RC3 -.0891 FAU .02577
FDE -.9207 FRA 1.1248 FC3-1.2051 BSP 18394
                                                                                                                                                      LSA 3391.9 MSA 173.2 SSA 18.1
                                                                                                                                                      EL1 3274.4 EL2 134.5 ALF 172.55
     BDE 2.3608 BRA 1.9387 BC3 4.4206 FSP -688
                                                                                                                                                                    ARRIVAL DATE JAN 7 1968
                                                                                          FLIGHT TIME 192.00
LAUNCH DATE JUN 29 1967
                                                                                          DISTANCE 552.495
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.874 GAL 5.14 AZL 93.21 MCA 268.70 SNA 123.36 ECC .24861 INC 3.2123 V1 29.294
RP 107.78 LAP 3.21 LOP 185.29 VP 37.243 GAP 12.46 AZP 89.93 TAL 164.01 TAP 72.71 RCA 92.69 APO 154.03 VZ 35.162
RC 165.860 GL -18.87 GP 5.35 ZAL 59.46 ZAP 169.83 ETS 29.87 ZAE 127.92 ETE 176.11 ZAC 70.75 ETC 11.64 CLP-171.33
   PLANETOCENTRIC CONIC
     C3 19.941 VHL 4.466 DLA 32.27 RAL 209.67 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 7.971 DPA
                                                                                                                                                                2.14 RAP 195.22 ECC 1.3282
    C3 19.941 VHL 4.466 DLA -32.27 RAL 209.67 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 7.971 DPA 2.14 RAP 196.22 ECC 1.32R2 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.83 10 47 41 1293.40 22.23 355.15 79.31 114.02 11 9 15 693.4 25.29 347.49 106.17 14 58 39 5778.01 22.25 273.51 79.32 114.00 16 34 57 5178.0 25.30 265.84 110.00 13 56 38 681.92 14.79 306.24 75.21 121.18 14 8 0 81.9 18.81 299.43 110.00 16 48 52 5437.48 30.12 250.57 82.59 106.99 18 19 30 4837.5 32.15 241.95
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5818.4 SGR 456.6 SG3 198.3

RRT -.3910 RRF -.3881 RTF .9525

SGB 5836.3 R23 .0149 R13 -.9526

SGI 5821.1 SG2 420.1 THA 176.23
                                                                                                                                                       ST 3174.5 SR 451.0 SS 853.0
     TOE-2.3445 TRA 2.2142 TC3-4.1162 BAU 1.0976
                                                                                                                                                     CRT -.9434 CR5 .8961 CST -.9923
LSA 3312.8 MSA 182.0 SSA 17.5
     RDE .3515 RRA .0124 RC3 -.0775 FAU .02362
     FOE -.8705 FRA 1.1751 FC3-1.0255 BSP 18459
BDE 2.3707 BRA 2.2142 BC3 4.1169 FSP -659
                                                                                                                                                      EL1 3202.9 EL2 148.3 ALF 172.35
                                                                                                                                                                    ARRIVAL DATE JAN 9 1968
                                                                                          FLIGHT TIME 194.00
LAUNCH DATE JUN 29 1967
                                                                                          DISTANCE 557.979
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.833 GAL 5.75 AZL 93.15 HCA 271.93 SHA 123.12 ECC .25460 INC 3.1462 V1 29.294 RP 107.81 LAP 3.14 LOP 188.52 VP 37.204 GAP 12.94 AZP 90.11 TAL 162.58 TAP 74.51 RCA 91.77 APO 154.47 V2 35.151 RC 167.829 GL -17.67 GP 5.16 TAL 56.91 ZAP 170.73 ETS 31.89 ZAE 127.81 ETE 176.25 ZAC 68.59 ETC 11.57 CLP-172.29
    PLANETOCENTRIC CONIC
                                                                                                                                                               1.04 RAP 198.22 ECC 1.3556
     C3 21.605 VML 4.648 DLA -32.00 RAL 212.77 RAD 6567.9 VEL 11.958 PTH 2.13 VMP 8.238 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.44 11 4 8 1299.89 21.52 355.30 83.61 114.27 11 25 48 699.9 24.62 347.70 105.56 15 6 57 5809.90 21.54 275.60 83.62 114.26 16 43 47 5209.9 24.63 267.99 74.44 11 4 8 1299.89 21.52 355.30 83.61 114.27 11 25 48 699.9 24.62 347.70
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121.73 14 15 4
107.00 18 37 49
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         105.56
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         110.00
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                                                                                                     87.20
        110.00
                                           5437.71
                                                                30.11
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 5846.2 SGR 460.0 SG3 190.2
RRT -.4020 RRF -.5978 RTF .9535
SGB 5864.2 R23 .0136 R13 -.9535
SGI 5849.1 SG2 421.0 THA 178.18
                                                                                                                                                     ST 3098.9 SR 455.9 SS 817.4
CRT -.9337 CRS .8834 CST -.9924
     TOE-2.3516 TRA 2.5010 TC3-3.8124 BAU 1.1013
     RDE .3699 RRA .0045 RC3 -.0658 FAU .02167
FDE -.8250 FRA 1.2228 FC3 -.8682 BSP 18605
                                                                                                                                                      LSA 3231.5 MSA 191.0 SSA 16.9
                                                                                                                                                      EL1 3128.1 EL2 161.7 ALF 172.16
     BOE 2.3805 BRA 2.5010 BC3 3.8130 FSP -635
                                                                                                                                                                    ARRIVAL DATE JAN 11 1968
                                                                                           FLIGHT TIME 196.00
LAUNCH DATE JUN 29 1967
                                                                                          DISTANCE 563.401
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 276.59 VL 25.793 GAL 6.39 AZL 93.08 HCA 275.16 SMA 122.88 ECC .26109 INC 3.0800 V1 29.294
RP 107.84 LAP 3.07 LOP 191.75 VP 37.165 GAP 13.44 AZP 90.28 TAL 161.16 TAP 76.32 RCA 90.80 APO 154.96 V2 35.139
RC 169.783 GL -16.49 GP 4.99 ZAL 54.45 ZAP 171.59 ETS 34.42 ZAE 127.69 ETE 176.37 ZAC 66.42 ETC 11.54 CLP-173.23
    PLANETOCENTRIC CONIC
     C3 23.533 VHL 4.851 DLA -31.67 RAL 215.75 RAD 6568.0 VEL 12.038 PTH 2.15 VHP 8.521 DPA
                                                                                                                                                                -.04 RAP 200.22 ECC 1.3873
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.18 11 21 5 1304.77 20.74 355.29 87.87 114.49 11-42 50 704.8 23.87 347.75
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114.48 16 51 11
114.49 11 42 50
114.48 16 51 11
122.28 14 21 6
106.99 18 56 14
                        11 21 5 1304.77
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                                             761.86
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         110.00
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                       17 25 36
                                          5437.46
                                                                 30.12
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                                                                                                     91.80
         110.00
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 3017.9 SR 459.3 S5 783.7
CRT - .9232 CRS .8698 CST - .9924
LSA 3145.2 MSA 200.5 SSA 16.3
                                                                                     SGT 5868.6 SGR 462.4 SG3 182.5

RRT -.4141 RRF -.4086 RTF .9545

SGB 5886.8 R23 .0124 R13 -.9545

SGI 5871.7 SGZ 420.7 THA 178.12
      TOE-2.3547 TRA 2.8040 TC3-3.5049 BAU 1.1029
     ROE .3869 RRA -.0051 RC3 -.0548 FAU .01978
FOE -.7819 FRA 1.2706 FC3 -.7276 BSP 18734
BDE 2.3866 BRA 2.8040 BC3 3,5054 FSP -612
                                                                                                                                                       EL1 3047.6 EL2 174.8 ALF 171.98
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FLIGHT TIME 190.00

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ARRIVAL DATE JAN 13 1968
                                                                             FLIGHT TIME 198.00
LAUNCH DATE JUN 29 1967
   RL 152.08 LAL -.00 LOL 276.59 VL 25.752 GAL 7.07 AZL 93.01 MCA 278.38 SMA 122.65 ECC .26811 INC 3.0131 V1 29.294
RP 107.88 LAP 2.98 LOP 194.98 VP 37.126 GAP 13.96 AZP 90.44 TAL 159.75 TAP 78.13 RCA 89.76 APO 155.53 V2 35.128
RC 171.722 GL -15.35 GP 4.84 ZAL 52.09 ZAP 172.43 ETS 37.60 ZAE 127.57 ETE 176.47 ZAC 64.23 ETC 11.54 CLP-174.17
                                                                             DISTANCE 568.752
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 25.766 VHL 5.076 DLA -31.30 RAL 218.59 RAD 6568.0 VEL 12.130 PTH 2.17 VHP 8.823 DPA -1.11 RAP 202.25 ECC 1.4240
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
        76.07 11 38 31 1307.87 103.93 15 18 58 5888.00 76.07 11 38 31 1307.87 103.93 15 18 58 5888.00 110.00 14 12 40 406 40
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114.68 16 57 6
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114.68 16 57 6
122.78 14 26 16
106.98 19 14 27
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       110.00
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                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2933.5 SR 461.1 SS 752.3
CRT -.9116 CRS .8553 CST -.9924
LSA 3056.0 MSA 210.1 SSA 15.7
                                                                        SCT 5885.5 SCR 463.8 SC3 175.2
RRT -.4271 RRF -.4203 RTF .9556
SCB 5903.8 R23 .0111 R13 -.9557
SCI 5888.9 SCZ 419.1 TMA 178.06
     TOE-2.3545 TRA 3.1239 TC3-3.1988 BAU 1.1020
    ROE .4084 RRA -.0162 RC3 -.0447 FAU .01796
FDE -.7415 FRA 1.3187 FC3 -.6036 BSP 18845
BDE 2.3896 BRA 3.1239 BC3 3.1991 FSP -590
                                                                                                                                EL1 2963.6 ELZ 187.6 ALF 171.81
                                                                                                                                           ARRIVAL DATE JAN 15 1968
                                                                             FLIGHT TIME 200,00
LAUNCH DATE JUN 29 1967
                                                                             DISTANCE 574.023
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 276.59 VL 25.712 GAL 7.79 AZL 92.95 MCA 281.61 SMA 122.41 ECC .27574 INC 2.9451 V1 29.294
RP 107.92 LAP 2.88 LOP 198.21 VP 37.087 GAP 14.52 AZP 90.59 TAL 158.35 TAP 79.96 RCA 88.66 APO 156.17 V2 35.116
RC 173.647 GL -14.23 GP 4.70 ZAL 49.84 ZAP 173.22 ETS 41.64 ZAE 127.45 ETE 176.56 ZAC 62.05 ETC 11.58 CLP-175.10
   PLANETOCENTRIC CONIC
    C3 28.347 VHL 5.324 DLA -30.90 RAE 221.29 RAD 6568.1 VEL 12.236 PTH 2.20 VMP 9.146 DPA -2.15 RAP 204.28 ECC 1.4665 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  114.85 12 18 24
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107.01 19 32 19
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       102.91
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                                                        8.55
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                                                                                      90.27
       110.00
                    14 16 29
                                     853.36
                                                                                                                                                                    241.98
                                                                                                                                   4838.0
                                                                                                                                                      32.14
                                                                     250.61
                                                                                   100.88
                                     5437.96
                                                       30.11
       110.00
                    18 1 41
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5897.3 SGR 464.0 SG3 168.2

RRT -.4409 RRF -.4330 RTF .9569

SGB 5915.5 R23 .0100 R13 -.9569

SGI 5900.9 SG2 416.3 THA 178.00
                                                                                                                               ST 2847.8 SR 461.2 SS 723.7
CRT -.8991 CRS .8401 CST -.9925
     TDE-2.3517 TRA 3.4622 TC3-2.8978 BAU 1.0983
    RDE .4284 RRA -.0289 RC3 -.0357 FAU .01621
FDE -.7039 FRA 1.3673 FC3 -.4951 BSP 18939
                                                                                                                               LSA 2966.1 MSA 219.6 SSA
                                                                                                                                                                       15.2
                                                                                                                               EL1 2877.9 EL2 199.8 ALF 171.67
     BOE 2.3904 BRA 3.4623 BC3 2.8980 FSP -569
                                                                                                                                           ARRIVAL DATE JAN 17 1968
                                                                             FLIGHT TIME 202.00
LAUNCH DATE JUN 29 1967
                                                                             DISTANCE 579.203
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.673 GAL 8.55 A7L 92.88 MCA 284.82 SMA 122.19 ECC .28403 INC 2.8756 VI 29.294
RP 107.96 LAP 2.78 LOP 201.43 VP 37.048 GAP 15.12 A7P 90.74 TAL 156.98 TAP 81.80 RCA 87.48 APO 156.89 V2 35.103
RC 175.555 GL -13.15 GP 4.57 ZAL 47.69 ZAP 173.95 ETS 46.81 ZAE 127.32 ETE 176.64 ZAC 59.87 ETC 11.66 CLP-176.03
    PLANETOCENTRIC CONIC
     C3 31.333 VML 5.598 DLA -30.46 RAL 223.84 RAD 6568.2 VEL 12.357 PTH 2.23 VMP 9.492 DPA -3.17 RAP 206.32 ECC 1.5157
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  114.99 12 37 11
114.98 15 35 37
114.98 15 35 37
114.98 15 35 37
123.59 14 34 34
107.07 19 49 41
                                                                                 100.28
                                                                                                                                     706.3
                                                                                                                                                   21.22 346.71
                   12 15 24 1306.31
15 23 58 699.15
                                                       18.00
                                                                     354.07
         78.28
                                                                                                                                       99.2
                                                                                                                                                      21.23
                                                        18.02
                                                                      309.34
                                                                                     100.28
        101.72
                                                                                                                                      706.3
                                                                                                                                                      21.22
                                                                                     100.28
                    12 15 24
15 23 58
                                    1306.31
                                                       18.00
                                                                     354.07
         78.28
                                                                                                                                                                    301.98
                                                                                                                                                      21.23
                                                                                                                                       99.2
                                                      18.02
                                                                     309.34
                                                                                    100.28
                                     699.15
        101.72
                                                                                                                                                                    311.82
                                                                                                                                      302.0
                                                                                                                                                      11.10
                                                         6.73
                                                                     318.18
                                                                                      93.82
                    14 19 32
18 19 1
                                      901.96
        110.00
                                                                                  105.35
                                                                                                                                                      32.12
                                   5439.54
                                                                                                                                    4839.5
                                                                     250.72
                                                       30.08
        110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2760.0 SR 459.4 SS 697.1

CRT -.8852 CRS .8234 CST -.9927

LSA 2874.3 MSA 229.1 SSA 14.6

EL1 2789.9 EL2 211.5 ALF 171.57
                                                                        SGT 5903.3 SGR 463.1 SG3 161.7

RRT -.4550 RRF -.4459 RTF .9582

SG8 5921.5 R23 .0087 R13 -.9582

SG1 5907.1 SG2 412.2 THA 177.95
     TOE-2.3435 TRA 3.8239 TC3-2.6007 BAU 1.0895
     RDE .4486 RRA -.0434 RC3 -.0281 FAU .01444
FDE -.6676 FRA 1.4185 FC3 -.3991 BSP 18938
     BDE 2.3861 BRA 3.8242 BC3 2.6008 FSP -545
                                                                                                                                            ARRIVAL DATE JAN 19 1968
                                                                              FLIGHT TIME 204.00
 LAUNCH DATE JUN 29 1967
                                                                             DISTANCE 584.275
    HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.634 GAL 9.37 AZL 92.80 MCA 288.04 SMA 121.96 ECC .29307 INC 2.8041 V1 29.294
RP 107.99 LAP 2.67 LOP 204.65 VP 37.009 GAP 15.76 AZP 90.87 TAL 155.62 TAP 83.67 RCA 86.22 APO 157.70 V2 35.091
RC 177.448 GT -12.11 GP 4.45 ZAL 45.65 ZAP 174.62 ETS 53.46 ZAE 127.18 ETE 176.71 ZAC 57.69 ETC 11.78 CLP-176.97
                         -12.11 GP
    PLANETOCENTRIC CONIC
     C3 34.789 VHL 5,898 DLA -30.00 RAL 226.25 RAD 6568.4 VEL 12.496 PTH 2.26 VHP 9.866 DPA -4.17 RAP 208.37 ECC 1.5725
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   115.10 12 57 0
115.09 15 35 53
                                                                                  104.26
                                                                                                                                       699.8
                   12 35 20
                                    1299.80
                                                       16.99
                                                                     353.09
         79.67
                                                                                                                                       158.4
                                                                                                                                                      20.25
                                                                                                                                                                     305.97
                     15 23 14
                                       758.39
                                                        17.01
                                                                      313.27
                                                                                     104.27
        100.33
                                                                                                                 12 57 0
                                                                                                                                                       20.23
                                                                                                                                                                     345.79
                                                                                                                                       699.8
                    12 35 20
                                                                      353.09
                                                                                     104.26
                                                                                                     115.10
                                     1299.80
                                                       16.99
         79.67
                                                                                                                                                      20.25
                                                                                                                                                                     305.97
                                                                                     104.27
                                                                                                      115.09
                                                                                                                 15 35 53
                                                                                                                                       158.4
                     15 23 14
                                       758.39
                                                       17.01
                                                                      313.27
        100.33
                                                                                                      123.88 14 37 54
107.17 20 6 25
                                                                                                                                                        9.26
                                                                                                                                                                     314.51
                                                                                                                                       351.9
                    14 22 3
                                                                      320.82
                                                                                      97.29
                                       951.90
                                                         4.84
        110.00
                                                                                                                                    4842.3
                                                                                                                                                      32.08
                     18 35 43
                                    5442.32
                                                        30.02
                                                                      250.92
                                                                                     109.74
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2677.3 SR 456.2 SS 674.7
CRT -.8709 CRS .8073 CST -.9929
                                                                         SGT 5905.8 SGR 461.3 SG3 155.5
RRT -.4700 RRF -.4600 RTF .9599
SGB 5923.8 R23 .0076 R13 -.9599
      TOE-2.3387 TRA 4.2027 1C3-2.3209 BAU 1.0795
     ROE .4692 RRA -.0595 RC3 -.0214 FAU .01282
                                                                                                                                LSA 2788.4 MSA 237.4 SSA 14.1
     FOE -.6361 FRA 1.4695 FC3 -.3191 BSP 19026
BOE 2.3853 BRA 4.2032 BC3 2.3210 FSP -526
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SG1 5909.8 SG2 406.9 THA 177.89

EL1 2706.9 EL2 221.8 ALF 171.50

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LAUNCH DATE JUN 29 1967
                                                                         FLIGHT TIME 206.00
                                                                                                                                   ARRIVAL DATE JAN 21 1968
   HELIOCENTRIC CONIC
                                                                         DISTANCE 589.225
    RL 152.08 LAL -.00 LOL 276.59 VL 25.596 GAL 10.24 A7L 92.73 MCA 291.26 SMA 121.74 ECC .30295 INC 2.7299 V1 29.294
RP 108.03 LAP 2.54 LOP 207.87 VP 36.970 GAP 16.44 A7P 90.99 TAL 154.30 TAP 85.56 RCA 84.86 APO 158.62 VZ 35.078
RC 179.325 GL -11.10 GP 4.34 ZAL 43.73 ZAP 175.18 ETS 61.98 ZAE 127.02 ETE 176.78 ZAC 55.52 ETC 11.94 CLP-177.92
   PLANETOCENTRIC CONIC
    C3 38.794 VHL 6.229 OLA -29.51 RAL 228.51 RAD 6568.5 VEL 12.656 PTH 2.30 VHP 10.269 DPA -5.14 RAP 210.43 ECC 1.6385
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        81.32 12 57 3' 1286.73
98.68 15 19 33 826.53
                                                                                             115.17 13 18 30
115.16 15 33 20
117.48 15 4 59
                                                   15.95
                                                                351.61
                                                                             108.17
                                                                                                                              686.7
                                   826.53
                                                    15.96
                                                                 317.81
                                                                                108.18
                                                                                                                              226.5
                                                                                                                                                           310.57
       100.00
                   14 49 36
                                 922.41
                                                    12.25
                                                                 323.03
                                                                                106.29
                                                                                                                              322.4
                                                                                                                                            15.83
                                                                                               112.92 16 20 48
124.07 14 40 47
107.32 20 22 29
       100.00
                   16 9 42
                                    666.08
                                                    19.73
                                                                 307.68
                                                                                109.95
                                                                                                                               66.1
                                                                                                                                             22.66
                                                                                                                              402.9
       110.00
                                                    2.90
                                                                 323.49
                                                                                100.68
       110.00
                                                   29.94
                                                                 251.21
                                                                                114.06
                                                                                                                            4846.4
                                                                                                                                             32.01
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    RID-COUNSE EXECUTION ACCOUNTS

SCT 5903.3 SGR 458.4 SG3 149.7

RRT -.4854 RRF -.4747 RTF .9617

SGB 5921.0 R23 .0065 R13 -.9617

SGI 5907.5 SG2 400.5 THA 177.83
                                                                                                                       ST 2597.0 SR 451.3 SS 655.2
CRT -.8556 CRS .7908 CST -.9932
LSA 2705.0 MSA 244.8 SSA 13.5
    TOE-2.3329 TRA 4,6057 TC3-2.0532 BAU 1.0649
    RDE .4898 RRA -.0772 RC3 -.0160 FAU .01124
FDE -.6072 FRA 1.5227 FC3 -.2508 BSP 19080
BDE 2.3838 BRA 4.6063 BC3 2.0533 FSP -506
                                                                                                                        EL1 2625.8 EL2 231.0 ALF 171.48
                                                                         FLIGHT TIME 208,00
                                                                                                                                    ARRIVAL DATE JAN 23 1968
   HELIOCENTRIC CONIC
                                                                         DISTANCE 594.029
    RL 152.08 LAL -.00 LOL 276.59 VL 25.558 GAL 11.18 AZL 92.65 MCA 294.47 SMA 121.53 ECC .31376 INC 2.6525 V1 29.294 RP 108.07 LAP 2.41 LOP 211.08 VP 36.931 GAP 17.18 AZP 91.10 TAL 153.02 TAP 87.49 RCA 83.40 APO 159.65 VZ 35.065 RC 181.185 GL -10.14 GP 4.24 ZAL 41.92 ZAP 175.61 ETS 72.65 ZAE 126.85 ETE 176.84 ZAC 53.36 ETC 12.14 CLP-178.87
   PLANETOCENTRIC CONIC
    C3 43.448 VHL 6.591 DLA -29.01 RAL 230.62 RAD 6568.6 VEL 12.838 PTH
                                                                                                  2.34 VHP 10.707 OPA
                                                                                                                               -6.09 RAP 212.48 ECC 1.7150
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.20 13 43 5
115.19 15 26 34
118.57 14 54 12
112.03 16 49 23
124.17 14 43 16
107.53 20 37 50
                   13 22 2 1262.14
15 11 26 908.30
                                                    14.87
                                                                 349.27
                                                                              111.99
                                                                                                                              662.1
                                                    14.88
                                                                 323.33
                                                                                112.00
                                                                                                                              308.3
                  14 37 13 1018.24
16 38 56 627.43
14 25 41 1054.56
                                                     9.18
                                                                                                                              418.2
                                                                 328.49
                                                                                109.04
                                                    20.74
                                                                 305.25
       100.00
                                                                                114.68
                                                                                                                              27.4
                                                                                                                                                           297.58
                                                     .93
       110.00
                                                                 326.19
                                                                               104.00
                                                                                                                              454.6
                                                                                                                                              5.40
                                                                                                                                                           319.96
                   19 6 58 5451.91
                                                   29.83
                                                                                                                          4851.9
                                                                                                                                           31.93
       110.00
                                                                 251.60
                                                                               118.29
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ST 2520.4 SR 444.7 SS 638.8
CRT -.8397 CRS .7742 CST -.9936
                                                                    SCT 5896.2 SGR 454.3 SG3 144.1
RRT -.5011 RRF -.4897 RTF .9637
SCB 5913.7 R23 .0054 R13 -.9637
    TOE-2.3277 TRA 5.0345 TC3-1.7998 BAU 1.0455
    RDE .5105 RRA -.0967 RC3 -.0117 FAU .00968
    FOE -.5811 FRA 1.5786 FC3 -.1928 BSP 19121
                                                                                                                        LSA 2625.9 MSA 251.1 SSA 13.0
    BOE 2.3830 BRA 5.0354 BC3 1.7999 FSP -488
                                                                     SG1 5900.6 SG2 392.9 THA 177.78
                                                                                                                        EL1 2548.2 EL2 238.9 ALF 171.50
                                                                        FLIGHT TIME 210.00
                                                                                                                                   ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUN 29 1967
                                                                        DISTANCE 598.663
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 276.59 VL 25.521 GAL 12.19 AZL 92.57 MCA 297.68 SMA 121.31 ECC .32563 INC 2.5711 V1 29.294
RP 108.11 LAP 2.28 LOP 214.29 VP 36.893 GAP 17.98 AZP 91.19 TAL 151.77 TAP 89.45 RCA 81.81 APO 160.82 VZ 35.052
    RC 183.028 GL -9.21 GP
                                       4.15 7AL 40.23 7AP 175.84 ETS 85.30 7AE 126.65 ETE 176.89 7AC 51.23 ETC 12.40 CLP-179.84
   PLANETOCENTRIC CONIC
    C3 48.869 VHL 6.991 DLA -28.50 RAL 232.59 RAD 6568.8 VEL 13.047 PTH 2.38 VHP 11.184 DPA -7.01 RAP 214.53 ECC 1.8043
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  13 56 14 1206.57
14 52 56 1022.88
                                                                                             115.20 14 16 21
115.19 15 9 59
                                                   13.78
                                                                344.66
                                                                              115.72
                                                                                                                           606.6
                                                                                                                                                        337.50
        86.63
                                                   13.79
                                                                331.22
                                                                               115.73
                                                                                                                             422.9
                                                                                                                                           17.07
                                                                                                                                                          324.06
        93.37
                                                                                                         14 47 46
17 12 30
       100.00
                   14 29 27 1098.71
                                                    6.53
                                                                332.99
                                                                               111.94
                                                                                               119.24
                                                                                                                             498.7
                                                                                                                                           10.38
                                                                                                                                                         326.32
                                                                                                                                          24.01
       100.00
                   17 2 24
                                  605.97
                                                   21.28
                                                                 303.89
                                                                               119.11
                                                                                               111.51
                                                                                                                               6.0
                                                                                                                                                         295.15
                                                                                               124.17 14 45 20
107.78 20 52 26
                   14 26 54 1106.78
                                                                               107.24
                                                                                                                             506.8
                                                                                                                                             3.42
                                                                                                                                                          322.70
       110.00
                                                   -1.07
                                                                 328.91
                                  545A.71 29.69
                                                                252.08
                                                                               122.43
                                                                                                                            4858.7
                                                                                                                                            31.83
       110.00
                   19 21 27
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5885.1 SGR 449.1 SG3 138.9
RRT -.5169 RRF -.5049 RTF ..9658
SGB 5902.3 R23 ..0041 R13 -.9658
SGI 5889.7 SG2 384.1 TMA 177.73
    TOE-2.3208 TRA 5.4950 TC3-1.5594 BAU 1.0188
                                                                                                                        ST 2446.7 SR 436.5 SS 625.1
    ROE .5310 RRA -.1181 RC3 -.0086 FAU .00809
FOE -.5567 FRA 1.6387 FC3 -.1433 BSP 19052
                                                                                                                       CRT -.8228 CRS .7570 CST -.9940
LSA 2549.8 MSA 256.3 SSA 12.5
                                                                                                                        EL1 2473.2 EL2 245.4 ALF 171.57
    BDE 2.3808 BRA 5.4962 BC3 1.5594 FSP -468
LAUNCH DATE JUN 29 1967
                                                                        FLIGHT TIME 212.00
                                                                                                                                   ARRIVAL DATE JAN 27 1968
  HELIOCENTRIC CONIC
                                                                        DISTANCE 603.094
   RL 152.08 LAL -.00 LOL 276.59 VL 25.484 GAL 13.28 AZL 92.48 MCA 300.89 SMA 121.11 ECC .33870 INC 2.4848 V1 29.294
RP 108.16 LAP 2.13 LOP 217.50 VP 36.855 GAP 18.86 AZP 91.28 TAL 150.58 TAP 91.47 RCA 80.09 APO 162.13 VZ 35.039
RC 184.853 GL -8.32 GP 4.07 ZAL 38.65 ZAP 175.85 ETS 99.00 ZAE 126.43 ETE 176.94 ZAC 49.12 ETC 12.70 CLP 179.16
   PLANETOCENTRIC CONIC
    C3 55.207 VHL 7.430 DLA -27.98 RAL 234.41 RAD 6569.0 VEL 13.288 PTH 2.43 VMP 11.706 DPA -7.90 RAP 216.57 ECC 1.9086
    ENCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 53 30 1269.56 9.07 346.91 117.56 116.94 14 14 40 669.6 12.62 340.03
        90.00
                   15 10 12
                                 1020.43
                                                   16.34
                                                                 332.23
                                                                               121.06
                                                                                               113.45
                                                                                                          15 27 12
                                                                                                                              420.4
                                                                                                                                                          324.87
                 14 23 37
                                  1172.19
                                                    4.07
                                                                337.06
                                                                               114.85
                                                                                               119.64
                                                                                                          14 43 9
                                                                                                                             572.2
                                                                                                                                             7.98
       100.00
                                                                                               17 22 46
                                                  21.60
                                                                280.97
                                                                               123.34
                                                                                                                            5281.1
                                                                                                                                            24.28
                                                                                                                                                          273.20
       100.00
                                  5881.08
                   14 27 43 1159.30
                                                   -3.08
                                                                 331.65
                                                                               110.41
                                                                                                                                             1.41
       110.00
                   19 35 10
                                                   29.52
                                                                252.64
                                                                               126.47
                                                                                                                            4866.7
       110.00
                                  5466.73
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5868.2 SGR 442.8 SG3 133.9
RRT -.5330 RRF -.5208 RTF .9683
SGB 5884.9 R23 .0031 R13 -.9683
SGI 5873.0 SG2 374.4 THA 177.69
                                                                                                                       ST 2378.8 SR 426.9 SS 615.1
CRT -.8060 CRS .7412 CST -.9946
LSA 2480.3 MSA 259.6 SSA 12.0
    TOE-2.3195 TRA 5.9827 TC3-1.3368 BAU .9867
    RDE .5515 RRA -.1409 RC3 -.0063 FAU .00658
    FDE -.5366 FRA 1.7013 FC3 -.1032 BSP 19099
BDE 2.3841 BRA 5.9843 BC3 1.3368 FSP -452
                                                                                                                       EL1 2403.9 EL2 250.0 ALF 171.68
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FLIGHT TIME 214.00 ARRIVAL CATE JAN 29 1968 LAUNCH DATE JUN 29 1967 DISTANCE 607.282 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.449 CAL 14.46 A7L 92.39 MCA 304.09 SMA 120.91 ECC .35313 INC 2.3926 V1 29.294
RP 108.20 LAP 1.98 LOP 220.70 VP 36.818 CAP 19.82 A7P 91.34 TAL 149.46 TAP 93.55 RCA 78.21 APO 163.60 V2 35.025
RC 186.660 GL -7.47 GP 3.99 TAL 37.20 TAP 175.60 ETS 112.25 TAE 126.17 ETE 176.98 TAC 47.03 ETC 13.06 CLP 178.14 PLANETOCENTRIC CONIC C3 62.648 VHL 7.915 DLA -27.45 RAL 236.09 RAD 6569.2 VEL 13.565 PTH 2.48 VHP 12.280 DPA -8.76 RAP 218.60 ECC 2.0310 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG CH AZMTH LNCH TIME L-I TIME 90.00 13 37 9 1375.92 90.00 15 39 55 975.82 100.00 14 18 46 1241.44 100.00 17 40 59 5873.57 110.00 14 28 10 1211.94 110.00 19 48 5 5475.83 119.94 117,78 14 0 5 775.9 5.74 352.95 112.60 15 56 11 375.8 322.03 17.53 329.49 125.59 117.73 119.85 14 39 28 641.4 110.99 19 18 53 5273.6 123.85 14 48 22 611.9 108.41 21 19 21 4875.8 5.69 334.32 1.73 340.87 272.70 5273.6 24.44 100.00 21.78 280.49 127.39 113.50 611.9 - .60 328.19 334.41 -5.08 110.00 31.55 29.32 253.28 130.38 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2315.8 SR 415.9 S5 608.3 CRT -.7893 CRS .7262 CST -.9951 SGT 5847.7 SGR 435.5 SG3 129.2 RRT -.5492 RRF -.5369 RTF .9708 SGB 5863.9 R23 .0021 R13 -.9708 SGI 5852.7 SG2 363.6 THA 177.65 TOE-2.3218 TRA 6.5063 TC3-1.1304 BAU .9468 ROE .5718 RRA -.1655 RC3 -.0049 FAU .00505 LSA 2416.1 MSA 261.3 SSA 11.6 FOE -.5194 FRA 1.7687 FC3 -.0698 BSP 19111 EL1 2339.2 EL2 252.8 ALF 171.84 BOE 2.3912 BRA 6.5084 BC3 1.1304 FSP -436 ARRIVAL DATE JAN 31 1968 FLIGHT TIME 216.00 DISTANCE 611.175 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.414 GAL 15.75 A7L 92.29 HCA 307.30 SHA 120.71 ECC .36912 INC 2.2932 VI 29.294
RP 108.24 LAP 1.82 LOP 223.91 VP 36.782 GAP 20.87 A7P 91.39 TAL 148.41 TAP 95.70 RCA 76.16 APO 165.27 V2 35.012
RC 188.449 GL -6.65 GP 3.92 ZAL 35.87 ZAP 175.12 ETS 123.85 ZAE 125.88 ETE 177.03 ZAC 44.99 ETC 13.47 CLP 177.09 PLANETOCENTRIC CONIC C3 71.425 VHL 8.451 DLA -26.92 RAL 237.61 RAO 6569.4 VEL 13.884 PTH 2.54 VHP 12.913 DPA -9.59 RAP 220.61 ECC 2.1755 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 26 39 1462.16 2.99 357.79 122.51 118.17 13 51 1 862.2 6.73 351.11 112.12 16 18 30 119.89 14 36 15 352.2 20.99 16 2 38 328.03 129.71 952.15 90.00 337.98 707.7 3.46 344.51 120.56 100.00 14 14 27 1307.74 -.52 80.25 131.28 110.90 19 35 20 37.19 116.51 123.53 14 49 18 53.98 134.17 108.77 21 31 40 MID-COURSE EXECUTION ACCURACY 5269.9 24.52 272.45 17 57 30 5869.86 21.87 280.25 100.00 330.94 664.5 -2.61 337.19 110.00 14 28 13 1264.52 -7.06 245.51 4885.8 31.39 110.00 20 0 14 5485.83 253.98 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5822.7 SGR 427.0 SG3 124.7 RRT -.5654 RRF -.5532 RTF .9734 SGB 5838.4 R23 .0011 R13 -.9734 SGI 5827.8 SG2 351.9 THA 177.62 ST 2257.3 SR 403.6 SS 604.7 CRT -.7727 CRS .7120 CST -.9957 TOE-2.3289 TRA 7.0691 TC3 -.9395 BAU .8971 RDE .5919 RRA -.1917 RC3 -.0042 FAU .00349 LSA 2357.0 MSA 261.2 SSA 11.1 EL1 2279.0 EL2 253.8 ALF 172.03 FOE -.5050 FRA 1.8417 FC3 -.0423 BSP 19110 BDE 2.4030 BRA 7.0717 BC3 .9395 FSP -421 ARRIVAL CATE FEB 2 1968 FLIGHT TIME 218.00 LAUNCH DATE JUN 29 1967 DISTANCE 614.712 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.381 GAL 17.17 A7L 92.19 MCA 310.50 SMA 120.53 ECC .38689 INC 2.1851 VI 29.294 RP 108.28 LAP 1.66 LOP 227.10 VP 36.746 GAP 22.04 A7P 91.42 TAL 147.45 TAP 97.95 RCA 73.90 APO 167.16 V2 34.999 RC 190.221 GL -5.87 GP 3.86 7AL 34.67 ZAP 174.44 ETS 133.32 ZAE 125.54 ETE 177.07 ZAC 43.00 ETC 13.94 CLP 175.99 PLANETOCENTRIC CONIC C3 81.837 VHL 9.046 DLA -26.38 RAL 238.99 RAD 6569.6 VEL 14.254 PTH 2.59 VHP 13.616 OPA -10.37 RAP 222.58 ECC 2.3468 C3 81.837 VHL 9.046 DLA -26.38 RAL 238.99 RAD 6569.6 VEL 14.254 PTH 2.59 VHP 13.616 DPA -10.37 RAP 222.38 ELC 2.3468 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 18 26 1539.49 .49 2.11 125.09 118.31 13 44 6 939.5 4.27 355.47 90.00 16 21 51 937.84 18.51 327.14 133.58 111.82 16 37 28 337.8 21.31 319.58 100.00 14 10 23 1371.71 -2.69 348.02 123.32 119.78 14 33 15 771.7 1.30 341.50 100.00 18 12 35 5868.90 21.90 280.19 134.99 110.87 19 50 24 5268.9 24.54 272.38 110.00 14 27 52 1316.86 -9.02 339.98 119.43 123.11 14 49 49 716.9 -4.60 333.68 110.00 20 11 35 5496.51 28.87 254.72 137.80 109.15 21 43 12 4896.5 31.21 246.29 14 27 52 1316.86 20 11 35 5496.51 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RRT - 5813 RRF - .5694 RTF .9761 SGB 5809.6 R23 .0001 R13 - .9761 SGI 5799.6 SG2 339.2 THA 177.59 ST 2201.7 SR 390.1 SS 604.0 CRT -.7560 CRS .6980 CST -.9963 TOE-2.3377 TRA 7.6806 TC3 -.7616 BAU .8333 RDE .6115 RRA -.2195 RC3 -.0042 FAU .00181 LSA 2301.5 MSA 259.6 SSA 10.6 FOE -. 4925 FRA 1.9227 FC3 -. 0191 BSP 18987 EL1 2221.6 EL2 253.0 ALF 172.27 BOE 2.4163 BRA 7.6837 BC3 .7616 FSP -404 ARRIVAL DATE FEB 4 1968 LAUNCH DATE JUN 29 1967 FLIGHT TIME 220.00 DISTANCE 617.808 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 276.59 VL 25.348 GAL 18.72 A7L 92.07 MCA 313.69 SMA 120.35 ECC .40671 INC 2.0662 V1 29.294
RP 108.32 LAP 1.49 LOP 230.30 VP 36.711 GAP 23.34 AZP 91.43 TAL 146.61 TAP 100.30 RCA 71.40 APO 169.30 V2 34.986
RC 191.975 GL -5.11 GP 3.79 ZAL 33.60 ZAP 173.60 ETS 140.84 ZAE 125.13 ETE 177.12 ZAC 41.06 ETC 14.47 CLP 174.84 PLANETOCENTRIC CONIC C3 94.265 VHL 9.709 DLA -25.84 RAL 240.22 RAD 6569.8 VEL 14.684 PTH 2.66 VHP 14.401 DPA -11.12 RAP 224.52 ECC 2.5514 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.26 13 38 12 111.63 16 54 11 127.62 1011.4 359.49 90.00 13 11 21 1611.37 -1.83 6.12 329.0 319.01 16 38 42 928.98 18.73 326.58 137.21 119.54 14 30 15 110.90 20 4 12 833.7 -.81 344.90 14 6 22 1435.75 -4.78 351.44 125.99 5269.9 24.52 272.45 18 26 22 5869.89 21.87 280.25 138.52 122.59 14 49 52 109.54 21 53 58 336.41 768.8 -6.57 14 27 4 1368.78 20 22 10 5507.60 -10.94 342.77 122.24 31.01 4907.6 247.10 110.00 28.62 255.48 141.26 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2151.7 SR 375.6 SS 607.2 CRT -.7409 CRS .6865 CST -.9968 SCT 5760.9 SCR 406.6 SC3 116.5 RRT -.5973 RRF -.5859 RTF ..9789 SCB 5775.2 R23 -.0008 R13 -.9789 TOE-2.3596 TRA 8.3373 TC3 -.6013 BAU .7577 ROE .6310 RRA -.2485 RC3 -.0046 FAU .00009 LSA 2252.6 MSA 255.9 SSA 10.1 FOE -.4846 FRA 2.0104 FC3 -.0008 BSP 18978 BDE 2.4425 BRA 8.3410 BC3 .6013 FSP -391 EL1 2169.9 EL2 250.1 ALF 172.53 SG1 5766.0 SG2 325.8 THA 177.58

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ARRIVAL DATE SEP 8 1967
                                                                                FLIGHT TIME 70.00
LAUNCH DATE JUN 30 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 171.680
    RL 152.09 LAL -.00 LOL 277.54 VL 24.619 GAL -4.86 A7L 93.55 MCA 72.78 SMA 116.50 ECC .31593 INC 3.5454 V1 29.293 RP 108.78 LAP -3.39 LOP 350.29 VP 36.069 GAP -18.03 A7P 91.05 TAL 190.70 TAP 263.48 RCA 79.70 APO 153.31 V2 34.838 RC 44.440 GL -16.09 GP -3.98 ZAL 112.89 ZAP 4.89 ETS 125.28 ZAE 156.35 ETE 19.65 ZAC 93.17 ETC 13.66 CLP 2.85
   PLANETOCENTRIC CONIC
    C3 29.969 VHL 5.474 DLA -8.44 RAL 158.77 RAD 6568.2 VEL 12.302 PTH 2.22 VHP 11.056 DPA
                                                                                                                                            2.17 RAP 173.44 ECC 1.4932
    ENCH AZHTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      114.16 5 5 4

79.40 15 48 31

115.34 6 18 10

78.24 17 9 21

118.63 7 14 0

75.02 18 22 53
                    4 30 55 2048.93
14 21 29 5222.23
5 48 10 1799.70
                                                                                     25.11
                                                       -15.23
                                                                       31.26
                                                                                                                        5 5 4 1448.9
                                                                                                                                                       -11.84
         90.00
                                                                       234.82
                                                                                         29.97
                                                                                                                                         4622.2
                                                                                                                                                          24.68
                                                                                                                                                                          226.58
         90.00
                                                        26.41
                                                                                                                                      1199.7
                                                                                         24.55
        100.00
                                                                        12.37
                                                                                                                                                        -12.87
                                                                                                                                                                             5.37
                                                       -16.41
                    15 46 55 4946.68
6 47 5 1615.23
17 4 29 4703.93
                                                                                                                                                         25.78
                                                                                                                                                                          205.98
       100.00
                                                       27.68
                                                                       214.27
                                                                                         29.69
                                                                                                                                         4346.7
                                                                                                                                       1015.2
                                                                                                                                                       -15.56
28.72
                                                       -19.53
                                                                                                                                                                          349.83
                                                                                         22.88
       110.00
                                                                       356.70
                                                                       194.91
                                                                                                                                         4103.9
                                                                                                                                                                          186.51
       110.00
                                                                                         28.76
                                                        31.09
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 738.6 SGR 425.7 SG3 76.2
RRT -.0774 RRF .0881 RTF -.6641
SGB 852.5 R23 -.0116 R13 .6650
SG1 739.7 SG2 423.8 THA 176.20
                                                                                                                             ST 389.3 SR 391.2 SS 293.2

CRT -.8509 CRS -.9786 CST .9332

LSA 605.9 MSA 152.2 SSA 19.3

EL1 530.9 EL2 150.7 ALF 134.83
    TOE .3367 TRA - .5203 TC3 .3142 BAU .1302
    ROE -.3714 RRA -.1401 RC3 .0824 FAU .02605
FOE -.2915 FRA .0713 FC3 -.7525 BSP 1972
BDE .5013 BRA .5388 BC3 .3249 FSP -176
                                                                                FLIGHT TIME 72.00
                                                                                                                                                 ARRIVAL DATE SEP 10 1967
LAUNCH DATE JUN 30 1967
                                                                                DISTANCE 178.411
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 24.906 GAL -4.88 A7L 93.47 MCA 75.95 SMA 117.98 ECC .30037 INC 3.4723 VI 29.293
RP 108.75 LAP -3.37 LOP 353.47 VP 36.274 GAP -16.91 A7P 90.84 TAL 191.56 TAP 267.51 RCA 82.54 APO 153.41 V2 34.846
RC 45.237 GL -16.69 GP -4.20 ZAL 114.37 ZAP 4.28 ETS 100.59 ZAE 154.56 ETE 17.34 ZAC 92.12 ETC 13.65 CLP .82
   PLANETOCENTRIC CONIC
    C3 27.377 VHL 5.232 DLA -8.39 RAL 157.06 RAD 6568.1 VEL 12.196 PTH 2.19 VHP 10.421 DPA 1.51 RAP 174.39 ECC 1.4506 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      114.51 4 57 36

78.60 15 41 40

115.72 6 10 39

77.41 17 2 29

119.07 7 6 33

74.08 18 15 57
                                                                                    21.96
                     4 23 44 2027.81
14 15 2 5198.15
                                                                                                                                      1427.8
                                                                                                                                                        -11.21
        90.00
                                                       -14.64
                                                                        29.99
                                                                                                                                                                            22.99
                                                                                         26.56
                                                                                                                                          4598.2
         90.00
                                                       26.10
                                                                       233.12
                                                                                                                                                          24.26
                                                                                                                                                                           224.93
                     5 41 1 1778.51
15 40 26 4922.68
6 39 59 1593.85
16 57 57 4680.10
                                                       -15.79
                                                                       11.10
                                                                                         21.40
                                                                                                                                         1178.5
       100.00
                                                                                                                                                          -12.20
                                                                                                                                                                             4.15
       100.00
                                                       27.34
                                                                                         26.27
                                                                                                                                         4322.7
                                                                                                                                                         25.33
                                                      -18.83
                                                                       355.44
                                                                                         19.75
                                                                                                                                          993.9
                                                                                                                                                        -14.81
28.17
                                                                                                                                                                          348.63
       110.00
                                                                                         25.30
                                                     30.66
                                                                                                                                        4080.1
       110.00
                                                                       193.19
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 766.0 SGR 428.0 SG3 85.3
RRT -. 0896 RRF .1027 RTF -. 6823
    TOE .3364 TRA -.4925 TC3 .3748 BAU .1406
                                                                                                                                     ST 403.2 SR 394.4 SS 306.5
                                                                                                                                    CRT -.8622 CRS -.9838 CST .9303
LSA 623.7 MSA 150.8 SSA 20.3
    ROE -.3579 RRA -.1331 RC3 .0846 FAU .02798
FOE -.3095 FRA .0463 FC3 -.8847 BSP 2086
BOE .4912 BRA .5101 BC3 .3842 FSP -202
                                                                           SGB 877.4 R23 -.0143 R13 .6834
                                                                            SG1 767.3 SG2 425.5 THA 175.86
                                                                                                                                     EL1 544.3 EL2 148.0 ALF 135.73
                                                                                                                                                ARRIVAL DATE SEP 12 1967
                                                                                FLIGHT TIME 74.00
LAUNCH DATE JUN 30 1967
                                                                               DISTANCE 185.155
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.168 GAL -4.91 AZL 93.40 HCA 79.12 SMA 119.37 ECC .28618 INC 3.4011 VI 29.293
RP 108.72 LAP -3.34 LOP 356.65 VP 36.463 GAP -15.84 AZP 90.64 TAL 192.48 TAP 271.61 RCA 83.21 APO 153.53 V2 34.856
    RC 46.178 GL -17.24 GP -4.46 ZAL 115.93 ZAP 4.63 ETS 73.70 ZAE 152.94 ETE 15.30 ZAC 91.12 ETC 13.65 CLP -1.26
   PLANETOCENTRIC CONIC
    C3 25.189 VHL 5.019 DLA -8.27 RAL 155.31 RAD 6568.0 VEL 12.106 PTH 2.17 VHP 9.817 OPA
                                                                                                                                               .84 RAP 175.29 ECC 1.4146
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     114.78 4 49 16
77.81 15 35 12
116.00 6 2 29
76.59 16 55 58
6 58 31
                    4 15 47 2011.08
14 8 59 5173.62
5 33 7 1761.58
15 34 19 4898.36
6 32 14 1576.47
16 51 42 4656.23
                                                                                                                                      1411.1
                                                                                    18.89
                                                                                                                                                        -10.71
        90.00
                                                      -14.17
                                                                       28.99
                                                                                        23.23
                                                                                                                                        4573.6
                                                                                                                                                         23.82
         90.00
                                                       25.76
                                                                       231.41
                                                                                                                                        1161.6
                                                                                                                                                         -11.67
                                                                                                                                                                            3.16
                                                                                        18.34
       100.00
                                                      -15.29
                                                                        10.10
                                                                                                                                                         24.85
       100.00
                                                                                                                                        4298.4
                                                      26.97
                                                                       210.86
                                                                                        22.92
                                                                                                        119.42 6 58 31
73.17 18 9 18
                                                                                                                                         976.5
                                                                                                                                                       -14,20
                                                                                                                                                                         347.66
       110.00
                                                      -18.25
                                                                       354.42
                                                                                        16.72
                                                                                                                                                        27.60
                                                                                                                                         4056.2
                                                                                                                                                                         183.25
       110.00
                                                      30.20
                                                                       191.48
                                                                                        21.93
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .3362 TRA -.4640 TC3 .4404 BAU .1510

RDE -.3459 RRA -.1268 RC3 .0848 FAU .03016

FDE -.3267 FRA .0170 FC3-1.0365 BSP 2206

BDE .4823 BRA .4810 BC3 .4485 FSP -231
                                                                          SGT 793.2 SGR 429.6 SG3 95.6

RRT -.1045 RRF .1194 RTF -.7002

SGB 902.1 R23 -.0166 R13 .7016

SG1 795.0 SG2 426.3 THA 175.45
                                                                                                                                    ST 416.2 SR 397.3 SS 319.4

CRT -.8736 CRS -.9881 CST .9274

LSA 640.6 MSA 149.2 SSA 21.3
                                                                                                                                    EL1 557.0 EL2 144.5 ALF 136.53
                                                                                                                                                ARRIVAL DATE SEP 14 1967
LAUNCH DATE JUN 30 1967
                                                                                FLIGHT TIME 76.00
                                                                               DISTANCE 191.907
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.407 GAL -4.95 AZL 93.33 MCA 82.30 SMA 120.68 ECC .2732B INC 3.3315 V1 29.293
RP 108.69 LAP -3.30 LOP 359.83 VP 36.638 GAP -14.82 AZP 90.45 TAL 193.45 TAP 275.75 RCA 87.70 APO 153.66 V2 34.865
RC 47.255 GL -17.72 GP -4.74 ZAL 117.53 ZAP 5.82 ETS 53.73 ZAE 151.49 ETE 13.46 ZAC 90.18 ETC 13.67 CLP -3.39
   PLANETOCENTRIC CONIC
    C3 23.345 VHL 4.832 DLA -8.08 RAL 153.53 RAD 6567.9 VEL 12.030 PTH 2.15 VHP 9.243 DPA
                                                                                                                                               .16 RAP 176.12 ECC 1.3842
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90,00 4 7 11 1998,66 -13,81 28,25 15,94 114.97 4 40 29 1398.7 -10.33 21,30
                                                                                                                                      1398.7
                                                                                    15.94
                     4 7 11 1998.66
                     14 3 25 5148.74
5 24 37 1748.82
                                                                                                          77.02
                                                                                                                   15 29 13
                                                                                                                                         4548.7
                                                                                                                                                         23.35
                                                                                                                                                                         221.60
                                                                                        20.00
        90.00
                                                       25.39
                                                                       229.68
                                                                                                                       5 53 46
                                                                                                                                        1148.8
                                                                                        15.40
                                                                                                                                                         -11.26
       100.00
                                                      -14.91
                                                                         9.34
                                                                                                         116.21
                                                                                                                   16 49 53
6 50 1
                    15 28 39 4873.80
6 23 58 1563.00
16 45 48 4632.39
                                                                                        19.68
                                                                                                          75.77
                                                                                                                                         4273.8
                                                                                                                                                                         201.04
                                                       26.57
                                                                                                                                                         24.35
       100.00
                                                                       209.14
                                                                                                        119.68
                                                                                                                                                       -13.72
27.01
       110.00
                                                      -17.80
                                                                       353.64
                                                                                        13.80
                                                                                                                                         963.0
                                                                                                                                                                         346.91
                                                                                                                   18 3 0
                                                                                                          72.27
                                                                                                                                        4032.4
                                                       29.72
                                                                       189.79
                                                                                        18.66
                                                                                                                                                                         181.65
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 819.6 SGR 430.6 SG3 107.2 ST 427.3 SR 399.8 SS 332.1 RRT -.1211 RRF .1391 RTF -.7165 CRT -.8841 CRS -.9915 CST .9238 SGB 923.8 R23 -.0202 R13 .7182 LSA 656.0 MSA 147.7 SSA 22.4 SG1 821.9 SG2 426.3 THA 175.01 EL1 568.0 EL2 140.5 ALF 137.15
    TOE .3350 TRA -.4356 TC3 .5088 BAU .1609
ROE -.3351 RRA -.1214 RC3 .0826 FAU .03263
    FOE - .3494 FRA - .0174 FC3-1.2102 BSP 2303
BOE .4739 BRA .4522 BC3 .5154 FSP -264
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ARRIVAL DATE SEP 16 1967
                                                                            FLIGHT TIME 78.00
LAUNCH DATE JUN 30 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 198.662
    RL 152.09 LAL -.00 LOL 277.54 VL 25.623 GAL -5.00 AZL 93.26 HCA 85.47 SHA 121.91 ECC .26160 INC 3.2628 V1 29.293
RP 108.66 LAP -3.25 LOP 3.01 VP 36.798 GAP -13.85 AZP 90.26 TAL 194.46 TAP 279.93 RCA 90.02 APO 153.80 V2 34.875
RC 48.488 GL -18.13 GP -5.05 ZAL 119.16 ZAP 7.53 ETS 41.28 ZAE 150.25 ETE 11.78 ZAC 89.32 ETC 13.70 CLP -5.60
   PLANETOCENTRIC CONIC
                                                                                                                                      -.52 RAP 176.88 ECC 1.3586
    C3 21.791 VHL 4.668 DLA -7.81 RAL 151.76 RAD 6567.9 VEL 11.965 PTH 2.13 VHP 8.697 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 58 3 1990.34
13 58 23 5123.61
5 15 38 1740.06
15 23 30 4849.11
                                                                                13.13
                                                                                                                               1390.3
                                                                                                                                               -10.08
                                                                                                 115.09 4 31 14
76.24 15 23 47
                                                                                                                                                                   20.82
                                                     -13.57
                                                                    27.76
        90.00
                                                                                                                                   4523.6
                                                                                                                                                   22.85
        90.00
                                                     24.99
                                                                    227.94
                                                                                    16.90
                                                                                                    116.36 5 44 38
74.96 16 44 19
119.86 6 41 10
71.41 17 57 8
                                                                       8.83
                                                                                  12.60
                                                                                                                                   1140.1
                                                                                                                                                  -10.98
                                                                                                                                                                    1.95
                                                    -14.64
       100.00
                                                    26.14
                                                                    207.43
                                                                                    16.57
                                                                                                                                   4249.1
                                                                                                                                                  23.82
       100.00
                                                                                                                                   953.3
                                                                                                                                                 -13.37
                                                                                                                                                                  346.37
                                  1553.26
                                                    -17.47
                                                                    353.08
                                                                                   11.03
                     6 15 17
       110.00
                                                                                                                                   4008.7
                                                                                                                                                  26.40
                                                                                                                                                                  180.07
       110.00
                   16 40 20 4608.66
                                                     29.21
                                                                    188.12
                                                                                     15.52
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .3330 TRA -.4076 TC3 .5782 BAU .1699
RDE -.3256 RRA -.1169 RC3 .0776 FAU .03544
                                                                        SGT 844.7 SGR 431.2 SG3 120.4
RRT -.1403 RRF .1618 RTF -.7310
                                                                                                                              ST 436.2 SR 402.0 SS 344.3

CRT -.8938 CRS -.9939 CST .9197

LSA 669.6 MSA 146.6 SSA 23.5
                                                        2403
-302
                                                                        SGB 948.4 R23 -. 0246 R13 .7331
    FOE -.3715 FRA -.0571 FC3-1.4081 BSP
                                                                        SG1 847.6 SG2 425.4 THA 174.52
                                                                                                                               EL1 577.3 EL2 136.2 ALF 137.62
    BOE .4657 BRA .4240 BC3 .5834 FSP
                                                                                                                                           ARRIVAL DATE SEP 18 1967
                                                                            FLIGHT TIME 80.00
LAUNCH DATE JUN 30 1967
                                                                            DISTANCE 205.417
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.820 GAL -5.06 A7L 93.19 HCA 88.65 SMA 123.05 ECC .25107 INC 3.1947 V1 29.293
RP 108.63 LAP -3.19 LOP 6.19 VP 36.945 GAP -12.92 A7P 90.08 TAL 195.49 TAP 284.14 RCA 92.15 APO 153.94 V2 34.886
RC 49.776 GL -18.46 GP -5.40 ZAL 120.80 ZAP 9.54 ETS 33.51 ZAE 149.23 ETE 10.19 ZAC 88.54 ETC 13.74 CLP -7.88
   PLANETOCENTRIC CONIC
    C3 20.483 VHL 4.526 DLA -7.49 RAL 150.01 RAD 6567.8 VEL 11.911 PTH
                                                                                                        2.12 VHP 8.179 OPA
                                                                                                                                      -1.20 RAP 177.56 ECC 1.3371
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  10.47
                                                                                                                                                -9.94
                      3 48 34 1985.85
13 53 57 5098.33
                                                                                                                  A 21 40
                                                                                                                                 1385.8
                                                                                                                                                                    20.56
                                                     -13.44
                                                                     27.49
                                                                                                   115.16
        90.00
                                                                                                      75.47 15 18 56
                                                                                                                                   4498.3
                                                                                                                                                    22.33
                                                                                                                                                                   218.26
                                                     24.57
                                                                     226.21
                                                                                     13.95
                    13 55 57
        90,00
                    5 6 19 1735.03
15 18 54 4824.38
                                                                                                                  5 35 14
                                                                                                                                   1135.0
                                                                                                                                                   -10.82
                                                                                                                                                                     1.66
                                                     -14.49
                                                                       8.53
                                                                                       9.95
                                                                                                    116.43
       100.00
                                                                                                    74.17 16 39 18
119.97 6 32 8
70.57 17 51 46
                                                                                                                                   4224.4
                                                                                                                                                  23.27
                                                                                                                                                                  197 76
                                                    25.69
                                                                     205.73
                                                                                     13.62
       100.00
                                  1547.07
                                                                                                                                                  -13.15
                                                                                                                                    947.1
                                                                                                                                                                  346.03
                     6 6 21
                                                    -17.26
                                                                     352.72
                                                                                       8.40
       110.00
                                                                                                                                                 25.77
                    16 35 21
                                                                                                                                  3985.1
                                                                                                                                                                  178.53
                                                                     186.49
                                                                                     12.55
       110.00
                                    4585.11
                                                     28.69
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 867.6 SGR 431.3 SG3 135.2
RRT -.1625 RRF .1881 RTF -.7441
SGB 968.9 R23 -.0296 R13 .7466
                                                                                                                              ST 442.8 SR 403.8 SS 355.9

CRT -.9027 CRS -.9953 CST .9149

LSA 681.1 MSA 145.9 SSA 24.6
    TOE .3300 TRA -.3798 TC3 .6471 BAU .1782
RDE -.3171 RRA -.1133 RC3 .0694 FAU .03862
    FOE -.3950 FRA -.1028 FC3-1.6322 BSP 2495
BDE .4577 BRA .3963 BC3 .6508 FSP -345
                                                                         SG1 871.4 SG2 423.8 THA 173.94
                                                                                                                               EL1 584.6 EL2 131.6 ALF 137.92
                                                                                                                                          ARRIVAL DATE SEP 20 1967
                                                                            FLIGHT TIME 82.00
LAUNCH DATE JUN 30 1967
                                                                            DISTANCE 212.168
    RL 152.09 LAL -.00 LOL 277.54 VL 25.997 GAL -5.11 A7L 93.13 MCA 91.83 SMA 124.11 ECC .24162 INC 3.1267 VI 29.293 RP 108.59 LAP -3.13 LOP 9.38 VP 37.080 GAP -12.03 A7P 89.90 TAL 196.54 TAP 288.37 RCA 94.12 APO 154.09 V2 34.897 RC 51.201 GL -18.71 GP -5.79 TAL 122.41 ZAP 11.76 ETS 28.40 ZAE 148.44 ETE 8.67 ZAC 87.86 ETC 13.79 CLP -10.25
   PLANETOCENTRIC CONIC
     C3 19.381 VHL 4.402 DLA -7.11 RAL 148.32 RAD 6567.8 VEL 11.864 PTH 2.10 VHP 7.687 DPA -1.89 RAP 178.13 ECC 1.3198
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                               -9.91
                    3 38 52 1984.86
13 50 10 5073.01
4 56 48 1733.42
15 14 54 4799.69
                                                                                                 115.17 4 11 56
74.71 15 14 43
116.46 5 25 42
                                                                                                                                1384.9
                                                                                      7.97
                                                    -13.41
                                                                     27.43
        90.00
                                                                                                                                   4473.0
                                                                                                                                                   21.80
                                                                                                                                                                 216.59
                                                     24.13
                                                                     224.49
                                                                                     11.17
                                                                                                                                                 -10.77
                                                                                                                                                                    1.57
                                                                                                                                   1133.4
                                                                      8.43
                                                                                      7.46
                                                                                                    116.46
       100.00
                                                    -14.44
                                                                                                    73.40 16 34 54
120.03 6 23 1
69.76 17 46 57
                                                                                                                                                  22.71
                                                                                                                                                                  196.15
       100.00
                                                    25.22
                                                                     204.04
                                                                                     10.83
                                                                                                                                   4199.7
                                                                                                                                                 -13.04
25.14
                                                                                                                                                                  345.86
                   5 57 17 1544.07
16 30 55 4561.80
                                                     -17.16
                                                                     352.55
                                                                                     5.94
                                                                                                                                    944.1
       110.00
                                                                                                                                                                  177.01
                                                                                       9.74
                                                                                                                                  3961.8
                                                     28.15
                                                                     184.89
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 449.0 SR 405.4 SS 368.3

CRT -.9118 CRS -.9956 CST ..9104

LSA 692.7 MSA 145.3 SSA 25.6

ELI 591.6 EL2 126.3 ALF 138.20
                                                                        SCT 891.0 SCR 431.4 SCG 152.4

RRT -.1907 RRF .2197 RTF -.7580

SCB 989.9 R23 -.0341 R13 .7611

SCI 895.9 SC2 421.2 THA 173.22
     TOE .3279 TRA -.3512 TC3 .7180 BAU .1866
     RDE -.3097 RRA -.1107 RC3 .0573 FAU .04229
    FDE -.4217 FRA -.1566 FC3-1.8891 BSP 2624
BDF .4511 BRA .3682 BC3 .7202 FSP -397
     BOE .4511 BRA .3682 BC3 .7202 FSP
                                                                                                                                           ARRIVAL DATE SEP 22 1967
LAUNCH DATE JUN 30 1967
                                                                             FLIGHT TIME 84.00
                                                                            DISTANCE 218.911
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.158 GAL -5.17 AZL 93.06 HCA 95.01 SMA 125.08 ECC .23317 INC 3.0584 V1 29.293
RP 108.56 LAP -3.05 LOP 12.56 VP 37.203 GAP -11.18 AZP 89.73 TAL 197.58 TAP 292.60 RCK 95.92 APO 154.25 V2 34.908
RC 52.722 GL -18.88 GP -6.22 ZAL 123.99 ZAP 14.14 ETS 24.85 ZAE 147.89 ETE 7.17 ZAC 87.29 ETC 13.85 CLP -12.72
   PLANETOCENTRIC CONIC
     C3 18.452 VHL 4.296 DLA -6.68 RAL 146.70 RAD 6567.7 VEL 11.825 PTH 2.09 VHP 7.221 DPA -2.57 RAP 178.59 ECC 1.3037
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 29 5 1986.98 -13.48 27.56 5.65 115.14 4 2 12 1387.0 -9.98 20.63 90.00 13 47 2 5047.75 23.66 222.78 8.58 73.98 15 11 9 4447.8 21.24 214.95 100.00 4 47 15 1734.83 -14.48 8.52 5.15 116.44 5 16 9 1134.8 -10.82 1.65 100.00 15 11 33 4775.13 24.74 202.38 8.22 72.66 16 31 8 4175.1 22.13 194.55
                                                                                                     120.03 6 13 57
68.98 17 42 43
                                                                                                                                                   -13.03
                                                                                                                                                                  345.85
                    5 48 13 1543.95
16 27 4 4538.78
                                                                                                                                     943.9
                                                     -17.16
                                                                     352.54
                                                                                       3.66
                                                                                       7.11
                                                                                                                                    3938.8
                                                                                                                                                   24.49
        110.00
                                                      27.60
                                                                     183.33
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 909.3 SGR 431.5 SG3 171.6
RRT - 2205 RRF .2556 RTF - .7680
SGB 1006.5 R23 - .0419 R13 .7720
                                                                                                                               ST 450.5 SR 406.7 SS 379.5
     TOE .3228 TRA -.3251 TC3 .7816 BAU .1931
                                                                                                                              CRT -.9187 CRS -.9948 CST .9040
LSA 700.3 MSA 146.1 SSA 26.5
     RDE -.3031 RRA -.1090 RC3 .0410 FAU .04642
     FOE -.4494 FRA -.2172 FC3-2.1781 BSP 2705
BOE .4428 BRA .3429 BC3 .7827 FSP -454
                                                                                                                              EL1 594.6 EL2 121.7 ALF 138.18
                                                                         SG1 915.6 SG2 418.0 THA 172.44
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ARRIVAL DATE SEP 24 1967

LAUNCH DATE JUN 30 1967

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DISTANCE 225.645
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.301 GAL -5.23 AZL 92.99 MCA 98.20 SMA 125.98 ECC .22565 INC 2.9894 VI 29.293
RP 108.52 LAP -2.96 LOP 15.75 VP 37.315 GAP -10.36 AZP 89.57 TAL 198.61 TAP 296.81 RCA 97.55 APO 154.41 V2 34.920
RC 54.330 GL -18.96 GP -6.71 ZAL 125.51 ZAP 16.69 ETS 22.28 ZAE 147.59 ETE 5.66 ZAC 86.84 ETC 13.91 CLP -15.32
   PLANETOCENTRIC CONIC
     C3 17.667 VHL 4.203 OLA -6.20 RAL 145.18 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 6.781 DPA -3.26 RAP 178.93 ECC 1.2907
    C3 17.667 VHL 4.203 OLA -6.20 RAL 145.18 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 6.781 DPA -3.26 RAP 178.93 ECC 1.2907
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 44 34 5022.63 23.18 221.10 6.17 73.27 15 8 16 4422.6 20.67 213.33
100.00 4 37 46 1738.91 -14.61 8.76 3.03 116.37 5 6 44 1138.9 -10.95 1.88
100.00 15 8 51 4750.76 24.23 200.75 5.81 71.94 16 28 2 4150.8 21.54 192.99
110.00 5 39 16 1546.35 -17.24 352.68 1.57 119.99 6 5 2 946.3 -13.12 345.99
110.00 16 23 50 4516.09 27.04 181.80 4.68 68.24 17 39 6 3916.1 23.84 174.10
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SCT 923.8 SCR 432.0 SC3 193.5
RRT -.2546 RRF .2971 RTF -.7760
SCB 1019.9 R23 -.0514 R13 .7811
                                                                                                                                                                    ST 449.3 SR 407.7 SS 390.5
CRT -.9243 CRS -.9930 CST .8967
LSA 705.7 MSA 147.9 SSA 27.2
     TOE .3165 TRA -.3006 TC3 .8390 BAU .1982
RDE -.2973 RRA -.1085 RC3 .0201 FAU .05111
     FDE -.4791 FRA -.2860 FC3-2.5047 BSP 2771
BDE .4342 BRA .3195 BC3 .8393 FSP -520
                                                                                              SG1 932.0 SG2 414.1 THA 171.53
                                                                                                                                                                    EL1 595.2 EL2 117.5 ALF 138.01
     BOE .4342 BRA .3195 BC3 .8393 FSP
                                                                                                                                                                                      ARRIVAL DATE SEP 26 1967
                                                                                                    FLIGHT TIME 88.00
   HELIOCENTRIC CONIC
                                                                                                    DISTANCE 232.366
    RL 152.09 LAL -.00 LOL 277.54 VL 26.430 GAL -5.29 AZL 92.92 MCA 101.38 SMA 126.80 ECC .21898 INC 2.9193 V1 29.293
RP 108.48 LAP -2.86 LOP 18.94 VP 37.417 GAP -9.57 AZP 89.42 TAL 199.61 TAP 301.00 RCA 99.03 APO 154.56 VZ 34.932
RC 56.016 GL -18.97 GP -7.26 ZAL 126.96 ZAP 19.40 ETS 20.34 ZAE 147.55 ETE 4.10 ZAC 86.54 ETC 13.98 CLP -18.04
   PLANETOCENTRIC CONIC
    C3 17.001 VHL 4.123 DLA -5.69 RAL 143.76 RAD 6567.7 VEL 11.764 PTH 2.08 VHP 6.365 DPA -3.95 RAP 179.12 ECC 1.2798 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                114.96 3 43 8
72.58 15 6 4
                                                                                                                                                                        1399.0
                                                                                                                                                                                              -10.34
                         3 9 49 1998.98
13 42 46 4997.68
4 28 28 1745.27
15 6 49 4726.62
                                                                                                          1.59
                                                                                                                                                                                                                       21.32
                                                                     -13.82
                                                                                          28.27
          90.00
                                                                                                                                                                            4397.7
                                                                                                                 3.96
                                                                                                                                                                                                20.09
          90.00
                                                                     22.68
                                                                                         219.44
                                                                                                                                  71.25 16 25 35 4126.6

119.90 5 56 23 950.9

67.53 17 36 7 3893.7
                                                                                                                                                                                                                         2.24
                                                                                                                1.10
                                                                                                                                                                                                 -11.15
         100.00
                                                                    -14.80
                                                                                           9.13
                                                                                                                                                                                                20.93
         100,00
                                                                     23.71
                                                                                         199.14
                                                                                                                 3.59
                          5 30 32 1550.92
16 21 13 4493.74
                                                                                                                                                                                              -13.28
23.18
                                                                                                                                                                                                                     346.24
         110.00
                                                                   -17.39
                                                                                         352.94
                                                                                                             359.66
                                                                                         180.32
         110.00
                                                                     26.46
                                                                                                               2.45
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 933.5 SGR 433.5 SG3 218.1
RRT -.2928 RRF .3445 RTF -.7818
SGB 1029.2 R23 -.0635 R13 .7886
                                                                                                                                                                     ST 444.9 SR 408.4 SS 401.1
CRT -.9285 CRS -.9904 CST .8880
LSA 708.6 MSA 150.7 SSA 27.7
     TOE .3086 TRA -.2781 TC3 .8884 BAU .2019
     ROE -.2921 RRA -.1091 RC3 -.0060 FAU .05642
FOE -.5107 FRA -.3637 FC3-2.8731 BSP 2818
BOE .4249 BRA .2987 BC3 .8884 FSP -595
                                                                                              SG1 944.1 SG2 409.9 THA 170.44
                                                                                                                                                                      EL1 593.1 EL2 113.8 ALF 137.63
                                                                                                                                                                                     ARRIVAL DATE SEP 28 1967
                                                                                                    FLIGHT TIME 90.00
LAUNCH DATE JUN 30 1967
                                                                                                   DISTANCE 239.072
   HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 26.545 GAL -5.34 AZL 92.85 MCA 104.57 SMA 127.54 ECC .21309 INC 2.8475 V1 29.293 RP 108.45 LAP -2.76 LOP 22.13 VP 37.510 GAP -8.82 AZP 89.28 TAL 200.57 TAP 305.14 RCA 100.36 APO 154.72 V2 34.945 RC 57.772 GL -18.90 GP -7.87 ZAL 128.33 ZAP 22.29 ETS 18.84 ZAE 147.77 ETE 2.44 ZAC 86.40 ETC 14.04 CLP -20.92
    PLANETOCENTRIC CONIC
     C3 16.432 VHL 4.054 DLA -5.16 RAL 142.45 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 5.975 DPA -4.63 RAP 179.15 ECC 1.2704
     C3 16.432 VHL 4.034 DLA -5.16 RAL 142.45 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 5.975 DPA -4.63 RAP 179.15 ECC 1.2704

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 0 32 2008.12 -14.08 28.82 359.84 114.82 3 34 0 1408.1 -10.62 21.85

90.00 13 41 40 4972.93 22.17 217.81 1.94 71.92 15 4 33 4372.9 19.49 210.16

100.00 4 19 27 1753.56 -15.05 9.62 359.37 116.14 4 48 40 1153.6 -11.41 2.72

100.00 15 5 26 4702.72 23.18 197.57 1.57 70.58 16 23 49 4102.7 20.32 189.94

110.00 5 22 7 1557.33 -17.61 353.31 357.95 119.78 5 48 5 957.3 -13.51 346.59

110.00 16 19 15 4471.71 25.88 178.87 18.97 66.85 17 33 47 3871.7 22.52 171.32

DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

TOE .2991 TRA -.2580 1C3 .0276 RAU .2040
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 937.2 SGR 436.7 SG3 246.0

RRT -.3353 RRF .3982 RTF -.7853

SGB 1033.9 R23 -.0786 R13 .7943

SG1 951.1 SG2 405.4 THA 169.12
                                                                                                                                                                      ST 437.3 SR 408.9 SS 411.1
      TOE .2991 TRA -.2580 TC3 .9276 BAU .2040
                                                                                                                                                                    CRT -.9312 CRS -.9869 CST .8776
LSA 709.1 MSA 154.5 SSA 28.1
      ROE -.2873 RRA -.1109 RC3 -.0380 FAU .06242
     FOE -.5439 FRA -.4510 FC3-3.2884 BSP 2851
                                                                                                                                                                      EL1 588.4 EL2 110.8 ALF 137.07
     BOE .4147 BRA .2808 BC3 .9284 FSP -680
                                                                                                                                                                                     ARRIVAL DATE SEP 30 1967
                                                                                                    FLIGHT TIME 92.00
LAUNCH DATE JUN 30 1967
                                                                                                   DISTANCE 245.761
     RL 152.09 LAL -.00 LOL 277.54 VL 26.647 GAL -5.39 AZL 92.77 MCA 107.76 SMA 128.21 ECC .20791 INC 2.7736 V1 29.293
RP 108.41 LAP -2.64 LOP 25.32 VP 37.594 GAP -8.10 AZP 89.15 TAL 201.48 TAP 309.24 RCA 101.55 APO 154.86 V2 34.957
RC 59.590 GL -18.75 GP -8.56 ZAL 129.61 ZAP 25.37 ETS 17.63 ZAE 148.27 ETE .61 ZAC 86.44 ETC 14.10 CLP -23.97
    PLANETOCENTRIC CONIC
     C3 15.943 VHL 3.993 DLA -4.59 RAL 141.28 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 5.609 DPA -5.32 RAP 179.00 ECC 1.2624
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              114.65 3 25 14
71.28 15 3 43
115.97 4 40 10
69.94 16 22 43
119.63 5 40 9
66.20 17 32 6
                                                                                                          358.29
                                                                                                                                                                        1418.9 -10.95
                             2 51 35 2018.92
                                                                     -14.39
                                                                                          29.46
                                                                                                                                                                             4348.3
                                                                                                                                                                                                 18.89
                                                                      21.64
                                                                                         216.20
                                                                                                                  .13
                          13 41 14 4948.35
                                                                                                                                                                                              -11.73
                                                                                                                                                                           1163.5
                             4 10 46 1763.48
                                                                     -15.34
                                                                                          10.21
                                                                                                              357.82
         100.00
                                                                                                                                                                            4079.0
                                                                                                                                                                                                19.70
                          15 4 44
                                             4679.02
                                                                     22.64
                                                                                        196.02
                                                                                                              359.75
                                                                                                                                                                       965.3
3850.0
                                                                                                                                                                                              -13.80
21.86
                         5 14 4 1565.31
16 17 56 4449.96
         110.00
                                                                     -17.88
                                                                                          353.77
                                                                                                              356.43
                                                                     25.29
                                                                                         177.45
                                                                                                              358.58
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 936.8 SGR 442.6 SG3 277.9
RRT - .3842 RRF .4590 RTF - .7878
SGB 1036.1 R23 - .0956 R13 .8001
                                                                                                                                                              ST 428.9 SR 409.3 SS 422.3

CRT -.9332 CRS -.9829 CST .8668

LSA 709.7 MSA 159.0 SSA 28.2

ELI 582.9 EL2 108.2 ALF 136.43
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FLIGHT TIME 86.00

SG1 955.5 SG2 400.7 THA 167.48

TOE .2896 TRA - .2392 TC3 .9589 BAU .2050 RDE -. 2832 RRA -. 1142 RC3 -. 0770 FAU . 06928 FOE -.5808 FRA -.5502 FC3-3.7618 BSP 2899 BDE .4051 BRA .2651 BC3 .9620 FSP -781

ARRIVAL DATE OCT 2 1967

JPL TM 33-99

LAUNCH DATE JUN 30 1967

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HELIOCENTRIC CONIC
                                                                                                  DISTANCE 252.431
     RL 152.09 LAL -.00 LOL 277.54 VL 26.737 GAL -5.43 A7L 92.70 MCA 110.96 SMA 128.80 ECC .20338 INC 2.6969 V1 29.293 RP 108.37 LAP -2.52 LOP 28.52 YP 37.669 GAP -7.40 A7P 89.03 TAL 202.32 TAP 313.27 RCA 102.61 APO 155.00 V2 34.970 RC 61.464 GL -18.54 GP -9.34 ZAL 130.80 ZAP 28.64 ETS 16.64 ZAE 149.04 ETE 358.55 ZAC 86.68 ETC 14.13 CLP -27.20
    PLANETOCENTRIC CONIC
      C3 15.516 VHL 3,939 DLA -4.01 RAL 140.24 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 5.268 DPA -6.01 RAP 178.64 ECC 1.2554
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                            LNCM TIME L-I TIME
2 43 2 2031:10
13 41 29 4923.90
4 2 30 1774.75
15 4 42 4655.48
5 6 26 1574.58
16 17 15 4428.42
                                                                                                                            114.46
                                                                                                                                                                   1431.1
                                                                                                                                                                                         -11.31
                                                                                                        356.92
                                                                                                                                                                                                                  23.18
                                                                   -14.74
                                                                                        30.19
                                                                                                                                                 3 16 53
                                                                                                           358.50
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65.58 17 31 4
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                          16 17 15
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                                                                                       176.07
                                                                                                           356.93
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 415.1 SR 409.4 SS 431.4
CRT -.9321 CRS -.9784 CST .8517
LSA 705.7 MSA 164.7 SSA 28.2
                                                                                             SGT 925.4 SGR 452.1 SG3 313.2
      TOE .2767 TRA -.2256 TC3 .9719 BAU .2032
                                                                                            RRT -.4320 RRF .5240 RTF -.7846
SGB 1030.0 R23 -.1197 R13 .8021
      RDE -.2792 RRA -.1189 RC3 -.1233 FAU .07687
     FDE -.6169 FRA -.6584 FC3-4.2889 BSP 2888
BDE .3931 BRA .2550 BC3 .9797 FSP -891
                                                                                             SG1 950.4 SG2 397.0 THA 165.50
                                                                                                                                                                   EL1 573.0 EL2 107.4 ALF 135.42
                                                                                                                                                                                  ARRIVAL DATE OCT 4 1967
LAUNCH DATE JUN 30 1967
                                                                                                  FLIGHT TIME 96.00
                                                                                                  DISTANCE 259.081
   HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 26.815 CAL -5.47 A7L 92.62 HCA 114.15 SMA 129.33 ECC .19943 INC 2.6168 VI 29.293 RP 108.33 LAP -2.39 LOP 31.71 VP 37.737 GAP -6.74 A7P 88.93 TAL 203.08 TAP 317.23 RCA 103.54 APO 155.12 V2 34.983 RC 63.388 GL -18.25 GP -10.21 ZAL 131.88 ZAP 32.14 ETS 15.79 ZAE 150.08 ETE 356.15 ZAC 87.14 ETC 14.15 CLP -30.65
    PLANETOCENTRIC CONIC
            15.139 VHL 3.891 DLA -3.40 RAL 139.33 RAD 6567.6 VEL 11.684 PTH
                                                                                                                                      2.06 VHP 4.952 DPA
                                                                                                                                                                            -6.70 RAP 178.05 ECC 1.2492
     C3 15.139 VHL 3.891 DLA -3.40 RAL 139.33 RAD 6567.6 VEL 11.684 PTH 2.06 VHP 4.952 DPA -6.70 RAP 178.05 ECC 1.2492
LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 34 53 2044.46 -15.11 30.99 355.74 114.24 3 8 58 1444.5 -11.71 23.96
90.00 13 42 25 4899.48 20.54 213.04 357.06 70.07 15 4 5 4299.5 17.64 205.57
100.00 3 54 39 1787.18 -16.05 11.62 355.29 115.56 4 24 26 1187.2 -12.47 4.65
100.00 15 5 21 4631.99 21.50 192.98 356.67 68.72 16 22 33 4032.0 18.42 185.54
110.00 4 59 15 1584.95 -18.54 354.92 353.93 119.25 5 25 39 985.0 -14.50 348.13
110.00 16 17 14 4406.98 24.08 174.70 355.47 64.97 17 30 41 3807.0 20.51 167.38
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 904.1 SGR 466.6 SG3 352.4
RRT -.4785 RRF .5922 RTF -.7763
                                                                                                                                                                   ST 398.1 SR 409.3 SS 439.5
CRT -.9281 CRS -.9736 CST .8328
     TOE .2620 TRA -.2163 TC3 .9675 BAU .1991
      RDE -.2754 RRA -.1251 RC3 -.1781 FAU .08528
     FOE -.6529 FRA -.7760 FC3-4.8769 BSP 2845
                                                                                            SGB 1017.4 R23 -.1503 R13 .8021
                                                                                                                                                                   LSA 699.3 MSA 171.2 SSA 28.1
  + BOE .3801 BRA .2499 BC3 .9838 FSP -1014
                                                                                             SG1 937.6 SG2 395.1 THA 163.03
                                                                                                                                                                    EL1 560.6 EL2 108.2 ALF 134.14
                                                                                                                                                                                ARRIVAL DATE OCT 5 1967
LAUNCH DATE JUN 30 1967
                                                                                                  FLIGHT TIME 98.00
                                                                                                  DISTANCE 265.709
   HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 26.883 GAL -5.50 AZL 92.53 MCA 117.35 SMA 129.79 ECC .19600 INC 2.5325 VI 29.293 RP 108.29 LAP -2.25 LOP 34.91 VP 37.798 GAP -6.09 AZP 88.84 TAL 203.76 TAP 321.11 RCA 104.35 APO 155.23 V2 34.996
     RC 65.357 GL -17.90 GP -11.18 ZAL 132.87 ZAP 35.88 ETS 15.02 ZAE 151.38 ETE 353.29 ZAC 87.84 ETC 14.12 CLP -34.32
    PLANETOCENTRIC CONIC
     C3 14.800 VHL 3.847 DLA -2.77 RAL 138.57 RAC 6567.6 VEL 11.670 PTH 2.05 VHP 4.661 CPA -7.47 RAP 177.22 ECC 1.2436
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         354.73
                                                                                                                             113.99
                                                                                                                                                                                        -12.14
                                                                                                                                                                     1458.9
                            2 27 10 2058.87
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          90.00
                                                                   -15.51
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                                                                                       211.47
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                                            4874.93
                                                                    19.96
           90.00
                          13 44 3
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                         3 47 13 1800.64
15 6 41 4608.39
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                                                                                                                                                                        1200.6
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                                                                    -16.44
                                                                                        12.43
                                                                                                           354.29
                                                                                                                                115.32
         100.00
                                                                                                                                  68.14 16 23 29
                                                                   20.91
                                                                                                           355.40
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                                                                                      191.48
         100.00
                                                                                                                                                                                         -14.90
19.82
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64.39 17 30 59
                           4 52 30 1596.29
16 17 53 4385.50
                                                                                       355.58
                                                                                                           352.96
                                                                                                                                                                         996.3
                                                                                                                                                                                                                348.77
         110.00
                                                                   -18.91
                                                                                                                                                                  3785.5
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                                                                                      173.35
                         16 17 53
                                                                   23.46
                                                                                                           354.19
         110.00
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SCT 872.5 SCR 487.9 SC3 395.6

RRT -.5192 RRF ,6609 RTF -.7613

SCB 999.7 R23 -.1882 R13 .8005
                                                                                                                                                                  ST 378,1 SR 409.1 SS 446.4
CRT -.9204 CRS -.9688 CST .8085
LSA 690.6 MSA 178.4 SSA 27.9
     TOE .2454 TRA -.2118 TC3 .9445 BAU .1930
     RDE -.2717 RRA -.1330 RC3 -.2429 FAU .09455
FDE -.6878 FRA -.9023 FC3-5.5304 BSP 2778
     BDE .3661 BRA .2501 BC3 .9752 FSP -1151
                                                                                             SG1 917.7 SG2 396.4 THA 159.90
                                                                                                                                                                  EL1 545.9 EL2 110.8 ALF 132.55
                                                                                                  FLIGHT TIME 100.00
                                                                                                                                                                                  ARRIVAL DATE OCT 8 1967
LAUNCH DATE JUN 30 1967
                                                                                                  DISTANCE 272.315
   HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 26.942 GAL -5.52 AZL 92.44 MCA 120.55 SMA 130.19 ECC .19304 INC 2.4431 VI 29.293 RP 108.25 LAP -2.10 LOP 38.11 VP 37.852 GAP -5.48 AZP 88.76 TAL 204.35 TAP 324.90 RCA 105.06 APO 155.33 V2 35.009 RC 67.365 GL -17.48 GP -12.28 ZAL 133.75 ZAP 39.87 ETS 14.30 ZAE 152.91 ETE 349.78 ZAC 88.80 ETC 14.04 CLP -38.24
    PLANETOCENTRIC CONIC
     C3 14.488 VML 3.806 DLA -2.13 RAL 137.95 RAD 6567.6 VEL 11.656 PTH 2.05 VMP 4.397 DPA -8.10 RAP 176.11 ECC 1.2384
     C3 14.488 VML 3.806 DLA -2.13 RAL 137.95 RAU 6567.6 VEL 11.656 VMP 4.397 DPA -63.10 RAP 176.11 ECC 1.2504 DPA -63.10 RAP 176.11 ECC 
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118.77 5 13 0
63.82 17 31 58
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                                            1608.50
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         110.00
                          16 19 14
                                              4363.77
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         110.00
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SCT 831.8 SGR 518.1 SC3 443.2
RRT -.5508 RRF .7275 RTF -.7381
SGB 980.0 R23 -.2308 R13 .7996
                                                                                                                                                                  ST 357.2 SR 409.0 SS 452.8
CRT -.9084 CRS -.9642 CST .7784
LSA 681.6 MSA 186.0 SSA 27.6
      TOE .2282 TRA -.2114 TC3 .9029 BAU .1855
      RDE -.2682 RRA -.1428 RC3 -.3195 FAU .10470
     FDE -.7219 FRA-1.0377 FC3-6.2565 BSP 2716
BDE .3522 BRA ..2551 BC3 .9577 FSP -1307
                                                                                            SG1 893.5 SG2 402.6 THA 155.86
                                                                                                                                                                EL1 530.7 EL2 115.1 ALF 130.75
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FLIGHT TIME 94.00

ARRIVAL DATE OCT 10 1967

LAUNCH DATE JUN 30 1967

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DISTANCE 278.898
       HELIOCENTRIC CONIC
         RL 152.09 LAL -.00 LOL 277.54 VL 26.991 GAL -5.53 AZL 92.35 MCA 123.75 SMA 130.54 ECC .19050 INC 2.3476 V1 29.293 RP 108:20 LAP -1.95 LOP 41.31 VP 37.899 GAP -4.88 AZP 88.70 TAL 204.85 TAP 328.60 RCA 105.67 APO 155.40 V2 35.023 RC 69.409 GL -16.98 GP -13.49 ZAL 134.54 ZAP 44.12 ETS 13.58 ZAE 154.62 ETE 345.37 ZAC 90.03 ETC 13.89 CLP -42.41
       PLANETOCENTRIC CONIC
          C3 14.195 VHL 3.768 DLA -1.45 RAL 137.47 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 4.159 DPA -8.81 RAP 174.73 ECC 1.2336 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                            113.42 2 47 47

66.37 15 9 53

114.76 4 4 6

67.02 16 27 30

118.49 5 7 20

63.26 17 33 39
                                          2 12 56 2090.71
13 49 29 4824.58
3 33 36 1830.49
15 11 30 4560.03
4 40 18 1621.71
16 21 17 4341.58
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                                                                                                                         -16.38
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                   90.00
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                100.00
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18.37
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                110.00
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                                                                                                                                                           170.62
                                                                                                                                                                                              352.13
                110.00
                                                                                                                          22.14
                                                                                                                                                                MID-COURSE EXECUTION ACCURACY
SGT 776.7 SGR 557.9 SG3 493.1
RRT -.5586 RRF .7871 RTF -.6967
SG8 956.3 R23 -.2785 R13 .7987
                                                                                                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                                                                                             ST 332.1 SR 408.2 SS 455.1

CRT -.8873 CRS -.9595 CST .7347

LSA 667.5 MSA 194.2 SSA 27.3

EL1 511.9 EL2 122.2 ALF 128.41
          TOE .2080 TRA -.2185 TC3 .8318 BAU
                                                                                                                                   .1758
         ROE -.2644 RRA -.1541 RC3 -.4003 FAU .11533
FOE -.7474 FRA-1.1733 FC3-7.0334 BBP 2601
BOE .3364 BRA .2674 BC3 .9266 FSP -1468
                                                                                                                                                                     SG1 880.2 SG2 417.8 THA 150.55
                                                                                                                                                                                                                                                                                                                           ARRIVAL DATE OCT 12 1967
                                                                                                                                                                              FLIGHT TIME 104.00
LAUNCH DATE JUN 30 1987
                                                                                                                                                                             DISTANCE 285.457
      HELIOCENTRIC CONIC
         RL 152.09 LAL -.00 LOL 277.54 VL 27.033 GAL -5.53 AZL 92.24 MCA 126.96 SMA 130.82 ECC .18833 INC 2.2445 V1 29.293 RP 108.16 LAP -1.79 LOP 44.52 VP 37.941 GAP -4.50 AZP 88.65 TAL 205.25 TAP 332.21 RCA 106.19 APO 155.46 V2 35.036 RC 71.485 GL -16.41 GP -14.84 ZAL 135.22 ZAP 48.62 ETS 12.82 ZAE 156.45 ETE 339.74 ZAC 91.53 ETC 13.64 CLP -46.86
       PLANETOCENTRIC CONIC
         C3 13.914 VHL 3.730 DLA -.74 RAL 137.13 RAD 6567.5 VEL 11.632 PTH 2.04 VHP 3.949 DPA -9.54 RAP 173.06 ECC 1.2290 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 53 23 4798.18 18.06 206.64 352.99 67.81 15 13 22 4198.2 14.89 199.40 100.00 3 27 19 1847.02 -17.77 15.23 352.30 114.44 5 58 6 1247.0 -14.32 8.13 100.00 15 15 5 4534.69 18.98 186.86 352.58 66.46 16 30 39 3934.7 15.63 179.66 110.00 4 34 47 1635.87 -20.20 357.93 351.02 118.18 5 2 2 1035.9 -16.28 351.00 110.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 16 24 7 4318.61 21.43 169.22 8.31 100.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 162.00 16
          C3 13.914 VHL 3.730 DLA
                                                                                                     -.74 RAL 137.13 RAD 6567.5 VEL 11.632 PTH
                                                                                                                                                                                                                                           2.04 WHP 3.949 DPA
                                                                                                                                                                                                                                                                                                                  -9.54 RAP 173.06 ECC 1.2290
                                                                                                                                                               THE STATE OF THE S
                                                                                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 SGT 712.3 SGR 608.7 SC3 544.7

RRT -.5329 RRF .6362 RTF -.6265

SGB 937.0 R23 -.3166 R13 .8052

SGB 937.0 R23 -.3166 R13 .8052
          TOE .1861 TRA -.2321 TC3 .7324 BAU .1661
           RDE -.2599 RRA -.1669 RC3 -.5111 FAU .12626
          FOE -.7622 FRA-1.3053 FC3-7.8561 BSP 2482
BDE .3197 BRA .2859 BC3 .8932 FSP -1636
                                                                                                                                                                                                                                                                                                                          ARRIVAL DATE OCT 14 1967
                                                                                                                                                                             FLIGHT TIME 106.00
 LAUNCH DATE JUN 30 1967
                                                                                                                                                                             DISTANCE 291,993
       HELIOCENTRIC CONIC
         RL 152.09 LAL -.00 LOL 277.54 VL 27.067 GAL -5.53 AZL 92.13 HCA 130.16 SMA 131.06 ECC .18648 INC 2.1323 VI 29.293 RP 108.12 LAP -1.63 LOP 47.72 VP 37.977 GAP -3.75 AZP 88.62 TAL 205.56 TAP 335.72 RCA 106.62 APO 155.50 VZ 35.049 RC 73.590 GL -15.75 GP -16.33 ZAL 135.81 ZAP 53.38 ETS 11.99 ZAE 158.24 ETE 332.48 ZAC 93.30 ETC 13.28 CLP -51.57
        PLANETOCENTRIC CONIC
                                                                                                      .01 RAL 136.93 RAD 6567.5 VEL 11.620 PTH 2.04 VHP 3.768 DPA -10.30 RAP 171.09 ECC 1.2245
          C3 13.638 VHL 3.693 OLA .01 RAL 136.93 RAD 6567.5 VEL 11.620 PTH 2.04 VHP 3.768 DPA -10.30 RAP 171.09 ECC 1.2245
LNCH A7HTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJARNTH INJTIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 159 57 2127.30 -17.36 36.03 352.37 112.73 2 35 24 1527.3 -14.13 28.84
100.00 3 21 18 1864.90 -18.27 16.32 351.95 114.08 3 52 23 1264.9 -14.86 9.18
100.00 15 19 32 4508.06 18.24 185.22 351.95 65.90 16 34 40 3908.1 14.84 176.09
110.00 4 29 34 1651.23 -20.69 358.85 350.70 117.84 4 57 5 1051.2 -16.81 351.88
110.00 16 27 46 4294.49 20.67 167.76 350.70 62.15 17 39 20 3694.5 16.78 160.79
DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
          C3 13.638 VHL 3.693 DLA
                                                                                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                                                  HID-COURSE EXECUTION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 SGT 645.6 SGR 672.9 SG3 597.7

RRT -,4595 RRF .8804 RTF -,5193

SG8 932.6 R23 -.3143 R13 .8324

SG1 797.0 SG2 484.1 THA 132.42
                                                                                                                                                                                                                                                                                         ST 280.9 SR 404.8 SS 449.0

CRT -.8024 CRS -.9503 CST .5903

LSA 631.6 MSA 211.6 SSA 26.7

EL1 471.2 EL2 144.0 ALF 122.51
           TOE .1644 TRA -.2511 TC3 .6055 BAU .1594
          RDE -.2550 RRA -.1814 RC3 -.6308 FAU .13740
FDE -.7681 FRA-1.4317 FC3-8.7221 BSP 2419
BDE .3034 BRA .3098 BC3 .8744 FSP -1815
                                                                                                                                                                                                                                                                                                                           ARRIVAL DATE OCT 16 1967
 LAUNCH DATE JUN 30 1967
                                                                                                                                                                               FLIGHT TIME 108.00
                                                                                                                                                                              DISTANCE 298.504
       HELIOCENTRIC CONIC
         RL 152.09 LAL -.00 LOL 277.54 VL 27.093 GAL -5.51 AZL 92.01 MCA 133.37 SMA 131.25 ECC .18493 INC 2.0089 VI 29.293 RP 108.08 LAP -1.46 LOP 50.93 VP 38.009 GAP -3.21 AZP 88.62 TAL 205.77 TAP 339.14 RCA 106.98 APO 155.52 V2 35.062 RC 75.721 GL -14.99 GP -17.96 ZAL 136.31 ZAP 58.37 ETS 11.03 ZAE 159.81 ETE 323.18 ZAC 95.32 ETC 12.77 CLP -56.55
         C3 13.363 VHL 3.656 OLA .83 RAL 136.88 RAD 6567.5 VEL 11.608 PTH 2.03 VHP 3.617 OPA -11.09 RAP 168.84 ECC 1.2199

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 53 43 2148.09 -17.90 37.32 352.18 112.31 2 29 31 1548.1 -14.72 30.04

90.00 14 4 2 4740.75 16.55 203.11 351.88 66.69 15 23 3
       PLANETOCENTRIC CONIC
                                                                                                                                                                                                                             INJ AZMTH INJ TIME
112.31 2 29 31
66.69 15 23 3
113.67 3 46 51
65.33 16 39 39
117.45 4 52 23
61.58 17 43 30
                                                   4 24 35 1668.09
                                                                                                                                                                                                                                                                                                           1068.1
                                                                                                                                                                                                                                                                                                                                           -17.36
                                                                                                                                                                                                                                                                                                                                                                                  352.85
                                                                                                                         -21.23
                                                                                                                                                            359.87
                                                                                                                                                                                               350.54
                 110.00
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                                              16 32 21
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                                                                                    4268.75
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                                                                                                                                                           166.22
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                 110.00
                                                                                                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                                                                MID-COURSE EXECUTION ACCURACY
        DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  SGT 585.1 SGR 748.1 SG3 647.4
RRT -.3026 RRF .9127 RTF -.3345
SGB 949.7 R23 -.2177 R13 .8885
SG1 788.8 SG2 528.9 THA 115.33
                                                                                                                                                                                                                                                                                           ST 257.0 SR 400.3 SS 435.8

CRT -.7207 CRS -.9444 CST .4670

LSA 605.6 MSA 220.9 SSA 26.6

EL1 448.3 EL2 159.1 ALF 118.79
           TOE .1411 TRA -.2778 TC3 .4408 BAU .1579
           ROE -. 2483 RRA -. 1963 RC3 -. 7658 FAU .14775
           FDE -.7494 FRA-1.5353 FC3-9.5720 BSP 2399
BDE .2855 BRA .3402 BC3 .8836 FSP -1979
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FLIGHT TIME 102.00

ARRIVAL DATE OCT 18 1967

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FLIGHT TIME 110.00
LAUNCH DATE JUN 30 1967
                                                                                 DISTANCE 304.990
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 27.114 GAL -5.48 AZL 91.87 HCA 136.58 SMA 131.39 ECC .18364 INC 1.8716 VI 29.293
RP 108.04 LAP -1.29 LOP 54.14 VP 38.035 GAP -2.70 AZP 88.64 TAL 205.88 TAP 342.46 RCA 107.26 APO 155.52 V2 35.075
RC 77.874 GL -14.10 GP -19.74 ZAL 136.72 ZAP 63.55 ETS 9.92 ZAE 160.86 ETE 311.68 ZAC 97.56 ETC 12.09 CLP -61.76
   PLANETOCENTRIC CONIC
    C3 13.085 VHL 3.617 OLA 1.72 RAL 136.98 RAD 6567.5 VEL 11.596 PTH 2.03 VHP 3.497 DPA -11.94 RAP 166.34 ECC 1.2153 LNCH AZHTH LNCH TIME L-I TIME [IN] LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          1571.3
                                                                                                                                                          -15.37
                                                                                        352.15
                                                                                                        111.83
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                     1 47 29 2171.27
14 11 4 4708.44
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                       3 9 38 1906.31
15 31 37 4448.64
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       100.00
                                                        -19.40
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                                     4240.77
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                                                                                        349.85
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 239.7 SR 393.8 SS 418.4
CRT -.6064 CRS -.9377 CST .3072
LSA 577.7 MSA 230.7 SSA 26.4
                                                                            SGT 554.0 SGR 836.3 SG3 693.3
RRT -.0522 RRF .9373 RTF -.0628
SG8 1003.2 R23 -.0241 R13 .9371
    TOE .1195 TRA -.3093 TC3 .2428 BAU .1663
    RDE -.2400 RRA -.2119 RC3 -.9191 FAU .15710
FDE -.7131 FRA-1.6167 FC-10.3945 BSP 2529
BDE .2681 BRA .3749 BC3 .9507 FSP -2142
                                                                             SG1 837.2 SG2 552.6 THA 93.51
                                                                                                                                       EL1 426.1 EL2 176.2 ALF 114.78
                                                                                                                                                   ARRIVAL DATE OCT 20 1967
                                                                                  FLIGHT TIME 112.00
  HELIOCENTRIC CONIC
                                                                                 DISTANCE 311.453
   RL 152.09 LAL -.00 LOL 277.54 VL 27.128 GAL -5.45 AZL 91.72 MCA 139.80 SMA 131.49 ECC .18258 INC 1.7168 V1 29.293
RP 108.00 LAP -1.11 LOP 57.35 VP 36.037 GAP -2.20 AZP 88.69 TAL 205.89 TAP 345.69 RCA 107.48 APO 155.50 V2 35.088
RC 80.046 GL -13.07 GP -21.66 ZAL 137.04 ZAP 68.86 ETS 8.60 ZAE 161.08 ETE 298.50 ZAC 99.96 ETC 11.23 CLP -67.16
   PLANETOCENTRIC CONIC
                                                                                                               2.03 WHP 3.410 OPA -12.86 RAP 163.62 ECC 1.2106
                                             2.73 RAL 137.24 RAD 6567.5 VEL 11.584 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 3 2197.67 -19.15 40.41 352.30 111.26 2 17 40 1597.7 -16.10 33.07
    C3 12.799 VHL 3.578 DLA
                                                                                                                        15 37 25
                                                                                                                                            4072.6
                                                                                                                                                             11.24
                     14 19 33 4672.55
                                                         14.66
                                                                         198.99
                                                                                         351.36
                                                                                                            65.50
         90.00
                   3 3 40 1951.20
15 39 37 4414.26
4 14 49 1708.46
16 44 57 4209.75
                                                                                                                                                            -16.82
                                                                                                                                            1331.2
                                                                                                           112.64
                                                                                                                          3 35 51
                                                        -20.06
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                                                                                         351.92
       100.00
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                                                                                                            60.38 17 55 6
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                                                                         162.75
                                                                                         349.64
                                                         17.89
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT .2617 RRF .9550 RTF .2633
SGB 1097.4 R23 .1206 R13 .9475
SGI 951.3 SG2 547.0 THA 76.12
                                                                                                                                       ST 230.0 SR 381.8 SS 388.8
CRT -.4525 CRS -.9265 CST .0993
    TOE .0989 TRA -.3467 TC3 .0043 BAU .1861
     RDE -. 2281 RRA -. 2259 RC3-1.0876 FAU .16426
                                                                                                                                       LSA 539.4 MSA 241.2 SSA
                                                                                                                                                                                  26.5
     FDE -.6409 FRA-1.6515 FC-11.1107 8SP 2795
                                                                                                                                       EL1 400.5 EL2 195.5 ALF 110.28
            .2486 BRA .4138 BC3 1.0876 FSP -2264
                                                                                                                                                   ARRIVAL DATE OCT 22 1967
                                                                                 FLIGHT TIME 114.00
LAUNCH DATE JUN 30 1967
                                                                                DISTANCE 317.892
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 27.137 GAL -5.40 AZL 91.54 MCA 143.01 SMA 131.55 ECC .18172 INC 1.5398 V1 29.293
RP 107.96 LAP -.93 LOP 60.56 VP 38.075 GAP -1.71 AZP 88.77 TAL 205.81 TAP 348.83 RCA 107.65 APO 155.46 V2 35.101
RC 82.236 GL -11.85 GP -23.74 ZAL 137.28 ZAP 74.21 ETS 7.05 ZAE 160.25 ETE 285.00 ZAC 102.46 ETC 10.15 CLP -72.71
   PLANETOCENTRIC CONIC
                                             3.88 RAL 137.66 RAD 6567.5 VEL 11.571 PTH 2.02 VHP 3.357 OPA -13.90 RAP 160.74 ECC 1.2058
   C3 12.505 VHL 3.536 OLA 3.88 RAL 137.66 RAO 6567.5 VEL 11.571 PTH 2.02 VHP 3.337 OPA -13.90 RAP 160.74 ECC 1.2058 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 29 50 4631.77 13.50 196.56 351.34 64.87 15 47 1 4031.8 10.00 189.63 100.00 2 57 18 1960.29 -20.81 22.26 352.28 111.96 3 29 58 1360.3 -17.65 14.90 100.00 15 49 21 4375.23 14.37 177.26 350.90 63.51 17 2 16 3775.2 10.70 170.39 110.00 4 9 43 1733.67 -23.23 3.90 351.12 115.81 4 38 36 1133.7 -19.56 356.68 110.00 16 53 26 4174.62 16.70 160.73 349.60 59.73 18 3 1 3574.6 12.55 154.07
    C3 12.505 VHL 3.536 DLA
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 670.2 SGR 1037.6 SG3 754.1
RRT .5306 RRF .9678 RTF .5367
SGB 1235.2 R23 .1798 R13 .9514
SGI 1116.8 SG2 527.8 THA 65.19
                                                                                                                                       ST 231.3 SR 363.2 SS 349.9

CRT -.2854 CRS -.9071 CST -.1279
    TOE .0827 TRA -.3868 TC3 -.2706 BAU .2174
    RDE -.2118 RRA -.2379 RC3-1.2722 FAU .16882
FDE -.5361 FRA-1.6409 FC-11.6874 BSP 3230
                                                                                                                                      LSA 493.1 MSA 253.0 SSA 26.9
EL1 372.4 EL2 216.2 ALF 105.72
     BOE .2274 BRA .4541 BC3 1.3006 FSP -2349
                                                                                                                                                   ARRIVAL DATE OCT 24 1967
                                                                                  FLIGHT TIME 116.00
LAUNCH DATE JUN 30 1967
                                                                                 DISTANCE 324.306
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 27.140 GAL -5.35 AZL 91.33 MCA 146.23 SMA 131.58 ECC .18104 INC 1.3341 V1 29.293
RP 107.92 LAP -.74 LOP 63.78 VP 38.089 GAP -1.24 AZP 88.89 TAL 205.65 TAP 351.88 RCA 107.76 APO 155.40 V2 35.113
RC 84.440 GL -10.38 GP -26.00 ZAL 137.42 ZAP 79.53 ETS 5.23 ZAE 158.32 ETE 272.74 ZAC 104.99 ETC 8.83 CLP -78.33
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 26 24 2265.61 -20.77 44.74 353.24 109.69 2 4 9 1665.6 -17.90 37.24
                                             5.23 RAL 138.27 RAD 6567.5 VEL 11.558 PTH 2.02 VHP 3.339 DPA -15.09 RAP 157.74 ECC 1.2008
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15 58 50
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1995.29
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                                                         -21.68
        100.00
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115.00 4 33 30
59.05 18 12 48
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                                    4329.84
                                                         12.98
        100.00
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17 3 54 4133.86
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                                                                                         351.76
                                                        -24.11
       110.00
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                                                                         158.41
                                                         15.29
                                                                                         349.74
        110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 820.4 SGR 1151.0 SG3 766.1
RRT .7048 RRF .9771 RTF .7112
SGB 1413.4 R23 .1974 R13 .9575
SGI 1319.0 SG2 507.8 THA 58.04
                                                                                                                                       ST 243.5 SR 337.1 SS 304.7
     TDE .0737 TRA -.4271 TC3 -.5790 BAU .2584
                                                                                                                                       CRT -.1416 CRS -.8721 CST -.3434
     RDE -.1906 RRA -.2474 RC3-1.4743 FAU .17045
                                                                                                                                      LSA 440.4 MSA 266.6 SSA 27.6
     FDE - . 4035 FRA-1 . 5843 FC-12 . 0923 8SP 3823
                                                                                                                                       EL1 340.7 EL2 238.6 ALF 101.57
     BDE .2044 BRA .4936 BC3 1.5839 FSP -2402
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ARRIVAL DATE OCT 26 1967

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LAUNCH DATE JUN 30 1967
                                                                                                  FLIGHT TIME 118.00
     HELIOCENTRIC CONIC
                                                                                                  DISTANCE 330.697
      RL 152.09 LAL -.00 LOL 277.54 VL 27.139 GAL -5.28 AZL 91.09 HCA 149.45 SMA 131.57 ECC .18053 INC 1.0908 V1 29.293
RP 107.89 LAP -.55 LOP 67.00 VP 38.100 GAP -.79 AZP 89.06 TAL 205.39 TAP 354.84 RCA 107.82 APO 155.33 V2 35.125
RC 86.655 GL -8.58 GP -28.47 ZAL 137.47 ZAP 84.70 ETS 3.10 ZAE 155.44 ETE 262.68 ZAC 107.45 ETC 7.26 CLP -83.97
     PLANETOCENTRIC CONIC
      C3 11.895 VHL 3.449 DLA
                                                      6.86 RAL 139.09 RAD 6567.5 VEL 11.545 PTH 2.01 VHP 3.360 DPA -16.51 RAP 154.68 ECC 1.1958
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           100.53 1 55 45
63.51 16 13 36
109.96 3 15 49
62.13 17 27 28
113.92 4 27 36
58.32 18 25 3
                                                                                                                                                                                      -19.07
                                                                                                       354.12
                                                                                                                                                                  1711.7
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                                                                    -21.80
                                                                                         47.73
                            1 17 14 2311,.65
                                                                                                          351.90
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            90.00
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                                             4527.45
                                                                     10.40
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                         2 41 51 2038.74
          100.00
                                                                    -22.72
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                         16 16 12 4275.60
3 57 34 1801.74
17 16 58 4085.36
          100.00
                                                                    11.27
                                                                                       171.49
                                                                                                          351.45
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                                                                                                         352.69
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          110.00
                                                                  -25.18
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          110.00
                                                                                       155.70
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                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 264.9 SR 297.8 SS 251.8 CRT -.0353 CRS -.7896 CST -.5652 LSA 379.0 MSA 278.9 SSA 29.2
      TOE .0741 TRA -.4658 TC3 -.9223 BAU .3059
                                                                                             SGT 1013.5 SGR 1266.3 SG3 760.2
      ROE -.1610 RRA -.2511 RC3-1.6877 FAU .16814
FOE -.2302 FRA-1.4664 FC-12.2371 89P 4515
BOE .1773 BRA .5292 BC3 1.9233 FSP -2390
                                                                                           RRT .8066 RRF .9837 RTF .8113
SGB 1622.0 R23 .2012 R13 .9634
SGI 1545.9 SG2 490.7 THA 52.78
                                                                                                                                                                 EL1 298.5 EL2 264.1 ALF 98.38
LAUNCH DATE JUN 30 1967
                                                                                                  FLIGHT TIME 120.00
                                                                                                                                                                                ARRIVAL DATE OCT 28 1967
                                                                                                  DISTANCE 337.065
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 27.134 GAL -5.21 AZL 90.80 HCA 152.67 SMA 131.54 ECC .18016 INC .7955 V1 29.293
RP 107.85 LAP -.37 LOP 70.21 VP 38.107 GAP -.35 AZP 89.29 TAL 205.05 TAP 357.72 RCA 107.84 APO 155.23 V2 35.137
RC 88.880 GL -6.33 GP -31.20 ZAL 137.40 ZAP 89.61 ETS .62 ZAE 151.79 ETE 254.94 ZAC 109.77 ETC 5.41 CLP -89.54
     C3 11.589 VHL 3.404 OLA 8.88 RAL 140.17 RAD 6567.4 VEL 11.532 PTH 2.01 VHP 3.424 DPA -18.23 RAP 151.59 ECC 1.1907 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG 90.00 1 5 45 2370.94 -23.03 51.64 355.40 106.95 1 45 16 1770.9 -20.49 45.88 90.00 15 18 12 4457.25 8.24 186.43 352.61 62.81 16 32 30 3857.2 4.53 179.72 100.00 2 31 25 2094.63 -23.97 30.99 355.08 108.41 3 6 20 1494.6 -21.23 23.26 100.00 16 35 13 4208.78 9.12 167.69 352.14 61.41 17 45 22 3608.8 5.23 161.06 110.00 3 49 31 1850.24 -26.88 11.40 354.04 112.45 4 20 21 1250.2 -23.20 110.00 17 33 37 4025.94 11.42 152.44 350.77 57 86
    PLANETOCENTRIC CONIC
     DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                          SGT 1231.7 SGR 1387.7 SG3 738.3
RRT .8644 RRF .9885 RTF .8678
SGB 1855.4 R23 .1986 R13 .9687
SGI 1792.4 SG2 479.5 THA 48.94
                                                                                                                                                                 ST 297.0 SR 244.7 SS 210.5
CRT .0354 CRS -.6017 CST -.7966
      TOE .0894 TRA - .4984 TC3-1 .2918 BAU .3581
      RDE -.1220 RRA -.2492 RC3-1.9169 FAU .16225
      FOE -.0301 FRA-1.3017 FC-12.1208 BSP 5297
BDE .1512 BRA .5572 BC3 2.3116 FSP -2333
                                                                                                                                                                 LSA 355.8 MSA 254.5 SSA 32.1
                                                                                                                                                                 EL1 297.4 EL2 244.2 ALF
                                                                                                                                                                               ARRIVAL DATE OCT 30 1967
                                                                                                 FLIGHT TIME 122.00
LAUNCH DATE JUN 30 1967
                                                                                                 DISTANCE 343.409
     RL 152.09 LAL -.00 LOL 277.54 VL 27.125 GAL -5.12 AZL 90.43 MCA 155.89 SMA 131.47 ECC .17993 INC .4279 VI 29.293
RP 107.82 LAP -.17 LOP 73.44 VP 38.111 GAP .08 AZP 89.61 TAL 204.64 TAP .53 RCA 107.82 APO 155.13 VZ 35.149
RC 91.113 GL -3.44 GP -34.31 ZAL 137.15 ZAP 94.13 ETS 357.73 ZAE 147.54 ETE 249.21 ZAC 111.85 ETC 3.24 CLP -95.00
     PLANETOCENTRIC CONIC
      C3 11.301 VML 3.362 DLA 11.46 RAL 141.57 RAD 6567.4 VEL 11.519 PTH 2.01 VMP 3.537 DPA -20.37 RAP 148.48 ECC 1.1860
      ENCH ATHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            DESCRIPTION OF THE L-1 TIME O 50 25 2450.60 15 44 46 4367.14 2 17 32 2169.60 17 0 20 4123.37 3 38 53 1915.07 17 55 28 3950.67
                                                                                                                                                                   1850.6 -22.26
                                                                   -24.51
                                                                                       57.01
                                                                                                        357.26
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           90.00
                                                                                      161.33
                                                                                                          353.79
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           90.00
                                                                      5.41
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         100.00
                                                                   -25.49
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                                                                      6.30
                                                                                     162.92
                                                                                                          353.30
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         100.00
                                                                   -28.09
                                                                                        15.75
                                                                                                          356.00
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         110.00
                                                                                      148.38
                                                                                                          351.87
                                                                                                                                                                      3350.7
                                                                                                                                                                                            4.21
         110.00
                                                                    8.64
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                           SGT 1464.8 SGR 1507.3 SG3 696.2
RRT .8982 RRF .9919 RTF .9005
SGB 2101.8 RZ3 .1958 R13 .9727
SG1 2047.7 SG2 474.0 THA 45.91
                                                                                                                                                                ST 347.7 SR 173.8 SS 215.6
CRT .1749 CRS -.3204 CST -.9657
      TOE .1256 TRA -.5210 TC3-1.6819 BAU .4124
     ROE -.0671 RRA -.2367 RC3-2.1500 FAU .15198
FOE .2077 FRA-1.0796 FC-11.6425 BSP 6103
BOE .1424 BRA .5723 BC3 2.7297 FSP -2200
                                                                                                                                                                LSA 408.4 MSA 171.2 SSA 38.4
EL1 349.4 EL2 170.2 ALF 6.56
LAUNCH DATE JUN 30 1967
                                                                                                 FLIGHT TIME 124.00
                                                                                                                                                                               ARRIVAL DATE NOV 1 1957
                                                                                                 DISTANCE 349.730
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 27.112 GAL -5.03 AZL 89.95 MCA 159.12 SMA 131.38 ECC .17982 INC .0280 V1 29.293
RP 107.78 LAP .02 LOP 76.66 VP 38.112 GAP .50 AZP 90.04 TAL 204.14 TAP 3.26 RCA 107.76 APO 155.01 V2 35.160
RC 93.352 GL .37 GP -37.95 ZAL 136.62 ZAP 98.10 ETS 354.34 ZAE 142.72 ETE 245.11 ZAC 113.60 ETC .68 CLP-100.30
    PLANETOCENTRIC CONIC
     C3 11.072 VHL 3.327 DLA 14.87 RAL 143.43 RAD 6567.4 VEL 11.509 PTH 2.00 VHP 3.715 DPA -23.07 RAP 145.31 ECC 1.1822
     C3 11.072 VHL 3.327 OLA 14.87 RAL 143.43 RAD 6367.4 VEL 11.509 PTH 2.00 VMP 3.715 OPA -23.07 RAP 145.31 ECC 1.1822 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 28 11 2563.89 -26.23 64.86 .01 101.08 1 10 55 1963.9 -24.43 56.65 90.00 16 21 50 4245.38 1.50 174.51 355.76 61.72 17 32 36 3645.4 -2.29 167.88 100.00 1 57 34 2275.65 -27.29 43.40 359.76 102.69 2 35 29 1675.7 -25.27 35.19 100.00 17 35 9 4008.86 2.46 156.59 355.23 60.20 18 41 58 3408.9 -1.53 150.07 110.00 3 23 45 2005.98 -30.08 22.08 358.92 107.07 3 57 11 1406.0 -27.45 13.88 110.00 18 25 27 3851.29 4.90 143.12 353.71 56.15 19 29 38 3251.3 .42 136.90
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 1705.1 SGR 1636.5 SG3 638.6 ST 437.9 SR 124.6 SS 298.9 RRT .9186 RRF .9945 RTF .9209 CRT .7010 CRS -.6072 CST -.9723 SGB 2363.3 R23 .1911 R13 .9761 LSA 553.9 MSA 96.9 SSA 47.0 SG1 2314.8 SG2 476.3 THA 43.72 EL1 446.9 EL2 87.1 ALF 11.73
      TOE .1929 TRA -.5281 TC3-2.0776 BAU .4689
     ROE .0069 RRA -.2142 RC3-2.3912 FAU .13636
FOE .4587 FRA -.8290 FC-10.8185 BSP 6978
BOE .1931 BRA .5699 BC3 3.1677 FSP -2031
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ARRIVAL DATE NOV 3 1967
                                                                                                                  FLIGHT TIME 126.00
LAUNCH DATE JUN 30 1967
                                                                                                                  DISTANCE 356.028
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 27.096 GAL -4.92 A7L 89.32 MCA 162.34 SMA 131.27 ECC .17983 INC .6828 VI 29.293
RP 107.75 LAP .21 LOP 79.88 VP 38.110 GAP .90 A7P 90.65 TAL 203.58 TAP 5.92 RCA 107.66 APO 154.87 V2 35.170
RC 95.596 GL 5.57 GP -42.33 7AL 135.56 7AP 101.35 ETS 350.37 7AE 137.29 ETE 242.26 7AC 114.94 ETC 357.64 CLP-105.44
     PLANETOCENTRIC CONIC
       C3 10.991 VHL 3.315 DLA 19.54 RAL 145.98 RAD 6567.4 VEL 11.506 PTH 2.00 VHP 3.986 DPA -26.55 RAP 141.96 ECC 1.1809
                                                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       LNCH AZHTH LNCH-TIME L-I TIME
                            23 47 52 2739.85
17 18 34 4066.43
                                                                                                                                4.22
                                                                                                                                                    94.99
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            90.00
                                                                                -27.91
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                                                                                                                                                        61.98
             90.00
                                                                                -4.26
                                                                                                      164.52
                                                                                                                             359.24
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                                                                                                                                                                                                                                                     46.51
                              1 25 24 2436.02
18 27 39 3843.49
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                                                                                                                                                        96.82
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           100.00
                                                                               -29.17
                                                                                                                                                        60.26 19 31 42
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           100.00
                                                                                -3.15
                                                                                                      147.52
                                                                                                                            358.62
                              3 0 4 2141.65
19 9 29 3712.42
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20 11 21
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                                                                                                                                                                                                    1541.8
                                                                                                                                                                                                                           -30.44
                                                                                                                                                                                                                                                     23.32
           110.00
                                                                             -32.37
                                                                                                        32.00
                                                                                                                                3.46
                                                                                                                                                     101.62
                                                                                                                                                                                                                              -4.88
           110.00
                                                                                                                             356.91
                                                                                                                                                        55.82
                                                                                                                                                                                                    3112.4
                                                                                  -.40
                                                                                                      135.86
                                                                                                           MID-COURSE EXECUTION ACCURACY
SCT 1948.9 SKR 1764.7 SC3 561.5
RRT .9310 RRF .9963 RTF .9337
SC8 2629.2 R23 .1874 R13 .9786
SG1 2583.8 SG2 486.0 THA 41.95
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                             ST 605.5 SR 226.3 SS 452.2
CRT .9880 CRS -.9743 CST -.9665
       TOE .3089 TRA -.5116 TC3-2.4473 BAU .5248
      ROE .1150 RRA -.1727 RC3-2.6010 FAU .12057
FOE .7316 FRA -.5427 FC3-9.4965 BSP 7844
BOE .3296 BRA .5399 BC3 3.5713 FSP -1788
                                                                                                                                                                                             LSA 782.7 MSA 93.8 SSA 29.2
EL1 645.6 EL2 32.8 ALF 20.32
                                                                                                                                                                                                                ARRIVAL DATE NOV 5 1967
                                                                                                                   FLIGHT TIME 128.00
LAUNCH DATE JUN 30 1967
                                                                                                                  DISTANCE 362.301
    HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 277.54 VL 27.077 GAL -4.81 A7L 88.40 MCA 165.56 SMA 131.13 ECC .17994 INC 1.5958 V1 29.293
RP 107.72 LAP .40 LOP 83.11 VP 38.106 GAP 1.29 AZP 91.55 TAL 202.94 TAP 8.51 RCA 107.54 APO 154.73 V2 35.180
RC 97.843 GL 12.93 GP -47.78 ZAL 133.43 ZAP 103.60 ETS 345.66 ZAE 131.04 ETE 240.34 ZAC 115.72 ETC 353.95 CLP-110.49
     PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 11.293 VHL 3.361 DLA 26.12 RAL 149.69 RAD 6567.4 VEL 11.519 PTH 2.01 VHP 4.410 DPA -31.05 RAP 138.17 ECC 1.1859
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 25 41 3087.86 -27.36 102.78 10.40 82.38 23 17 8 2487.9 -28.13 94.20
90.00 19 10 21 3729.60 -14.53 145.11 6.45 65.43 20 12 31 3129.6 -17.73 137.89
100.00 0 18 46 2735.96 -29.55 77.16 10.67 85.27 1 4 22 2136.0 -29.89 68.37
100.00 20 3 53 3556.73 -12.55 131.42 5.46 62.65 21 3 10 2956.7 -16.12 124.45
110.00 2 16 10 2368.62 -34.15 49.41 10.82 91.49 2 55 39 1768.6 -33.57 40.22
110.00 20 22 58 3496.83 -8.57 124.53 3.09 56.78 21 21 15 2896.8 -12.88 118.08
                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 2857.7 SG2 505.0 THA 40.52
                                                                                                                                                                                              ST 905.8 SR 475.4 SS 652.1
CRT .9849 CRS -.9987 CST -.9778
      TOE .5079 TRA -.4569 TC3-2.7127 BAU .5797 RDE .2748 RRA -.1041 RC3-2.7175 FAU .09932
                                                                                                                                                                                              LSA 1207.2 MSA 119.8 SSA 12.7
EL1 1020.4 EL2 73.2 ALF 27.49
      FOE .9965 FRA -.2460 FC3-7.6136 BSP 8744
BDE .5775 BRA .4686 BC3 3.8398 FSP -1501
                                                                                                                                                                                                               ARRIVAL DATE NOV 7 1967
                                                                                                                  FLIGHT TIME 130.00
LAUNCH DATE JUN 30 1967
                                                                                                                  DISTANCE 368.549
     HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 27.055 GAL -4.68 AZL 86.98 MCA 168.78 SMA 130.98 ECC .18014 INC 3.0205 V1 29.293
RP 107.69 LAP .59 LOP 86.34 VP 38.099 GAP 1.68 AZP 92.96 TAL 202.24 TAP 11.02 RCA 107.38 APO 154.57 VZ- 35.190
RC 100.092 GL 23.53 GP -54.76 7AL 129.17 ZAP 104.49 ETS 340.02 ZAE 123.60 ETE 238.90 ZAC 115.77 ETG 349.33 CLP-115.70
     PLANETOCENTRIC CONIC
      C3 12.670 VHL 3.559 DLA 35.50 RAL 155.66 RAD 6567.5 VEL 11.578 PTH 2.02 VHP 5.122 DPA -36.94 RAP 133.38 ECC 1.2085
     C3 12.670 VHL 3.559 DLA 35.50 RAL 155.66 RAD 6567.5 VEL 11.578 PTH 2.02 VHP 5.122 DPA -36.94 RAP 133.38 ECC 1.2085 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.64 18 28 34 3950.18 -27.29 167.55 19.34 66.36 19 34 24 3350.2 -30.24 159.48 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.23 81.96 67.64 18 28 34 3950.18 -27.29 167.55 19.34 66.36 19 34 24 3350.2 -30.24 159.48 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.23 81.96 67.64 18 28 34 3950.18 -27.29 167.55 19.34 66.36 19 34 24 3350.2 -30.24 159.48 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 19 34 24 3350.2 -30.24 159.48 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.23 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.36 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.69 -27.28 90.03 19.33 66.35 24 43 38 2315.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 2 2915.7 -30.25 81.96 112.36 23 55 22 55 2915.7 -30.25 81.9
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                            SGT 2460.6 SGR 2005.0 SG3 356.6
RRT .9408 RRF .9980 RTF .9488
SG8 3174.1 R23 .1787 R13 .9823
SG1 3128.8 SG2 534.3 THA 38.82
                                                                                                                                                                                            ST 1409.2 SR 845.5 SS 872.8
CRT .9881 CRS-1.0000 CST -.9879
      TDE .8661 TRA -.3329 TC3-2.6939 BAU .6288
       RDE .5241 RRA .0169 RC3-2.5546 FAU .07453
                                                                                                                                                                                            LSA 1855.3 MSA 142.5 SSA 5.9
ELI 1639.6 ELZ 111.6 ALF 30.82
      FOE 1.2233 FRA .0485 FC3-5.0930 BSP 9612
BOE 1.0123 BRA .3333 BC3 3.7126 FSP -1153
                                                                                                                                                                                                                ARRIVAL DATE NOV 9 1967
                                                                                                                   FLIGHT TIME 132.00
                                                                                                                   DISTANCE 374.763
     HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 27.031 GAL -4.54 AZL 84.43 MCA 171.99 SMA 130.81 ECC .18043 INC 5.5718 V1 29.293
RP 107.66 LAP .78 LOP 89.57 VP 38.091 GAP 2.05 AZP 95.52 TAL 201.46 TAP 13.46 RCA 107.21 APO 154.41 V2 35.199
RC 102.344 GL 38.43 GP -63.95 ZAL 121.19 ZAP 103.50 ETS 332.83 ZAE 114.31 ETE 236.91 ZAC 114.84 ETC 342.95 CLP-122.12
     PLANETOCENTRIC CONIC
      C3 17.720 VHL 4.210 DLA 48.06 RAL 166.77 RAD 6567.7 VEL 11.794 PTH 2.09 VMP 6.499 DPA -44.54 RAP 126.23 ECC 1.2916
                                                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
      LNCH AZMTH LNCH TIME L-I TIME
                                17 52 43 4247.75
2 3 30 2768.09
17 52 43 4247.75
2 3 30 2768.09
                                                                                                                          41.11
                                                                                                                                                                                                                           -37.56
                                                                                                                                                                                                     3647.8
                                                                                                     197.07
                                                                                                                                                        52.83 19 3 31
             49.40 17 52 43
                                                                                -32.98
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           130.60
                                                                                -32.97
                                                                                                        81.20
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                                                                                                                                                         52.82
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             49.40
                             17 52 43
                                                                                -32.98
                                                                                                       197.07
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           130.60
                                                                               -32.97
                                                                                                        81.20
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                                17 52 43 4247.75
2 3 30 2768.09
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             49.40
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           130.60
                                                                               -32.97
                                                                                                        81.20
                                                                                                                                41.10
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                           SGT 2778.4 SGR 2026.1 SG3 236.3
RRT .9374 RRF .9972 RTF .9548
SG8 3438.7 R23 .1756 R13 .9833
SG1 3389.7 SG2 578.5 THA 35.55
                                                                                                                                                                                              ST 2145.7 SR 1227.1 SS 1018.2
CRT .9907 CRS -.9998 CST -.9930
       TOE 1.5758 TRA -.0532 TC3-2.0939 BAU .6591
      ROE .8943 RRA .2425 RC3-1.8322 FAU .04765
FDE 1.3245 FRA .3055 FC3-2.3282 BSP 10430
BDE 1.8119 BRA .2482 BC3 2.7823 FSP -773
                                                                                                                                                                                              LSA 2668.2 MSA 166.0 SSA -3.0
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EL1 2467.5 EL2 145.5 ALF 29.65

ARRIVAL DATE NOV 11 1967

LAUNCH DATE JUN 30 1967

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DISTANCE 380.919
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 27.004 GAL -4.38 AZL 78.53 MČA 175.17 SMA 130.62 ECC .18075 INC11.4723 V1 29.293 RP 107.63 LAP .96 LOP 92.80 VP 38.080 GAP 2.40 AZP 101.43 TAL 200.60 TAP 15.77 RCA 107.01 APO 154.24 V2 35.208 RC 104.596 GL 56.18 GP -76.25 ZAL 109.05 ZAP 100.08 ETS 319.44 ZAE 101.76 ETE 228.87 ZAC 112.76 ETC 329.67 CLP-137.47
   PLANETOCENTRIC CONTC
    C3 41.346 VHL 6.446 DLA 60.16 RAL 190.19 RAD 6568.6 VEL 12.764 PTH 2.32 VHP 9.932 DPA -53.78 RAP 112.34 ECC 1.6837 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    18 42 24 4552.93

4 20 39 2882.98

18 42 24 4552.93

4 20 39 2882.98

18 42 24 4552.93

4 20 39 2882.98
                                                                                                       34.29 19 58 17
                                                                                     82.46
                                                                                                                                       3952.9
        34.42
                                                                                                                                                          -34.48
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                                                       -27.98
                                                                       224.69
                                                      -27.97
                                                                                                           34.29
       145.58
                                                                        87.68
                                                                                         82.44
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                                                                                                                                         2283.0
                                                                                                                                                          -34.47
                                                                                                                                                                            82.64
                                                                                                           34.29 19 58 17
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                                                                                                                                                          -34.48
        34.42
                                                      -27.98
                                                                       224.69
                                                                                         82.46
                                                                                                                                                                           219.65
       145.58
                                                      -27.97
                                                                        87.68
                                                                                         82.44
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                                                                                                                                         2283.0
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        34.42
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                                                                                                          34.29 19 56 17
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                                                                                                                                                                           219.65
                                                                           MID-COURSE EXECUTION ACCURACY
SGT 3971 4 APRIL 1701
       145.58
                                                      -27.97
                                                                         87.68
                                                                                                                                         2263.0
                                                                                                                                                          -34.47
                                                                                                                                                                            82.64
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 3271.6 SGR 1633.8 SG3 127.0
RRT .9010 RRF .9793 RTF .9687
SGB 3656.8 R23 .1637 R13 .9858
SGI 3599.7 SG2 644.2 THA 25.08
                                                                                                                                    ST 2754.2 SR 913.4 55 887.4
CRT .9706 CRS -.9918 CST -.9934
     TOE 3.0626 TRA .7759 TC3 -.9080 BAU
                                                            .6034
    RDE .9484 RRA .6547 RC3 -.5963 FAU .02181
FDE 1.1222 FRA .5076 FC3 -.4345 88P 11253
BDE 3.2061 BRA 1.0152 BC3 1.0863 FSP -424
                                                                                                                                    LSA 3026.1 MSA 223.1 SSA 1.5
ELI 2894.1 EL2 209.2 ALF 17.94
LAUNCH DATE JUN 30 1967
                                                                                FLIGHT TIME 136.00
                                                                                                                                                  ARRIVAL DATE NOV 13 1967
                                                                                DISTANCE 386.810
  HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.975 GAL -4.16 AZL 52.75 MCA 178.11 SMA 130.43 ECC .18086 INC37.2459 V1 29.293
RP 107.61 LAP 1.14 LOP 96.04 VR 38.067 GAP 2.67 AZP 127.23 TAL 199.50 TAP 17.61 RCA 106.84 APO 154.01 V2 35.216
RC 106.849 GL 63.48 GP -75.11 ZAL 96.31 ZAP 94.29 ETS 205.94 ZAE 78.09 ETE 119.60 ZAC 110.67 ETC 212.90 CLP 106.95
   PLANÉTOCENTRIC CONIC
    C3 331.203 VHL 18.199 DLA 57.32 RAL 214.80 RAD 6571.9 VEL 21.272 PTH 3.20 VHP 25.516 DPA -58.32 RAP 69.91 ECC 6.4508 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                      235.76
                                                                                                                                        4340.1
        37.84
                    20 29 26 4940.15
                                                        -4.40
                                                                                      121.98
                                                                                                         32.79 21 51 46
                                                                                                                                                         -11.10
                                                                                                                                                                          231.78
                      5 49 55 3304.17
20 29 26 4940.15
       142.16
                                                         -4.36
                                                                        103.06
                                                                                        121.96
                                                                                                           32.79
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                                                                                                                                          2704.2
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        37.84
                    20 29 26
                                                        -4.40
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                      5 49 55 3304.17
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        37.84
                     20 29 26
                                                                                        121.98
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                                                                          HID-COURSE EXECUTION ACCURACY
       142.16
                       5 49 55
                                     3304.17
                                                        -4.38
                                                                       103.06
                                                                                                                                         2704.2
                                                                                                                                                          -11.09
                                                                                                                                                                             99.07
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 284.3 SR 2126.7 93 803.9

CRT .1791 CRS .9933 CST .0544

LSA 2272.4 MSA 293.5 SSA .8

EL1 2127.4 EL2 279.6 ALF 88.60
                                                                          SGT 790.8 SGR 3610.4 SG3 62.0
RRT -.6944 RRF -.9932 RTF .7728
    TOE -.5234 TRA 1.3246 TC3 -.0119 BAU .6456
    RDE-6.1169 RRA-5.1591 RC3 -.1453 FAU-.01032
                                                                           SG8 3696.0 R23 -.0916 R13 -.9956
    FOE .9851 FRA 1.0965 FC3 .0270 89P 9832
80E 6.1392 88A 5.3264 8C3 .1458 FSP -176
                                                                           SG1 3652.9 SG2 562.4 THA 98.86
                                                                                FLIGHT TIME 138.00
                                                                                                                                                 ARRIVAL DATE NOV 15 1967
LAUNCH DATE JUN 30 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 393.878
    RL 152.09 LAL -.00 LOL 277.54 VL 26.945 GAL -4.17 AZL 127.33 MCA 182.18 SMA 130.21 ECC .18262 INC37.3311 V1 29.293 RP 107.59 LAP 1.32 LOP 99.27 VP 38.052 GAP 3.27 AZP 52.69 TAL 199.28 TAP 21.46 RCA 106.43 APO 154.00 V2 35.223 RC 109.101 GL -63.37 GP 78.26 ZAL 96.30 ZAP 96.04 ETS 160.81 ZAE 78.52 ETE 245.62 ZAC 84.20 ETC 144.92 CLP 121.15
   PLANETOCENTRIC CONIC
     C3 332.401 VHL 18.232 DLA -53.09 RAL 137.85 RAD 6571.9 VEL 21.300 PTH 3.20 VHP 21.801 DPA 69.61 RAP 307.26 ECC 6.4705
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LÖNG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43,02 3 38 54 2266.15 4.14 62.99 44.72 142.97 4 16 40 1666.2 10.50 58.52 136.98 12 26 34 690.93 4.16 297.32 44.74 142.97 12 38 5 90.9 10.52 292.85 43.02 3 38.54 2266.15 4.14 62.99 44.72 142.97 4 16 40 1666.2 10.50 58.52
                                                                                                         142.97 12 38 5
                    12 26 34 690.93
3 38 54 2266.15
12 26 34 690.93
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       136.98
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                                                                       297.32
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         43.02
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                                                          4.16
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 153.8 SR 3258.2 SS 1378.6

CRT -.1825 CR3 -.9995 CST .1513

LSA 3537.7 MSA 156.6 SSA 1.1

EL1 3258.3 EL2 151.2 ALF 90.49
     TOE .0072 TRA .9794 TC3 -.0237 BAU .6895
                                                                            SGT 519.7 SGR 3755.3 SG3 69.4
    RO-10.2204 RRA-3.4844 RC3 .1553 FAU-.00990
FOE-2.3070 FRA -.6368 FC3 .0258 BSP 10485
BOE10.2204 BRA 3.6194 BC3 .1552 FSP -197
                                                                           RRT -.5099 RRF .9959 RTF -.4323
SGB 3771.3 R23 -.0963 R13 .9951
SGI 3744.8 SGZ 445.9 THA 94.12
LAUNCH DATE JUN 30 1967
                                                                                FLIGHT TIME 140.00
                                                                                                                                                  ARRIVAL DATE NOV 17 1967
                                                                                DISTANCE 399.800
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.913 GAL -3.94 AZL 106.77 MCA 185.19 SMA 129.99 ECC .18299 INC16.7717 V1 29.293 RP 107.57 LAP 1.50 LOP 102.51 VP 38.035 GAP 3.55 AZP 73.29 TAL 198.13 TAP 23.32 RCA 106.21 APO 153.78 V2 35.230 RC 111.351 GL -62.37 GP 71.65 ZAL 102.50 ZAP 105.15 ETS 61.05 ZAE 99.74 ETE 148.45 ZAC 87.63 ETC 47.36 CLP-146.10
   PLANETOCENTRIC CONIC
    C3 76.469 VHL 8.745 OLA -48.49 RAL 131.02 RAD 6569.5 VEL 14.065 PTH 2.56 VHP 9.445 OPA 74.81 RAP 228.63 ECC 2.2585
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       1367.9
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                     3 30 2 1967.94
11 40 59 5766.28
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13 17 5
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11 40 59 5766.28
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11 40 59 5766.28
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        131.17
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                                                                       268.43
                                                                                         25.62
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 3833.3 SCR 969.7 SC3 147.3
RRT -.7939 RRF -.8928 RTF .9819
SCB 3954.0 R23 .1565 R13 -.9871
                                                                                                                                  ST 2917.3 SR 950.1 SS 1182.9
CRT -.9710 CRS .9876 CST -.9965
LSA 3280.5 MSA 226.9 SSA 1.4
     TOE-4.3059 TRA-2.5026 TC3 -.4474 BAU
                                                             .4705
    RDE 1.4499 RRA .0505 RC3 .1075 FAU .02102
FDE-2.1790 FRA -.8439 FC3 -.2579 BSP 12224
                                                                            SG1 3911.6 SG2 577.9 THA 168.39
                                                                                                                                  EL1 3060.5 EL2 216.6 ALF 162.36
     BOE 4.5434 BRA 2.5031 BC3 .4602 FSP -466
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FLIGHT TIME 134.00

ARRIVAL DATE NOV 19 1967

LAUNCH DATE JUN 30 1967

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DISTANCE 405.889
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 26.879 GAL -3.75 A7L 101.51 MCA 188.38 SMA 129.76 ECC .18370 INC11.5103 VI 29.293
RP 107.55 LAP 1.67 LOP 105.75 VP 38.017 GAP 3.88 AZP 78.61 TAL 197.09 TAP 25.46 RCA 105.93 APO 153.60 VZ 35.236
RC 113.598 GL -58.77 GP 57.71 ZAL 106.32 ZAP 113.95 ETS 47.06 ZAE 111.45 ETE 139.87 ZAC 92.51 ETC 34.39 CLP-139.46
   PLANETOCENTRIC CONIC
                                                                                                    2.32 VHP 6.580 DPA 66.14 RAP 192.40 ECC 1.6738
    C3 40.944 VHL 6.399 OLA -42.93 RAL 133.43 RAD 6568.6 VEL 12.740 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 7 14 1744.05
11 23 1 5664.49
                                                     21.76
                                                                    31.37
                                                                                   18.01
                                                                                                 127.97
                                                                                                               4 36 18
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        56.27
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                  4 7 14 1744.05
11 23 1 5684.49
4 7 14 1744.05
11 23 1 5684.49
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      123.73
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SCT 3739.2 SGR 1363.9 SG3 247.8

RRT -,9186 RRF -,9660 RTF .,9688

SGB 3980.2 R23 .2000 R13 -,9786

SGI 3947.3 SG2 510.7 THA 161.15
                                                                                                                           ST 2629.6 SR 1214.2 SS 1326.4
CRT -. 9844 CRS .. 9982 CST -. 9931
    TOE-2.8259 TRA-1.9477 TC3-1.0785 BAU .6267
    ROE 1.3493 RRA .3256 RC3 .3842 FAU .04405
FDE-2.5730 FRA-1.0012 FC3 -.9315 BSP 12336
BDE 3.1315 BRA 1.9748 BC3 1.1449 FSP -792
                                                                                                                           LSA 3178.1 MSA 220.3 SSA 2.1
                                                                                                                           EL1 2889.9 EL2 194.2 ALF 155.44
                                                                                                                                       ARRIVAL DATE NOV 21 1967
                                                                           FLIGHT TIME 144.00
LAUNCH DATE JUN 30 1967
                                                                          DISTANCE 411.992
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 26.844 GAL -3.54 AZL 99.14 HCA 191.60 SMA 129.52 ECC .18454 INC 9.1440 V1 29.293 RP 107.55 LAP 1.83 LOP 108.99 VP 37.997 GAP 4.21 AZP 81.04 TAL 196.02 TAP 27.62 RCA 105.62 APO 153.43 V2 35.241 RC 115.842 GL -52.13 GP 46.89 ZAL 108.38 ZAP 121.42 ETS 42.27 ZAE 119.12 ETE 142.13 ZAC 96.41 ETC 30.35 CLP-139.70
  PLANETOCENTRIC CONIC
                                                                                                     2.21 VHP 5.517 OPA 56.99 RAP 179.49 ECC 1.4788
    C3 29.095 VHL 5.394 DLA -38.85 RAL 136.36 RAD 6568.2 VEL 12.267 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 62.20 4 45 10 1584.74 23.16 18.77 14.26 122.11 5 11 35 984.7 27.23 11.57
                  LNCH TIME L-1 TIME
4 45 10 1584.74
11 8 24 5671.59
4 45 10 1584.74
11 8 24 5671.59
4 45 10 1584.74
11 8 24 5671.59
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122.10 12 42 55
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                   11 8 24
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      117.80
                                   5671.59
                                                     23.18
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 3827.0 SGR 1231.1 SG3 331.4
RRT -.9258 RRF -.9901 RTF ..9638
    TOE-2.3242 TRA-1.6848 TC3-1.6762 BAU .6819
                                                                                                                            ST 2563.8 SR 1051.0 SS 1423.6
    ROE .9847 RRA .2480 RC3 .5136 FAU .06221
                                                                                                                           CRT -.9846 CRS .9990 CST -.9915
LSA 3107.7 MSA 216.1 SSA 2.8
    FOE-2.7826 FRA-1.0331 FC3-1.8512 8SP 12513
BOE 2.5242 BRA 1.7030 BC3 1.7532 FSP -1073
                                                                     SGB 4020.2 R23 .2262 R13 -.9720
SG1 3995.4 SG2 445.8 THA 163.20
                                                                                                                          EL1 2765.7 EL2 170.3 ALF 157.93
                                                                                                                                       ARRIVAL DATE NOV 23 1967
                                                                          FLIGHT TIME 146.00
LAUNCH DATE JUN 30 1967
                                                                         DISTANCE 418.088
  HELTOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 26.807 GAL -3.33 A7L 97.80 MCA 194.83 SMA 129.28 ECC .18550 INC 7.7966 V1 29.293 RP 107.32 LAP 1.99 LOP 112.24 VP 37.976 GAP 4.53 A7P 82.46 TAL 194.94 TAP 29.76 RCA 105.30 APO 153.26 V2 35.246 RC 118.080 GL -48.55 GP 38.64 ZAL 109.30 ZAP 127.48 ETS 39.00 ZAE 124.03 ETE 146.30 ZAC 99.08 ETC 27.71 CLP-141.17
   PLANETOCENTRIC CONIC
    C3 23.463 VHL 4.844 DLA -35.96 RAL 139.12 RAO 6568.0 VEL 12.035 PTH 2.15 VHP 5.061 OPA 49.41 RAP 173.64 ECC 1.3861
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  5 20 2 1461.74
10 55 35 5688.12
5 20 2 1461.74
10 55 35 5688.12
5 20 2 1461.74
10 55 35 5688.12
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118.15 12 30 23
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      113.16
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      RRT - 9265 RRF - 9868 RTF - 9623
SGB 4129.0 R23 .2357 R13 - 9661
SGI 4110.8 SGZ 386.9 THA 166.06
                                                                                                                           ST 2569.7 SR 883.7 SS 1477.8
CRT -.9843 CRS .9992 CST -.9907
LSA 3086.0 MSA 212.5 SSA 3.7
    TOE-2.0957 TRA-1.5376 TC3-2.2456 BAU .7250
    RDE .7440 RRA .1779 RC3 .5462 FAU .07507
   FOE-2.8326 FRA -.9915 FC3-2.7700 BSP 13172
BOE 2.2239 BRA 1.5478 BC3 2.3111 FSP -1319
                                                                                                                           EL1 2713.4 EL2 147.6 ALF 161.24
                                                                                                                                       ARRIVAL DATE NOV 25 1967
LAUNCH DATE JUN 30 1967
                                                                           FLIGHT TIME 148.00
                                                                          DISTANCE 424.179
   RL 152.09 LAL -.00 LOL 277.54 VL 26.770 GAL -3.11 AZL 96.92 MCA 198.06 SMA 129.03 ECC .18656 INC 6.9231 V1 29.293
RP 107.50 LAP 2.14 LOP 115.48 VP 37.953 GAP 4.86 AZP 83.42 TAL 193.81 TAP 31.87 RCA 104.96 APO 153.10 V2 35.250
RC 120.312 GL -45.77 GP 32.37 ZAL 109.43 ZAP 132.37 ETS 36.33 ZAE 127.05 ETE 150.65 ZAC 100.70 ETC 25.58 CLP-142.94
  PLANETOCENTRIC CONIC
    C3 20.222 VHL 4.497 DLA -33.93 RAL 141.75 RAD 6567.8 VEL 11.900 PTH 2.11 VHP 4.866 DPA 43.35 RAP 170.70 ECC 1.3328
    LNCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                               115.48 6 14 10
115.47 12 20 21
                                                                                                                6 14 10
                                                                                                                                  762.6
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                   5 51 27 1362.56
10 45 6 5715.50
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10 45 6 5715.50
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112.95 12 52 47
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                   10 16 28
                                   5802.86
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      110.00
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      110.00
                   11 19 15
                                   5611.23
                                                     26.06
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 4018.2 SGR 844.3 SG3 402.6

RRT -.9100 RRF -.9812 RTF ..9562

SGB 4105.9 R23 .2523 R13 -.9604

SG1 4091.5 SG2 343.7 THA 169.10
                                                                                                                           ST 2527.6 SR 715.5 SS 1432.8
CRT -.9825 CRS ..9992 CST -.9891
    TOE-1.9198 TRA-1.3732 TC3-2.6582 BAU
                                                        .729A
    ROE .5603 RRA .1021 RC3 .4699 FAU .07706
FOE-2.6589 FRA -.7789 FC3-3.2990 BSP 12402
                                                                                                                           LSA 2984.8 MSA 211.5 SSA
                                                                                                                           EL1 2623.8 EL2 128.5 ALF 164.42
    BOE 1.9999 BRA 1.3770 BC3 2.6994 FSP -1250
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FLIGHT TIME 142.00

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LAUNCH DATE JUN 30 1967
                                                                           FLIGHT TIME 150.00
                                                                                                                                        ARRIVAL DATE NOV 27 1967
                                                                           DISTANCE 430.250
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.732 CAL -2.88 AZL 96.31 MCA 201.30 SMA 128.77 ECC .18773 INC 6.3076 V1 29.293 RP 107.49 LAP 2.29 LOP 118.73 VP 37.929 GAP 5.18 AZP 84.12 TAL 192.66 TAP 33.96 RCA 104.60 APO 152.94 V2 35.253
    RC 122.338 GL -43.55 GP 27.55 TAL 109.00 ZAP 136.41 ETS 34.08 ZAE 128.83 ETE 134.62 ZAC 101.53 ETC 23.76 CLP-144.78
   PLANETOCENTRIC CONIC
    C3 18.126 VML 4.257 DLA -32.51 RAL 144.28 RAD 6567.7 VEL 11.811 PTH 2.09 VMP 4.802 DPA 38.50 RAP 169.22 ECC 1.2983
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 12.48
                   6 19 34 1281,33
10 37 14 5745.06
                                                                   354.60
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        73.32
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10 37 14 5745.06
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       110.00
                                     642.01
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                                                                                                                                 4832.4
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       110.00
                   12 18 37
                                   5432.38
                                                     30.22
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RIGT 4164.9 SGR 713.0 SG3 416.2
RRT -.8966 RRF -.9703 RTF ..9551
SGB 4225.5 R23 .2446 R13 -.9579
SG1 4214.2 SG2 309.2 THA 171.21
                                                                                                                            ST 2562.3 SR 613.2 SS 1423.4
CRT -.9824 CRS ..9993 CST -.9886
    TOE-1.8482 TRA-1.2747 TC3-3.1121 BAU .7606
    ROE .4549 RRA .0660 RC3 .4099 FAU .07964
FDE-2.5380 FRA -.6417 FC3-3.6040 BSP 12928
BDE 1.9034 BRA 1.2765 BC3 3.1369 FSP -1319
                                                                                                                            LSA 2987.3 MSA 208.4 SSA
                                                                                                                             EL1 2632.3 EL2 111.5 ALF 166.75
                                                                                                                                        ARRIVAL DATE NOV 29 1967
LAUNCH DATE JUN 30 1967
                                                                           FLIGHT TIME 152.00
  HELIOCENTRIC CONIC
                                                                           DISTANCE 436.305
   RL 152.09 LAL -.00 LOL 277.54 VL 26.693 GAL -2.64 AZL 95.85 MCA 204.55 SMA 128.51 ECC .18901 INC 5.8481 V1 29.293 RP 107.49 LAP 2.43 LOP 121.98 VP 37.904 GAP 5.51 AZP 84.68 TAL 191.47 TAP 36.02 RCA 104.22 APO 152.80 VZ 35.256 RC 124.755 GL -41.73 GP 23.78 ZAL 108.16 ZAP 139.81 ETS 32.18 ZAE 129.84 ETE 158.05 ZAC 101.76 ETC 22.20 CLP-146.60
  PLANETOCENTRIC CONIC
    C3 16.661 VHL 4.082 DLA -31.54 RAL 146.80 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 4.811 DPA 34.55 RAP 168.65 ECC 1.2742
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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12 8 52
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        75.49
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       110.00
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      RIGT 4297.5 SGR 607.0 SG3 417.2

RRT -.8793 RRF -.9518 RTF ..9537

SGB 4340.1 R23 .2298 R13 -.9556

SG1 4330.7 SG2 286.9 THA 172.89
                                                                                                                            ST 2604.1 SR 536.4 SS 1402.1
CRT -.9829 CRS .9994 CST -.9883
    TOE-1.8071 TRA-1.1789 TC3-3.5214 BAU .7879
    ROE .3618 RRA .0446 RC3 .3373 FAU .07940
FDE-2.3958 FRA -.4928 FC3-4.1257 89P 13362
BOE 1.8470 BRA 1.1797 BC3 3.5375 FSP -1335
                                                                                                                            LSA 2998.8 MSA 205.0 SSA
                                                                                                                            EL1 2657.0 EL2 96.9 ALF 168.54
                                                                                                                                       ARRIVAL DATE DEC 1 1967
                                                                           FLIGHT TIME 154.00
LAUNCH DATE JUN 30 1967
                                                                          DISTANCE 442.345
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 26.653 GAL -2.39 AZL 95.49 MCA 207.79 SMA 128.24 ECC .19040 INC 5.4900 VI 29.293
RP 107.48 LAP 2.56 LOP 125.22 VP 37.878 GAP 5.83 AZP 85.14 TAL 190.26 TAP 38.05 RCA 103.83 APO 152.66 V2 35.258
RC 126.964 GL -40.20 GP 20.80 ZAL 106.99 ZAP 142.74 ETS 30.56 ZAE 130.36 ETE 160.94 ZAC 101.54 ETC 20.84 CLP-148.36
   PLANETOCENTRIC CONTC
    C3 15.582 VHL 3.947 DLA -30.91 RAL 149.33 RAD 6567.6 VEL 11.703 PTH 2.06 VHP 4.862 OPA 31.26 RAP 168.62 ECC 1.2564
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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10 31 47 5790.56
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                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RET -48704 RRF - 9231 RTF - 9522
SGB 4448.6 R23 .2095 R13 - 9535
SGI 4440.1 SGZ 274.8 THA 174.21
                                                                                                                            ST 2652.1 SR 479.9 SS 1375.5
CRT -.9840 CRS ..9996 CST -.9880
    TDE-1.7865 TRA-1.0815 TC3-3.8924 BAU .8127
    RDE .3305 RRA .0292 RC3 .2632 FAU .07744 FDE-2.2515 FRA -.3441 FC3-4.3024 BSP 13719
                                                                                                                            LSA 3019.2 MSA 201.2 SBA 7.8
EL1 2693.8 EL2 84.1 ALF 169.89
    BOE 1.8168 BRA 1.0819 BC3 3.9013 FSP -1315
                                                                                                                                        ARRIVAL DATE DEC 3 1967
LAUNCH DATE JUN 30 1967
                                                                           FLIGHT TIME 156.00
                                                                           DISTANCE 448.367
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 26.612 GAL -2.13 AZL 95.20 HCA 211.04 SMA 127.98 ECC .19191 INC 5.2015 V1 29.293
RP 107.48 LAP 2.68 LOP 128.47 VP 37.850 GAP 6.15 AZP 85.54 TAL 189.02 TAP 40.06 RCA 103.42 APO 152.54 VZ 35.259
RC 129.165 GL -38.86 GP 18.39 ZAL 105.55 ZAP 145.31 ETS 29.21 ZAE 130.57 ETE 163.35 ZAC 100.97 ETC 19.66 CLP-150.05
   PLANETOCENTRIC CONIC
    C3 14.763 VHL 3.842 DLA -30.54 RAC 151.92 RAD 6567.6 VEL 11.668 PTH 2.05 VHP 4.942 DPA 28.47 RAP 169.01 ECC 1.2430 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.05 7 22 54 1131.25 22.86 343.18 16.31 110.83 7 41 45 531.3 25.48 335.31
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                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
SGT 4534.1 SGR 465.4 SG3 400.1
RRT -.8117 RRF -.8830 RTF .9508
SGB 4558.0 R23 .1857 R13 -.9517
SG1 4549.9 SG2 270.9 THA 175.22
                                                                                                                            ST 2709.5 SR 439.7 SS 1350.5
CRT -.9859 CRS .9997 CST -.9879
    TDE-1.7833 TRA -.9821 TC3-4.2359 BAU .8369
    RDE .2948 RRA .0199 RC3 .1940 FAU .07470
                                                                                                                            LSA 3052.8 MSA 197.0 SSA 8.9
    FDE-2.1188 FRA -.2046 FC3-4.3806 BSP 14090
BDE 1.8075 BRA .9823 BC3 4.2403 FSP -1285
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ELI 2744.0 EL2 72.6 ALF 170.90

ARRIVAL DATE DEC 5 1967

LAUNCH DATE JUN 30 1967

DISTANCE 454.373 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.571 GAL -1.85 AZL 94.96 MCA 214.28 SMA 127.71 ECC .19354 INC 4.9626 VI 29.293
RP 107.48 LAP 2.79 LOP 131.72 VP 37.821 GAP 6.47 AZP 85.90 TAL 187.76 TAP 42.04 RCA 102.99 APO 152.42 V2 35.259
RC 131.355 GL -37.67 GP 16.42 ZAL 103.87 ZAP 147.60 ETS 28.07 ZAE 130.60 ETE 165.36 ZAC 100.12 ETC 18.63 CLP-151.67 PLANETOCENTRIC CONTC C3 14.130 VHL 3.759 DLA -30.37 RAL 154.59 RAD 6567.6 VEL 11.641 PTH 2.04 VHP 5.041 DPA 26.03 RAP 169.69 ECC 1.2325 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.54 7 37 5 1110.23 10 41 54 5803.03 7 37 5 1110.23 10 41 54 5803.03 18.25 110.44 7 55 35 510.2 333.76 28.97 341.65 76.54 267.82 18.26 110.43 12 18 37 5203.0 25.55 275.72 101.46 22.98 7 55 35 510.2 25.54 333.76 18.25 110.44 22.97 341.65 78.54 110.43 12 16 37 5203.0 267.82 101.46 22.98 275.72 16.26 116.5 121.68 9 49 53 99.08 15 7 38 301.44 110.00 9 37 57 716.45 13.56 308.16 13.42 227.24 13 40 13 5244.80 4644.8 236.36 21.27 110.00 33.10 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4643.5 SGR 423.5 SG3 367.5 RRT -.7630 RRF -.8311 RTF ..9495 SGB 4652.8 R23 ..1611 R13 -.9502 SG1 4654.8 SG2 273.1 THA 176.01 ST 2772.9 SR 411.1 SS 1326.5 CRT -. 9884 CRS .. 9997 CST -. 9879 TDE-1.7922 TRA -.8778 TC3-4.5489 BAU .4507 ROE .2697 RRA .0149 RC3 .1309 FAU .07145 LSA 3095.3 MSA 192.3 SSA 10.0 FOE-1.9969 FRA -.0746 FC3-4.3775 BSP 14430 EL1 2802.6 EL2 61.7 ALF 171.66 BOE 1.8124 BRA .8779 BC3 4.5508 FSP -1245 ARRIVAL DATE DEC: 7 1967 LAUNCH DATE JUN 30 1967 FLIGHT TIME 160.00 DISTANCE 460.360 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.529 GAL -1.57 AZL 94.76 MCA 217.53 SMA 127.44 ECC .19530 INC 4.7604 V1 29.293 RP 107.48 LAP 2.90 LOP 134.97 VP 37.792 GAP 6.78 AZP 86.22 TAL 186.48 TAP 44.00 RCA 102.55 APO 152.32 VZ 35.259 RC 133.537 GL -36.58 GP 14.79 ZAL 101.98 ZAP 149.67 ETS 27.12 ZAE 130.51 ETE 167.04 ZAC 99.06 ETC 17.71 CLP-153.21 PLANETOCENTRIC CONIC 2.04 VHP 5.153 OPA 23.88 RAP 170.60 ECC 1.2245 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.59 7 48 25 1101.37 23.14 341.06 20.46 110.22 8 6 47 501.4 25.68 333.14 101.41 10 52 31 5796.42 23.15 275.29 20.47 110.20 12 29 8 5196.4 25.69 267.38 78.59 7 48 25 1101.37 23.14 341.06 20.46 110.22 8 6 47 501.4 25.68 333.14 101.41 10 52 31 5796.42 23.15 275.29 20.47 110.20 12 29 8 5196.4 25.69 267.38 101.41 10 52 31 5796.42 23.15 275.29 20.47 110.20 12 29 8 5196.4 25.69 267.38 101.40 10 52 31 5796.42 23.15 275.29 20.47 110.20 12 29 8 5196.4 25.69 267.38 100.00 9 48 40 709 47 13 41 307 78 C3 13.641 VHL 3.693 DLA -30.35 RAL 157.34 RAD 6567.5 VEL 11.620 PTH 121.59 10 0 30 98.71 15 18 43 307.78 109.6 17.89 110.00 9 48 40 709.57 13.81 15.69 4636.2 34.03 110.00 5236.21 13 51 27 33.19 235.71 23.40 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4754.0 SGR 396.4 SG3 374.5 RRT -.7078 RRF -.7708 RTF ..9487 SG8 4770.5 R23 .1373 R13 -.9491 SG1 4762.3 SG2 279.5 THA 176.61 ST 2844.6 SR 391.8 SS 1305.7 CRT -.9912 CRS .9993 CST -.9881 TDE-1.8127 TRA -.7703 TC3-4.8368 BAU .8825 RDE .2525 RRA .0132 RC3 .0755 FAU .06810 LSA 3148.8 MSA 187.1 SSA 11.1 FDE-1.8892 FRA .0419 FC3-4.3219 BSP 14809 EL1 2871.0 EL2 51.4 ALF 172.22 BOE 1.8302 BRA .7704 BC3 4.8394 FSP -1207 ARRIVAL DATE DEC 9 1967 FLIGHT TIME 162.00 LAUNCH DATE JUN 30 1967 DISTANCE 466.330 HELIOCENTRIC CONTC RL 152.09 LAL -.00 LOL 277.54 VL 26.487 GAL -1.27 AZL 94.59 HCA 220.77 SMA 127.17 ECC .19719 INC 4.5861 VI 29.293 RP 107.48 LAP 2.99 LOP 138.22 VP 37.761 GAP 7.10 AZP 86.52 TAL 185.17 TAP 45.94 RCA 102.09 APO 152.24 V2 35.257 RC 135.709 GL -35.54 GP 13.43 ZAL 99.92 ZAP 151.56 ETS 26.33 ZAE 130.36 ETE 168.45 ZAC 97.83 ETC 16.90 CLP-154.69 PLANETOCENTRIC CONIC C3 13.259 VHL 3.643 DLA -30.46 RAL 160.19 RAD 6567.5 VEL 11.604 PTH 2.03 VHP 5.277 DPA 21.93 RAP 171.70 ECC 1.2184 LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT.ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.29 7 57 38 1102.27 23.35 341.21 22.93 110.13 8 16 0 502.3 25.88 333.28 101.71 11 6 5 5783.50 23.36 274.41 22.93 110.11 12 42 29 5183.5 25.89 266.48 78.29 7 57 38 1102.27 23:35 341.21 22.93 110.13 8 16 0 502.3 25.88 333.28 1102.27 5783.50 110.11 12 42 29 121.42 10 13 18 98.68 15 28 29 25.89 5183.5 11 6 5 23.36 274.41 22.93 98.2 18.27 110.00 10 1 40 698.23 14.21 307.15 18.27 14 1 13 5235.54 46357.5 34.04 33.19 235.66 25.79 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4848.6 SGR 379.8 SG3 360.0 RRT -.6477 RRF -.7049 RTF ..9474 SGB 4863.5 R23 .1169 R13 -.9477 SGI 4854.9 SG2 289.0 THA 177.08 ST 2914.9 SR 378.7 SS 1283.0 CRT - .9939 CRS .9983 CST - .9883 LSA 3202.1 MSA 181.9 SSA 12.2 TOE-1.8379 TRA -.6520 TC3-5.0873 BAU .9025 ROE .2407 RRA .0130 RC3 .0260 FAU .06442 FOE-1.7874 FRA .1552 FC3-4.2031 BSP 15083 BOE 1.8536 BRA .6522 BC3 5.0874 FSP -1156 EL1 2939.1 EL2 41.3 ALF 172.64 ARRIVAL DATE DEC 11 1967 LAUNCH DATE JUN 30 1967 FLIGHT TIME 164.00 DISTANCE 472.281 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.445 GAL -.95 AZL 94.43 HCA 224.02 SMA 126.89 ECC .19923 INC 4.4332 V1 29.293
RP 107.49 LAP 3.08 LOP 141.47 VP 37.730 GAP 7.42 AZP 86.81 TAL 183.84 TAP 47.86 RCA 101.61 APO 152.17 V2 35.255
RC 137.871 GL -34.53 GP 12.27 ZAL 97.69 ZAP 153.31 ETS 25.70 ZAE 130.18 ETE 169.63 ZAC 96.44 ETC 16.18 CLP-156.11 PLANETOCENTRIC CONIC C3 12.999 VHL 3.605 DLA -30.65 RAL 163.15 RAD 6567.5 VEL 11.592 PTH 2.03 VHP 5.409 DPA 20.15 RAP 172.94 ECC 1.2139 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.64 110.15 333.95 8 24 2 510.2 26.12 8 5 32 1110.22 11 21 48 5766.68 77.76 23.60 341.90 110.13 12 57 55 5166.7 26.14 102.24 11 21 48 23.61 273.25 25.64 8 24 2 510.2 26.12 333.95 8 5 32 1110.22 23.60 341.90 25.64 110.15 77.76 110.13 12 57 55 121.20 10 27 56 98.93 15 37 20 5166.7 11 21 48 5766.68 23.61 273.25 25.64 26.14 102.24 83.7 18.75 10 16 32 663.69 14.72 306.34 21.13 4641.2 34.01 5241.20 110.00 14 9 59 33.13 236.09 28.44 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4950.1 SGR 372.4 SG3 346.8 RRT -.5916 RRF -.6413 RTF .9470 SGB 4964.1 R23 .0980 R13 -.9473 SGI 4955.0 SG2 300.0 THA 177.44 ST 2992.4 SR 371.4 SS 1264.6 CRT -.9963 CRS .9967 CST -.9887 TOE-1.8725 TRA -.5304 TC3-5.3150 BAU .9237 RDE .2336 RRA .0147 RC3 -.0148 FAU .06107 LSA 3265.0 MSA 176.0 SSA 13.3 FDE-1.6996 FRA .2534 FC3-4.0670 BSP 15443 BDE 1.8870 BRA .5306 BC3 5.3151 FSP -1118 EL1 3015.2 EL2 31.6 ALF 172.95

FLIGHT TIME 158.00

ARRIVAL DATE DEC 13 1967

JPL TM 33-99

LAUNCH DATE JUN 30 1967

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DISTANCE 478.212
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.403 GAL -.63 AZL 94.30 HCA 227.26 SHA 126.62 ECC .20143 INC 4.2973 V1 29.293
RP 107.50 LAP 3.16 LOP 144.73 VP 37.697 GAP 7.75 AZP 87.08 TAL 182.50 TAP 49.76 RCA 101.12 APO 152.13 V2 35.253
RC 140.023 GL -33.54 GP 11.29 ZAL 95.32 ZAP 154.93 ETS 25.21 ZAE 129.98 ETE 170.64 ZAC 94.93 ETC 15.53 CLP-157.47
   PLANETOCENTRIC CONIC
     C3 12.823 VHL 3.581 DLA -30.90 RAL 166.22 RAD 6567.5 VEL 11.585 PTH 2.03 VHP 5.548 DPA 18.49 RAP 174.30 ECC 1.2110
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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110.24 13 14 44
110.25 8 31 37
110.24 13 14 44
120.94 10 44 6
99.40 15 45 34
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8 12 55 1122.70
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       110.00
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                                      5252.07
                                                          33.02
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             SCT 5043.7 SCR 371.2 SC3 333.5

RRT -.5396 RRF -.5824 RTF .9466

SCB 5057.3 R23 .0827 R13 -.9468

SCI 5047.7 SC2 312.2 THA 177.72
                                                                                                                                       ST 3069.2 SR 368.2 SS 1246.1

CRT -.9980 CRS .9943 CST -.9891

LSA 3328.6 MSA 170.2 SSA 14.4
     TDE-1.9117 TRA -.3998 TC3-5.5019 BAU .9432
    ROE .2300 RRA .0172 RC3 -.0495 FAU .05765
FDE-1.6192 FRA .3454 FC3-3.8920 BSP 15756
BDE 1.9255 BRA .4001 BC3 5.5022 FSP -1076
                                                                                                                                        EL1 3091.2 EL2 22.9 ALF 173.17
                                                                                                                                                     ARRIVAL DATE DEC 15 1967
LAUNCH DATE JUN 30 1967
                                                                                  FLIGHT TIME 168.00
                                                                                  DISTANCE 484.123
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.360 GAL -.29 AZL 94.18 MCA 230.51 SMA 126.35 ECC .20378 INC 4.1750 VI 29.293
RP 107.51 LAP 3.22 LOP 147.98 VP 37.664 GAP 8.07 AZP 87.34 TAL 181.13 TAP 51.64 RCA 100.60 APO 152.10 VZ 35.249
RC 142.165 GL -32.53 GP 10.44 ZAL 92.82 ZAP 156.46 ETS 24.84 ZAE 129.77 ETE 171.49 ZAC 93.32 ETC 14.96 CLP-158.78
   PLANETOCENTRIC CONIC
    C3 12.735 VHL 3.569 DLA -31.19 RAL 169.40 RAD 6567.5 VEL 11.581 PTH
                                                                                                                2.03 WHP 5.695 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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44.20 31.74 110.42 8 39 14
70.70 31.75 110.41 13 32 27
44.20 31.74 110.42 8 39 14
70.70 31.75 110.41 13 32 27
04.37 27.60 120.65 11 1 34
38.06 34.45 100.06 15 53 25
MID-COURSE EXECUTION ACCURACY
                    8 20 16 1138,05
11 56 57 5730,01
8 20 16 1138,05
11 56 57 5730,01
10 50 45 648,87
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         76.33
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        103.67
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                                                                                                                                                                              228.98
                                                          32.84
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5129.1 SGR 373.4 SG3 319.9

RRT -.4939 RRF -.5291 RTF .9463

SGB 5142.7 R23 .0688 R13 -.9464

SGI 5132.5 SG2 324.4 THA 177.93
                                                                                                                                        ST 3138.5 SR 367.6 SS 1222.2
CRT -.9989 CRS .9911 CST -.9895
     TOE-1.9512 TRA -.2594 TC3-5.6493 BAU .9619
     ROE .2288 RRA .0199 RC3 -.0775 FAU .05433
    FDE-1.5388 FRA .4327 FC3-3.6933 BSP 15997
BDE 1.9645 BRA .2602 BC3 5.6498 FSP -1028
                                                                                                                                        LSA 3384.0 MSA 164.7 SSA 15.5
                                                                                                                                        EL1 3159.9 EL2 16.8 ALF 173.33
                                                                                                                                                    ARRIVAL DATE DEC 17 1967
                                                                                  FLIGHT TIME 170.00
LAUNCH DATE JUN 30 1967
                                                                                  DISTANCE 490.013
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.317 GAL .06 AZL 94.06 MCA 233.75 SMA 126.08 ECC .20631 INC 4.0636 V1 29.293 RP 107.52 LAP 3.28 LOP 151.23 VP 37.630 GAP 8.40 AZP 87.59 TAL 179.75 TAP 53.51 RCA 100.07 APO 152.09 V2 35.245
     RC 144.295 GL -31.51 GP
                                             9.70 TAL 90.20 TAP 157.89 ETS 24.60 TAE 129.57 ETE 172.22 TAC 91.62 ETC 14.43 CLP-160.03
   PLANETOCENTRIC CONIC
     C3 12.733 VHL 3.568 DLA -31.51 RAL 172.69 RAD 6567.5 VEL 11.581 PTH 2.03 VHP 5.848 DPA 15.46 RAP 177.30 ECC 1.2096
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.57 8 28 4 1154.70 24.34 345.55 35.12 110.65 8 47 19 554.7 26.93 337.57
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110.64 13 50 35
110.65 8 47 19
110.64 13 50 35
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12 15 21 5713.31
6 28 4 1154.70
12 15 21 5713.31
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        110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5184.9 SGR 376.1 SG3 304.6

RRT -.4522 RRF -.4765 RTF ..9449

SGB 5198.5 R23 ..0532 R13 -.9450

SGI 5187.7 SG2 335.3 THA 178.11
                                                                                                                                       ST 3180.8 SR 367.1 SS 1179.5
CRT -.9989 CRS .9864 CST -.9894
     TDE-1.9792 TRA -.1031 TC3-5.7341 BAU .9763
     RDE .2285 RRA .0220 RC3 -.1001 FAU .05091
FDE-1.4414 FRA .5235 FC3-3.4615 BSP 16011
BOE 1.9923 BRA .1054 BC3 5.7349 FSP -955
                                                                                                                                        LSA 3408.4 MSA 160.9 55A 16.4
                                                                                                                                        ELI 3201.8 EL2 17.2 ALF 173.42
                                                                                  FLIGHT TIME 172.00
                                                                                                                                                     ARRIVAL DATE DEC 19 1967
LAUNCH DATE JUN 30 1967
                                                                                  DISTANCE 495.880
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 26.274 GAL .43 AZL 93.96 MCA 237.00 SMA 125.81 ECC .20903 INC 3.9612 V1 29.293
RP 107.55 LAP 3.32 LOP 154.48 VP 37.595 GAP 8.74 AZP 87.84 TAL 178.36 TAP 55.36 RCA 99.51 APO 152.11 V2 35.240
RC 146.414 GL -30.46 GP 9.06 ZAL 87.50 ZAP 159.24 ETS 24.47 ZAE 129.38 ETE 172.84 ZAC 89.84 ETC 13.97 CLP-161.25
   PLANETOCENTRIC CONIC
     C3 12.821 VHL 3.581 OLA -31.82 RAL 176.07 RAD 6567.5 VEL 11.585 PTH
                                                                                                               2,03 VHP 6,007 DPA 14,04 RAP 178.91 ECC 1.2110
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.85 8 36 32 1171.87 24.53 346.94 38.70 110.93 8 56 4 571.9 27.15 338.95
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110.91 14 8 50
110.91 14 8 50
110.91 14 8 50
120.01 11 39 16
101.74 16 8 56
                    8 36 32 1171.87
12 33 51 5699.08
8 36 32 1171.87
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                     14 40 30 5306.55
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        110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE-2.0400 TRA .0488 TC3-5.8049 BAU .9952

ROE .2340 RRA .0253 RC3 -.1165 FAU .04781

FDE-1.4002 FRA .5905 FC3-3.2282 BSP 16569

BOE 2.0533 BRA .0549 BC3 5.8061 FSP -950
                                                                            SGT 5286.3 SGR 386.5 SG3 294.3
RRT -.4266 RRF -.4508 RTF ..9456
SGB 5300.4 R23 .0504 R13 -.9457
SGI 5288.9 SG2 349.4 THA 178.21
                                                                                                                                      ST 3266.8 SR 374.7 SS 1176.5
CRT -.9979 CRS .9821 CST -.9903
LSA 3488.8 MSA 155.7 SSA 17.4
                                                                                                                                        EL1 3288.1 EL2 24.1 ALF 173.47
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FLIGHT TIME 166.00

ARRIVAL DATE DEC 21 1967

LAUNCH DATE JUN 30 1967 HELIOCENTRIC CONIC DISTANCE 501.724 RL 152.09 LAL -.00 LOL 277.54 VL 26.231 GAL .82 AZL 93.87 MCA 240.24 SMA 125.54 ECC .21194 INC 3.8660 V1 29.293
RP 107.55 LAP 3.36 LOP 157.73 VP 37.560 GAP 9.08 AZP 88.08 TAL 176.96 TAP 57.20 RCA 98.93 APO 152.15 VZ 35.234
RC 148.521 GL -29.37 GP 8.50 ZAL 84.71 ZAP 160.53 ETS 24.47 ZAE 129.19 ETE 173.38 ZAC 87.99 ETC 13.55 CLP-162.42 PLANETOCENTRIC CONIC C3 12.999 VHL 3.605 DLA -32.11 RAL 179.53 RAD 6567.5 VEL 11.592 PTH 2.03 VHP 6.173 DPA 12.68 RAP 180.58 ECC 1.2139 LRCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T4.18 8 45 52 1188.81 24.67 348.28 42.46 111.23 9 5 41 588.8 27.53 340.31 105.82 12 52 7 5688.09 24.69 267.76 42.46 111.22 14 26 55 5088.1 27.34 259.78 105.82 12 52 7 5688.09 24.67 348.28 42.46 111.23 9 5 41 588.8 27.33 340.31 105.82 12 52 7 5688.09 24.69 267.76 42.46 111.23 9 5 41 588.8 27.33 340.31 105.82 12 52 7 5688.09 24.69 267.76 42.46 111.22 14 26 55 5088.1 27.34 259.78 110.00 11 48 57 5883.91 17.76 279.24 38.93 119.70 13 27 1 5283.9 21.57 272.19 110.00 14 48 13 5329.02 32.01 242.69 45.00 102.68 16 17 2 4729.0 33.43 233.75 C3 12.999 VHL 3.605 DLA -32.11 RAL 179.53 RAD 6567.5 VEL 11.592 PTH 2.03 VHP 6.173 DPA 12.68 RAP 180.58 ECC 1.2139 111.22 14 26 55 119.70 13 27 1 102.68 16 17 2 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3317.3 SR 381.0 SS 1150.3 CRT -.9960 CRS .9765 CST -.9907 LSA 3528.4 MSA 152.0 SSA 18.2 SGT 5362.6 SGR 394.9 SG3 282.6 RRT -.4050 RRF -.4238 RTF .9461 TOE-2.0846 TRA .2163 TC3-5.8211 BAU 1.0119 ROE .2396 RRA .0277 RC3 -.1263 FAU .04494 FDE-1.3361 FRA .6599 FC3-2.9927 88P 16832 BDE 2.0983 BRA .2181 BC3 5.8224 FSP -914 SG8 5377.1 R23 .0425 R13 -.9462 SG1 5365.0 SG2 360.9 THA 178.28 EL1 3338.9 EL2 34.0 ALF 173.47 FLIGHT TIME 176.00 ARRIVAL DATE DEC 23 1967 LAUNCH DATE JUN 30 1967 DISTANCE 507.542 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.188 GAL 1.22 AZL 93.78 MCA 243.48 SMA 125.27 ECC .21507 INC 3.7769 V1 29.293
RP 107.57 LAP 3.38 LOP 160.97 VP 37.524 GAP 9.43 AZP 88.31 TAL 175.54 TAP 59.03 RCA 98.33 APO 152.22 V2 35.228
RC 150.615 GL -28.25 GP 8.00 ZAL 81.87 ZAP 161.76 ETS 24.59 ZAE 129.02 ETE 173.85 ZAC 86.09 ETC 13.17 CLP-163.55 PLANETOCENTRIC CONIC C3 13.275 VHL 3.643 OLA -32.37 RAL 183.05 RAD 6567.5 VEL 11.604 PTH 2.03 VHP 6.346 DPA 11.36 RAP 182.31 ECC 1.2185 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.61 8 56 7 1205.17 24.75 349.57 46.38 111.56 9 16 13 605.2 27.46 341.60 106.39 13 9 58 5680.78 24.76 267.24 46.38 111.55 14 44 39 5080.8 27.47 259.27 8 56 7 1205.17 13 9 58 5680.78 12 8 48 5869.99 24.75 349.57 46.38 111.56 9 16 13 605.2 27.46 341.60 73.61 13 9 56 12 8 48 111.55 14 44 39 119.43 13 46 38 103.63 16 25 40 24.76 46.38 106.39 267.24 271.34 235.51 278.43 5270.0 22.00 110.00 18.22 43.04 33.20 14 56 28 244.39 48.86 4752.0 110.00 5352.01 31.66 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY TOE-2.1280 TRA .3942 TC3-5.7849 BAU 1.0269 RDE .2469 RRA .0296 RC3 -.1318 FAU .04208 FDE-1.2746 FRA .7257 FC3-2.7445 BSP 17079 BOE 2.1423 BRA .3953 BC3 5.7864 FSP -880 SGT 5432.0 SGR 403.8 SG3 271.1 RRT - .3894 RRF - .4040 RTF .9465 SGB 5447.0 R23 .0366 R13 - .9465 SGI 5434.3 SG2 371.8 THA 178.33 ST 3356.1 SR 388.7 SS 1121.8 CRT -.9931 CRS .9702 CST -.9910 LSA 3556,7 MSA 149.6 SSA 18.9 EL1 3378.2 EL2 45.2 ALF 173.44 ARRIVAL DATE DEC 25 1967 LAUNCH DATE JUN 30 1967 FLIGHT TIME 178.00 DISTANCE 513.334 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.145 CAL 1.64 A7L 93.69 MCA 246.72 SMA 125.01 ECC .21843 INC 3.6926 V1 29.293
RP 107.59 LAP 3.39 LOP 164.22 VP 37.488 CAP 9.78 A2P 88.54 TAL 174.12 TAP 60.84 RCA 97.70 APO 152.31 V2 35.221
RC 152.696 GL -27.10 GP 7.56 ZAL 78.99 ZAP 162.93 ETS 24.83 ZAE 128.86 ETE 174.25 ZAC 84.13 ETC 12.84 CLP-164.66 PLANETOCENTRIC CONIC C3 13.653 VHL 3.695 DLA -32.59 RAL 186.62 RAD 6567.5 VEL 11.621 PTH 2.04 VHP 6.527 DPA 10.08 RAP 184.09 ECC 1.2247 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.91 9 27 41 111.89 15 1 52 111.89 15 1 52 111.89 15 1 52 111.89 15 1 52 119.23 14 5 50 104.53 16 35 9 9 7 20 1220.69 13 27 14 5677.50 27.50 50.44 620.7 342.80 73.15 24.75 350.76 50.45 5077.5 259.03 13 27 14 24.77 266.99 106.85 9 7 20 1220.69 13 27 14 5677.50 350.76 50.44 620.7 27,50 342.80 24.75 73.15 259.03 24.77 50.45 5077.5 27.51 266.99 106.85 13 27 14 12 28 10 5859.86 15 5 35 5374.37 5259.9 22.31 270.72 277.64 47.26 18.56 110.00 4774.4 237.21 246.03 52.88 110.00 31.29 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5492.2 SGR 412.6 SG3 259.8 RRT - 3784 RRF - 3694 RTF 9467 SGB 5507.7 R23 .0318 R13 - .9467 SGI 5494.4 SG2 381.7 THA 178.36 ST 3377.4 SR 397.0 SS 1089.4 CRT -.9894 CRS .9630 CST -.9913 TOE-2.1666 TRA .5852 TC3-5.6958 BAU 1.0400 ROE .2558 RRA .0306 RC3 -.1333 FAU .03928 FOE-1.2132 FRA .7901 FC3-2.4907 BSP 17266 BOE 2.1816 BRA .5860 BC3 5.6974 FSP -844 LSA 3567.8 MSA 148.8 SSA 19.3 EL1 3400.2 EL2 57.2 ALF 173.36 FLIGHT TIME 180,00 ARRIVAL DATE DEC 27 1967 LAUNCH DATE JUN 30 1967 **DISTANCE 519.098** HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 26.102 GAL 2.08 AZL 93.61 HCA 249.96 SMA 124.74 ECC .22204 INC 3.6125 VI 29.293
RP 107.62 LAP 3.39 LOP 167.47 VP 37.451 GAP 10.15 AZP 88.76 TAL 172.68 TAP 62.65 RCA 97.05 APO 152.44 V2 35.214
RC 154.762 GL -25.91 GP 7.17 ZAL 76.09 ZAP 164.06 ETS 25.22 ZAE 128.71 ETE 174.60 ZAC 82.13 ETC 12.54 CLP-165.73 PLANETOCENTRIC CONIC C3 14.144 VHL 3.761 DLA -32.75 RAL 190.21 RAD 6567.6 VEL 11.642 PTH 2.04 VHP 6.714 DPA 8.83 RAP 185.91 ECC 1.2328 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.81 9 19 29 1235.17 24.67 351.83 54.62 112.25 9 40 4 635.2 27.47 343.90 54.62 9 19 29 1235.17 13 43 44 5678.52 54.63 112.24 15 18 22 5078.5 27.48 259.10 13 43 44 24.68 267.03 107.19 1235.17 5678.52 112.25 9 40 4 635.2 27.47 351.83 54.62 72.81 9 19 29 24.67 15 18 22 5078.5 27.48 259.10 24.68 267.03 112.24 107.19 13 43 44 5678.52 54.63 525+... 4794.9 5654.86 18.73 119.13 14 24 7 22.47 270.41 12 46 32 277.55 51.55 110.00 16 45 46 105.35 57.03 32.72 238.76 15 15 52 5394.87 30.93 247.52 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5553.2 SGR 421.2 SG3 249.1 RRT -.3726 RRF -.3604 RTF .9473 SGB 5569.2 R23 .0277 R13 -.9473 SGI 5555.4 SG2 390.7 THA 178.37 TOE-2.2040 TRA .7847 TC3-5.5684 BAU 1.0532 ST 3387.1 SR 406.1 SS 1055.8 ROE .2663 RRA .0309 RC3 -.1305 FAU .03668 FDE-1.1551 FRA .8492 FC3-2.2453 BSP 17495 BOE 2.2201 BRA .7853 BC3 5.5700 FSP -813 CRT -.9850 CRS .9554 CST -.9915 LSA 3567.8 MSA 149.3 SSA 19.6 EL1 3410.7 EL2 69.6 ALF 173.26

FLIGHT TIME 174.00

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ARRIVAL DATE DEC 29 1967
                                                                                                          FLIGHT TIME 182.00
LAUNCH DATE JUN 30 1967
                                                                                                          DISTANCE 524.829
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 26.060 GAL 2.54 AZL 93.54 MCA 253.20 SMA 124.48 ECC .22591 INC 3.5355 VI 29.293
RP 107.64 LAP 3.38 LOP 170.71 VP 37.413 GAP 10.52 AZP 88.98 TAL 171.24 TAP 64.45 RCA 96.36 APO 152.61 V2 35.205
RC 156.813 GL -24.70 GP 6.82 ZAL 73.20 ZAP 165.15 ETS 25.76 ZAE 128.57 ETE 174.91 ZAC 80.09 ETC 12.28 CLP-166.77
    PLANETOCENTRIC CONIC
      C3 14.757 VHL .3.842 DLA -32.85 RAL 193.80 RAD 6567.6 VEL 11.668 PTH 2.05 VHP 6.911 DPA
                                                                                                                                                                                           7.60 RAP 187.76 ECC 1.2429
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.61 9 32 29 1248.66 24.50 352.79 58.89 112.60 9 53 18 648.7 27.34 344.89
                                                                                                                                        INJ AZMTH INJ TIME PO C

112.60 9 53 18

112.59 15 34 6 1

112.59 15 34 6 1

112.59 15 34 6 1

119.16 14 41 1 1

106.03 16 57 48
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13 59 22 5683.85
9 32 29 1248.66
13 59 22 5683.85
13 3 25 5856.17
15 27 36 5412.37
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          107.39
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           72.61
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         110.00
                                                                                               248.78
                                                                                                  MID-COURSE EXECUTION ACCURACY
SCT 5609.9 SGR 429.5 SG3 239.0
RRT -.3708 RRF -.3761 RTF .9481
SGB 5626.3 R23 .0245 R13 -.9481
SGI 5612.1 SG2 398.7 THA 178.37
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ST 3381.4 SR 415.5 SS 1021.0

CRT -.9798 CRS .9472 CST -.9917

LSA 3553.3 MSA 151.3 SSA 19.6
     TOE-2,2376 TRA .9952 TC3-5.3998 BAU 1.0656
RDE .2784 RRA .0303 RC3 -.1246 FAU .03422
     FOE-1.0995 FRA .9052 FC3-2.0078 8SP 17715
BOE 2.2548 BRA .9957 BC3 5.4012 FSP -784
                                                                                                                                                                                EL1 3405.8 EL2 82.4 ALF 173.13
                                                                                                                                                                                                  ARRIVAL DATE DEC 31 1967
                                                                                                           FLIGHT TIME 184.00
LAUNCH DATE JUN 30 1967
   HELIOCENTRIC CONIC
                                                                                                           DISTANCE 530.528
    RL 152.09 LAL -.00 LOL 277.54 VL 26.017 GAL 3.01 AZL 93.46 HCA 256.44 SMA 124.23 ECC .23008 IRC 3.4612 VI 29.293
RP 107.67 LAP 3.36 LOP 173.96 VP 37.376 GAP 10.91 AZP 89.19 TAL 169.80 TAP 66.24 RCA 95.64 APO 152.81 V2 35.197
RC 158.850 GL -23.47 GP 6.50 ZAL 70.31 ZAP 166.19 ETS 26.47 ZAE 128.44 ETE 175.18 ZAC 78.02 ETC 12.05 CLP-167.79
    RC 158.850 GL -25.47 UP

PLANETOCENTRIC CONIC

C3 15.506 VHL 3.938 DLA -32.88 RAL 197.36 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 7.117 DPA 6.40 RAP 189.64 ECC 1.2552

LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

72.55 9 46 17 1261.02 24.22 353.61 63.23 112.94 10 7 18 661.0 27.12 345.75

107.45 14 13 59 5693.67 24.24 267.99 63.24 112.93 15 48 53 5093.7 27.13 260.12

72.55 9 46 17 1261.02 24.22 353.61 63.23 112.94 10 7 18 661.0 27.12 345.75

107.45 14 13 59 5693.67 24.24 267.99 63.24 112.93 15 48 53 5093.7 27.13 260.12

107.45 14 13 59 5693.67 24.24 267.99 63.24 112.93 15 48 53 5093.7 27.13 260.12

110.00 13 18 27 5864.70 18.40 278.13 60.17 119.33 14 56 12 5264.7 22.17 271.01

110.00 15 41 0 5426.03 30.34 249.76 65.70 106.55 17 11 26 4826.0 32.31 241.09

ORBIT DETERMINATION ACCURACY

ORBIT DETERMINATION ACCURACY
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                 ST 3355.1 SR 424.4 SS 981.9
CRT -.9738 CRS .9377 CST -.9918
                                                                                                     SGT 5654.9 SGR 436.8 SG3 228.9
RRT -.3711 RRF -.3739 RTF .9484
      TOE-2.2626 TRA 1.2211 TC3-5.1833 BAU 1.0747
     RDE .2915 RRA .0284 RC3 -.1169 FAU .03171
FDE-1.0419 FRA .9616 FC3-1.7708 BSP 17825
BDE 2.2813 BRA 1.2214 BC3 5.1846 FSP -749
                                                                                                   SGB 5671.7 R23 .0217 R13 -.9484
SGI 5657.2 SGZ 405.5 THA 178.35
                                                                                                                                                                                 LSA 3518.0 MSA 155.4 SSA 19.5
                                                                                                                                                                                 EL1 3380.4 EL2 95.7 ALF 172.97
                                                                                                                                                                                                 ARRIVAL DATE JAN 2 1968
                                                                                                          FLIGHT TIME 186.00
LAUNCH DATE JUN 30 1967
                                                                                                          DISTANCE 536.188
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 25.975 GAL 3.52 AZL 93.39 HCA 259.67 SHA 123.97 ECC .23456 INC 3.3890 VI 29.293
RP 107.70 LAP 3.33 LOP 177.20 VP 37.337 GAP 11.31 AZP 89.39 TAL 168.35 TAP 68.03 RCA 94.89 APO 153.05 V2 35.187
RC 160.871 GL -22.24 GP 6.22 ZAL 67.47 ZAP 167.20 ETS 27.39 ZAE 128.31 ETE 175.41 ZAC 75.92 ETC 11.86 CLP-168.79
    PLANETOCENTRIC CONIC
      C3 16.404 VHL 4.050 DLA -32.84 RAL 200.88 RAD 6567.7 VEL 11.758 PTH 2.07 VHP 7.333 DPA
                                                                                                                                                                                             5.21 RAP 191.56 ECC 1.2700
     C3 16.404 VHL 4.050 DLA -32.84 RAL 200.88 RAO 6567.7 VEL 11.738 PTH 2.07 VHP 7.333 DPA 5.21 RAP 191.56 ECC 1.2700 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.63 10 0 50 1272.15 23.86 354.29 67.61 113.27 10 22 2 672.2 26.79 346.48 107.37 14 27 28 5708.10 23.87 268.92 67.61 113.27 10 22 2 672.2 26.79 346.48 107.37 14 27 28 5708.10 23.87 268.92 67.61 113.27 10 22 2 672.2 26.79 346.48 107.37 14 27 28 5708.10 23.87 268.92 67.61 113.27 10 22 2 672.2 26.79 346.48 107.37 14 27 28 5708.10 23.87 268.92 67.61 113.25 16 2 36 5108.1 26.81 261.11 110.00 13 31 24 5880.81 17.86 279.06 64.42 119.64 15 9.25 5280.8 21.67 272.00 110.00 15 56 5 5335.48 30.16 250.43 70.19 106.91 17 26 40 4835.5 32.18 241.80 DIEFERPHILL CORRECTIONS
                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                   SGT 5701.9 SGR 443.7 SG3 219.5
RRT -.3751 RRF -.3761 RTF .9492
SGB 5719.2 R23 .0196 R13 -.9493
SGI 5704.4 SG2 411.1 THA 178.32
                                                                                                                                                                                 ST 3319.1 SR 433.2 SS 944.5
CRT -.9672 CRS .9281 CST -.9919
       TOE-2.2863 TRA 1.4555 TC3-4.9450 BAU 1.0847
      RDE .3061 RRA .0255 RC3 -.1068 FAU .02945
FDE -.9894 FRA 1.0135 FC3-1.5544 BSP 18027
                                                                                                                                                                                 LSA 3474.2 MSA 160.5 SSA 19.1
                                                                                                                                                                                 ELI 3345.4 EL2 109.1 ALF 172.80
      BOE 2.3067 BRA 1.4557 BC3 4.9462 FSP -723
                                                                                                                                                                                                  ARRIVAL DATE JAN 4 1968
                                                                                                            FLIGHT TIME 188.00
LAUNCH DATE JUN 30 1967
                                                                                                           DISTANCE 541.808
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 277.54 VL 25.933 GAL 4.05 AZL 93.32 MCA 262.91 SMA 123.72 ECC .23939 INC 3.3183 V1 29.293
RP 107.73 LAP 3.29 LOP 180.44 VP 37.299 GAP 11.72 AZP 89.59 TAL 166.90 TAP 69.81 RCA 94.10 APO 153.33 V2 35.178
RC 162.878 GL -20.99 GP 5.97 ZAL 64.68 ZAP 168.18 ETS 28.54 ZAE 128.20 ETE 175.61 ZAC 73.80 ETC 11.70 CLP-169.77
    PLANETOCENTRIC CONIC
      C3 17.469 VHL 4.180 DLA -32.73 RAL 204.32 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 7.560 DPA
                                                                                                                                                                                             4.05 RAP 193.50 ECC 1.2875
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.89 10 16 2 1282.10 23.39 354.84 72.00 113.57 10 37 24 682.1 26.38 347.07
                                                                                                                                        INJ AZMTH INJ TIME
113.57 10 37 24
113.56 16 15 12
113.57 10 37 24
113.56 16 15 12
120.08 13 52 34
107.12 17 43 20
                           10 16 2
14 39 45
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                                                 5727.10
                                                                            23.40
                                                                                               270.16
           107.15
                                                                                                                                                                                          682.1
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                            10 16 2
                                                                            23.39
                                                                                                354.84
                                                                                                                        72.00
            72.85
                                                 1282.10
                                                                                                                                                                                        5127.1
                                                                                                                                                                                                                26.38
                                                                                                                                                                                                                                   262.39
                                                                                                                       72.01
                            14 39 45 5727.10
                                                                            23.40
                                                                                                270.16
           107.15
                                                                                                                                                                                                               20.94
                                                                                                                                                                                                                                   295.52
                                                                                                                                                                                           16.2
                           13 42 18 516.18
16 12 39 5441.03
                                                                            17.07
                                                                                                302.51
                                                                                                                        68.60
           110.00
                                                                                                                                                                                        4841.0
                                                                                                                                                                                                               32.09
                                                                          30.05
                                                                                                250.83
                                                                                                                       74.76
           110.00
                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                   SGT 5744.2 SGR 449.7 SG3 210.5
RRT -.3812 RRF -.3804 RTF .9501
SG8 5761.8 R23 .0177 R13 -.9501
SG1 5746.8 SG2 415.5 THA 178.28
                                                                                                                                                                        ST 3269.4 SR 441.3 SS 906.5
CRT -.9599 CRS .9175 CST -.9919
LSA 3417.2 MSA 167.1 SSA 18.7
EL1 3296.8 EL2 122.7 ALF 172.61
       TDE-2.3047 TRA 1.7030 TC3-4.6812 BAU 1.0935
      RDE .3218 RRA .0213 RC3 -.0957 FAU .02728
FDE -.9383 FRA 1.0639 FC3-1.3522 89P 18212
       BOE 2.3271 BRA 1.7031 BC3 4.6821 FSP -697
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ARRIVAL DATE JAN 6 1968 LAUNCH DATE JUN 30 1967 FLIGHT TIME 190.00 HELIOCENTRIC CONIC DISTANCE 547.383 RL 152.09 LAL -.00 LOL 277.54 VL 25.891 GAL 4.60 A7L 93.25 HCA 266.14 SMA 123.47 ECC .24460 INC 3.2485 V1 29.293
RP 107.76 LAP 3.24 LOP 183.67 VP 37.260 GAP 12.16 AZP 89.78 TAL 165.46 TAP 71.59 RCA 93.27 APO 153.67 V2 35.167
RC 164.869 GL -19.75 GP 5.74 ZAL 61.95 ZAP 169.12 ETS 29.97 ZAE 128.08 ETE 175.79 ZAC 71.65 ETC 11.58 CLP-170.74 PLANETOCENTRIC CONIC C3 18.721 VHL 4.327 DLA -32.56 RAL 207.67 RAD 6567.8 VEL 11.837 PTH 2.10 VHP 7.799 DPA 2.91 RAP 195.46 ECC 1.3081 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.22 10 31 46 1290.92 106.78 14 50 44 5750.61 76.39 113.86 10 53 17 113.85 16 26 35 113.86 10 53 17 22.83 355.25 690.9 25.86 347.53 271.70 76.40 5150.6 25.87 263.99 106.78 22.85 347.53 73.22 10 31 46 1290.92 22.83 355.25 76.39 690.9 25.86 106.78 14 50 44 5750.61 22.85 271.70 76.40 113.85 16 26 35 5150.6 25.87 263.99 120.60 14 2 5 107.21 18 1 5 110.00 13 51 19 16.04 304.22 72.69 46.1 297.31 110.00 16 30 22 5443.45 30.00 251.00 79.39 4843.5 32.06 242.39 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5780.0 SGR 454.7 SG3 201.9 RRT -.3891 RRF -.3867 RTF .9509 SGB 5797.9 R23 .0161 R13 -.9509 ST 3207.4 SR 448.3 SS 868.6 CRT -.9517 CRS .9061 CST -.9919 TOE-2.3174 TRA 1.9644 TC3-4.3952 BAU 1.1003 ROE .3365 RRA .0157 RC3 -.0840 FAU .02519 FOE -.8888 FRA 1.1136 FC3-1.1648 89P 18370 BDE 2.3420 BRA 1.9645 BC3 4.3961 FSP -672 LSA 3348.4 MSA 174.9 SSA 18.1 SG1 5782.8 SG2 418.7 THA 178.24 EL1 3235.7 EL2 136.5 ALF 172.41 ARRIVAL DATE JAN 8 1968 FLIGHT TIME 192.00 HELIOCENTRIC CONIC DISTANCE 552,908 RL 152.09 LAL -.00 LOL 277.54 VL 25.849 GAL 5.18 A7L 93.18 MCA 269.37 SMA 123.22 ECC .25021 INC 3.1794 V1 29.293 RP 107.79 LAP 3.18 LOP 186.91 VP 37.221 GAP 12.61 A7P 89.96 TAL 164.01 TAP 73.38 RCA 92.39 APO 154.05 V2 35.156 RC 166.846 GL -18.53 GP 5.53 ZAL 59.30 ZAP 170.03 ETS 31.75 ZAE 127.98 ETE 175.95 ZAC 69.49 ETC 11.49 CLP-171.69 PLANETOCENTRIC CONIC C3 20.185 VHL 4.493 DLA -32.32 RAL 210.91 RAD 6567.8 VEL 11.898 PTH 2.11 VHP 8.052 OPA 1.79 RAP 197.44 ECC 1.3322 C3 20.185 VML 4.493 DLA -32.32 RAL 210.91 RAD 6567.8 VEL 11.898 PTH 2.11 VMP 8.032 DPA 1.79 RAP 197.44 ECC 1.3322

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

73.73 10 48 2 1298.41 22.19 355.51 80.76 114.13 11 9 40 698.4 25.25 347.85

106.27 15 0 21 5778.77 22.20 273.54 80.77 114.12 16 36 40 5178.8 25.26 265.89

73.73 10 48 2 1298.41 22.19 355.51 80.76 114.13 11 9 40 698.4 25.25 347.85

106.27 15 0 21 5778.77 22.20 273.54 80.77 114.12 16 36 40 5178.8 25.26 265.89

110.00 13 58 43 681.43 14.80 306.21 76.69 121.17 14 10 5 81.4 18.82 299.40

DIFFERENTIAL CORRECTIONS DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5807.2 SGR 458.7 SG3 193.7 RRT -.3979 RRF -.3939 RTF .9515 SGB 5825.3 R23 .0145 R13 -.9516 ST 3131.9 SR 453.9 SS 830.5 CRT -.9423 CRS .8930 CST -.9919 TDE-2.3214 TRA 2.2443 TC3-4.0874 BAU 1.1032 RDE .3559 RRA .0086 RC3 -.0727 FAU .02308 FDE -.8395 FRA 1.1646 FC3 -.9898 BSP 18423 LSA 3266.6 MSA 184.1 SSA 17.5 BOE 2.3485 BRA 2.2443 BC3 4.0881 FSP -644 SG1 5810.1 SG2 420.6 THA 178.19 EL1 3161.0 EL2 150.6 ALF 172.21 LAUNCH DATE JUN 30 1967 FLIGHT TIME 194.00 ARRIVAL DATE JAN 10 1968 DISTANCE 558.376 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.808 GAL 5.80 AZL 93.11 MCA 272.59 SMA 122.98 ECC .25629 INC 3.1104 VI 29.293
RP 107.83 LAP 3.11 LOP 190.14 VP 37.182 GAP 13.09 AZP 90.14 TAL 162.58 TAP 75.17 RCA 91.46 APO 154.49 V2 35.145
RC 168.808 GL -17.32 GP 5.34 ZAL 56.73 ZAP 170.91 ETS 33.96 ZAE 127.87 ETE 176.08 ZAC 67.32 ETC 11.44 CLP-172.63 PLANETOCENTRIC CONIC C3 21.888 VHL 4.678 DLA -32.03 RAL 214.03 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 8.321 DPA .68 RAP 199.44 ECC 1.3602 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 11 4 47 85.09 74.37 1304.47 355.62 704.5 21.46 24.56 348.02 15 8 30 5811.61 21.47 275.69 85.10 5211.6 24.57 268.10 11 26 31 16 45 22 74.37 11 4 47 1304.47 21.46 355.62 85.09 114.37 704.5 24.56 348.02 105.63 15 6 30 5811.61 21.47 275.69 85.10 114.36 5211.6 24.57 26A . 10 14 16 50 18 38 22 110.00 14 4 48 721.19 13.39 308.42 121.75 301.71 80.60 121.2 17.49 17 7 39 5442.89 30.01 250.96 88.69 107.19 4842.9 32.07 242.35 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY RRT - 4088 RRF - 4034 RTF . 9526 SGB 5852.4 R23 .0132 R13 - .9526 SGB 5857.2 SG2 421.3 THA 178.14 ST 3054.1 SR 458.3 SB 795.7 CRT -.9323 CRS .8797 CST -.9919 LSA 3183.2 MSA 193.4 SSA 16.9 TDE-2.3253 TRA 2.5346 TC3-3.7819 BAU 1.1068 RDE .3742 RRA .0001 RC3 -.0613 FAU .02117 FDE -.7951 FRA 1.2127 FC3 -.8373 BSP 18573 BOE 2.3552 BRA 2.5346 BC3 3.7823 FSP -621 EL1 3083.9 EL2 164.2 ALF 172.01 LAUNCH DATE JUN 30 1967 -FLIGHT TIME 196.00 ARRIVAL DATE JAN 12 1968 HELIOCENTRIC CONIC DISTANCE 563.780 RL 152.09 LAL -.00 LOL 277.54 VL 25.767 GAL 6.45 AZL 93.04 MCA 275.82 SMA 122.74 ECC .26286 INC 3.0411 V1 29.293
RP 107.86 LAP 3.03 LOP 193.37 VP 37.142 GAP 13.59 AZP 90.31 TAL 161.15 TAP 76.97 RCA 90.47 APO 155.00 V2 35.134
RC 170.755 GL -16.14 GP 5.17 ZAL 54.27 ZAP 171.75 ETS 36.72 ZAE 127.76 ETE 176.20 ZAC 65.14 ETC 11.41 CLP-173.56 PLANETOCENTRIC CONIC C3 23.864 VHL 4.885 DLA -31.69 RAL 217.02 RAD 6568.0 VEL 12.052 PTH 2.15 VHP 8.607 DPA -.40 RAP 201.46 ECC 1.3927 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.15 11 21 59 1308.95 20.65 355.56 89.38 114.58 11 43 48 708.9 23.79 348.03 114.57 16 52 37 114.58 11 43 48 114.57 16 52 37 122.31 14 22 33 107.15 18 57 11 104.85 15 15 8 5849.19 20.66 278.16 89.38 5249.2 23.80 270.62 75.15 11 21 59 1308.95 20.65 355.56 89.38 708.9 23.79 348.03 104.85 15 15 8 5849.19 20.66 278.16 89.38 5249.2 23.80 270.62 14 9 49 110.00 11.83 310.80 84.41 164.4 16.01 304.19 110.00 17 26 29 5441.73 30.03 250.86 93.33 4841.7 32.0A 242.26 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2971.0 SR 461.2 SS 762.8 CRT -.9212 CRS .8653 CST -.9919 LSA 3095.1 MSA 203.2 SSA 16.3 EL1 3001.3 EL2 177.6 ALF 171.83 SGT 5855.2 SGR 464.0 SG3 178.5 RRT -.4207 RRF -.4140 RTF .9537 SGB 5873.6 R23 .0119 R13 -.9537 TOE-2.3250 TRA-2.8413 TC3-3.4726 BAU 1.1080 RDE .3932 RRA -.0099 RC3 -.0506 FAU .01933 FDE -.7530 FRA 1.2610 FC3 -.7011 BSP 18699 BDE 2.3580 BRA 2.8413 BC3 3.4730 FSP -599 SG1 5858.5 SG2 420.7 THA 178.08

ARRIVAL DATE JAN 14 1968

LAUNCH DATE JUN 30 1967

HELIOCENTRIC CONIC DISTANCE 569.112 RL 152.09 LAL -.00 LOL 277.54 VL 25.726 GAL 7.14 A7L 92.97 MCA 279.04 SMA 122.50 ECC .26998 INC 2.9710 VI 29.293 RP 107.90 LAP 2.93 LOP 196.60 VP 37.103 GAP 14.12 A7P 90.47 TAL 159.73 TAP 78.77 RCA 89.43 APO 155.57 V2 35.122 RC 172.666 GL -14.99 GP 5.01 TAL 51.90 ZAP 172.56 ETS 40.17 ZAE 127.65 ETE 176.31 ZAC 62.95 ETC 11.43 CLP-174.49 PLANETOCENTRIC CONIC C3 26.153 VHL 5.114 DLA -31.30 RAL 219.87 RAD 6568.1 VEL 12.146 PTH 2.18 VHP 8.911 DPA -1.46 RAP 203.49 ECC 1.4304 C3 26.153 VHL 5.114 OLA -31.30 RAL 219.87 RAD 6568.1 VEL 12.146 PTH 2.18 VHP 8.911 OPA -1.46 RAP 203.49 ECC 1.4304 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.07 11 39 44 1311.46 19.78 355.33 93.60 114.77 12 1 36 711.5 22.95 347.86 103.93 15 20 7 603.75 19.79 303.05 93.60 114.76 15 30 11 3.8 22.96 295.57 103.93 15 20 7 603.75 19.79 303.05 93.60 114.77 12 1 36 711.5 22.95 347.86 103.93 15 20 7 603.75 19.79 303.05 93.60 114.76 15 30 11 3.8 22.96 295.57 110.00 14 13 58 810.33 10.15 313.29 88.13 122.82 14 27 28 210.3 14.40 306.77 110.00 17 45 4 5440.92 30.05 250.82 PS.92 107.12 19 15 45 4840.9 32.10 242.20 5440.92 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2884.9 SR 462.4 55 732.3 CRT -.9091 CRS .8501 CST -.9920 LSA 3004.5 MSA 213.1 SSA 15.7 EL1 2915.5 EL2 190.6 ALF 171.67 SCT 5870.8 SCR 465.1 SCS 171.5 RRT -.4334 RRF -.4256 RTF .9549 SCB 5889.2 R23 .0107 R13 -.9549 SCI 5874.3 SC2 418.9 THA 178.02 TOE-2.3212 TRA 3.1654 TC3-3.1646 BAU 1.1066 RDE .4126 RRA -.0214 RC3 -.0410 FAU .01754 FOE -.7134 FRA 1.3096 FC3 -.5806 BSP 18801 BOE 2.3575 BRA 3.1655 BC3 3.1649 FSP -578 ARRIVAL DATE JAN 16 1968 FLIGHT TIME 200.00 LAUNCH DATE JUN 30 1967 DISTANCE 574.363 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.686 GAL 7.87 AZL 92.90 HCA 282.26 SNA 122.27 ECC .27772 INC 2.8997 V1 29.293
RP 107.94 LAP 2.83 LOP 199.82 VP 37,063 GAP 14.69 AZP 90.62 TAL 158.33 TAP 80.59 RCA 88.31 APO 156.22 V2 35.110
RC 174.603 GL -13.88 GP 4.87 ZAL 49.64 ZAP 173.32 ETS 44.53 ZAE 127.53 ETE 176.40 ZAC 60.76 ETC 11.49 CLP-175.42 PLANETOCENTRIC CONIC C3 28.802 VHL 5.367 DLA -30.88 RAL 222.57 RAD 6568.2 VEL 12.255 PTH 2.20 VMP 9.238 DPA -2.51 RAP 205.53 ECC 1.4740 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG UNCH AZMTH LNCH TIME L-I TIME 77,14 11 58 7 1311.50 114.92 12 19 59 T14.91 15 34 10 711.5 97.75 22.05 18.84 354.87 51.7 22.06 18.86 306.20 97.76 15 23 18 651.71 102.86 15 23 18 651.71 11 58 7 1311.50 114.92 12 19 59 114.91 15 34 10 22.05 711.3 18.84 354.87 97,75 77.14 51.7 22.06 306.20 97.76 15 23 18 651.71 18,86 102.86 123.26 14 31 42 107.12 19 33 53 258.3 12.69 309.43 14 17 24 8.37 91.77 A5A.33 315.87 110.00 32.10 4840.9 250.82 102.47 18 3 12 5440.93 30.05 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2795.0 SR 461.8 SS 703.5 CRT -.8954 CRS .8330 CST -.9920 SGT 5880.4 SGR 464.9 SG3 164.9 RRT -.4465 RRF -.4374 RTF .9561 SGB 5898.7 R23 .0094 R13 -.9561 TDE-2.3106 TRA 3.5123 TC3-2.8571 BAU 1.1002 ROE .4323 RRA -.0348 RC3 -.0326 FAU .01573 LSA 2910.3 MSA 223.3 SSA 15.1 FOE -.6747 FRA 1.3609 FC3 -.4729 BSP 18797 BDE 2.3507 BRA 3.5125 BC3 2.8573 FSP -553 EL1 2825.6 EL2 203.4 ALF 171.54 SG1 5884.1 SG2 415.7 THA 177.97 ARRIVAL DATE JAN 18 1968 FLIGHT TIME 202.00 LAUNCH DATE JUN 30 1967 DISTANCE 579.519 RL 152.09 LAL -.00 LOL 277.54 VL 25.646 GAL 8.65 A7L 92.83 MCA 285.48 SMA 122.04 ECC .28614 INC 2.8267 V1 29.293 RP 107.97 LAP 2.72 LOP 203.04 VP 37.024 GAP 15.29 AZP, 90.76 TAL 156.95 TAP 82.43 RCA 87.12 APO 156.96 V2 35.097 RC 178.504 GL -12.80 GP 4.73 ZAL 47.49 ZAP 174.02 ETS 50.07 ZAE 127.40 ETE 176.48 ZAC 58.57 ETC 11.58 CLP-176.35 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 31.867 VHL 5.645 DLA -30.43 RAL 225.13 RAD 6568.3 VEL 12.379 PTH 2.23 VHP 9.588 DPA -3.52 RAP 207.58 ECC 1.5244 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 115.05 12 39 7 115.04 15 36 14 115.05 12 39 7 115.04 15 36 14 123.63 14 35 22 107.16 19 51 27 354,15 101.83 17.86 78.38 12 17 19 1306.33 105.6 21.10 309.76 101.84 101.62 15 24 29 705.63 17.87 21.09 708.3 354.15 101.83 12 17 19 1308.33 17.86 705.63 21.10 105.6 309.76 101.84 17.87 15 24 29 101.62 312.14 10.68 307.9 6.50 318.50 95.32 14 20 14 110.00 32.08 4842.1 250.90 106.96 30.03 18 20 45 5442.07 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2709.8 SR 459.6 S5 679.0 CRT -.8812 CRS .8164 CST -.9922 LSA 2821.6 MSA 232.5 SSA 14.5 SCT 5886.6 SCR 463.9 SC3 158.6 RRT -.4607 RRF -.4507 RTF .9577 SCB 5904.9 R23 .0082 R13 -.9577 TDE-2.3030 TRA 3.8744 1C3-2.5657 BAU 1.0931 RDE .4525 RRA -.0497 RC3 -.0251 FAU .01409 FDE -.6411 FRA 1.4111 FC3 -.3828 BSP 18896 BDE 2.3470 BRA 3.8748 BC3 2.5658 FSP -534 EL1 2740.1 EL2 214.9 ALF 171.45 SG1 5890.5 SG2 411.4 THA 177.91 ARRIVAL DATE JAN 20 1968 FLIGHT TIME 204.00 LAUNCH DATE JUN 30 1967 DISTANCE 584.565 RELIDERINIC CONIC UISTANCE 284.707

RELIDERINIC UISTANCE 284.707

RELIDERINIC CONIC UISTANCE 284.707

RELIDERINIC CONIC UISTANCE 284.707

RELIDERINIC CONIC UISTANCE 284.707 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 35.417 VHL 5.951 DLA -29.95 RAL 227.53 RAD 6568.4 VEL 12.521 PTH 2.27 VHP 9.966 DPA -4.52 RAP 209.64 ECC 1.5829 C3 35.417 VHL 5.951 DLA -29.95 RAL 227.53 RAD 6568.4 VEL 12.521 PTH 2.27 VHP 9.966 DPA -4.52 RAP 209.64 ECC 1.5829

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 100.18 15 23 18 766.53 16.85 313.80 105.83 115.14 12 59 21 700.7 20.08 345.79

100.18 15 23 18 766.53 16.85 313.80 105.83 115.14 12 59 21 700.7 20.08 345.79

100.18 15 23 18 766.53 16.85 313.80 105.83 115.14 12 59 21 700.7 20.08 345.79

100.18 15 23 18 766.53 16.85 313.80 105.84 115.13 15 36 5 166.5 20.10 306.51 10.00 14 22 33 958.72 4.58 321.18 98.79 123.91 14 38 32 358.7 9.00 314.88 110.00 18 37 36 544.55 29.98 251.08 111.37 107.25 20 8 21 4844.5 32.04 242.47 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS CRT 1 DETERMINATION ACCORDS
T 2626.7 SR 455.8 SS 657.5
CRT -.8660 CRS .7993 CST -.9925
LSA 2735.2 MSA 240.9 SSA 14.0
EL1 2656.4 EL2 225.4 ALF 171.39 SGT 5887.8 SGR 461.7 SG3 152.6 TDE-2.2941 TRA 4.2585 TC3-2.2855 BAU 1.0822 RDE .4729 RRA -.0662 RC3 -.0189 FAU .01249 FDE -.6102 FRA 1.4631 FC3 -.3052 83P 18969 BDE 2.3423 BRA 4.2590 BC3 2.2856 FSP -515 RRT -.4754 RRF -.4645 RTF .9594 SG8 5905.9 R23 .0071 R13 -.9595 SG1 5891.9 SG2 405.9 THA 177.85

FLIGHT TIME 198.00

ARRIVAL DATE JAN 22 1968 FLIGHT TIME 206.00 LAUNCH DATE JUN 30 1967 DISTANCE 589.484 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.569 GAL 10.37 AZL 92.67 MCA 291.91 SMA 121.59 ECC .30535 INC 2.6733 VI 29.293
RP 108.05 LAP 2.48 LOP 209.47 VP 36.946 GAP 16.63 AZP 91.00 TAL 154.26 TAP 86.17 RCA 84.46 APO 158.72 V2 35.071
RC 180.257 GL -10.75 GP 4.51 ZAL 43.54 ZAP 175.16 ETS 66.00 ZAE 127.11 ETE 176.62 ZAC 54.22 ETC 11.89 CLP-178.22 PLANETOCENTRIC CONIC C3 39.536 VHL 6.288 DLA -29.45, RAL 229.79 RAD 6568.5 VEL 12.685 PTH 2.30 VMP 10.375 DPA -5.49 RAP 211.70 ECC 1.6507 C3 39.536 VHL 6.288 OLA -29.45, RAL 229.79 RAD 6568.5 VEL 12.685 PTM 2.30 VMP 10.375 DPA -5.49 RAP 211.70 ECC 1.6507 LNCM A7MTM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.54 12 59 58 1285.98 15.78 351.47 109.75 115.20 13 21 24 686.0 19.04 344.23 98.46 15 19 0 836.86 15.79 318.50 109.75 115.19 15 32 57 236.9 19.06 311.26 100.00 14 47 48 936.82 11.79 325.86 107.71 117.67 15 3 24 336.8 15.40 316.93 100.00 16 13 52 661.25 19.86 307.38 111.65 112.81 16 24 53 61.2 22.78 299.80 110.00 14 24 26 1010.43 2.61 323.88 102.18 124.10 14 41 16 410.4 7.07 317.63 110.00 18 53 43 5448.44 29.90 251.35 115.70 107.40 20 24 31 4848.4 31.98 242.76 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RTT -,4904 RRT -,4789 RTF .,9614 SGB 5902.0 R23, .0060 R13 -,9614 SGI 5888.5 SGZ 399.3 THA 177.80 ST 2546.8 SR 450.3 SS 639.0 CRT -.8498 CRS .7819 CST -.9928 TOE-2.2847 TRA 4.6666 TC3-2.0182 BAU 1.0668 ROE .4933 RRA -.0844 RC3 -.0139 FAU .01092 FDE -.5820 FRA 1.5173 FC3 -.2391 BSP 19028 LSA 2652,5 MSA 248.4 SSA 13.5 BDE 2.3374 BRA 4.6673 BC3 2.0182 FSP -497 EL1 2575.7 EL2 234.7 ALF 171.38 ARRIVAL DATE JAN 24 1968 FLIGHT TIME 208.00 LAUNCH DATE JUN 30 1967 **DISTANCE 594.254** HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.531 GAL 11.32 ATL 92.59 MCA 295.12 SMA 121.38 ECC .31635 INC 2.5916 V1 29.293
RP 108.09 LAP 2.35 LOP 212.69 VP 38.907 GAP 17.37 AZP 91.10 TAL 152.97 TAP 88.10 RCA 82.98 APO 159.77 VZ 35.058
RC 182.108 GL -9.79 GP 4.40 ZAL 41.73 ZAP 175.52 ETS 76.85 ZAE 126.93 ETE 176.68 ZAC 52.06 ETC 12.12 CLP-179.17 PLANETOCENTRIC CONIC C3 44.325 WHL 6.658 DLA -28.94 RAL 231.89 RAD 6568.7 VEL 12.872 PTH 2.34 VHP 10.819 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.75 13 25 57 1258.26 14.69 348.89 113.57 115.22 13 46 56 658.3 17.97 341.71 115.22 15 25 11 118.69 14 53 11 111.96 16 52 52 124.18 14 43 37 107.60 20 39 56 322.2 15 9 49 922.24 14.71 324.27 113.58 17.98 317.08 96.25 14 36 O 8.76 110.49 431.0 12.53 322.44 100.00 1031.01 329.21 23.60 24.7 297.40 100.00 16 42 28 624.72 20.80 305.08 116.37 320.40 462.8 5.09 110.00 14 25 54 1062.77 .61 326.62 105.50 29.79 251.73 119.94 4853.8 31.90 243.16 110.00 19 9 3 5453.77 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5875.8 SGR 454.1 SG3 141.6 RRT -.5057 RRF -.4936 RTF .9635 ST 2470.5 SR 443.2 SS 623.6 CRT -.8329 CRS .7644 CST -.9933 TOE-2.2752 TRA 5.1011 TC3-1.7656 BAU 1.0463 RDE .5137 RRA -.1043 RC3 -.0100 FAU .00939 FOE -.5564 FRA 1.5742 FC3 -.1834 BSP 19058 BOE 2.3325 BRA 5.1021 BC3 1.7656 FSP -480 SGB 5893.3 R23 .0049 R13 -.9635 SG1 5880.3 SG2 391.4 THA 177.75 LSA 2573.7 MSA 254.7 SSA 13.0 EL1 2498.2 EL2 242.5 ALF 171.42 ARRIVAL DATE JAN 26 1968 FLIGHT TIME 210.00 LAUNCH DATE JUN 30 1967 DISTANCE 598.848 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.493 GAL 12.34 AZL 92.51 MCA 298.33 SMA 121.17 ECC .32843 INC 2.5056 VI 29.293 RP 108.13 LAP 2.21 LOP 215.90 VP 36.869 GAP 18.19 AZP 91.19 TAL 151.73 TAP 90.06 RCA 81.37 APO 160.96 VZ 35.045 RC 183.942 GL -8.87 GP 4.31 ZAL 40.05 ZAP 175.68 ETS 89.31 ZAE 126.74 ETE 176.74 ZAC 49.93 ETC 12.40 CLP 179.86 PLANETOCENTRIC CONTC C3 49.910 VHL 7.065 DLA -28.42 RAL 233.85 RAD 6568.8 VEL 13.087 PTH 2.39 VHP 11.303 DPA -7.35 RAP 215.81 ECC 1.8214 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.20 14 24 14 508.9 115.19 15 4 29 451.0 119.32 14 46 54 511.1 111.46 17 15 45 4.1 124.16 14 45 35 515.5 107.85 20 54 35 4860.5 336.13 16.87 87.47 14 4 25 1188.94 92.53 14 46 58 1051.02 100.00 14 28 23 1111.11 13.59 343.27 117.30 16.89 333.19 117.31 326.04 13.60 113.40 9.98 327.02 333.68 6.11 100.00 24.05 296.03 21.32 303.77 120.79 100.00 17 5 41 604.08 3.09 323.16 1115.53 329.37 108.75 14 26 50 -1.41 110.00 31.80 243.65 29.65 252.20 124.08 110.00 19 23 35 5460.47 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5863.6 SGR 448.5 SG3 136.6 RRT -.5210 RRF -.5085 RTF ..9658 SGB 5880.7 R23 ..0037 R13 -.9658 SGI 5868.2 SG2 382.5 THA 177.71 ST 2397.9 SR 434.4 SS 610.9 CRT -.8150 CRS .7463 CST -.9937 TDE-2.2646 TRA 5.5679 TC3-1.5255 BAU 1.0179 RDE .5339 RRA -.1261 RC3 -.0072 FAU .00782 FDE -.5326 FRA 1.6355 FC3 -.1356 BSP 18999 BDE 2.3266 BRA 5.5693 BC3 1.5255 FSP -460 LSA 2498.8 MSA 259.8 SSA 12.5 EL1 2424.2 EL2 249.0 ALF 171.51 ARRIVAL DATE JAN 28 1968 FLIGHT TIME 212.00 LAUNCH DATE JUN 30 1967 **DISTANCE 603.232** HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 277.54 VL 25.457 GAL 13.46 AZL 92.41 MCA 301.54 SMA 120.96 ECC .34174 INC 2.4143 VI 29.293 RP 108.18 LAP 2.08 LOP 219.10 VP 36.831 GAP 19.08 AZP 91.26 TAL 150.54 TAP 92.08 RCA 79.62 APO 162.30 V2 35.032 RC 185.758 GL -7.98 GP 4.23 ZAL 38.48 ZAP 175.62 ETS 102.36 ZAE 126.51 ETE 176.79 ZAC 47.82 ETC 12.73 CLP 178.87 PLANETOCENTRIC CONIC C3 56.445 VHL 7.513 DLA -27.89 RAL 235.66 RAD 6569.0 VEL 13.334 PTH 2.44 VHP 11.834 OPA -8.23 RAP 217.86 ECC 1.9289 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.14 14 11 16 113.26 15 32 54 119.69 14 42 21 111.15 19 3 54 124.03 14 47 10 108.14 21 8 26 118.90 13 49 46 15 16 3 690.7 11.99 341.26 1290.69 8.42 348.12 90.00 410.2 19.62 324 . 22 1010.21 16.62 331.61 122.85 90.00 15 16 14 22 36 584.5 7.5A 331.15 1184.50 3.65 337.74 116.31 100.00 5279.7 24.31 273.11 5879.68 21.63 280.88 125.01 100.00 568.5 1.06 325.93 14 27 42 1168.51 -3.43 332.14 111.91 110.00 19 37 18 4858.4 31.67 244.24 110.00 5468.43 252.76 128.12 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5846.2 SGR 441.9 SG3 131.7 ST 2331.4 SR 424.4 SS 602.0 RRT -.5567 RRF -.5240 RTF .9682 SGB 5862.9 R23 .0027 R13 -.9682 LSA 2430.8 MSA 263.0 SSA 12.0 SG1 5891.1 SG2 372.5 THA 177.67 EL1 2556.1 EL2 253.4 ALF 171.65 TOE-2.2596 TRA 6.0624 TC3-1.3052 BAU .9850 RDE .5541 RRA -.1492 RC3 -.0053 FAU .00632 FOE -.5130 FRA 1.6994 FC3 -.0969 BSP 19037 BDE 2.3266 BRA 6.0642 BC3 1.3053 FSP -444

ARRIVAL DATE JAN 30 1968

EL1 2128.1 EL2 252.3 ALF 172.59

LAUNCH DATE JUN 30 1967

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DISTANCE 607.363
  HELLOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.421 GAL 14.66 A7L 92.32 MCA 304.74 SMA 120.76 ECC .35645 INC 2.3165 VI 29.293
RP 108.22 LAP 1.90 LOP 222.31 VP 36.794 GAP 20.05 A7P 91.32 TAL 149.42 TAP 94.16 RCA 77.72 APO 163.80 V2 35.019
RC 187.557 GL -7.13 GP 4.15 ZAL 37.04 ZAP 175.32 ETS 114.72 ZAE 126.25 ETE 176.84 ZAC 45.74 ETC 13.11 CLP 177.84
   PLANETOCENTRIC CONIC
    C3 64.125 VHL 8.000 OLA -27.35 RAL 237.32 RAD 6569.2 VEL 13.619 PTH 2.49 VHP 12.418 DPA -9.08 RAP 219.89 ECC 2.0553
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 34 47 1392.66 5.21 353.90 121.35 117.87 13 58 0 792.7 8.90 347.16 90.00 15 44 17 970.32 17.67 .329.15 127.31 112.49 16 0 28 370.3 20.57 321.68
         90.00 13 34 47 1392.66
90.00 15 44 17 970.32
                                                                                                             119.87 14 38 40 653.7
110.97 19 21 51 5272.5
123.80 14 48 24 621.5
108.47 21 21 30 4877.5
                                                                                                                                                                    5.28
                    14 17 47 - 1253.74
                                                                                          119.19
       100.00
                                                            1.31
                                                                          341.55
                                                                                         129.06
                                                                                                                                                5272.5
                                                                                                                                                                  24.46
       100.00
                      17 43 59 5872.52
                                                           21.81
                                                                          280.42
                    14 28 2 1221.52
19 50 13 5477.49
                                                                                          115.00
                                                                                                                                                621.5
                                                                                                                                                                    -.96
                                                          -5.44
                                                                           334.92
       110.00
                                                                                                                                                                  31.53
                                                           29.29
                                                                          253.39
                                                                                           132.03
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                              SGT 5824.4 SGR 434.1 SG3 127.2
RRT -.5524 RRF -.5398 RTF ..9708
SG8 5840.5 R23 ..0017 R13 -.9708
SG1 5829.3 SG2 361.5 THA 177.63
                                                                                                                                           ST 2269.7 SR 412.9 SS 596.1
CRT -.7796 CRS .7140 CST -.9949
    TDE-2.2580 TRA 6.5927 TC3-1.1006 BAU
                                                               .9435
    RDE .5741 RRA -.1740 RC3 -.0041 FAU .00480 FDE -.4962 FRA 1.7683 FC3 -.0648 BSP 19044
                                                                                                                                           LSA 2368.0 MSA 264.4 SSA 11.5
                                                                                                                                           EL1 2292.7 EL2 256.0 ALF 171.82
    BDE 2.3299 BRA 6:5950 BC3 1.1006 FSP -429
                                                                                                                                                        ARRIVAL DATE FEB 1 1968
                                                                                    FLIGHT TIME 216.00
                                                                                   DISTANCE 611.190
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 277.54 VL 25.386 GAL 15.98 AZL 92.21 HCA 307.94 SMA 120.57 ECC .37276 INC 2.2110 V1 29.293
RP 108.26 LAP 1.74 LOP 225.51 VP 36.757 GAP 21.12 AZP 91.36 TAL 148.38 TAP 96.32 RCA 75.62 APO 165.51 V2 35.005
RC 189.337 GL -6.32 GP 4.08 ZAL 35.72 ZAP 174.81 ETS 125.46 ZAE 125.95 ETE 176.89 ZAC 43.70 ETC 13.55 CLP 176.79
   PLANETOCENTRIC CONIC
                                                                                                                                                   -9.89 RAP 221.89 ECC 2.2046
    C3 73.197 VHL 8.555 DLA -26.81 RAL 238.83 RAD 6569.4 VEL 13.948 PTH
                                                                                                                  2.55 VHP 13.063 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 24 43 1477.44 2.49 358.65 123.93 118.22 13 49 20 877.4 6.25 351.98
                                                                           327.79
                                                                                           131.40
                                                                                                              112.04
                                                                                                                           16 22 14
                                                                                                                                                  348.4
                                                                                                                                                                   21.07
         90.00
                     16 6 25
                                       948.38
                                                            18.24
                                                                                                              119.88 14 35 27
110.88 19 38 11
123.46 14 49 14
108.83 21 33 47
                                                                                                                                                  720.0
                                                                                                                                                                    3.05
                                                                                           122.02
       100.00
                      14 13 27
                                     1320.02
                                                             -.94
                                                                           345.18
                    18 0 22 5869.07
14 27 59 1274.39
                                                          21.89
                                                                           280.20
                                                                                         132.93
                                                                                                                                                5269.1
                                                                                                                                                                  24.53
                                                                                                                                                                                 272.40
       100.00
                                                                           337.71
                                                                                                                                                  674.4
                                                                                                                                                                   -2.98
                                                           -7.44
                                                                                          118.01
       110.00
                                                                                                                                                4887.5
                                                                                                                                                                   31.36
                                                                           254.09
                                                                                           135.80
       110.00
                     20 2 19
                                      5487.47
                                                           29.07
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                               RRT - 5680 RRF - 5557 RTF . 9736
SGB 5814.2 R23 .0008 R13 - .9736
SGI 5803.7 SGZ 349.6 THA 177.61
    TOE-2.2606 TRA 7.1644 TC3 -.9112 BAU .8917
                                                                                                                                           ST 2212.5 SR 400.2 SS 593.4
CRT -.7620 CRS .6991 CST -.9956
    RDE .5938 RRA -.2004 RC3 -.0037 FAU .00324
                                                                                                                                           LSA 2310.3 MSA 264.1 SSA 11.0
    FDE -.4821 FRA 1.8438 FC3 -.0383 BSP 19025
                                                                                                                                           EL1 2233.7 EL2 256.7 ALF 172.05
    BOE 2.3373 BRA 7.1672 BC3 .9112 FSP -414
                                                                                                                                                       ARRIVAL DATE FEB 3 1968
                                                                                    FLIGHT TIME 218.00
LAUNCH DATE JUN 30 1967
                                                                                   DISTANCE 614.646
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.353 GAL 17.42 AZL 92.10 MCA 311.14 SMA 120.38 ECC .39089 INC 2.0959 V1 29.293 RP 108.30 LAP 1.58 LOP 228.70 VP 36.721 GAP 22.32 AZP 91.38 TAL 147.43 TAP 98.57 RCA 73.32 APO 167.44 V2 34.992 RC 191.100 GL -5.54 GP 4.01 ZAL 34.54 ZAP 174.11 ETS 134.27 ZAE 125.60 ETE 176.93 ZAC 41.72 ETC 14.06 CLP 175.69
   PLANETOCENTRIC CONIC
    C3 83.971 VHL 9.164 DLA -26.27 RAL 240.19 RAD 6569.6 VEL 14.329 PTH 2.61 VHP 13.781 DPA -10.67 RAP 223.87 ECC 2.3819
    C3 83.971 VHL 9.164 OLA -26.27 RAL 240.19 RAO 6569.6 VEL 14.329 PTH 2.61 VMP 13.781 OPA -10.67 RAP 223.87 ECC 2.3819 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 16 43 1553.99 .03 2.92 126.51 118.32 13 42 37 954.0 3.81 356.28 90.00 16 25 16 935.02 18.58 326.96 135.24 111.76 16 40 51 335.0 21.37 319.40 100.00 14 9 22 1383.96 -3.10 348.69 124.77 119.75 14 32 25 784.0 .88 342.17 100.00 18 15 19 5868.32 21.91 280.15 136.62 110.86 19 53 7 5268.3 24.55 272.35 110.00 14 27 32 1326.92 -9.40 340.52 120.92 123.02 14 49 39 726.9 -4.98 334.21 110.00 20 13 38 5498.12 28.84 254.83 139.42 109.21 21 45 16 4898.1 31.18 246.41
                      20 13 38
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 2158.9 SR 386.3 SS 593.8
CRT -.7445 CRS .6847 CST -.9962
                                                                               SGT 5769.5 SGR 415.1 SG3 118.8
RRT -.5835 RRF -.5715 RTF .9763
    TDE-2.2661 TRA 7.7844 TC3 -.7356 BAU .8258
    RDE .6130 RRA -.2263 RC3 -.0039 FAU .00156
FDE -.4700 FRA 1.9260 FC3 -.0161 BSP 18923
                                                                                                                                          LSA 2257.0 MSA 262,1 SSA 10.5
EL1 2178.3 EL2 255.6 ALF 172.31
                                                                               SGB 5784.4 R23 -.0002 R13 -.9763
SGI 5774.6 SGZ 336.8 THA 177.59
    BDE 2.3476 BRA 7.7877 BC3 .7356 FSP
                                                              - 398
                                                                                                                                                        ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUN 30 1967
                                                                                    FLIGHT TIME 220.00
                                                                                    DISTANCE 617.642
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 277.54 VL 25.321 GAL 19.01 TXL 91.97 HCA 314.34 SNA 120.20 ECC .41114 INC 1.9691 VI 29.293 RP 108.34 LAP 1.41 LOP 231.90 VP 36.687 GAP 23.65 AZP 91.38 TAL 146.60 TAP 100.94 RCA 70.78 APO 169.62 V2 34.979 RC 192.846 GL -4.79 GP 3.95 ZAL 33.49 ZAP 173.26 ETS 141.33 ZAE 125.19 ETE 176.98 ZAC 39.79 ETC 14.63 CLP 174.53
   PLANETOCENTRIC CONIC
    C3 96.849 VHL 9.841 DLA -25.73 RAL 241.40 RAD 6569.9 VEL 14.771 PTH 2.67 VHP 14.582 DPA -11.40 RAP 225.81 ECC 2.5939
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           118.23 13 36 49
111.59 16 57 18
                                                                                        129.04
                                                                                                                                                1025.3
                                                                                                                                                                     1.52
         90.00 13 9 44 1625.33
                                                            -2.28
                                                                             6.90
                                                                                                                                                  326.8
                                                                                                                                                                   21.55
                      16 41 51
                                         926.76
                                                            18.78
                                                                            326.44
                                                                                            138.84
         90.00
                                                                                                              119.48 14 29 24 845.9
110.89 20 6 47 5269.5
122.47 14 49 37 779.0
109.60 21 55 56 4909.2
                                                                                                                                                                    -1.22
                                                                            352.11
                                                                                            127.43
                     14 5 18
                                      1445.89
                                                            -5.19
        100.00
                                                                                                                                                                   24.53
                                                            21.88
                                                                            280.22
                                                                                            140.12
                       18 28 58
                                        5869.48
        100.00
                                                                                                                                                                   -6.95-
                                                                                                                                                                                   336.95
                                                                            343.33
                      14 26 38
                                     1378.96
                                                         -11.31
                                                                                            123.72
        110.00
                                                                                                                                                                   30.98
                                                                                            142.86
                      20 24 7
                                        5509.17
                                                           26.59
                                                                           255.59
        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 5735.0 SGR 403.9 SG3 114.9

RRT -.5989 RRF -.5874 RTF .9791

SGB 5749.3 R23 -.0010 R13 -.9791

SGI 5740.2 SG2 323.2 THA 177.58
                                                                                                                                           ST 2110.5 SR 371.4 55 597.9
CRT -.7286 CRS .6727 CST -.9968
     TOE-2.2840 TRA 8.4515 TC3 -.5771 BAU .7472
     RDE .6322 RRA -.2572 RC3 -.0044 FAU-.00017
                                                                                                                                           LSA 2209.8 MSA 258.0 SSA 10.0
     FOE -.4624 FRA 2.0159 FC3 .0016 BSP 18907
BOE 2.3699 BRA 8.4554 BC3 .5771 FSP -385
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FLIGHT TIME 214.00

ARRIVAL DATE SEP 9 1967

LAUNCH DATE JUL 1 1967

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DISTANCE 172.622
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 24.768 GAL -5.25 A7L 93.53 MCA 73.41 SMA 117.27 ECC .30953 INC 3.5254 VI 29.292
RP 108.76 LAP -3.38 LOP 351.88 VP 36.176 GAP -17.56 AZP 91.01 TAL 191.93 TAP 265.35 RCA 80.97 APO 153.57 VZ 34.842
RC 44.820 GL -16.23 GP -4.26 ZAL 115.06 ZAP 4.67 ETS 113.87 ZAE 155.42 ETE 18.05 ZAC 92.60 ETC 13.64 CLP 1.92
    PLANETOCENTRIC CONIC
     C3 29.434 VHL 5.425 OLA -8.07 RAL 157.51 RAD 6568.2 VEL 12.280 PTH 2.21 VHP 10.796 OPA
                                                                                                                                                                    1.66 RAP 173.93 ECC 1.4844
    C3 29.434 VHL 5.425 OLA -8.07 RAL 157.51 RAD 6568.2 VEL 12.280 PTH 2.21 VHP 10.796 DPA 1.66 RAP 173.93 ECC 1.4844 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG 90.00 4 19 5 2056.08 -15.43 31.69 23.59 114.04 4 53 21 1456.1 -12.06 24.64 90.00 14 15 21 5206.04 26.20 233.68 28.21 78.86 15 42 7 4606.0 24.40 225.47 100.00 5 36 31 1806.24 -16.60 12.76 23.03 115.22 6 6 38 1206.2 -13.07 5.75 100.00 15 40 35 4931.11 27.46 213.16 27.92 77.70 17 2 46 4331.1 25.49 204.92 110.00 6 39 52 1620.42 -19.70 357.01 21.38 118.52 7 2 53 1020.4 -15.74 350.13 110.00 16 57 44 4689.70 30.83 193.88 26.96 74.46 18 15 53 4089.7 28.40 185.53
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 733.4 SGR 425.1 SG3 78.6
RRT -. 0848 RRF . 0965 RTF -. 6641
                                                                                                                                                          ST 384.8 SR 391.8 SS 284.5
CRT -.8567 CRS -.9832 CST .9270
     TDE .3315 TRA -.4986 TC3 .3355 BAU .1357
RDE -.3686 RRA -.1382 RC3 .0796 FAU .02683
                                                                                                                                                          LSA 600.0 MSA 149.1 SSA 19.8
EL1 529.2 EL2 147.0 ALF 134.40
     FDE -.2875 FRA .0443 FC3 -.7892 BSP 1968
BDE .4957 BRA .5174 BC3 .3448 FSP -183
                                                                                        SG8 847.7 R23 -.0122 R13 .6652
                                                                                        SG1 734.8 SG2 422.8 THA 175.79
                                                                                                                                                                         ARRIVAL DATE SEP 11 1967
                                                                                             FLIGHT TIME 72.00
LAUNCH DATE JUL 1 1967
                                                                                             DISTANCE 179.363
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 25.046 GAL -5.25 AZL 93.45 MCA 76.59 SMA 118.72 ECC .29451 INC 3.4497 V1 29.292
RP 108.74 LAP -3.36 LOP 355.06 VP 36.375 GAP -16.45 AZP 90.80 TAL 192.86 TAP 269.44 RCA 83.76 APO 153.68 V2 34.851
RC 45.690 GL -16.79 GP -4.51 ZAL 116.60 ZAP 4.51 ETS 87.63 ZAE 153.72 ETE 15.91 ZAC 91.59 ETC 13.64 CLP -.15
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

'C3 26.994 VHL 5.196 DLA -7.96 RAL 155.77 RAD 6568.1 VEL 12.181 PTH 2.19 VHP 10.170 DPA .98 RAP 174.84 ECC 1.4443

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 4 11 18 2037.98 -14.93 30.60 20.47 114.34 4 45 16 1438.0 -11.52 23.58

90.00 14 9 15 5180.98 25.86 231.92 24.83 78.05 15 35 36 4581.0 23.95 223.77

100.00 5 28 48 1787.96 -16.07 11.67 19.92 115.55 5 58 36 1188.0 -12.50 4.69

100.00 15 34 26 4906.23 27.09 211.41 24.52 76.85 16 56 13 4306.2 25.01 203.23

110.00 6 28 16 1601.73 -19.09 355.90 18.29 118.91 6 54 58 1001.7 -15.09 349.07

110.00 16 51 27 4665.22 30.37 192.12 23.53 73.51 18 9 13 4065.2 27.82 183.86
                                                                                                                          76.85 16 56 13
118.91 6 54 58
73.51 18 9 13
                        16 51 27
                                           4665.22
                                                                 30.37
                                                                                   192.12
                                                                                                       23.53
                                                                                                                                                                4065.2
                                                                                                                                                                                    27.82
        110.00
    DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                                                          ST 397.7 SR 395.2 SS 296.6

CRT -.8676 CRS -.9877 CST .9232

LSA 616.4 MSA 148.0 SSA 20.9

EL1 541.8 EL2 144.3 ALF 135.21
                                                                                        SGT 761.4 SGR 427.5 SG3 88.1
RRT -.0974 RRF .1123 RTF -.6823
     TDE .3310 TRA -.4717 TC3 .3975 BAU .1463
RDE -.3561 RRA -.1318 RC3 .0805 FAU .02808
     FOE -.3050 FRA .0162 FC3 -.9263 BSP 2059
BOE .4861 BRA .4898 BC3 .4055 FSP -210
                                                                                        SGB 873.2 R23 -.0159 R13 .6836
SG1 763.0 SG2 424.5 THA 175.46
                                                                                                                                                                        ARRIVAL DATE SEP 13 1967
                                                                                             FLIGHT TIME 74.00
LAUNCH DATE JUL 1 1967
                                                                                             DISTANCE 186.114
    MELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 278.50 VL 25.299 GAL -5.27 AZL 93.38 HCA 79.76 SMA 120.09 ECC .28084 INC 3.3758 V1 29.292
RP 108.71 LAP -3.32 LOP 358.24 VP 36.559 GAP -15.40 AZP 90.60 TAL 193.83 TAP 273.59 RCA 86.36 APO 153.82 VZ 34.860
RC 46.700 GL -17.28 GP -4.78 ZAL 118.19 ZAP 5.29 ETS 64.01 ZAE 152.19 ETE 14.00 ZAC 90.64 ETC 13.66 CLP -2.27
    PLANETOCENTRIC CONIC
     C3 24.939 VML 4.994 DLA -7.78 RAL 154.00 RAD 6568.0 VEL 12.096 PTH 2.17 VMP 9.575 DPA
                                                                                                                                                                       .31 RAP 175.69 ECC 1.4104
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        4 2 49 2024.23
14 3 37 5155.55
5 20 24 1773.91
15 28 43 4881.10
6 20 6 1587.02
16 45 31 4640.76
                                                                                                   17,47
                                                                                                                      114.57 4 36 33
                                                                                                                                                         1424.2 -11.11 22.78
                                                                -14.54
                                                                                   29.78
          90.00
                                                                                                       21.54
                                                                                                                            77.23 15 29 33
                                                                                                                                                                4555.5
                                                                                                                                                                                    23.48
                                                                                                                                                                                                     222.06
                                                                                   230.15
                                                                 25.49
          90.00
                                                                                                                                                                               -12.06
                                                                                                                         115.79
                                                                                                                                        5 49 58
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                                                                                    10.83
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                                                                -15.65
         100.00
                                                                                                                           76.01 16 50 4
119.21 6 46 33
72.58 18 2 51
                                                                                                                                                                4281.1
                                                                                                                                                                                    24.50
                                                                                                                                                                                                      201.53
                                                                26.69
                                                                                   209.65
                                                                                                       21.22
         100.00
                                                                                                                                                                                                      348.25
                                                               -18.60
                                                                                   355.04
                                                                                                       15.32
                                                                                                                          119.21
                                                                                                                                                                 987.0
                                                                                                                                                                                  -14.57
        110.00
                                                                                                                                                                                                      182.21
                                                                                   190.38
                                                                                                                                                                4040.8
                                                                                                                                                                                   27.22
                                                              29.89
                                                                                                       20.20
        110.00
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SCT 786.4 SGR 429.2 SG3 98.8

RRT -.1142 RRF .1307 RTF -.6999

SGB 895.9 R23 -.0179 R13 .7016

SG1 788.5 SG2 425.2 THA 174.97
                                                                                                                                                         ST 408.9 SR 398.1 SS 308.4

CRT -.8789 CRS -.9912 CST .9195

LSA 631.6 MSA 146.4 SSA 22.0
     TDE .3300 TRA -.4424 TC3 .4616 BAU .1562
RDE -.3449 RRA -.1262 RC3 .0792 FAU .03120
     FOE - 3237 FRA - .0165 FC3-1.0830 BSP 2187
                                                                                                                                                          EL1 553.2 EL2 140.4 ALF 135.87
     BOE .4774 BRA .4600 BC3 .4684 FSP
                                                                                             FLIGHT TIME 76.00
                                                                                                                                                                         ARRIVAL DATE SEP 15 1967
LAUNCH DATE JUL 1 1967
                                                                                             DISTANCE 192.871
   HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 278.50 VL 25.529 GAL -5.31 AZL 93.30 MCA 82.93 SMA 121.37 ECC .26845 INC 3.3034 V1 29.292
RP 108.68 LAP -3.28 LOP 1.42 VP 36.728 GAP -14.39 AZP 90.41 TAL 194.85 TAP 277.78 RCA 88.79 APO 153.96 VZ 34.870
RC 47.841 GL -17.70 GP -5.08 ZAL 119.82 ZAP 6.75 ETS 48.08 ZAE 150.86 ETE 12.25 ZAC 89.76 ETC 13.68 CLP -4.45
    PLANETOCENTRIC CONIC
     C3 23.209 VHL 4.818 DLA -7.53 RAL 152.22 RAD 6567.9 VEL 12.024 PTH 2.15 VHP 9.010 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  14.59
                        3 53 46 2014.69
13 58 30 5129.86
5 11 30 1763.95
15 23 28 4855.84
                                                                                                                        114.72
                                                                                                                                           4 27 21
                                                                                                                                                              1414.7
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                                                                 -14.27
                                                                                    29.21
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          90.00
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          90.00
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         100.00
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119.42 6 37 45
71.69 17 56 55
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                                                                                   207.89
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         100.00
                                         1576.14
                                                                                                                                                                  976.1
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                                                               -18.24
                                                                                   354.40
                                                                                                      12.48
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         110.00
                           6 11 29
                         16 39 58
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         110.00
                                            4616.41
                                                                29.38
                                                                                                        16.99
    DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                        9GT 811.8 SGR 430.4 SG3 111.0
RRT -.1320 RRF .1520 RTF -.7157
                                                                                                                                                           ST 418.2 SR 400.8 SS 319.8
CRT -.8888 CRS -.9937 CST .9149
     TOE .3282 TRA -.4144 TC3 .5286 BAU .1657 RDE -.3350 RRA -.1214 RC3 .0754 FAU .03384
     FOE -.3350 RRA -.1214 NC3 .0/79 FRA 10000-
FOE -.3437 FRA -.0547 FC3-1.2622 BSP 2291
                                                                                                                                                         LSA 645.1 MSA 145.3 SSA 23.1
EL1 562.9 EL2 136.4 ALF 136.37
                                                                                       SG8 918.8 R23 -. 0220 R13 .7177
                                                                                        SG1 814.5 SG2 425.2 THA 174.49
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FLIGHT TIME 70.00

ARRIVAL DATE SEP 17 1967

EL1 583.4 EL2 118.4 ALF 136.89

LAUNCH DATE JUL 1 1967

FLIGHT TIME 78.00

ARRIVAL DATE SEP 25 1967

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FLIGHT TIME 86.00
LAUNCH DATE JUL 1 1967
                                                                               DISTANCE 226.612
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.388 GAL -5.55 AZL 92.95 HCA 98.84 SMA 126.54 ECC .22312 INC 2.948 VI 29.292
RP 108.50 LAP -2.91 LOP 17.34 VP 37.383 GAP -9.99 AZP 89.55 TAL 200.15 TAP 298.99 RCA 98.30 APO 154.77 V2 34.926
RC 55.163 GL -18.61 GP -7.23 ZAL 127.71 ZAP 18.17 ETS 21.91 ZAE 147.60 ETE 4.50 ZAC 86.78 ETC 13.95 CLP -16.71
   PLANETOCENTRIC CONIC
    C3 17.898 VHL 4.231 OLA -5.43 RAL 144.09 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 6.595 DPA -3.82 RAP 178.90 ECC 1.2946 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                      -10.95
                    3 5 14 2019.15
13 42 11 5001.35
4 24 1 1765.02
15 6 5 4730.71
5 26 23 1569.76
16 20 12 4498.74
                                                                                                                                                                         22.49
                                                                                          2.71
                                                                                                      114.65
                                                                                                                      3 38 53
                                                                                                                                     1419.1
                                                                       29.47
         90.00
                                                       -14.40
                                                                                                                     15 5 32
                                                                                                                                        4401.3
                                                                                                                                                        20.17
                                                                                                                                                                         211.97
                                                       22.76
                                                                                          5.05
                                                                                                         72.68
                                                                       219.69
         90.00
                                                                                          2.22
                                                                                                        115.95
                                                                                                                       4 53 26
                                                                                                                                        1165.0
                                                                                                                                                        -11.70
                                                                                                                                                                           3.37
                                                                        10.30
       100.00
                                                      -15.39
                                                                                                                                        4130.7
                                                                                                                                                        21.04
                                                                                                                                                                         191.71
                                                                                                         71.36 16 24 56
                                                                                          4.68
       100.00
                                                       23.80
                                                                       199.41
                                                                                                        119.55 5 52 33 969.8
67,69 17 35 11 3898.7
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                                                                                                                                                                         347.28
                                                                       354.03
                                                                                           .77
                                                      -18.03
       110.00
                                                                                                                                                       23.33
                                                                                                                                                                        173.01
                                                                       180.65
                                                                                          3.53
                                                       26.59
       110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 430.1 SR 408.9 SS 371.5

CRT -.9253 CRS -.9890 CST .8795

LSA 683.5 MSA 148.9 SSA 27.8

EL1 582.3 EL2 114.5 ALF 136.56
                                                                           SGT 905.8 SGR 434.2 SG3 201.1
RRT -.2738 RRF .3227 RTF -.7712
     TOE .3054 TRA -.2842 TC3 .8356 BAU .1999
    ROE -. 3000 RRA -.1126 RC3 .0020 FAU .05349
                                                                           SG8 1004.5 R23 -.0581 R13 .7777
SG1 915.6 SG2 413.2 THA 170.59
    FOE -.4672 FRA -.3488 FC3-2.5872 BSP 2715
BOE .4281 BRA .3057 BC3 .8356 FSP -543
                                                                                                                                                ARRIVAL DATE SEP 27 1967
LAUNCH DATE JUL 1 1967
                                                                                FLIGHT TIME 88.00
                                                                               DISTANCE 233.329
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.511 GAL -5.60 A7L 92.87 MCA 102.03 SMA 127.32 ECC .21684 INC 2.8730 V1 29.292 RP 108.46 LAP -2.81 LOP 20.54 VP 37.481 GAP -9.21 A7P 89.40 TAL 201.16 TAP 303.18 RCA 99.71 APO 154.93 V2 34.938 RC 56.885 GL -18.55 GP -7.82 TAL 129.11 TAP 20.98 ETS 20.14 TAE 147.71 ETE 2.86 TAC 86.58 ETC 14.02 CLP -19.53
   PLANETOCENTRIC CONIC
    C3 17.274 VML 4.156 DLA -4.89 RAL 142.75 RAD 6567.7 VEL 11.775 PTH 2.08 VMP 6.190 DPA -4.51 RAP 178.99 ECC 1.2843 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 48 2027.82 -14.64 29.99 .90 114.51 3 29 36 1427.8 -11.21 22.99 90.00 13 40 54 4976.19 22.24 218.02 2.96 72.00 15 3 50 4376.2 19.57 210.37 100.00 4 14 50 1772.85 -15.62 10.77 .42 115.81 4 44 23 1172.8 -12.02 3.82
                                                                                                                    16 22 59
                                                                                                                                                                          190.17
                     15 4 33 4706.39
                                                                       197.81
                                                                                          2.59
                                                                                                          70.68
                                                                                                                                         4106.4
                                                                                                                                                          20.41
        100.00
                                                       23.26
                                                                                                                                                                          347.62
                    5 17 48 1575.72
16 18 4 4476.29
                                                                                       359.00
                                                                                                         119.43
                                                                                                                    5 44 4
                                                                                                                                         975.7
                                                                                                                                                        -14.17
                                                                       354.38
                                                      -18.23
       110.00
                                                                                                          66.99 17 32 40
                                                                                                                                         3676.3
                                                                                                                                                         22.66
                                                                                                                                                                          171.61
                                                                       179.17
                                                       26.01
                                                                                         1.42
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 423.9 SR 409.5 SS 380.6

CRT -,9286 CRS -,9849 CST .8683

LSA 684.3 MSA 152.5 SSA 28.2

EL1 578.8 EL2 111.3 ALF 136.06
                                                                           SCT 912.3 SGR 437.0 SC3 226.9
RRT -.3139 RRF .3733 RTF -.7759
SGB 1011.5 R23 -.0718 R13 .7845
     TDE .2967 TRA -.2633 TC3 .8777 BAU .2028
     ROE -.2951 RRA -.1142 RC3 -.0269 FAU .05913
    FOE -.4966 FRA -.4334 FC3-2.9637 BSP 2760
BDE .4184 BRA .2870 BC3 .8781 FSP -622
                                                                           SG1 925.1 SG2 409.1 THA 169.34
                                                                                                                                                ARRIVAL DATE SEP 29 1967
                                                                               FLIGHT TIME 90.00
LAUNCH DATE JUL I 1967
                                                                               DISTANCE 240.030
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.620 GAL -5.65 AZL 92.80 MCA 105.21 SMA 128.03 ECC .21131 INC 2.7978 V1 29.292
RP 108.43 LAP -2.70 LOP 23.73 VP 37.570 GAP -8.47 AZP 89.27 TAL 202.11 TAP 307.32 RCA 100.98 APO 155.09 V2 34.951
RC 58.673 GL -18.42 GP -8.49 ZAL 130.43 ZAP 23.98 ETS 18.75 ZAE 148.08 ETE 1.09 ZAC 86.55 ETC 14.08 CLP -22.51
    PLANETOCENTRIC CONIC
    C3 16.738 VHL 4.091 DLA -4.33 RAL 141.53 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 5.810 DPA -5.20 RAP 178.90 ECC 1.2755
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    359.28
                                                                                                     114.34 3 20 39
71.35 15 2 48
115.65 4 35 42
                                                                                                                                     1438.2
                       2 46 41 2038.24
13 40 17 4951.27
                                                       -14.94
                                                                        30.62
         90.00
                                                                                                                                         4351.3
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                                                       21.70
         90.00
                     13 40 17
                                                                       216.39
                                                                                         1.07
                                                                                                                                         1182.4
                                                                                                                                                      -12.32
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                                   1782.39
4682.35
                                                                        11.33
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        100.00
                       4 6 0
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119.28 5 35 58
66.32 17 30 48
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       100.00
                     15 3 39
                                                       22.71
                                                                       196.23
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                                                                                                                                         983.3
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                       5 9 35 1583.32
16 16 34 4454.18
                                                       -18.48
                                                                       354.82
                                                                                       357.41
       110.00
                                                                                                                                         3854.2
                                                                                                                                                          21.99
                                                                                                                                                                          170.25
                     16 16 34
                                                                       177.73
                                                                                      359.51
                                                       25.41
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 414.7 SR 409.9 SS 389.5

CRT -,9301 CR3 -,9800 CST .8549

LSA 682.8 MSA 157.3 SSA 28.5

EL1 572.8 EL2 109.0 ALF 135.36
                                                                           RET -.3576 RRF .4501 RTF -.7776
SGB 1013.8 R23 -.0893 R13 .7894
SG1 929.3 SG2 405.1 THA 167.83
     TOE .2864 TRA -.2452 TC3 .9089 BAU .2039
     ROE - . 2906 RRA - . 1172 RC3 - . 0619 FAU . 06549
    FOE -.5275 FRA -.5281 FC3-3.3875 BSP 2779
BDE .4079 BRA .2718 BC3 .9110 FSP -711
     BOE .4079 BRA .2718 BC3 .9110 FSP
                                                                                                                                                 ARRIVAL DATE OCT 1 1967
LAUNCH DATE JUL 1 1967
                                                                                FLIGHT TIME 92.00
                                                                                DISTANCE 246.712
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.716 GAL -5.69 AZL 92.72 MCA 108.41 SMA 128.67 ECC .20647 INC 2.7201 V1 29.292 RP 108.39 LAP -2.58 LOP 26.92 VP 37.650 GAP -7.76 AZP 89.14 TAL 203.00 TAP 311.40 RCA 102.10 APO 155.24 V2 34.964 RC 60.521 GL -18.22 GP -9.24 ZAL 131.65 ZAP 27.17 ETS 17.61 ZAE 148.73 ETE 359.10 ZAC 86.71 ETC 14.12 CLP -25.66
    PLANETOCENTRIC CONIC
     C3 16.275 VHL 4.034 DLA -3.74 RAL 140.44 RAD 6567.7 VEL 11.733 PTH 2.07 VHP 5.455 DPA -5.90 RAP 178.62 ECC 1.2678
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                          114.14 3 12 .7
70.73 15 2 27
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                                   2050.11
4926.55
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                     13 40 20
                                                         21.16
                                                                        214.78
                                                                                       359.38
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                                                                                                                                          1193.4
                                                                                                                                                         -12.67
                      3 57 32 1793.36
15 3 26 4658.53
                                                                                                         115.45
                                                       -16.23
                                                                         11.99
                                                                                       357,39
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                     15 3 26
                                                         22.15
                                                                        194.69
                                                                                       358.99
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                                                                                                         119.10 5 28 18
65.69 17 29 34
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                                    1592.29
                                                                                                                                           992.3
                                                                                       356.01
                      5 1 46
                                                       -18.78
                                                                        355.35
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                                                                                                                                                        21.31
                                                                                                                                          3832.4
                                                                                       357.79
        110.00
                     16 15 42
                                      4432.36
                                                         24.80
                                                                        176.32
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 402.6 SR 409.9 SS 397.6
CRT -.9296 CRS -.9745 CST .8387
LSA 678.9 MSA 163.0 SSA 28.6
                                                                          SGT 905.2 SGR 449.8 SG3 288.6
RRT -.4037 RRF .4923 RTF -.7760
SGB 1010.7 R23 -.1111 R13 .7925
     TOE .2744 TRA -.2304 TC3 .9273 BAU .2030
     RDE -.2863 RRA -.1216 RC3 -.1038 FAU .07263
     FOE -.5589 FRA -.6329 FC3-3.8633 BSP 2780
BDE .3966 BRA .2606 BC3 .9331 FSP -812
                                                                           SG1 927.6 SG2 401.5 THA 165.98
                                                                                                                                   ELI 564.4 EL2 107.7 ALF 134.45
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LAUNCH DATE JUL 1 1967
                                                                                      FLIGHT TIME 94.00
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 253.375
     RL 152.09 LAL -.00 LOL 278.50 VL 26.801 GAL -5.72 ATL 92.64 MCA 111.60 SMA 129.24 ECC .20224 INC 2.6394 VI 29.292
RP 108.35 LAP -2.45 LOP 30.12 VP 37.722 GAP -7.07 AZP 89.03 TAL 203.81 TAP 315.41 RCA 103.10 APO 155.38 V2 34.977
RC 62.420 GL -17.96 GP -10.08 ZAL 132.78 ZAP 30.58 ETS 16.64 ZAE 149.64 ETE 356.83 ZAC 87.08 ETC 14.15 CLP -29.02
   PLANETOCENTRIC CONIC
    C3 15.868 VHL 3.983 OLA -3.14 RAL 139.49 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 5.125 DPA -6.60 RAP 178.13 ECC 1.2612

LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 29 37 2063.20 -15.63 32.12 356.61 113.92 3 4 0 1463.2 -12.27 25.06

90.00 13 41 3 4901.94 20.60 213.20 357.87 70.15 15 2 45 4301.9 17.70 205.72

100.00 3 49 30 1805.53 -16.58 12.72 356.16 115.23 4 19 35 1205.5 -13.05 5.71

100.00 15 3 52 4654.84 21.57 193.16 357.88 68.79 16 21 7 4034.8 18.50 185.72

110.00 4 54 23 1602.41 -19.11 355.94 554.80 118.89 5 21 5 1002.4 -15.11 349.11

110.00 16 15 28 4410.72 24.19 174.94 356.27 63.08 17 28.59 3810.7 20.63 167.61
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 892.0 SCR 462.5 SG3 325.6
RRT -.4528 RRF .5598 RTF -.7718
SCB 1004.8 R23 -.1369 R13 .7953
                                                                                                                                             ST 389.6 SR 409.9 SS 406.6

CRT -.9276 CRS -.9686 CST .8204

LSA 675.0 MSA 169.5 SSA 28.5
     TOE .2624 TRA -.2182 TC3 .9347 BAU
                                                                .2010
     ROE -.2824 RRA -.1277 RC3 -.1540 FAU .08071
    FOE -.5928 FRA -.7504 FC3-4.4031 BSP 2791
BOE .3855 BRA .2528 BC3 .9473 FSP -931
                                                                                 SG1 922.3 SG2 398.9 THA 163.65
                                                                                                                                              EL1 555.2 EL2 107.4 ALF 133.43
LAUNCH DATE JUL 1 1967
                                                                                      FLIGHT TIME 96.00
                                                                                                                                                           ARRIVAL DATE OCT 5 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 260.017
    RL 152.09 LAL -.00 LOL 278.50 VL 26.874 GAL -5.75 AZL 92.56 MCA 114.80 SMA 129.74 ECC .19857 INC 2.5551 V1 29.292
RP 108.31 LAP -2.32 LOP 33.31 VP 37.786 GAP -6.42 AZP 88.93 TAL 204.54 TAP 319.34 RCA 103.97 APO 155.50 VZ 34.990
RC 64.367 GL -17.62 GP -11.02 ZAL 133.80 ZAP 34.21 ETS 15.80 ZAE 150.81 ETE 354.14 ZAC 87.68 ETC 14.13 CLP -32.60
   PLANETOCENTRIC CONIC
    C3 15.305 VHL 3.938 DLA -2.52 RAL 138.67 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 4.821 DPA -7.30 RAP 177.39 ECC 1.2552 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 21 44 2077.35
13 42 27 4877.32
3 41 54 1818.73
15 4 58 4611.17
4 47 27 1613.52
16 15 54 4389.15
                                                                                                               -12.66
         90.00
                                                           -16.02
                                                                             32.98
                                                                                            355.55
                                                                                                                                                  1477.3
                                                                                                                                                                                       25.89
         90.00
                                                            20.02
                                                                            211.62
                                                                                              356.54
                                                                                                                                                   4277.3
                                                                                                                                                                     17.06
                                                                                                                                                                                      204.20
        100.00
                                                           -16.96
                                                                              13.51
                                                                                              355.10
                                                                                                                                                   1218.7
                                                                                                                                                                     -13.45
                                                                                                                                                                                        6.48
        100.00
                                                            20.96
                                                                            191.65
                                                                                              356.14
                                                                                                                                                   4011.2
                                                                                                                                                                    17.84
                                                                                                                                                                                       184.27
                                                          -19.48
       110.00
                                                                             356.60
                                                                                              353.76
                                                                                                                                                   1013.5
                                                                                                                                                                   -15.50
                                                                                                                                                                                      349.74
       110.00
                      16 15 54
                                       4389.15
                                                            23.57
                                                                             173.58
                                                                                             354.92
                                                                                                                                                   3789.2
                                                                                                                                                                     19.94
                                                                                                                                                                                      166.32
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 866.1 SGR 480.8 SG3 366.0
RRT -.4953 RRF .6281 RTF -.7594
     TOE .2470 TRA -.2121 TC3
                                                                                                                                              ST 371.8 SR 409.5 SS 413.3
CRT -.9212 CRS -.9625 CST .7955
                                              .9205 BAU .1958
     RDE -.2785 RRA -.1354 RC3 -.2129 FAU .08952
                                                                                 968 990.6 R23 -.1714 R13 .7947
SG1 906.7 SG2 399.0 THA 160.76
    FOE -.6240 FRA -.8753 FC3-4.9982 BSP 2740
BOE .3722 BRA .2516 BC3 .9448 FSP -1059
                                                                                                                                              LSA 666.9 MSA 176.8 SSA 28.4
ELI 542.2 EL2 109.3 ALF 132.00
                                                                                                                                                          ARRIVAL DATE OCT 7 1967
                                                                                     FLIGHT TIME 98.00
LAUNCH DATE JUL 1 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 266.636
    RL 152.09 LAL -.00 LOL 278.50 VL 26.938 GAL -5.77 AZL 92.47 MCA 118.00 SMA 130.17 ECC .19539 INC 2.4661 V1 29.292 RP 108.27 LAP -2.18 LOP 36.51 VP 37.843 GAP -5.78 AZP 88.84 TAL 205.19 TAP 323.18 RCA 104.74 APO 155.61 V2 35.003 RC 66.356 GL -17.22 GP -12.07 ZAL 134.73 ZAP 38.09 ETS 15.02 ZAE 152.22 ETE 350.89 ZAC 88.53 ETC 14.07 CLP -36.41
   PLANETOCENTRIC CONIC
     C3 15.174 VHL 3.895 OLA -1.87 RAL 138.00 RAD 6567.6 VEL 11.686 PTH 2.06 VHP 4.543 OPA -8.01 RAP 176.40 ECC 1.2497
     ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            -13.13
                     2 14 16 2092.45
13 44 32 4852.52
                                                                             33.89
                                                                                            354.66
                                                                                                                                               1492.4
                                                                                                                                                                                      26.78
         90.00
                                                           -16,43
         90.00
                                                            19.42
                                                                            210.05
                                                                                             355,39
                                                                                                                                                  4252.5
                                                                                                                                                                    16.39
                                                                                                                                                                                     202.69
                     3 34 44 1832.87
15 6 45 4587.34
4 40 59 1625.50
16 17 0 4367.47
                                                           -17.37
                                                                                             354.22
                                                                                                                                                  1232.9
                                                                                                                                                                   -13.89
                                                                                                                                                                                       7.30
        100.00
                                                                             14.37
                                                           20.37
                                                                           190.14
                                                                                             354.96
                                                                                                                                                  3987.3
                                                                                                                                                                    17.17
                                                                                                                                                                                     182.82
                                                                                                                                                                  -15.92
19.23
       110.00
                                                           -19.87
                                                                            357.31
                                                                                             352.90
                                                                                                                118.41
                                                                                                                               5 8 4
                                                                                                                                                   1025.5
                                                                                                                                                                                     350.41
                                                                                                                 63.92 17 29 47
                                                                                             553.75
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       110.00
                                                           22.92
                                                                            172.22
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 829.0 SGR 506.6 SG3 410.0
RRT -.5281 RRF .6949 RTF -.7379
SGB 971.5 R23 -.2130 R13 .7927
                                                                                                                                            ST 351.3 SR 408.8 SS 418.1
CRT -.9097 CRS -.9562 CST .7626
LSA 656.0 MSA 184.9 SSA 28.2
     TOE .2298 TRA -.2113 TC3 .8859 BAU .1886
    RDE -.2745 RRA -.1448 RC3 -.2819 FAU .09909
FDE -.6518 FRA-1.0076 FC3-5.6532 BSP 2660
     BOE .3580 BRA .2561 BC3 .9296 FSP -1199
                                                                                SG1 883.8 SG2 403.5 THA 157.08
                                                                                                                                             EL1 527.0 EL2 113.1 ALF 130.25
                                                                                                                                                           ARRIVAL DATE OCT 9 1967
LAUNCH DATE JUL 1 1967
                                                                                      FLIGHT TIME 100.00
                                                                                     DISTANCE 273.232
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.992 GAL -5.78 A7L 92.37 HCA 121.20 SMA 130.54 ECC .19266 INC 2.3717 V1 29.292
RP 108.22 LAP -2.03 LOP 39.71 VP 37.894 GAP -5.17 AZP 88.77 TAL 205.74 TAP 326.94 RCA 105.39 APO 155.69 V2 35.016
RC 68.382 GL -16.75 GP -13.24 ZAL 135.55 ZAP 42.23 ETS 14.26 ZAE 153.85 ETE 346.85 ZAC 89.65 ETC 13.95 CLP -40.48
   PLANETOCENTRIC CONIC
    C3 14.867 VHL 3.856 DLA -1.21 RAL 137.46 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 4.292 DPA -8.72 RAP 175.14 ECC 1.2447
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 11 2108.52 -16.86 34.88 353.93 113.09 2 42 20 1508.5 -13.59 27.73
                                                                                                             113.09 2 42 20
68.42 15 7 48
                                                                                                                                               1508.5
                     2 7 11 2108.52
13 47 21 4827.29
3 27 58 1847.94
                                                                                                                                                                -13.59
                                                            18.80
                                                                            208.46
                                                                                              354.40
                                                                                                                                                   4227.3
                                                                                                                                                                     15.70
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         90.00
                                                                                                                 114.42 3 58 46
67.09 16 25 18
118.12 5 2 14
63.36 17 31 12
                                                                                              353.50
                                                                                                                                                   1247.9
        100.00
                                                           -17.79
                                                                             15.28
                                                                                                                114.42
                                                                                                                                                                   -14.35
                                                                                                                                                                                        8.19
                                                                                                                                                   3963.1
                                                                                                                                                                     16.47
                                                                                                                                                                                      181.36
                      15 9 15
                                        4563.11
                                                            19.74
                                                                            188.63
                                                                                              353.99
        100.00
                        4 34 55
                                     1638.34
                                                                                              352.20
                                                                                                                                                   1038.3
                                                                                                                                                                    -16.36
                                                                                                                                                                                      351.14
                                                           -20.28
                                                                            358.08
                                                                                                                118.12
       110.00
       110.00
                      16 18 47
                                        4345.47
                                                            22.26
                                                                            170.86
                                                                                              352.74
                                                                                                                                                   3745.5
                                                                                                                                                                    18.50
                                                                                                                                                                                      163.74
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 783.7 SGR 542.3 SG3 458.2 ST 330.5 SR 408.1 SS 422.8 RRT -.5477 RRF .7581 RTF -.7056 CRT -.8928 CRS -.9503 CST . '20 SGB 953.1 R23 -.2570 R13 .7932 LSA 645.3 MSA 193.4 SSA 27.8 SG1 858.3 SG2 414.3 THA 152.26 EL1 511.5 EL2 118.8 ALF 128.31
     TOE .2125 TRA -.2149 TC3 .8329 BAU .1806
    ROE -.2705 RRA -.1563 RC3 -.3634 FAU .10953
FOE -.6785 FRA-1.1480 FC3-6.3783 8SP 2596
BOE .3440 BRA .2657 BC3 .9087 FSP -1358
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ARRIVAL DATE OCT 11 1967
                                                                              FLIGHT TIME 102.00
LAUNCH DATE JUL 1 1987
                                                                             DISTANCE 279.805
  HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.037 GAL -5.78 AZL 92.27 HCA 124.40 SMA 130.86 ECC .19032 INC 2.2706 V1 29.292 RP 108.18 LAP -1.87 LOP 42.92 VP 37.939 GAP -4.58 AZP 88.72 TAL 206.19 TAP 330.59 RCA 105.96 APO 155.76 V2 35.029 RC 70.443 GL -16.21 GP -14.54 ZAL 136.27 ZAP 46.62 ETS 13.48 ZAE 155.60 ETE 341.75 ZAC 91.03 ETC 13.73 CLP -44.81
   PLANETOCENTRIC CONIC
    C3 14.574 VHL 3.818 DLA -.51 RAL 137.07 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 4.068 DPA -9.45 RAP 173.58 ECC 1.2399
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    112.76 2 35 54
67.88 15 10 56
                                                                                                                                                   -14.08
                                                                                  353.37
                                                                                                                    2 35 54
                                                                                                                                     1525.6
                     2 0 28 2125.61
13 50 55 4801.35
                                                      -17.31
                                                                      35.93
                                                                                                                                                     14.98
                                                                                                                                                                      199.59
                                                                                                                                      4201.4
                                                       18.14
                                                                     206.84
                                                                                     353.56
        90.00
                                                                                                     114.10 3 52 38
66.54 16 28 8
117.82 4 56 48
62.81 17 33 20
                                                                                                                                      1264.0
                                                                                                                                                     -14.83
                                                                                                                                                                        9.13
                                                                                     352.95
       100.00
                      3 21 34 1863.99
                                                      -18.24
                                                                      16.26
                                                                                                                                                    15.74
                                                                                                                                                                      179.87
                                                                                                                                     3938.2
       100.00
                    15 12 30
                                    4538.20
                                                       19.07
                                                                     187.08
                                                                                     353.15
                                                                                                                                                    -16.83
                                                                                                                                                                      351.93
                    4 29 16 1652.08
16 21 17 4322.88
                                                                                                                                     1052.1
                                                      -20.72
                                                                     358.90
                                                                                     351.67
       110.00
                                                                                                                                  3722.9
                                                                                                                                                     17.75
                                                                                                                                                                     162.43
                                                                     169.48
                                                                                     351.89
       110.00
                                                      21.56
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 725.2 SGR 587.6 SG3 507.6
RRT -.5356 RRF .8128 RTF -.6483
SGB 933.3 R23 -.2998 R13 .7965
SG1 825.2 SG2 436.0 THA 145.80
                                                                                                                                ST 306.2 SR 406.2 SS 422.2
CRT -.8632 CRS -.9439 CST .6621
LSA 628.7 MSA 202.5 SSA 27.6
    TOE .1920 TRA -.2267 TC3 .7491 BAU .1710
    ROE -.2658 RRA -.1690 RC3 -.4570 FAU .12021
FOE -.6929 FRA-1.2842 FC3-7.1407 BSP 2479
BDE .3279 BRA .2828 BC3 .8775 FSP -1518
                                                                                                                                  EL1 492.5 EL2 127.5 ALF 125.82
                                                                                                                                             ARRIVAL DATE OCT 13 1967
                                                                              FLIGHT TIME 104.00
LAUNCH DATE JUL 1 1967
                                                                              DISTANCE 286.354
  HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.074 GAL -5.78 AZL 92.16 MCA 127.61 SMA 131.12 ECC .18832 INC 2.1613 V1 29.292
RP 108.14 LAP -1.71 LOP 46.12 VP 37.977 GAP -4.02 AZP 88.68 TAL 206.55 TAP 334.15 RCA 106.43 APO 155.81 V2 35.042
RC 72.534 GL -15.59 GP -15.97 ZAL 136.90 ZAP 51.28 ETS 12.64 ZAE 157.40 ETE 335.21 ZAC 92.69 ETC 13.41 CLP -49.41
   PLANETOCENTRIC CONIC
                                                                                                           2.04 VHP 3.873 DPA -10.19 RAP 171.74 ECC 1.2352
                                              .22 RAL 136.82 RAD 6567.6 VEL 11.648 PTH
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 2 2143.91 -17.79 37.06 352.96 112.40 2 29 46 1543.9 -14.60 29.83 90.00 13 55 19 4774.33 17.44 205.17 352.88 67.33 15 14 54 4174.3 14.22 197.97
    C3 14.290 VHL 3.780 DLA
                                                                                                                                                      -15.35
                    3 15 29 1881.20
15 16 34 4512.27
4 23 58 1666.85
                                                                                                                     3 46 50
                                                                                                                                      1281.2
                                                                       17.32
                                                                                      352.55
                                                                                                       113.74
       100.00
                                                       -18.72
                                                                                                       65.99 16 31 46
                                                                                                                                      3912.3
                                                                                                                                                      14.96
                                                                      185.48
                                                                                      352.46
       100.00
                                                      18.36
                                                                                                                   4 51 44
                                                                                                                                      1066.8
                                                                                                                                                    -17.34
                                                                                                      117.47
       110,00
                                                      -21.19
                                                                      359.79
                                                                                      351.29
                                                                                                                                                        16.95
                                                                                                        62.26 17 36 14
                                                                                                                                      3699.4
                     16 24 35
                                   4299.38
                                                                     160.05
                                                                                     351.20
       110,00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 660.8 SGR 644.3 SG3 558.2
RRT - 4804 RRF .8587 RTF - .5547
SGB 923.0 R23 - .3171 R13 .8143
                                                                                                                                 ST 281.9 SR 403.4 SS 417.6
CRT -.8170 CRS -.9372 CST .5787
     TDE .1706 TRA -.2449 TC3 .6371 BAU .1627
     ROE -. 2603 RRA -. 1833 RC3 -. 5648 FAU .13105
                                                                                                                                 LSA 609.0 MSA 211.9 SSA 27.4
EL1 472.1 EL2 138.9 ALF 122.93
     FOE -.6956 FRA-1,4143 FC3-7.9395 8SP 2384
                                                                          SG1 794.2 SG2 470.2 THA 136.51
     BOE .3112 BRA .3059 BC3 .8514 FSP -1683
                                                                                                                                             ARRIVAL DATE OCT 15 1967
                                                                              FLIGHT TIME 106.00
LAUNCH DATE JUL 1 1967
                                                                              DISTANCE 292.878
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.104 GAL -5.77 AZL 92.04 HCA 130.81 SMA 131.33 ECC .18663 INC 2.0421 V1 29.292 RP 108.10 LAP -1.55 LOP 49.33 VP 38.011 GAP -3.47 AZP 88.66 TAL 206.80 TAP 337.62 RCA 106.82 APO 155.84 V2 35.056 RC 74.652 GL -14.88 GP -17.53 ZAL 137.44 ZAP 56.16 ETS 11.70 ZAE 159.05 ETE 326.83 ZAC 94.60 ETC 12.96 CLP -54.27
    PLANETOCENTRIC CONIC
                                           1.00 RAL 136.70 RAD 6567.6 VEL 11.636 PTH 2.04 VHP 3.708 DPA -10.97 RAP 169.62 ECC 1.2306
     C3 14.009 VHL 3.743 DLA
     LNCH AZNTH LNCH TIME LEI TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   -15.16
                      1 47 48 2163.74
14 0 40 4745.73
3 9 37 1899.86
15 21 33 4484.84
                                                                                                   111.99 2 23 52
66.78 15 19 46
                                                                                                                                    1563.7
                                                                                    352.72
                                                                                                                    2 23 52
                                                      -18.30
                                                                       38.29
         90.00
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                                                                                                                                                       13.39
                                                                      203.41
                                                                                      352.35
                      14 0 40
                                                       16.68
         90.00
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                                                                                      352.31
                                                                                                      113.34
                                                      -19.23
                                                                       18.48
        100.00
                                                                                                       65.44 16 36 17
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                                                                                                                                      3884.8
                                                       17.59
                                                                      183.80
                                                                                     351.92
                     15 21 33
        100.00
                                                                                                       117.09 4 46 58
61.70 17 39 58
                                                                                                                                      1082.9
                                                                                                                                                      -17.88
                       4 18 55 1682.91
16 28 43 4274.56
                                                       -21.69
                                                                          .77
                                                                                   350.64
                                                                                      351.07
        110.00
                                                                                                                                                        16.09
                                                                                                                                      3674.6
                                                       20.03
                                                                      166.56
                     16 28 43
        110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 260.6 SR 399.6 SS 410.2

CRT -.7489 CRS -.9301 CST .4677

LSA 588.1 MSA 221.8 SSA 27.1

EL1 451.9 EL2 152.7 ALF 119.76
                                                                          SGT 600.1 SGR 714.1 SG3 608.8

RRT -.3629 RRF .8958 RTF -.4053

SGB 932.8 R23 -.2624 R13 .8608

SG1 779.5 SG2 512.3 THA 122.15
     TDE .1497 TRA -.2687 TC3 .4968 BAU .1591
     RDE -.2539 RRA -.1990 RC3 -.6889 FAU .14178
FDE -.6865 FRA-1.5344 FC3-8.7619 BSP 2363
     BOE .2948 BRA .3344 BC3 .8494 FSP -1856
                                                                                                                                              ARRIVAL DATE OCT 17 1967
                                                                               FLIGHT TIME 108.00
LAUNCH DATE JUL 1 1967
                                                                               DISTANCE 299.378
    HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.128 GAL -5.74 AZL 91.91 MCA 134.02 SMA 131.50 ECC .18522 INC 1.9107 V1 29.292 RP 108.06 LAP -1.37 LOP 52.53 VP 38.040 GAP -2.94 AZP 88.67 TAL 206.96 TAP 340.98 RCA_107.14 APO 155.85 V2 35.069 RC 76.795 GL -14.06 GP -19.24 ZAL 137.88 ZAP 61.25 ETS 10.62 ZAE 160.32 ETE 316.33 ZAC 96.74 ETC 12.35 CLP -59.38
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 39 2185.54 -18.85 39.65 352.63 111.53 2 18 4 1585.5 -15.76 32.34
                                                                                                         66.22 15 25 40
                     14 7 5 4714.97
3 3 51 1920.39
                                                        15.84
                                                                       201.54
                                                                                      351.96
         90.00
                                                                                                                     3 35 51
                                                                                                                                                       -16.50
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                                                                        19.75
                                                                                      352.23
                                                                                                        112.89
                                                       -19.77
        100.00
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                                                                                                                                                       13.23
                                                                                                                                                                       175.00
                                                                       182.02
                                                                                       351.53
                                                                                                         64.87
                                                                                                                                       3855.4
                     15 27 34
                                      4455.36
                                                        16.75
        100.00
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                                                                                                                                                                       354.74
                                                                                                                    4 42 25
                                                                                                                                       1100.6
                       4 14 4
                                     1700.61
                                                                         1.85
                                                                                       351.01
                                                                                                        116.66
        110.00
                                                       -22.23
                                                                                                                   17 44 38
                                                                                                                                                       15.16
                                                                                                                                       3647.9
                                                                                                                                                                       158.15
                     16 33 50
                                      4247.90
                                                                       164.98
                                                                                       350.23
                                                                                                         61.14
        110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 242.3 SR 392.6 SS 394.5
CRT -.6455 CRS -.9206 CST .3111
LSA 560.2 MSA 232.2 SSA 27.0
                                                                          SGT 557.6 SGR 794.0 SG3 654.6

RRT -.1492 RRF .9239 RTF -.1673

SGB 970.2 R23 -.0941 R13 .9195

SG1 802.2 SG2 545.7 THA 101.23
     TOE .1282 TRA -. 3001 TC3 .3195 BAU .1628
     RDE - .2453 RRA - .2148 RC3 - .8276 FAU .15139
     FOE -.6524 FRA-1.6261 FC3-9.5489 BSP 2419
                                                                                                                                   EL1 429.2 EL2 169.3 ALF 116.08
     BOE .2767 BRA .3690 BC3 .8872 FSP -2009
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LAUNCH DATE JUL 1 1967

ARRIVAL DATE OCT 19 1967

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DISTANCE 305.853
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.144 GAL -5.71 AZL 91.76 MCA 137.24 SMA 131.61 ECC .18404 INC 1.7641 V1 29.292 RP 108.02 LAP -1.20 LOP 55.74 VP 38.063 GAP -2.43 AZP 88.70 TAL 207.01 TAP 344.25 RCA 107.39 APO 155.84 V2 35.082 RC 78.958 GL -13.11 GP -21.08 ZAL 138.24 ZAP 66.50 ETS 9.36 ZAE 160.91 ETE 303.92 ZAC 99.06 ETC 11.55 CLP -64.70
   PLANETOCENTRIC CONIC
     C3 13.438 VHL 3.666 DLA 2.79 RAL 136.92 RAD 6567.5 VEL 11.611 PTH 2.03 VHP 3.471 DPA -12.65 RAP 164.61 ECC 1.2211 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 110.99
                    1 35 24 2210.00
14 14 47 4681.25
2 58 3 1943.44
                                                                                   352.71
                                                                                                                                 1610.0
                                                                                                                                                -16.43
                                                                     41.19
                                                                                                                  2 12 14
         90.00
                                                     -19.46
                                                                                                                                                                   33.82
                                                                                                      65.64 15 32 48
                                                                                    351.71
                                                                                                                                    4081.3
                                                                                                                                                   11.50
                                                                                                                                                                  192.49
         90.00
                                                      14.91
                                                                    199.51
                                                                                                                 3 30 26
       100.00
                                                     -20.38
                                                                      21.20
                                                                                    352.32
                                                                                                    112.36
                                                                                                                                   1343.4
                                                                                                                                                 -17.17
                                                                                                                                                                   13.68
                                                                                                    64.29 16 48 32
116.16 4 37 57
60.55 17 50 24
                   15 34 49
                    15 34 49 4423.05
4 9 16 1720.51
16 40 5 4218.74
                                                                                                                                    3423.0
       100.00
                                                      15.81
                                                                    180.09
                                                                                    331.28
                                                                                                                                                  12.22
                                                                                                                                                                  173.13
                                                                                                                                                 -19.13
14.13
       110.00
                                                     -22.83
                                                                       3.08
                                                                                   351.13
                                                                                                                                   1120.5
                                                                                                                                                                  355.90
                                                                    163.27
                                                                                                                                   3616.7
       110.00
                                                     18.19
                                                                                   349.97
                                                                                                                                                                  156.51
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1082 TRA -.3368 TC3 .1071 BAU .1774

RDE -.2339 RRA -.2301 RC3 -.9816 FAU .15941

FOE -.5923 FRA-1.6832 FC-10.2700 BSP 2618

BOE .2577 BRA .4079 BC3 .9875 FSP -2140
                                                                        SGT 559.1 SGR 883.8 SG3 693.8

RRT .1446 RRF .9448 RTF .1427

SGB 1045.8 R23 .0805 R13 .9413

SGI 889.8 SG2 549.5 THA 81.52
                                                                                                                              ST 231.5 SR 381.8 SS 371.2

CRT -.5066 CRS -.9069 CST .1119

LSA 526.4 MSA 243.4 SSA 27.1
                                                                                                                               EL1 404.9 EL2 188.2 ALF 112.09
LAUNCH DATE JUL 1 1967
                                                                             FLIGHT TIME 112.00
                                                                                                                                           ARRIVAL DATE OCT 21 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 312.303
    RL 152.09 LAL -.00 LOL 278.50 VL 27.155 GAL -5.67 AZL 91.60 MCA 140.45 SMA 131.69 ECC .18308 INC 1.5984 V1 29.292
RP 107.98 LAP -1.02 LOP 58.96 VP 38.083 GAP -1.94 AZP 88.77 TAL 206.98 TAP 347.43 RCA 107.58 APO 155.80 VZ 35.094
RC 81.139 GL -12.00 GP -23.06 ZAL 138.51 ZAP 71.83 ETS 7.88 ZAE 160.54 ETE 290.56 ZAC 101.52 ETC 10.56 CLP -70.19
   PLANETOCENTRIC CONIC
    C3 13.142 WHL 3.625 OLA 3.84 RAL 137.26 RAD 6567,5 VEL 11.599 PTH 2.03 VHP 3.401 OPA -13.61 RAP 161.81 ECC 1.2163 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                -17.18
                   1 28 52 2236.09
14 24 1 4643.51
2 52 0 1969.92
15 43 34 4386.92
                                                                                 352.97
                                                                                                  110.34
                                                                                                                                1638.1
                                                                     42.98
                                                                                                                  2 5 10
        90.00
                                                     -20.13
                                                                                                                                                                    35.54
                                                                                                      65.05 15 41 25
                                                                    197.26
                                                                                    351.62
                                                                                                                                    4043.5
        90.00
                                                      13.84
                                                                                                                                                    10.36
                                                                                                                                                                   190.30
                                                                                                     111.72
                                                     -21-05
                                                                      22.88
                                                                                    352.59
                                                                                                                  3 24 50
                                                                                                                                   1369.9
       100.00
                                                                                                                                                  -17.92
                                                                                                                                                                    15.48
                                                                                                      63.69 16 56 41
                                                                    177.95
                                                                                                                                   3786.9
       100.00
                                                     14.75
                                                                                    351.18
                                                                                                                                                   11.07
                                                                                                                                                                   171.06
                      4 4 22 1743.42
                                                                                                    115.56 4 33 26
59.94 17 57 27
                                                     -23.52
       110.00
                                                                       4.52
                                                                                    351.42
                                                                                                                                   1143.4
                                                                                                                                                  -19.88
                                                                                                                                                                   357.26
       110.00
                    16 47 41
                                                                    161.39
                                                                                    349.86
                                                                                                                                   3586.2
                                                                                                                                                    12.97
                                    4186.19
                                                     17.09
   DIFFERENTIAL CORRECTIONS
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SCT 622.5 SCR 984.0 SC3 724.7

RRT .4313 RRF .9602 RTF .4374

SCB 1164.3 R23 .1627 R13 .9467

SCI 1034.6 SC2 534.1 THA 68.85
    TOE .0922 TRA -.3768 TC3 -.1382 BAU .2039
                                                                                                                               ST 230.9 SR 366.6 SS 342.5
    ROE -.2194 RRA -.2443 RC3-1.1524 FAU .16544
FOE -.5093 FRA-1.7025 FC-10.8983 BSP 2996
                                                                                                                               CRT -. 3505 CRS -. 8870 CST -. 1051
                                                                                                                               LSA 488.9 MSA 255.5 SSA 27.3
    BOE .2380 BRA .4491 BC3 1.1607 FSP -2254
                                                                                                                               EL1 379.6 EL2 208.8 ALF 108.10
                                                                                                                                          ARRIVAL DATE OCT 23 1967
LAUNCH DATE JUL 1 1967
                                                                            FLIGHT TIME 114.00
                                                                            DISTANCE 318.730
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.161 GAL -5.62 AZL 91.41 MCA 143.67 SMA 131.73 ECC .18231 INC 1.4083 VI 29.292
RP 107.94 LAP -.83 LOP 62.17 VP 38.099 GAP -1.46 AZP 88.87 TAL 206.85 TAP 350.51 RCA 107.72 APO 155.75 VZ 35.107
RC 83.336 GL -10.69 GP -25.19 ZAL 138.69 ZAP 77.16 ETS 6.15 ZAE 159.12 ETE 277.78 ZAC 104.02 ETC 9.35 CLP -75.78
   PLANETOCENTRIC CONIC
     C3 12.838 VHL 3.583 DLA 5.06 RAL 137.77 RAD 6567.5 VEL 11.586 PTH 2.03 VHP 3.366 DPA -14.68 RAP 158.88 ECC 1.2113
                                                                                                LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                1671.2
                                                                                                                                                -18.05
                                                                                 353.44
                                                                                                                                                                  37.59
        90.00
                     1 21 43 2271.20
                                                     -20.90
                                                                    45.10
                                                                                                                                                                  187.82
                    14 35 14
                                    4600.32
                                                      12.58
                                                                   194.70
                                                                                   351.70
                                                                                                                                   4000.3
                                                                                                                                                    9.04
         90.00
                                                                                                                                   1401.1
                                                                                                                                                 -18.78
                                                                                                                                                                   17.40
                     2 45 27 2001.14
                                                     -21.83
                                                                     24.87
                                                                                   353.07
       100.00
                                                                                                                                                  9.75
                                                                                                                                                                  168.71
                    15 54 11
                                   4345.61
                                                     13.47
                                                                   175.53
                                                                                   351.25
                                                                                                                                   3745.6
       100.00
                                                                                                                                               -20.75
                     3 59 9 1770.45
                                                     -24.30
                                                                      6.22
                                                                                   351.94
                                                                                                                                   1170.5
                                                                                                                                                                  358.88
                   16 56 58 4149.06
                                                     15.82
                                                                    159.27
                                                                                   349.91
                                                                                                                                   3549.1
                                                                                                                                                   11.63
                                                                                                                                                                  152.67
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 748.9 SGR 1088.4 SG3 741.7

RRT .6415 RRF .9713 RTF .6489

SGB 1321.2 R23 .1936 R13 .9524

SGI 1217.2 SG2 513.7 THA 60.41
                                                                                                                              ST 240.1 SR 343.0 SS 304.0 CRT -.1965 CRS -.8491 CST -.3339
     TOE .0809 TRA -.4194 TC3 -.4204 BAU .2402
    ROE -.1994 RRA -.2553 RC3-1.3349 FAU .16830
FOE -.3896 FRA-1.6672 FC-11.3494 BSP 3506
BOE .2152 BRA .4910 BC3 1.3995 FSP -2315
                                                                                                                              LSA 441.1 MSA 269.0 SSA , 27.9
                                                                                                                              EL1 348.9 EL2 231.4 ALF 104.16 -
                                                                            FLIGHT TIME 116.00
                                                                                                                                          ARRIVAL DATE OCT 25 1967
LAUNCH DATE JUL 1 1967
                                                                            DISTANCE 325.132
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 278.50 VL 27.162 GAL -5.55 AZL 91.19 HCA 146.89 SMA 131.74 ECC .18171 INC 1.1867 V1 29.292
RP 107.91 LAP -.65 LOP 65.39 VP 38.110 GAP -1.00 AZP 89.01 TAL 206.63 TAP 353.51 RCA 107.80 APO 155.68 VZ 35.119
RC 85.546 GL -9.10 GP -27.48 ZAL 138.78 ZAP 82.39 ETS 4.14 ZAE 156.69 ETE 266.81 ZAC 106.50 ETC 7.90 CLP -81.42
   PLANETOCENTRIC CONIC
    C3 12.527 VHL 3.539 DLA 6.50 RAL 138.47 RAD 6567.5 VEL 11,572 PTH 2.02 VHP 3.368 DPA -15.93 RAP 155.88 ECC 1.2062
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 108.54 1 52 3
63.77 16 4 49
109.96 3 11 57
                                                     -21.79
                                                                    47.71
                                                                                                                  1 52 3
                                                                                                                                                                   40.10
        90.00
                      1 13 32 2311.38
                                                                                  354.16
                                                                                                                                  1711.4
                                                                                                                                                -19.06
                                                                                                                                                                  184.93
                                                                                                                                   3949.6
                                                                                                                                                     7.46
        90.00
                    14 49 0 4549.63
                                                      11.07
                                                                    191.74
                                                                                   351.97
                                                                                                                                   1439.0
       100.00
                     2 37 58
                                   2039.04
                                                     -22.73
                                                                     27.33
                                                                                   353.81
                                                                                                                                                -19.80
                                                                                                                                                                   19.75
                                                                                                    62.40 17 18 52
113.88 4 23 21
58.61 18 16 50
       100.00
                                                                                                                                   3697.2
                                                                                                                                                    8.17
                    16 7 14
                                    4297.20
                                                     11.96
                                                                    172.73
                                                                                   351.52
                                                                                                                                                                  165.99
                     3 53 18 1803.30
17 8 24 4105.70
       110.00
                                                     -25.22
                                                                      8.33
                                                                                   352.71
                                                                                                                                  1203.3
                                                                                                                                                  -21.78
                                                                                                                               3505.7
                                                                    156.84
                                                                                   350.16
                                                                                                                                                   10.03
                                                                                                                                                                 150.32
                                                     14.29
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 921.8 SGR 1199.3 SG3 745.3

RRT .7677 RRF .9793 RTF .7741

SGB 1512.6 R23 .2010 R13 .9591

SG1 1429.1 SG2 495.7 THA 54.56
                                                                                                                       ST 259.0 SR 311.2 SS 263.2

CRT -.0775 CRS -.7796 CST -.5456

LSA 390.9 MSA 282.1 SSA 28.9

EL1 313.2 EL2 256.6 ALF 101.38
    TOE .0783 TRA -.4610 TC3 -.7333 BAU .2844
     RDE -.1740 RRA -.2627 RC3-1.5318 FAU .16805
    FDE -.2458 FRA-1.5834 FC-11.6145 BSF 4149
BDE .1908 BRA .5306 BC3 1.6983 FSP -2342
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FLIGHT TIME 110.00

ARRIVAL DATE OCT 27 1967

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LAUNCH DATE JUL 1 1967
                                                                         DISTANCE 331.511
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.158 GAL -5.48 AZL 90.92 HCA 150.11 SMA 131.71 ECC .18126 INC .9230 V1 29.292 RP 107.87 LAP -.46 LOP 68.61 VP 38.119 GAP -.55 AZP 89.20 TAL 206.32 TAP 356.43 RCA 107.84 APO 155.58 V2 35.131 RC 87.767 GL -7.16 GP -30.00 ZAL 138.76 ZAP 87.42 ETS 1.81 ZAE 153.46 ETE 258.09 ZAC 108.87 ETC 6.21 CLP -87.02
   PLANETOCENTRIC CONIC
    C3 12.213 VHL 3.495 DLA 8.25 RAL 139.39 RAD 6567.5 VEL 11.559 PTH 2.02 VHP 3.409 DPA -17.43 RAP 152.85 ECC 1.2010
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              107.20
                                                   -22.85
                                                                  51.03
                                                                               355.21
                                                                                                             1 43 0
                                                                                                                             1761.8
                                                                                                                                            -20.28
                    1 3 39 2361.78
15 6 14 4488.44
        90.00
                                                                                                                                                            181.47
                                                                                                                                               5.53
                                                                  188.22
                                                                                                  63.10 16 21 3
                                                                                                                              SAAA . 4
                                                                                352.51
                                                    9.21
        90.00
                                                                                               108.64 3 3 45
61.71 17 34 14
112.63 4 17 4
57.90 18 30 17
                                                                                                                                                              22.75
                   2 28 59 2086.55
16 23 35 4238.90
3 46 20 1844.49
17 22 43 4053.74
                                                                                354.88
                                                                                                                              1486.6
                                                                                                                                             -21.03
                                                   -23.80
                                                                   30.45
       100.00
                                                                                                                                                            162.73
                                                                                                                              3638.9
                                                                                                                                              6.24
                                                                  169.40
                                                                                352.04
       100.00
                                                   10.10
                                                                                                                                                              3.41
                                                                                                                              1244.5
                                                                                                                                            -23.03
                                                                   11.02
                                                                                353.83
       110.00
                                                  -26.33
                                                                                                                          3453.7
                                                                                                                                                            147.54
                                                                                                                                               A . 10
                                                                                350.66
       110.00
                                                                  153.96
                                                   12.43
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 287.2 SR 265.3 SS 224.7
CRT .0098 CRS -.6252 CST -.7663
                                                                      SGT 1126.9 SGR 1310.1 SG3 731.3
    TOE .0872 TRA -.4993 TC3-1.0758 BAU .3336
                                                                      RRT .8408 RRF .9851 RTF .8453
SGB 1728.1 R23 .2016 R13 .9648
SGI 1659.6 SGZ 481.6 THA 50.10
    RDE -.1390 RRA -.2635 RC3-1.7370 FAU .16389
FDE -.0643 FRA-1.4393 FC-11.6180 BSP 4862
BDE .1641 BRA .5645 BC3 2.0431 FSP -2302
                                                                                                                          LSA 358.5 MSA 271.8 SSA 31.1
EL1 287.3 EL2 265.2 ALF 3.52
                                                                                                                                      ARRIVAL DATE OCT 29 1967
                                                                          FLIGHT TIME 120.00
LAUNCH DATE JUL 1 1967
                                                                          DISTANCE 337.866
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.150 GAL -5.40 AZL 90.60 MCA 153.33 SMA 131.65 ECC .18095 INC .6014 V1 29.292 RP 107.83 LAP -.27 LOP 71.83 VP 36.124 GAP -.11 AZP 89.46 TAL 205.93 TAP 359.26 RCA 107.83 APO 155.48 V2 35.143 RC 89.996 GL -4.72 GP -32.80 ZAL 138.60 ZAP 92.12 ETS 359.12 ZAE 149.59 ETE 251.47 ZAC 111.04 ETC 4.23 CLP -92.52
   PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 50 59 2427.44 -24.10 55.43 356.72 105.33 1 31 26 1427.4 -21.72
                   15 28 26 4412.11
2 17 30 2148.36
16 44 35 4166.42
3 37 31 1897.97
17 41 4 3989.58
                                                                  183.87
                                                                                                             16 41 58
                                                                                                                               3612.1
                                                      6.83
                                                                                 353.41
                                                                                                   62.45
        90.00
                                                                                                                                                              26.72
                                                                                                            2 53 19
                                                                                                                               1548.4
                                                                                                                                              -22.54
                                                                   34.59
                                                                                 356.41
                                                                                                 106.82
                                                    -25.08
       100.00
                                                                                                                                                             158.73
                                                                                                   61.03 17 54 2
                                                                                                                               3566.4
                                                                                                                                                3.A1
                                                     7.73
                                                                  165.32
                                                                                 352.92
       100.00
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                                                                                                                               1298.0
                                                                                                                                              -24.58
                                                                                                                                                               6.79
                                                   -27.68
                                                                    14.59
                                                                                 355.41
                                                                                                 110.91
       110.00
                                                                                                   57.16 18 47 33
                                                                  150.47
                                                                                 351.50
                                                                                                                               3389.6
                                                                                                                                                5.69
                                                                                                                                                             144.14
                                                    10.09
       110.00
                    17 41 4
                                   3989.58
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RRT .8834 RRF .9994 RTF .8868
SGB 1964.4 R23 .1983 R13 .9697
SGI 1906.5 SG2 473.5 THA 46.79
                                                                                                                          ST 328.7 SR 207.9 SS 215.5
CRT .1022 CRS -.3892 CST -.9355
     TOE .1129 TRA -.5299 TC3-1.4401 BAU .3866
     RDE -. 0942 RRA -. 2583 RC3-1.9554 FAU .15639
                                                                                                                          LSA 390.5 MSA 209.9 SSA 34.7
    FOE .1345 FRA-1.2552 FC-11.3700 BSP 5657
BDE .1471 BRA .5895 BC3 2.4284 FSP -2225
                                                                                                                          EL1 329.8 EL2 206.1 ALF
                                                                                                                                                               6.08
                                                                                                                                     ARRIVAL DATE OCT 31 1967
                                                                          FLIGHT TIME 122.00
LAUNCH DATE JUL 1 1967
                                                                          DISTANCE 344.197
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 27.138 GAL -5.31 AZL 90.20 HCA 156.55 SMA 131.57 ECC .18076 INC .1978 V1 29.292 RP 107.80 LAP -.08 LOP 75.05 VP 38.126 GAP .31 AZP 89.82 TAL 205.47 TAP 2.02 RCA 107.79 APO 155.35 V2 35.154 RC 92.232 GL -1.58 GP -35.99 ZAL 138.23 ZAP 96.37 ETS 356.00 ZAE 145.19 ETE 246.61 ZAC 112.94 ETC 1.93 CLP -97.88
    PLANETOCENTRIC CONIC
     C3 11.635 VHL 3.411 DLA 13.24 RAL 142.14 RAD 6567.4 VEL 11.534 PTH 2.01 VHP 3.633 OPA -21.52 RAP 146.77 ECC 1.1915
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 33 37 2516.96
15 58 12 4312.89
2 1 52 2232.37
17 12 38 4072.71
3 25 36 1970.26
18 5 22 3907.59
                                                                              358.88
                                                                                                                          1917.0 -23.58
                                                                                                                                                             53.47
                                                                                            102.59
                                                   -25.57
                                                                  61.57
                                                                                                             1 15 34
         90.00
                                                                                                                                                             171.65
                                                                                 354.87
                                                                                                  61.90 17 10 5
                                                                                                                               3712.9
                                                                                                                                               -.11
                                                                 178.28
         90.00
                                                     3.68
                                                                                 358.61
                                                                                                 104.15
                                                                                                             2 39 4
                                                                                                                               1632.4
                                                                                                                                              -24.40
                                                                                                                                                              32.26
                                                                   40.37
                                                   -26.61
        100.00
                                                                                                 60.43 18 20 31 3472.7
108.39 3 58 28 1370.3
56.46 19 10 29 3307.6
                                                                                                                                                 .64
                                                                                                                                                            153.58
                                                                160.11
                                                                                 354.36
        100.00
                                                     4.61
                                                                                                                               1370.3
                                                                                                                                              -26.54
                                                                                                                                                              11.49
                                                                                 357.71
        110.00
                                                   -29.33
                                                                   19.56
                                                                                                                                                             139.84
                                                                                                                                              2.57
                                                   7.03
                                                                  146.09
                                                                                 352.86
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 395.9 SR 143.2 SS 263.5

CRT .3968 CRS -.3555 CST -.9809

LSA 477.1 MSA 131.5 SSA 41.7
                                                                      SGT 1583.9 SGR 1540.2 SG3 654.8
     TOE .1627 TRA -.5485 TC3-1.8180 BAU .4406
                                                                     RRT .9090 RRF .9925 RTF .9116
SGB 2209.3 R23 .1959 R13 .9732
SG1 2158.5 SG2 471.0 THA 44.12
     ROE -.0320 RRA -.2415 RC3-2.1721 FAU .14473
     FOE .3661 FRA-1.0186 FC-10.7692 BSP 6462
BOE .1658 BRA .5993 BC3 2.8325 FSP -2076
                                                                                                                          EL1 400.4 EL2 129.9 ALF
                                                                                                                                                                9.13
                                                                                                                                      ARRIVAL DATE NOV 2 1967
                                                                          FLIGHT TIME 124.00
 LAUNCH DATE JUL 1 1967
                                                                          DISTANCE 350.505
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 278.50 VL 27.123 GAL -5.20 AZL 89.68 HCA 159.78 SMA 131.46 ECC .18069 INC .3217 V1 29.292 RP 107.77 LAP .11 LOP 78.27 VP 38.125 GAP .72 AZP 90.30 TAL 204.93 TAP 4.70 RCA 107.71 APO 155.22 V2 35.165 RC 94.474 GL 2.58 GP -39.75 ZAL 137.49 ZAP 100.01 ETS 352.37 ZAE 140.27 ETE 243.14 ZAC 114.48 ETC 359.24 CLP-103.07
    PLANETOCENTRIC CONIC
                                                                                                    2.01 VHP 3.843 DPA -24.39 RAP 143.65 ECC 1.1884
     C3 11.449 VHL 3.384 DLA 16.96 RAL 144.20 RAD 6567.4 VEL 11.525 PTH
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               62.38
                    0 7 35 2647.07
16 40 40 4176.05
1 38 37 2353.49
17 52 19 3944.86
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        100.00
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55.92 19 42 29
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        110,00
                     3 8 15
                                   2073.07
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                                                                   140.33
                                                                                 355.12
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                    18 39 11
                                                    2.88
        110.00
                                   3798.05
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 513.4 SR 151.3 SS 372.4
CRT .9290 CRS -.8584 CST -.9689
                                                                      SCT 1822.2 SCR 1660.2 SC3 592.4
RRT .9247 RRF .9948 RTF .9274
SGB 2465.1 R23 .1924 R13 .9762
     TDE .2481 TRA -.5491 TC3-2.1913 BAU .4958
     RDE .0521 RRA -.2128 RC3-2.3657 FAU .12988
FDE .6072 FRA -.7554 FC3-9.8213 89P 7316
                                                                                                                         LSA 644.9 NSA 87.1 SSA 42.0
EL1 532.5 EL2 54.0 ALF 15.48
                                                                       SG1 2418.6 SGZ 476.2 THA 42.12
     BDE .2535 BRA .5889 BC3 3.2393 FSP -1889
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FLIGHT TIME 118.00

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LAUNCH DATE JUL 1 1967
                                                                      FLIGHT TIME 126.00
                                                                                                                               ARRIVAL DATE NOV 4 1957
  HELIOCENTRIC CONIC
                                                                      DISTANCE 356.790
    RL 152.09 LAL -.00 LOL 278.50 VL 27.105 GAL -5.09 A7L 88.96 MCA 163.00 SMA 131.33 ECC .18073 INC 1.0345 VI 29.292 RP 107.73 LAP .30 LOP 81.50 VP 38.122 GAP 1.12 A7P 90.99 TAL 204.32 TAP 7.32 RCA 107.60 APO 155.07 VZ 35.175 RC 96.719 GL 8.28 GP -44.31 ZAL 136.07 ZAP 102.85 ETS 348.14 ZAE 134.74 ETE 240.74 ZAC 115.56 ETC 356.06 CLP-108.11
   PLANETOCENTRIC CONIC
    C3 11.472 VHL 3.387 OLA 22.06 RAL 147.05 RAO 6567.4 VEL 11.527 PTH 2.01 VHP 4.159 OPA -28.07 RAP 140.30 ECC 1.1888
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          6.90
                                                                                          90.65 24 5 36
62.61 18 55 10
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       90.00 23 17 57 2859.09
                                                 -28.31
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        90.00
                  17 49 5
                                3964.90
                                                 -7.48
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      100.00
                    0 58 58 2546.04
                                                 -29.78
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      100.00
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      110.00
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55.94 20 30 56
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      110.00
                                3641.72
                                                 -3.10
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   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                    ST 722.5 SR 311.6 SS 535.0
CRT .9890 CRS -.9914 CST -.9718
LSA 945.6 MSA 102.9 SSA 21.3
    TOE .3912 TRA -.5215 TC3-2.5167 BAU .5496
                                                                  SGT 2061.7 SGR 1777.4 SG3 512.7
   ROE .1739 RRA -.1626 RC3-2.5503 FAU .11130
FOE .8614 FRA -.4635 FC3-8.3986 BSP 8140
BOE .4281 BRA .5462 BC3 3.5830 FSP -1636
                                                                  RRT .9340 RRF .9964 RTF .9375
SGB 2722.1 R23 .1896 R13 .9784
SGI 2677.8 SG2 489.0 THA 40.47
                                                                                                                     EL1 785.7 EL2 42.3 ALF 23.17
                                                                      FLIGHT TIME 128.00
                                                                                                                               ARRIVAL DATE NOV 6 1967
 .HELIOCENTRIC CONIC
                                                                      DISTANCE 363.050
   RL 152.09 LAL -.00 LOL 278.50 VL 27.084 GAL -4.97 AZL 87.93 MCA 166.22 SMA 131.19 ECC .18086 INC 2.0694 V1 29.292
RP 107.70 LAP .49 LOP 84.73 VP 38.116 GAP 1.51 AZP 92.01 TAL 203.64 TAP 9.86 RCA 107.46 APO 154.91 VZ 35.185
RC 98.967 GL 16.32 GP -50.01 ZAL 133.31 ZAP 104.61 ETS 343.16 ZAE 128.36 ETE 239.08 ZAC 116.06 ETC 352.21 CLP-113.11
  PLANETOCENTRIC CONIC
    C3 12.029 VML 3.468 DLA 29.22 RAL 151.26 RAD 6567.5 VEL 11.551 PTH
                                                                                                2.02 VHP 4.653 OPA -32.84 RAP 136.41 ECC 1.1980
    LNCH APHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  19 48 14
                                 3622.62
                                                 -22.92
                                                              140.81
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       82.46
                 21 52 25
                                 3221.21
                                                 -22.91
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                                                                                             71.34
                                                                                                       22 46 6
                                                                                                                        2621.2
       97.54
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      100.00
                  23 4 47
                                 2989.20
                                                 -26.73
                                                                95.41
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64.97 2 23 30
      100.00
                                3329.87
                                                -19.20
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      110.00
                   1 41 40 2510.16
                                                -33.86
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                                                -12.80 118.29
      110.00
                 21 2 6 3361.67
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                                                                                                                       2781.7
                                                                                                                                      -16.93
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
   TDE .6317 TRA -.4504 TC3-2.7044 BAU .6022
RDE .3518 RRA -.0823 RC3-2.5898 FAU .08981
                                                                                                                    ST 1075.9 SR 585.4 SS 729.4
CRT .9865 CRS -.9995 CST -.9825
                                                                   SGT 2309.7 SGR 1894.5 SG3 418.6
                                                                 RRT .9391 RRF .9974 RTF .9449
SG8 2987.3 R23 .1856 R13 .9803
SG1 2943.3 SG2 511.0 THA 39.00
   FDE 1.0937 FRA -.1721 FC3-6.4633 BSP 9036
                                                                                                                    LSA 1420.0 MSA 125.9 SSA
                                                                                                                                                         9.9
    BOE .7230 BRA .4578 BC3 3.7444 FSP -1350
                                                                                                                     ELI 1221.9 EL2 84.4 ALF 28.37
LAUNCH DATE JUL 1 1967
                                                                                                                               ARRIVAL DATE NOV 8 1967
                                                                      FLIGHT TIME 130.00
                                                                      DISTANCE 369.282
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 278.50 VL 27.060 GAL -4.83 AZL 86.28 MCA 169.44 SMA 131.02 ECC .18108 INC 3.7199 V1 29.292
RP 107.67 LAP .68 LOP 87.96 VP 38.107 GAP 1.88 AZP 93.66 TAL 202.89 TAP 12.33 RCA 107.29 APO 154.74 V2 35.195
RC 101.218 GL 27.77 GP -57.34 ZAL 128.02 ZAP 104.89 ETS 337.16 ZAE 120.70 ETE 237.65 ZAC 115.79 ETC 347.31 CLP-118.44
   PLANETOCENTRIC CONIC
    C3 14.104 VHL 3.755 DLA 39.23 RAL 158.21 RAD 6567.6 VEL 11.640 PTH 2.04 VHP 5.500 DPA -39.01 RAP 131.29 ECC 1.2321
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                 TONG INJ RT ASC INJ AZMTH INJ THE
7.90 24.94 62.59 19 11 35
5.59 24.94 62.58 1 23 42
7.90 24.94 62.58 1 23 42
7.90 24.94 62.58 1 23 42
7.90 24.94 62.58 1 23 42
7.90 24.94 62.58 1 23 42
MID-COURSE EXECUTION ACCURACY
SCT 2575 II SCR 1973 II SC3 3 II I
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       61.63 18 3 51
                                 4064.30
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                                 2848.14
                                                -29.23
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                  18 3 51
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       61.63
                                 4064.30
                                                -29.24
                                                              177.90
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      118.37
                   0 36 14 2848.14
                                                -29.23
                                                               85.59
                                                                                                                        2248.1
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                  18 3 51 4064.30
0 36 14 2848.14
       61.63
                                                -29.24
                                                              177.90
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                                                               85.59
                                                                                                                                    -32.65
                                                -29.23
                                                                                                                        2248.1
      118.37
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                    ST 1642.9 SR 957.3 SS 926.7
                                                                  SGT 2576.0 SGR 1973.0 SG3 310.1
    TOE 1.0702 TRA -.2927 TC3-2.5394 BAU .6451
   ROE .6261 RRA .0603 RC3-2.2930 FAU .06522
FDE 1.2760 FRA .1114 FC3-4.0034 BSP 9830
BDE 1.2399 BRA .2989 BC3 3.4214 FSP -1007
                                                                  RRT .9397 RRF .9977 RTF .9505
SGB 3244.8 RZ3 .1825 R13 .9816
SGI 3199.0 SG2 543.4 THA 36.99
                                                                                                                    CRT .9897 CRS-1.0000 CST -.9903
                                                                                                                    LSA 2110.1 HSA 146.7 SSA
                                                                                                                                                        4.9
                                                                                                                    EL1 1897.7 EL2 118.9 ALF 30.10
LAUNCH DATE JUL 1 1967
                                                                      FLIGHT TIME 132.00
                                                                                                                               ARRIVAL DATE NOV 10 1967
                                                                      DISTANCE 375.478
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 276.50 VL 27.033 GAL -4.68 AZL 83.21 HCA 172.64 SMA 130.83 ECC .18137 INC 6.7920 V1 29.292 RP 107.65 LAP .87 LOP 91.19 VP 38.097 GAP 2.24 AZP 96.74 TAL 202.07 TAP 14.71 RCA 107.10 APO 154.56 VZ 35.204 RC 103.470 GL 43.26 GP -66.98 ZAL 118.82 ZAP 103.21 ETS 329.21 ZAE 111.04 ETE 235.01 ZAC 114.54 ETC 340.18 CLP-125.75
  PLANETOCENTRIC CONIC
   C3 21.620 VHL 4.650 DLA 51.84 RAL 171.56 RAD 6567.9 VEL 11.958 PTH 2.13 VHP 7.196 DPA -46.87 RAP 123.21 ECC 1.3558
   LNCH AZHTH LNCH TIME L-1 TIME
44.57 17 52 15 4331.94
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                 MID-COURSE EXECUTION ACCURACY
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  DIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 2913.7 SGR 1923.4 SG3 197.8
                                                                                                                    ST 2396.4 SR 1230.6 SS 1007.9
    TOE 1.9441 TRA .0684 TC3-1.7774 BAU .6624
                                                                  RRT .9316 RRF .9955 RTF .9570
SGB 3491.3 R23 .1792 R13 .9826
                                                                                                                    CRT .9901 CRS -.9996 CST -.9938
LSA 2871.1 MSA 172.7 SSA 2.6
    ROE .9857 RRA .3229 RC3-1.4465 FAU .03962
   FDE 1.3042 FRA .3476 FCS-1.5865 BSP 10628
BDE 2.1797 BRA .3300 BC3 2.2917 FSP -655
                                                                  SG1 3440.7 SG2 591.9 THA 32.68
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ARRIVAL DATE NOV 12 1967

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LAUNCH DATE JUL 1 1967
                                                                     DISTANCE 381.597
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 278.50 VL 27.005 GAL -4.51 AZL 75.51 MCA 175.79 SNA 130.64 ECC .18168 INC14.4893 VI 29.292 RP 107.62 LAP 1.05 LOP 94.42 VP 38.085 GAP 2.58 AZP 104.45 TAL 201.16 TAP 16.95 RCA 106.90 APO 154.37 V2 35.212 RC 105.723 GL 60.04 GP -79.56 ZAL 106.12 ZAP 99.10 ETS 309.77 ZAE 97.56 ETE 220.69 ZAC 112.31 ETC 320.60 CLP-150.84
   PLANETOCENTRIC CONIC
    C3 60.450 VHL 7.775 DLA 61.61 RAL 198.26 RAD 6569.1 VEL 13.484 PTH 2.46 VHP 11.749 DPA -55.90 RAP 106.22 ECC 1.9949
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 32.69 19 6 23 4653.86 -23.02 229.80 94.99 31.11 20 23 56 4053.9 -29.79 225.47
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                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2776.1 SR 446.3 SS 810.9
                                                                  SCT 3496.1 SCR 1176.5 SC3 103.7
RRT .8177 RRF .9184 RTF .9780
SCB 3688.8 R23 .1558 R13 .9873
SCI 3630.7 SC2 652.2 THA 15.91
    TOE 3.6772 TRA 1.2954 TC3 -.5927 BAU .5316
                                                                                                                    CRT .8482 CRS -.9027 CST -.9936
    RDE .4318 RRA .6724 RC3 -.2854 FAU .01548
FDE 1.0247 FRA .5598 FC3 -.2217 BSP 11087
BDE 3.7025 BRA 1.4595 BC3 .6578 FSP -338
                                                                                                                    LSA 2915.9 MSA 247.2 SSA 1.2
                                                                                                                    EL1 2802.0 EL2 234.2 ALF
                                                                                                                                                       7.82
                                                                                                                               ARRIVAL DATE NOV 14 1967
                                                                      FLIGHT TIME 136.00
FAUNCH DATE JUL 1 1967
                                                                      DISTANCE 367.233
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.974 GAL -4.24 AZL 34.23 HCA 178.51 SMA 130.43 ECC .18146 INC55.7689 V1 29.292
RP 107.60 LAP 1.23 LOP 97.66 VP 38.070 GAP 2.79 AZP 145.77 TAL 199.82 TAP 18.33 RCA 106.76 APO 154.09 V2 35.220
RC 107.975 GL 57.25 GP -64.24 ZAL 94.40 ZAP 93.14 ETS 190.71 ZAE 66.70 ETE 105.65 ZAC 111.24 ETC 195.64 CLP 97.25
   PLANETOCENTRIC CONIC
    C3 699.333 VHL 26.445 DLA 50.39 RAL 211.98 RAD 6572.7 VEL 28.647 PTH 3.43 VHP 36.163 DPA -52.74 RAP 52.63 ECC12.5093 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             39.62 22 1 40
                                                                                                                        4340.4
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       133.59
                     5 9 44
                                 3422.20
                                                   -.67
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 680.9 SR 1869.0 SS 1031.2
CRT .9083 CRS .9981 CST .8805
                                                                  SGT 753.8 SGR 3440.6 SG3 56.8
RRT .6539 RRF -.9982 RTF -.6083
    TOE-3.1408 TRA -. 2063 TC3 -. 0599 BAU 2.1036
    RDE-7.7187 RRA-8.1793 RC3 -.2169 FAU-.03297
    FOE 1.3181 FRA 1.6217 FC3 .04Q8 BSP 6280
                                                                  SGB 3522.2 R23 -. 0826 R13 -. 9965
                                                                                                                     LSA 2222.0 MSA 287.6 SSA
                                                                   SG1 3476.7 SG2 564.4 THA 81.62
                                                                                                                     EL1 1970.7 EL2 270.1 ALF 71.33
    BOE 8.3332 BRA 8.1619 BC3 .2250 FSP -110
                                                                                                                               ARRIVAL DATE NOV 16 1967
                                                                      FLIGHT TIME 138.00
LAUNCH DATE JUL 1 1967
                                                                      DISTANCE 394.507
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.942 GAL -4.29 AZL 120.45 HCA 182.78 SMA 130.20 ECC .18356 INC30.4476 V1 29.292
RP 107.58 LAP 1.41 LOP 100.89 VP 38.054 GAP 3.44 AZP 59.58 TAL 199.74 TAP 22.52 RCA 106.30 APO 154.10 V2 35.227
    RC 110.226 GL -64.61 GP 80.81 ZAL 97.81 ZAP 97.82 ETS 141.40 ZAE 84.02 ETE 226.07 ZAC 84.62 ETC 125.09 CLP 148.35
   PLANETOCENTRIC CONIC
    C3 227.143 VHL 15.071 DLA -53.06 RAL 134.65 RAD 6571.3 VEL 18.667 PTH 3.06 VHP 17.666 DPA 73.13 RAP 292.99 ECC 4.7382
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          142.76
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                                                               295.54
       136.95
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1045.1 SR 3037.1 SS 1235.5
                                                                   SGT 1067.3 SGR 3687.3 SG3 78.6
     TOE-2.7432 TRA -.3581 TC3 -.0054 BAU .2192
                                                                  RRT .9105 RRF .9899 RTF .9594
$68 3838.6 R23 -.1108 R13 .9937
                                                                                                                    CRT .9885 CRS -.9985 CST -.9953
    ROE-7.8014 RRA-3.4463 RC3 .0720 FAU-.00144
FOE-2.1014 FRA -.6863 FC3 .0055 BSP 11522
                                                                                                                    LSA 3437.7 MSA 156.6 58A
                                                                                                                    EL1 3208.4 EL2 149.8 ALF 71.17
                                                                   SG1 3814.9 SG2 426.5 THA 75.04
     BDE 8.2697 BRA 3.4649 BC3 .0722 FSP -240
                                                                                                                                ARRIVAL DATE NOV 18 1967
                                                                      FLIGHT TIME 140.00
LAUNCH DATE JUL 1 1967
                                                                      DISTANCE 400.483
   MELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.908 GAL -4.07 AZL 105.70 MCA 185.85 SNA 129.97 ECC .18401 INC15.6984 V1 29.292 RP 107.56 LAP 1.58 LOP 104.13 VP 38.036 GAP 3.73 AZP 74.38 TAL 198.61 TAP 24.47 RCA 106.06 APO 153.89 V2 35.233 RC 112.475 GL -61.39 GP 69.18 ZAL 103.58 ZAP 106.94 ETS 58.30 ZAE 101.79 ETE 146.00 ZAC 88.53 ETC 43.67 CLP-145.07
   PLANETOCENTRIC CONIC
     C3 68.442 VHL 8.273 DLA -47.52 RAL 131.50 RAD 6569.3 VEL 13.777 PTH
                                                                                               2.52 WHP 8.870 DPA 73.85 RAP 219.57 ECC 2.1264
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 50.10 3 32 20 1931.25 17.70 44.84 24.50 134.86 4 4 31 1331.2 23.24 39.09
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134.85 13 10 28
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                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 3600.0 SGR 1048.9 SC3 157.8
RRT -.8358 RRF -.9288 RTF .9787
SGB 3942.1 R23 .1686 R13 -.9849
SG1 3902.0 SG2 560.8 THA 166.73
                                                                                                                    ST 2824.5 SR 1011.6 SS 1176.1
CRT -.9748 CRS ..9913 CST -.9957
LSA 3214.6 MSA 225.6 SSA 1.3
     TOE-3.9320 TRA-2.4354 TC3 -.5361 BAU .5081
    RDE 1.4592 RRA .1433 RC3 .1446 FAU .02427 FDE-2.1817 FRA -.8702 FC3 -.3069 BSP 12014
                                                                                                                     EL1 2992.6 EL2 212.9 ALF 160.65
     BDE 4.1941 BRA 2.4396 BC3 .5552 FSP -494
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FLIGHT TIME 134.00

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LAUNCH DATE JUL 1 1967
                                                                        FLIGHT TIME 142.00
                                                                                                                                 ARRIVAL DATE NOV 20 1967
   HELIOCENTRIC CONTG
                                                                       DISTANCE 406.567
    RL 152.09 LAL -.00 LOL 278.50 VL 26.873 GAL -3.87 AZL 101.19 HCA 189.05 SMA 129.73 ECC .18473 INC11.1907 VI 29.292
RP 107.54 LAP 1.75 LOP 107.37 VP 38.016 GAP 4.06 AZP 78.94 TAL 197.54 TAP 26.59 RCA 105.77 APO 153.70 VZ 35.239
RC 114.720 GL -55.97 GP 56.08 ZAL 107.09 ZAP 115.49 ETS 47.36 ZAE 112.44 ETE 140.65 ZAC 93.08 ETC 33.61 CLP-140.46
   PLANETOCENTRIC CONIC
    C3 39.424 VHL 6.279 DLA -42.28 RAL 134.04 RAD 6568.5 VEL 12.680 PTH 2.30 VHP 6.474 DPA 64.82 RAP 189.96 ECC 1.6488
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 3763.3 SGR 1289.4 SG3 250.8

RRT -.9147 RRF -.9850 RTF ..9674

SG8 3978.0 R23 .2087 R13 -.9766

SG1 3946.9 SG2 496.9 THA 162.31
    TDE-2.7431 TRA-1.9551 TC3-1.1491 BAU .6387
                                                                                                                      ST 2606.0 SR 1141.5 SS 1305.4
                                                                                                                     CRT -.9832 CRS .9981 CST -.9926
LSA 3122.4 MSA 220.3 SSA 2.2
    RDE 1.2448 RRA .3018 RC3 .3849 FAU .04569
    FOE-2.5246 FRA-1.0027 FC3-1.0034 BSP 12248
BOE 3.0124 BRA 1.9783 BC3 1.2119 FSP -798
                                                                                                                      EL1 2838.6 EL2 191.1 ALF 156.59
                                                                        FLIGHT TIME 144.00
                                                                                                                                 ARRIVAL DATE NOV 22 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 412.662
    RL 152.09 LAL -.00 LOL 278.50 VL 26.837 GAL -3.66 A7L 99.03 MCA 192.27 SMA 129.48 ECC .18558 INC 9.0278 V1 29.292
RP 107.52 LAP 1.91 LOP 110.62 VP 37.995 GAP 4.39 AZP 81.17 TAL 196.45 TAP 28.72 RCA 105.45 APO 153.51 VZ 35.244
    RC 116.961 GL -51.56 GP 45.88 ZAL 108.99 ZAP 122.69 ETS 42.90 ZAE 119.49 ETE 143.15 ZAC 96.62 ETC 29.84 CLP-140.87
   PLANETOCENTRIC CONIC
    C3 28.786 VHL 5.365 DLA -38.44 RAL 136.91 RAD 6568.2 VEL 12.254 PTH
                                                                                                 2.20 VHP
                                                                                                              5.533 OPA
                                                                                                                             55.99 RAP 178.86 ECC 1.4737
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
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121.65 12 38 12
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      117.16
                                                                266.06
                                                                                                                                                      258.84
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 3861.8 SGR 1158.9 SG3 325.4
RRT -.9209 RRF -.9885 RTF ..9626
                                                                                                                      ST 2551.4 SR 987.7 SS 1387.2
CRT -.9833 CRS .9988 CST -.9910
    TOE-2.2967 TRA-1.7132 TC3-1.7289 BAU .6918
    RDE .9206 RRA .2295 RC3 .4919 FAU .06215
                                                                                                                  SGB 4031.9 R23 .2325 R13 -.9701
SG1 4008.4 SG2 435.3 THA 164.36
    FDE-2.6884 FRA-1.0173 FC3-1.8690 BSP 12521
    BDE 2.4743 BRA 1.7285 BC3 1.7975 FSP -1052
                                                                                                                      EL1 2730.7 EL2 168.1 ALF 159.08
                                                                       FLIGHT TIME 146.00
                                                                                                                                ARRIVAL DATE NOV 24 1967
LAUNCH DATE JUL 1 1967
                                                                       DISTANCE 418.747 -
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.799 GAL -3.44 AZL 97.75 MCA 195.50 SMA 129.23 ECC .18655 INC 7.7548 VI 29.292 RP 107.51 LAP 2.07 LOP 113.86 VP 37.973 GAP 4.71 AZP 82.52 TAL 195.33 TAP 30.83 RCA 105.12 APO 153.33 V2 35.248 RC 119.197 GL -48.14 GP 38.06 ZAL 109.81 ZAP 128.54 ETS 39.Z3 ZAE 124.03 ETE 147.20 ZAC 99.00 ETC 27.26 CLP-142.30
   PLANETOCENTRIC CONIC
    C3 23.491 VHL 4.847 OLA -35.71 RAL 139.63 RAD 6568.0 VEL 12.036 PTH 2.15 VHP 5.118 DPA 48.71 RAP 173.68 ECC 1.3866
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.27 5 20 30 1454,97 23,20 8.23 13.02 117.95 5 44 44 855.0 26.74 .74
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117,94 12 26 14
117,95 5 44 44
117,94 12 26 14
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117.94 12 26 14
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      112.73
                  10 51 19
                                 5695.47
                                                  23.21
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4022.1 SGR 1000.3 SG3 378.6

RRT -.9210 RRF -.9867 RTF ..9610

SGB 4144.6 R23 .2404 R13 -.9663

SG1 4127.1 SG2 379.9 THA 166.99
                                                                                                                     ST 2557.6 SR 835.9 SS 1432.0
    TOE-2.0836 TRA-1.5699 TC3-2.2804 BAU .7342
    ROE .7044 RRA .1656 RC3 .5150 FAU .07363
FDE-2.7150 FRA -9665 FC3-2.7135 83P 13183
BDE 2.1994 BRA 1.5786 BC3 2.3378 FSP -1273
                                                                                                                     CRT -.9829 CRS .9990 CST -.9901
                                                                                                                     LSA 3040.6 MSA 213.4 SSA
                                                                                                                      EL1 2686.8 EL2 146.4 ALF 162.13
                                                                       FLIGHT TIME 148.00
                                                                                                                                 ARRIVAL DATE NOV 26 1967
LAUNCH DATE JUL 1 1967
                                                                       DISTANCE 424.827
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 278.50 VL 26.760 GAL -3.22 AZL 96.91 MCA 198.74 SMA 128.97 ECC .18761 INC 6.9126 VI 29.292
RP 107.50 LAP 2.22 LOP 117.11 VP 37.949 GAP 5.03 AZP 83.45 TAL 194.18 TAP 32.92 RCA 104.77 APO 153.16 VZ 35.252
RC 121.426 GL -45.45 GP 32.06 ZAL 109.88 ZAP 133.29 ETS 37.12 ZAE 126.86 ETE 151.34 ZAC 100.41 ETC 25.15 CLP-144.01
   PLANETOCENTRIC CONIC
    C3 20.359 VHL 4.512 DLA -33.79 RAL 142.23 RAD 6567.8 VEL 11.905 PTH 2.12 VHP 4.939 DPA 42.86 RAP 171.06 ECC 1.3351
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
70.75 5 51 12 1358.89 23.07 .61 12.69 115.40 6 13 51 758.9 26.29 552.96
                                                                                          115.40 6 13 51
115.39 12 16 45
115.40 6 13 51
115.39 12 16 45
115.39 12 16 45
118.60 11 43 34
112.22 12 56 29
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                 10 41 23
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                                5588.05
                  11 25 21
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                                                 26.67
      110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4071.1 SGR 810.7 SG3 390.8
RRT -.9053 RRF -.9784 RTF ..9557
SG8 4151.0 R23 .2524 R13 -.9595
SG1 4137.2 SG2 338.8 THA 169.71
    TOE-1.9230 TRA-1.4155 TC3-2.6995 BAU .7448
                                                                                                                     ST 2527.6 SR 687.8 SS 1396.0
                                                                                                                   CRT -.9813 CRS ..9990 CST -.9887
LSA 2960.7 MSA 212.1 SSA 4.9
EL1. 2616.4 EL2 128.0 ALF 165.01
    ROE .5404 RRA .0992 RC3 .4478 FAU .07590
FDE-2.5600 FRA -.7759 FC3-3.2273 BSP 12678
BDE 1.9975 BRA 1.4189 BC3 2.7364 FSP -1236
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ARRIVAL DATE NOV 28 1967

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FLIGHT TIME 150.00
LAUNCH DATE JUL 1 1967
                                                                         DISTANCE 430.888
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 278.50 VL 26.721 GAL -2.98 A7L 96.31 MCA 201.98 SMA 128.70 ECC .18879 INC 6.3111 V1 29.292 RP 107.49 LAP 2.36 LOP 120.35 VP 37.924 GAP 5.35 A7P 84.14 TAL 193.00 TAP 34.98 RCA 104.41 APO 153.00 V2 35.255 RC 123.648 GL -43.30 GP 27.42 TAL 109.42 TAP 137.23 ETS 34.91 TAE 128.55 ETE 155.12 TAC 101.08 ETC 23.37 CLP-145.79
   PLANETOCENTRIC CONIC
    C3 18.297 VHL 4.277 DLA -32.44 RAL 144.77 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 4.881 DPA 38.14 RAP 169.78 ECC 1.3011
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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106.66 13 48 53
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                                   649.83
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      110.00
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                                                                 249.97
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                                 5428 .95
                                                    30.29
                    12 18 25
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 4197.0 SCR 683.8 SC3 399.9

RRT -.8908 RRF -.9657 RTF ..9537

SC8 4252.4 R23 ..2456 R13 -.9563

SC1 4241.2 SC2 307.5 THA 171.70
                                                                                                                         ST 2552.9 SR 591.3 SS 1378.7
CRT -.9810 CRS ..9992 CST -.9880
    TDE-1.8473 TRA-1.3088 TC3-3.1317 BAU
    RDE .4408 RRA .0648 RC3 .3848 FAU .07750
FDE-2.4294 FRA -.6279 FC3-3.6670 BSP 13034
                                                                                                                          LSA 2953.6 MSA 209.2 SSA
                                                                                                                          EL1 2618.1 EL2 111.7 ALF 167.17
    BOE 1.8991 BRA 1.3104 BC3 3.1553 FSP -1271
                                                                                                                                     ARRIVAL DATE NOV 30 1967
                                                                          FLIGHT TIME 152.00
LAUNCH DATE JUL I 1967
                                                                          DISTANCE 436.933
    RL 152.09 LAL -.00 LOL 278.50 VL 26.681 GAL -2.73 AZL 95.86 MCA 205.22 SMA 128.44 ECC .19007 INC 5.8575 V1 29.292 RP 107.48 LAP 2.49 LOP 123.60 VP 37.897 GAP 5.67 AZP 84.70 TAL 191.79 TAP 37.01 RCA 104.02 APO 152.85 V2 35.257 RC 125.861 GL -41.52 GP 23.77 ZAL 108.55 ZAP 140.55 ETS 33.04 ZAE 129.53 ETE 158.39 ZAC 101.18 ETC 21.83 CLP-147.54
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.837 VHL 4.103 DLA -31.52 RAL 147.30 RAD 6567.7 VEL 11.757 PTH 2.08 VHP 4.892 DPA 34.27 RAP 169.31 ECC 1.2771 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.55 6 42 42 1217.27 22.79 349.62 14.02 112.38 7 2 59 617.3 25.62 341.84
                                                                                                                               5174.9
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                                                                                                112.37
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12 6 32
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                                 1217.27
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                                                    22.79
                                                                  349.62
        75.55
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14 16 48
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       110.00
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                   12 47 39
                                   5348.29
                                                                  244.12
                                                                                  17.27
                                                                                                103.48
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     RET -.8697 RRF -.9453 RTF ..9521
SGB 4363.3 R23 .2302 R13 -.9540
SGI 4353.8 SG2 287.1 THA 173.25
                                                                                                                          ST 2592.6 SR 521.2 SS 1357.6
    TOE-1.8062 TRA-1.2099 TC3-3.5332 BAU .7985
                                                                                                                          CRT -.9816 CRS .9993 CST -.9876
LSA 2965.4 MSA 205.8 SSA 6.9
    RDE .3729 RRA .0426 RC3 .3155 FAU .07707
    FOE-2.2931 FRA -.4811 FC3-3.9630 83P 13434
BOE 1.8442 8RA 1.2107 8C3 3.5472 FSP -1261
                                                                                                                          EL1 2642.6 EL2 97.6 ALF 168.82
                                                                                                                                     ARRIVAL DATE DEC 2 1967
                                                                          FLIGHT TIME 154.00
LAUNCH DATE JUL 1 1967
    RL 152.09 LAL -.00 LOL 278.50 VL 26.640 GAL -2.47 A7L 95.50 MCA 208.46 SMA 128.16 ECC .19147 INC 5.5013 V1 29.292 RP 107.48 LAP 2.62 LOP 126.85 VP 37.870 GAP 5.99 A7P 85.16 TAL 190.56 TAP 39.02 RCA 103.63 APO 152.70 V2 35.258 RC 128.066 GL -40.01 GP 20.86 7AL 107.36 ZAP 143.41 ETS 31.45 ZAE 130.04 ETE 161.16 ZAC 100.86 ETC 20.49 CLP-149.23
                                                                          DISTANCE 442.963
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 15.753 VHL 3.969 DLA -30.92 RAL 149.85 RAD 6567.6 VEL 11.711 PTH 2.06 VHP 4.944 DPA 31.03 RAP 169.39 ECC 1.2593 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              15.36
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                    7 3 16 1169.40
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                                  5298.66
                                                                  240.43
                    13 8 26
                                                     32.44
       110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2640.8 SR 470.0 SS 1333.7
CRT -.9829 CRS .9995 CST -.9873
                                                                      SGT 4442.2 SGR 510.8 SG3 393.9
RRT -.8391 RRF -.9146 RTF .9506
SGB 4471.4 R23 .2093 R13 -.9519
     TDE-1.7865 TRA-1.1105 TC3-3.9012 BAU
                                                        .8232
     RDE .3254 RRA .0263 RC3 .2455 FAU .07517
FDE-2.1586 FRA -.3371 FC3-4.1310 BSP 13803
                                                                                                                          LSA 2988.7 MSA 202.0 SSA 8.0
                                                                                                                          EL1 2680.9 EL2
                                                                                                                                                 85.1 ALF 170.07
     BDE 1.8158 BRA 1.1108 BC3 3.9090 FSP -1264
                                                                      SG1 4462.9 SG2 276.6 THA 174.47
                                                                                                                                      ARRIVAL DATE DEC 4 1967
                                                                           FLIGHT TIME 156.00
 LAUNCH DATE JUL 1 1967
                                                                          DISTANCE 448.975
    HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.598 GAL -2.21 AZL 95.21 MCA 211.71 SMA 127.89 ECC .19298 INC 5.2125 VI 29.292 RP 107.48 LAP 2.74 LOP 130.10 VP 37.841 GAP 6.31 AZP 85.56 TAL 189.30 TAP 41.01 RCA 103.21 APO 152.57 V2 35.259 RC 130.281 GL -38.69 GP 18.50 ZAL 105.89 ZAP 145.93 ETS 30.11 ZAE 130.28 ETE 163.47 ZAC 100.21 ETC 19.33 CLP-150.87
    PLANETOCENTRIC CONIC
     C3 14.923 VHL 3.863 DLA -30.58 RAL 152.46 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 5.023 DPA 28.25 RAP 169.85 ECC 1.2456
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          335.67
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                    13 24 31
                                    5267.85
                                                                   238.11
       110.00
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                                                                      HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 4552.7 SGR 455.9 SG3 363.9
RRT -. 7985 RRF -. 8722 RTF . 9490
                                                                                                                           ST 2696.0 SR 433.1 SS 1309.7
CRT -. 9850 CRS .. 9997 CST -. 9872
     TOE-1.7823 TRA-1.0073 TC3-4.2393 BAU .8465
     RDE .2919 RRA .0196 RC3 .1795 FAU .07245
FOE-2.0325 FRA -.1997 FC3-4.2028 BSP 14136
                                                                     SGB 4575.5 R23 .1855 R13 -.9499
                                                                                                                          LSA 3021.9 MSA 197.8 SSA
                                                                                                                          EL1 2729.5 EL2 73.7 ALF 171.00
                                                                      SG1 4567.3 SG2 273.6 THA 175.41
     BOE 1.8080 BRA 1.0075 BC3 4.2431 FSP -1232
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LAUNCH DATE JUL 1 1967
                                                                          FLIGHT TIME 158.00
   HELIOCENTRIC CONIC
                                                                         DISTANCE 454.971
    RL 152.09 LAL -.00 LOL 278.50 VL 26.556 GAL -1.93 AZL 94.97 MCA 214.95 SMA 127.62 ECC .19462 INC 4.9723 V1 29.292
RP 107.48 LAP 2.85 LOP 133.35 VP 37.811 GAP 6.62 AZP 85.92 TAL 188.01 TAP 42.97 RCA 102.78 APO 152.45 VZ 35.259
    RC 132.447 GL -37.50 GP 16.57 7AL 104.18 ZAP 148.18 ETS 28.98 ZAE 130.33 ETE 165.41 ZAC 99.30 ETC 18.31 CLP-152.43
   PLANETOCENTRIC CONIC
    C3 14.278 VHL 3.779 DLA -30.43 RAL 155.16 RAD 6567.6 VEL 11.647 PTH 2.04 VHP 5.122 DPA 25.83 RAP 170.59 ECC 1.2350 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               19.00
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                                  1116.53
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99.32 15 5 8
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       101.63
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                     9 37 13
                                    715.68
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                   13 37 36
                                                                  236.77
                                                                                                                            4650.2
       110.00
                                   5250.18
                                                    33.04
                                                                                 22.04
                                                                                                                                                            227.66
                                                                                                                                              33.97
                                                                     MID-COURSE EXECUTION ACCURACY

SCT 4661.8 SGR 418.1 SGS 372.4

RRT -.7491 RRF -.8191 RTF .9478

SGB 4680.5 R23 .1609 R13 -.9484

SGI 4672.4 SGZ 276.3 THA 176.14
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE-1.7916 TRA -.9016 TC3-4.5528 BAU .8694
                                                                                                                          ST 2759.9 SR 407.4 SS 1288.2
CRT -.9877 CRS .9996 CST -.9873
    RDE .2686 RRA .0151 RC3 .1198 FAU .06935
    FOE-1.9187 FRA -.0745 FC3-4.2049 BSP 14487
BOE 1.8117 BRA .9017 BC3 4.5544 FSP -1196
                                                                                                                          LSA 3066.8 MSA 192.9 SSA 10.2
EL1 2789.1 EL2 62.9 ALF 171.70
LAUNCH DATE JUL 1 1967
                                                                          FLIGHT TIME 160.00
                                                                                                                                     ARRIVAL DATE DEC 8 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 460.949
   RL 152.09 LAL -.00 LOL 278.50 VL 26.514 GAL -1.63 AZL 94.77 HCA 218.20 SMA 127.34 ECC .19639 INC 4.7681 V1 29.292
RP 107.48 LAP 2.95 LOP 136.60 VP 37.781 GAP 6.94 AZP 86.25 TAL 186.71 TAP 44.91 RCA 102.33 APO 152.35 VZ 35.258
RC 134.624 GL -36.41 GP 14.96 ZAL 102.27 ZAP 150.21 ETS 28.05 ZAE 130.28 ETE 167.04 ZAC 98.18 ETC 17.41 CLP-153.94
   PLANETOCENTRIC CONIC
    C3 13.777 VHL 3.712 DLA -30.43 RAL 157.94 RAD 6567.5 VEL 11.626 PTH 2.04 VHP 5.253 DPA 25.67 RAP 171.55 ECC 1.2267
LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        78.36
                     7 45 14 1108.83
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110.33 8 3 43
       101.64
                   10 52 40
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                                  1108.83
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98.98 15 16 5
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                   13 48 43
       110.00
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                                                                                 24.20
                                                                  236.18
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                                                                                                                                              34.01
                                                                                                                                                            227.05
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     SCT 4759.9 SCR 393.2 SC3 359.4

RRT -.6929 RRF -.7576 RTF .9464

SCB 4776.1 R23 .1379 R13 -.9469

SCI 4767.7 SC2 283.1 THA 176.71
                                                                                                                          ST 2826.0 SR 389.5 SS 1266.2
CRT -.9907 CRS ..9992 CST -.9874
    TOE-1.8088 TRA -.7872 1C3-4.8333 BAU .8903
    ROE .2323 RRA .0131 RC3 .0662 FAU .06596
FOE-1.8131 FRA .0451 FC3-4.1449 BSP 14783
BOE 1.8263 BRA .7873 BC3 4.8338 FSP -1153
                                                                                                                          LSA 3115.4 MSA 187.8 SSA 11.3
EL1 2852.2 EL2 52.5 ALF 172.22
LAUNCH DATE JUL 1 1967
                                                                         FLIGHT TIME 162.00
                                                                                                                                    ARRIVAL DATE DEC 10 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 466.908
   PLANETOCENTRIC CONIC
    C3 13.395 VHL 3.660 DLA -30.55 RAL 160.83 RAD 6567.5 VEL 11.610 PTH 2.03 VHP 5.356 DPA 21.72 RAP 172.68 ECC 1.2205
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              110.25 8 12 51
110.24 12 42 56
110.25 8 12 51
110.25 8 12 51
110.24 12 42 56
121.38 10 13 20
98.98 15 25 45
                  7 54 21 1110.37
11 6 37 5779.52
7 54 21 1110.37
11 6 37 5779.52
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   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 4861.4 SGR 379.5 SG3 346.9
RRT -.6360 RRF -.6937 RTF .9456
SG8 4876.2 R23 .1167 R13 -.9460
SG1 4867.4 SG2 292.5 THA 177.15
                                                                                                                         ST 2900.2 9R 378.4 SS 1248.1

CRT -.9936 CRS .9982 CST -.9877

LSA 3174.7 MSA 182.2 SSA 12.5

EL1 2924.5 EL2 42.4 ALF 172.61
    TOE-1.8365 TRA -.6692 TC3-5.0912 BAU .9118
    ROE .2417 RRA .0135 RC3 .0204 FAU .06266
FOE-1.7211 FRA .1514 FC3-4.0497 BSP 15125
BDE 1.8523 BRA .6693 BC3 5.0913 FSP -1115
LAUNCH DATE JUL 1 1967
                                                                         FLIGHT TIME 164.00
                                                                                                                                     ARRIVAL DATE DEC 12 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 472.849
   RL 152.09 LAL -.00 LOL 278.50 VL 26.428 GAL -1.01 AZL 94.44 HCA 224.69 BMA 126.79 ECC .20035 INC 4.4361 V1 29.292
RP 107.49 LAP 3.12 LOP 143.10 VP 37.717 GAP 7.58 AZP 86.84 TAL 184.04 TAP 48.73 RCA 101.39 APO 152.19 V2 35.254
RC 138.949 GL -34.36 GP 12.46 ZAL 97.92 ZAP 153.79 ETS 26.67 ZAE 130.00 ETE 169.56 ZAC 95.47 ETC 15.90 CLP-156.75
  PLANETOCENTRIC CONIC
    C3 13.117 VHL 3.622 DLA -30.75 RAL 163.63 RAD 6567.5 VEL 11.598 PTH 2.03 VHP 5.467 DPA 19.92 RAP 173.95 ECC 1.2159
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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110.26 12 58 40
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      110.00
                                  5248.79
                                                   33.05
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                                                                                 29.30
                                                                                                                                              33.98
                                                                                                                                                           227.55
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4956.7 SGR 373.3 SG3 334.0

RRT -.5807 RRF -.6311 RTF .9450

SG8 4970.7 R23 .0986 R13 -.9452
                                                                                                                       ST 2975.5 9R 372.1 SS 1229.8
CRT -.9961 CRS .9966 CST -.9881
LSA 3236.2 MSA 176.3 SSA 13.6
    TOE-1.8698 TRA -.5440 TC3-5.3140 BAU .9319
   RDE .2352 RRA .0151 RC3 -.0192 FAU .05929
FDE-1.6364 FRA .2494 FC3-3.9131 BSP 15448
BDE 1.8845 BRA .5442 BC3 5.3141 FSP -1074
                                                                    SG1 4961.4 SG2 303.6 THA 177.49
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ARRIVAL DATE DEC 14 1967

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LAUNCH DATE JUL 1 1967
                                                                                DISTANCE 478.770
    RL 152.09 LAL -.00 LOL 278.50 VL 26.384 GAL -.68 A7L 94.30 HCA 227.94 SMA 126.51 ECC .20255 INC 4.2976 VI 29.292 RP 107.50 LAP 3.19 LOP 146.35 VP 37.684 GAP 7.90 A7P 87.12 TAL 182.67 TAP 50.61 RCA 100.89 APO 152.14 V2 35.251 RC 141.095 GL -33.35 GP 11.48 ZAL 95.52 ZAP 155.39 ETS 26.20 ZAE 129.83 ETE 170.54 ZAC 93.92 ETC 15.26 CLP-158.08
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 12.933 VHL 3.596 DLA -31.02 RAL 166.95 RAD 6567.5 VEL 11.590 PTH 2.03 VHP 5.626 DPA 18.26 RAP 175.34 ECC 1.2128
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT-INJ 2 LONG
                    8 9 43 1131.33
11 40 2 5743.35
8 9 43 1131.33
11 40 2 5743.35
10 33 54 662.35
14 15 1 5260.33
                                                                                                        110.39 8 28 34
110.37 13 15 45
                                                                                                                                             531.3
                                                                                      29.46
                                                         23.89
                                                                        343.61
         76.78
                                                                                                                                            5143.3
                                                                                                                                                              26.46
                                                                         271.62
                                                                                           29.47
                                                          23.91
        103.22
                                                                                                           110.39 8 28 34
110.37 13 15 45
120.87 10 44 57
99.76 15 42 41
                                                                                                                                                              26.45
                                                                                                                                                                             335.65
                                                                                                                                              531.3
                                                          23.89
                                                                         343.61
                                                                                           29.46
         76.78
                                                                                                                                                              26.46
                                                                                                                                            5143.3
                                                          23.91
                                                                         271.62
                                                                                           29.47
       103.22
                                                                                                                                               62.3
                                                                                                                                                              19.45
                                                                                                                                                                            298.28
                                                                                           25.18
                                                          15.47
                                                                         305.14
       110.00
                                                                                                                                            4660.3
                                                                                                                                                              33.92
                                                         32.92
                                                                         237.54
                                                                                           32.22
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 3052.1 SR 369.8 SS 1212.5
CRT -.9979 CRS .9941 CST -.9886
                                                                             SCT 5051.2 SCR 373.0 SC3 321.9
RRT -.5322 RRF -.5746 RTF .9448
SCB 5064.9 R23 .0825 R13 -.9450
SCI 5055.1 SCZ 315.5 THA 177.74
     TDE-1.9088 TRA -.4108 TC3-5.5060 BAU .9520
     ROE .2320 RRA .0175 RC3 -.0514 FAU .05613
FOE-1.5602 FRA .3396 FC3-3.7574 BSP 15773
BOE 1.9229 BRA .4111 BC3 5.5062 FSP -1038
                                                                                                                                       LSA 3300.5 MSA 170.4 SSA 14.6
EL1 3074.4 EL2 23.6 ALF 173.10
                                                                                                                                                    ARRIVAL DATE DEC 16 1967
                                                                                   FLIGHT TIME 168.00
LAUNCH DATE JUL 1 1967
                                                                                  DISTANCE 484.671
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.341 GAL -.33 AZL 94.17 MCA 231.18 SMA 126.23 ECC .20492 INC 4.1726 V1 29.292
RP 107.51 LAP 3.25 LOP 149.60 VP 37.650 GAP 8.22 AZP 87.38 TAL 181.29 TAP 52.47 RCA 100.37 APO 152.10 V2 35.247
RC 143.232 GL -32.34 GP 10.63 ZAL 92.99 ZAP 156.88 ETS 25.86 ZAE 129.65 ETE 171.37 ZAC 92.27 ETC 14.70 CLP-159.35
   PLANETOCENTRIC CONIC
    C3 12.839 VHL 3.583 OLA -31.32 RAL 170.17 RAD 6567.5 VEL 11.586 PTH 2.03 VHP 5.772 OPA 16.69 RAP 176.82 ECC 1.2113 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                             26.73
                      8 17 16 1146.52
11 58 13 5725.03
8 17 16 1146.52
11 58 13 5725.03
                                                                                       32.67
                                                                                                                                              546.5
                                                                                                           110.57
                                                                                                                         8 36 22
                                                          24.15
                                                                         344.86
         76.03
                                                                                                                                             5125.0
                                                                                                                                                               26.74
                                                                                                                                                                              262.37
                                                                                                            110.55 13 33 38
                                                           24.17
                                                                         270.34
                                                                                           32.67
        103.97
                                                                             0.34 32.67 110.55 13 33 38

14.07 28.59 120.55 11 2 49

18.75 35.37 100.44 15 50 30

MIO-COURSE EXECUTION ACCURACY

3GT 5139.0 SGR 376.1 463
                                                                                                                                                               26.73
                                                                                                                                                                              336.89
                                                                                                                                              546.5
                                                           24.15
                                                                         344.86
         76.03
                                                                                                                                                                            262.37
297.15
                                                                                                                                             5125.0
                                                                                                                                                               26.74
                                                                         270.34
                                                           24.17
        103.97
                                                                                                                                                               20.07
                                                                         304.07
                                                                                                                                               43.4
                      10 52 6
                                        643.44
                                                           16.13
        110.00
                                                                                                                                            4676.1
                                                                                                                                                               33.83
                      14 22 34
                                      5276.10
                                                           32.74
                                                                         238.73
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 3123.7 SR 370.2 SS 1192.1

CRT - .9989 CRS .9908 CST - .9890

LSA 3359.8 MSA 165.0 SSA 15.7

EL1 3145.5 EL2 17.3 ALF 173.25
                                                                             SGT 5139.0 SGR 376.1 SG3 309.8

RRT -.4903 RRF -.5248 RTF .9445

SGB 5152.7 R23 .0686 R13 -.9447

SG1 5142.3 SG2 327.6 THA 177.94
     TOE-1.9497 TRA -.2677 TC3-5.6576 BAU .9712
     ROE .2314 RRA .0201 RC3 -.0774 FAU :05304
     FDE-1,4867 FRA .4260 FC3-3.5764 BSP 16119
BDE 1,9634 BRA .2684 BC3 5.6581 FSP -1005
                                                                                                                                                    ARRIVAL DATE DEC 18 1967
                                                                                  FLIGHT TIME 170.00
LAUNCH DATE JUL 1 1967
                                                                                 DISTANCE 490.550
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.297 GAL .03 AZL 94.06 MCA 234.43 SHA 125.96 ECC .20747 INC 4.0585 VI 29.292 RP 107.53 LAP 3.30 LOP 152.85 VP 37.615 GAP 8.55 AZP 87.64 TAL 179.90 TAP 54.32 RCA 99.83 APO 152.09 V2 35.243 RC 145.356 GL -31.30 GP 9.90 ZAL 90.34 ZAP 158.29 ETS 25.64 ZAE 129.47 ETE 172.09 ZAC 90.54 ETC 14.18 CLP-160.58
    PLANETOCENTRIC CONIC
     C3 12.834 VHL 3.582 DLA -31.64 RAL 173.50 RAD 6567.5 VEL 11.585 PTH 2.03 VHP 5.924 DPA 15.20 RAP 178.38 ECC 1.2112
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          27.00 338.23
                                                                                        36.09
                                                                                                         110.80 8 44 40
110.79 13 51 56
110.80 8 44 40
                                                                                                                                             563.0
                      8 25 17 1163.00
12 16 47 5708.38
8 25 17 1163.00
12 16 47 5708.38
                                                                         346.20
                                                         24.39
         75.27
                                                                                                                                                              27.01
                                                                                                                                             5108.4
                                                           24.40
                                                                         269.18
                                                                                           36.10
        104.73
                                                                                                                                                              27.00
                                                                                                                                              563.0
                                                                                           36.09
                                                           24.39
                                                                         346.20
         75.27
                                                                                                           110.79 13 51 56
120.22 11 21 44
101.26 15 58 10
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                                                           24.40
                                                                         269.18
                                                                                           36.10
        104.73
                                                                                                                                                               20.68
                                                                         302.96
                                                                                           32.23
                                                                                                                                              24.1
                                                           16.80
        110.00
                                        624.11
                      Г1 11 20
                      14 29 55 5295.26
                                                                                                                                                               33.70
                                                                                                                                             4695.3
                                                                         240.18
                                                                                           38.74
                                                           32.49
        110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                       CRT - .9989 CRS . .9859 CST - .9889
LSA 3375.0 MSA 159.7 SSA 16.6
EL1 3181.6 EL2 17.3 ALF 173.36
                                                                              SGT 5155.8 SGR 378.3 SG3 288.7
     TDE-1.9741 TRA -.1104 TC3-5.6814 BAU .9750
     ROE .2301 RRA .0226 RC3 -.1072 FAU .04807
FDE-1.3770 FRA .5087 FC3-3.2428 BSP 15770
                                                                              RRT -.4400 RRF -.4680 RTF .9413
SGB 5169.6 R23 .0580 R13 -.9414
SGI 5158.5 SG2 339.6 THA 178.14
     BOE 1.9875 BRA .1127 BC3 5.6824 FSP
                                                              -877
                                                                                                                                                     ARRIVAL DATE DEC 20 1967
                                                                                   FLIGHT TIME 172.00
 LAUNCH DATE JUL I 1967
                                                                                 DISTANCE 496.408
    HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.254 GAL .40 AZL 93.95 MCA 237.67 SMA 125.69 ECC .21021 INC 3.9534 VI 29.292
RP 107.54 LAP 3.34 LOP 158.10 VP 37.579 GAP 8.88 AZP 87.88 TAL 178.49 TAP 56.16 RCA 99.27 APO 152.11 V2 35.237
RC 147.469 GL -30.24 GP 9.26 ZAL 87.60 ZAP 159.62 ETS 25.55 ZAE 129.30 ETE 172.71 ZAC 88.73 ETC 13.73 CLP-161.77
    PLANETOCENTRIC CONIC
     C3 12.919 VHL 3.594 DLA -31.95 RAL 176.93 RAD 6567.5 VEL 11.589 PTH 2.03 VHP 6.083 DPA 13.77 RAP 180.01 ECC 1.2126
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.54 8 34 0 1179.95 24.59 347.57 39.72 111.08 8 53 39 579.9 27.23 339.59
                                                                                       39.72
                      8 34 0 1179.95
12 35 25 5694.28
8 34 0 1179.95
12 35 25 5694.28
                                                                                                         111.08 8 53 39
111.06 14 10 19
                                                                                                                                                               27.24
                                                                                                                                              5094.3
                                                           24.60
                                                                          268.20
                                                                                            39.72
        105.46
                                                                                                           111.08 8 55 55
111.06 14 10 19
119.88 11 41 22
102.17 16 5 56
                                                                                                                                                                27.23
                                                                                                                                                                               339.59
                                                                                                                                               579.9
                                                                          347.57
                                                                                            39.72
                                                           24.59
          74.54
                                                                                            39.72
                                                                                                                                              5094.3
                                                                                                                                                               27.24
                                                           24.60
                                                                          268.20
        105.46
                                                                                                                                                  5.4
                                                                                                                                                               21.28
                                                                                            36.07
                                         605.38
                                                           17.44
                                                                          301.89
                      11 31 16
        110.00
                      14 37 19 5516.85
                                                                                                                                              4716.8
                                                                                                                                                                33.53
                                                           32.19
                                                                          241.79
                                                                                            42.30
        110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 3246.4 SR 378.0 SS 1146.0
CRT -.9979 CRS .9816 CST -.9898
                                                                             SGT 5285.7 SGR 389.5 SG3 284.8
RRT -.4260 RRF -.4495 RTF .9438
SG8 5300.0 R23 .0505 R13 -.9439
     TOE-2.0350 TRA .0479 TC3-5.8039 BAU 1.0026
RDE .2370 RRA .0252 RC3 -.1147 FAU .04656
                                                                                                                                       LSA 3459.9 MSA 155.6 SSA 17.6
     FDE-1.3516 FRA .5817 FC3-3.1200 BSP 16524
BDE 2.0487 BRA .0541 BC3 5.8050 FSP -916
                                                                                                                                       EL1 3268.3 EL2 24.1 ALF 173.37
                                                                             SG1 5288.3 SG2 352.3 THA 178.19
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FLIGHT TIME 166.00

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LAUNCH DATE JUL 1 1967
                                                                                FLIGHT TIME 174.00
                                                                                                                                                ARRIVAL DATE DEC 22 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 502.242
    RL 152.09 LAL -.00 LOL 278.50 VL 26.210 GAL .79 A7L 93.86 MCA 240.91 SMA 125.42 ECC .21315 INC 3.8556 VI 29.292
RP 107.56 LAP 3.37 LOP 159.35 VP 37.543 GAP 9.22 A7P 88.12 TAL 177.07 TAP 57.98 RCA 98.68 APO 152.15 V2 35.231
RC 149.570 GL -29.14 GP 8.69 ZAL 84.78 ZAP 160.89 ETS 25.58 ZAE 129.14 ETE 173.24 ZAC 86.86 ETC 13.32 CLP-162.91
   PLANETOCENTRIC CONTC
     C3 13.098 VHL 3.619 DLA -32.25 RAL 180.44 RAD 6567.5 VEL 11.597 PTH 2.03 VMP 6.249 DPA 12.39 RAP 181.71 ECC 1.2156
     LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     111.38 9 3 34

111.37 14 28 30

111.38 9 3 34

111.38 9 3 34

111.37 14 28 30

119.55 13 29 30

103.13 16 14 1
        73.89
                                                                                    43.53
                                                                                                                                                      27.41
                     8 43 38 1196.51
12 53 47 5683.66
                                                        24.73
                                                                       348.90
                                                                                                                                        596.5
       106.11
                                                         24.74
                                                                       267.45
                                                                                         43.53
                                                                                                                                         5083.7
                                                                                                                                                          27.42
                                                                                                                                                                         259.47
                     8 43 36 1196.51
12 53 47 5683.66
         73.89
                                                         24.73
                                                                       348.90
                                                                                         43.53
                                                                                                                                          596.5
                                                                                                                                                          27.41
                                                                                                                                                                          340.92
       106.11
                                                         24.74
                                                                       267.45
                                                                                         43.53
                                                                                                                                         5083.7
                                                                                                                                                          27.42
                                                                                                                                                                         259.47
                    11 51 34 5876.27
14 45 1 5339.94
       110.00
                                                        18.01
                                                                       278.80
                                                                                         40.09
                                                                                                                                         5276.3
                                                                                                                                                                          271.72
       110.00
                                                        31.85
                                                                       243.50
                                                                                         46,03
                                                                                                                                        4739.9
                                                                                                                                                          33.32
                                                                                                                                                                         234.58
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 5361.4 SGR 396.1 SG3 273.8
RRT -.4063 RRF -.4247 RTF .9443
SGB 5376.2 R23 .0429 R13 -.9443
SGI 5363.9 SGZ 363.6 THA 178.26
                                                                                                                                  ST 3297.3 SR 384.8 SS 1121.9
CRT -.9960 CRS .9759 CST -.9902
LSA 3500.8 MSA 152.0 SSA 18.4
    TDE-2.0798 TRA .2178 TC3-5.8185 BAU 1.0191
    ROE .2429 RRA .0274 RC3 -.1239 FAU .04376
FOE-1.2914 FRA .6504 FC3-2.8925 BSP 16839
BOE 2.0940 BRA .2195 BC3 5.8198 FSP -889
                                                                                                                                    EL1 3319.5 EL2 34.1 ALF 173.37
LAUNCH DATE JUL 1 1967
                                                                                                                                                ARRIVAL DATE DEC 24 1967
                                                                                FLIGHT TIME 176.00
   HELIOCENTRIC CONIC
                                                                               DISTANCE 508.050
    RL 152.09 LAL -.00 LOL 278.50 VL 26.167 GAL 1.20 AZL 93.76 MCA 244.15 SMA 125.15 ECC .21630 INC 3.7637 V1 29.292
RP 107.58 LAP 3.39 LOP 162.60 VP 37.507 GAP 9.57 AZP 88.36 TAL 175.64 TAP 59.79 RCA 98.08 APO 152.21 V2 35.225
RC 151.657 GL -28.00 GP 8.19 ZAL 81.91 ZAP 162.10 ETS 25.74 ZAE 128.98 ETE 173.70 ZAC 84.94 ETC 12.95 CLP-164.03
   PLANETOCENTRIC CONIC
    C3 13.377 VHL 3.657 OLA -32.51 RAL 184.02 RAD 6567.5 VEL 11.609 PTH
                                                                                                             2.03 WHP 6.422 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    6 54 11 1212.60
13 11 45 5676.67
6 54 11 1212.60
13 11 45 5676.67
12 11 48 5861.86
14 53 16 5363.45
                                                                                                       111.71 9 14 23
111.70 14 46 21
111.71 9 14 23
111.70 14 46 21
111.70 14 46 21
119.27 13 49 30
104.09 16 22 41
        73.33
                                                        24.81
                                                                       350.16
                                                                                        47.50
                                                                                                                                         612.6
                                                                                                                                                          27.53
       106.67
                                                        24.82
                                                                       266.95
                                                                                         47.51
                                                                                                                                         5076.7
                                                                                                                                                           27.54
                                                                                                                                                                          258.98
        73.33
                                                        24.81
                                                                       350.16
                                                                                         47.50
                                                                                                                                          612.6
                                                                                                                                                                          342.19
                                                                                                                                                          27.53
       106.67
                                                        24.82
                                                                       266.95
                                                                                        47.51
                                                                                                                                         5076.7
       110.00
                                                        18.50
                                                                       277.96
                                                                                        44:27
                                                                                                                                        5261.9
                                                                                                                                                          22.25
                                                                                                                                                                         270.84
       110.00
                                                        31.47
                                                                       245.23
                                                                                        49.94
                                                                                                                                        4763.5
                                                                                                                                                          33.06
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 5425.2 SGR 406.9 SG3 262.9

RRT -.3916 RRF -.4055 RTF .9445

SGB 5440.5 R23 .0368 R13 -.9446

SGI 5427.6 SG2 374.2 THA 178.31
    TOE-2.1199 TRA .4016 TC3-5.7755 BAU 1.0331
ROE .2503 RRA .0288 RC3 -.1288 FAU .04096
                                                                                                                                   ST 3330.9 SR 392.5 SS 1093.1
CRT -.9931 CRS .9693 CST -.9905
    FOE-1.2308 FRA .7182 FC3-2.6511 89P 17003
80E 2.1346 8RA .4026 BC3 5.7769 FSP -849
                                                                                                                                    LSA 3524.4 MSA 150.0 SSA 19.1
                                                                                                                                    EL1 3353.7 EL2 45.6 ALF 173.32
LAUNCH DATE JUL 1 1967
                                                                               FLIGHT TIME 176.00
                                                                                                                                               ARRIVAL DATE DEC 26 1967
   HELIOCENTRIC CONTC
                                                                              DISTANCE 513.831
    RL 152.09 LAL -.00 LOL 278.50 VL 28.123 GAL 1.83 AZL 93.68 MCA 247.39 SMA 124.88 ECC .21969 INC 3.6769 VI 29.292
RP 107.60 LAP 3.39 LOP 165.85 VP 37.470 GAP 9.92 AZP 88.58 TAL 174.20 TAP 61.59 RCA 97.44 APO 152.31 VZ 35.217
RC 153.730 GL -26.84 GP 7.75 ZAL .79.00 ZAP 163.25 ETS 26.04 ZAE 128.84 ETE 174.10 ZAC 82.96 ETC 12.62 CLP-165.11
   PLANETOCENTRIC CONIC
    C3 13.761 VHL 3.710 DLA -32.72 RAL 187.63 RAD 6567.5 VEL 11.625 PTH 2.04 VHP 6.602 DPA
                                                                                                                                           9.77 RAP 185.24 ECC 1.2265
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    9 5 45 1227.74
13 29 4 5673.89
9 5 43 1227.74
13 29 4 5673.89
12 31 27 5851.55
15 2 30 5386.12
                                                                                                     112.05 9 26 11
112.05 9 26 11
112.05 9 26 11
112.04 15 3 37
112.04 15 3 37
119.07 14 8 58
105.00 16 32 16
                                                                                    51.61
                                                                                                                                                       27.57
        72.88
                                                       24.80
                                                                      351.32
                                                                                                                                        627.7
                                                                                                                                                                       343.37
       107.12
                                                                                                                                                         27.58
                                                        24.81
                                                                       266.73
                                                                                        51.62
                                                                                                                                        5073.9
                                                                                                                                                                        258.78
                                                                                                                                                                        343.37
        72.88
                                                        24.80
                                                                       351.32
                                                                                        51.61
                                                                                                                                         627.7
                                                                                                                                                         27.57
       107.12
                                                        24.81
                                                                       266.73
                                                                                        51.62
                                                                                                                                        5073.9
                                                                                                                                                         27.58
                                                                                                                                                                        258.78
       110.00
                                                        18.84
                                                                       277.36
                                                                                        48.54
                                                                                                                                        5251.5
                                                                                                                                                         22.57
                                                                                                                                                                        270.20
                                                                                                                                                       32.63
       110.00
                                                                       246.88
                                                                                        53.99
                                                                                                                                       4786.1
                                                        31.08
                                                                                                                                                                        238.10
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                  ST 3354.5 SR 401.3 SS 1063.4
CRT -.9894 CRS ..9623 CST -.9909
    TOE-2.1600 TRA .5925 TC3-5.6919 BAU 1.0474
                                                                           SGT 5490.5 SGR 415.8 SG3 252.5
                                                                          RRT -.3826 RRF -.3929 RTF .9451
SGB 5506.2 R23 .0320 R13 -.9452
SGI 5492.8 SGZ 384.0 THA 178.33
    ROE .2596 RRA .0297 RC3 -.1292 FAU .03634
    FOE-1.1740 FRA .7794 FC3-2.4122 BSP 17259
BOE 2.1755 BRA .5932 BC3 5.6933 FSP -820
                                                                                                                                   LSA 3538.6 MSA 149.0 SSA 19.5
                                                                                                                                   EL1 3377.9 EL2 57.7 ALF 173.25
LAUNCH DATE JUL 1 1967
                                                                               FLIGHT TIME 180.00
                                                                                                                                                ARRIVAL DATE DEC 28 1967
                                                                               DISTANCE 519.583
   RL 152.09 LAL -.00 LOL 278.50 VL 26.080 GAL 2.07 AZL 93.59 MCA 250.63 SMA 124.61 ECC .22334 INC 3.5940 V1 29.292
RP 107.63 LAP 3.39 LOP 169.09 VP 37.432 GAP 10.29 AZP 88.81 TAL 172.75 TAP 63.39 RCA 96.78 APO 152.44 V2 35.210
RC 155.789 GL -25.64 GP 7.36 ZAL 76.07 ZAP 164.36 ETS 26.48 ZAE 128.70 ETE 174.45 ZAC 80.94 ETC 12.33 CEP-166.16
   PLANETOCENTRIC CONIC
    C3 14.260 VHL 3.776 DLA -32.87 RAL 191.27 RAD 6567.6 VEL 11.647 PTH 2.04 VMP 6.790 DPA 8.51 RAP 187.07 ECC 1.2347
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.57 9 18 10 1241.96 24.71 352.37 55.84 112.40 9 38 52 642.0 27.53 344.44
                                                                                    55.84
                    9 18 10 1241.96
13 45 36 5675.34
9 18 10 1241.96
                                                                                                                                                       27.53 344.44
                                                                                                      112.40
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15 20 13
       107.43
                                                        24.72
                                                                      266.80
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                                                                       352.37
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        72.57
                                                        24.71
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118.97 14 27 26
105.61 16 43 6
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       107.43
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       110.00
                    12 49 59
                                     5846.70
                                                        19.00
                                                                      277.07
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                     15 12 59 5406.63
                                                       30.71
                                                                                                                                       4806.6
       110.00
                                                                      248.37
                                                                                        58.19
                                                                                                                                                         32.57
                                                                                                                                                                        239.64
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SCT 5530.7 SCR 424.4 SC3 242.4

RRT -.3778 RRF -.3849 RTF .9460

SCB 5566.9 R23 .0277 R13 -.9460

SCI 5553.1 SC2 392.8 THA 178.34
                                                                                                                                  ST 3361.9 SR 410.4 SS 1030.8
CRT -.9850 CRS .9545 CST -.9911
LSA 3537.1 MSA 149.5 SSA 19.7
    TOE-2.1959 TRA .7949 TC3-5.5623 BAU 1.0607
   ROE .2703 RRA .0297 RC3 -.1259 FAU .03585
FOE-1.1182 FRA .8380 FC3-2.1767 89P 17494
BOE 2.2125 BRA .7954 BC3 5.5637 FSP -792
                                                                                                                                   EL1 3386.2 EL2 70.4 ALF 173.14
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JPL TM 33-99

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ARRIVAL DATE DEC 30 1967
                                                                               FLIGHT TIME 182.00
LAUNCH DATE JUL 1 1967
                                                                              DISTANCE 525.304
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 26.037 GAL 2.54 AZL 93.51 MCA 253.87 SMA 124.35 ECC .22725 INC 3.5144 VI 29.292 RP 107.65 LAP 3.38 LOP 172.33 VP 37.394 GAP 10.66 AZP 89.02 TAL 171.30 TAP 65.17 RCA 96.09 APO 152.61 V2 35.201 RC 157.834 GL -24.41 GP 7.00 ZAL 73.14 ZAP 165.43 ETS 27.09 ZAE 128.57 ETE 174.75 ZAC 78.89 ETC 12.08 CLP-167.19
   PLANETOCENTRIC CONIC
    C3 14.885 VHL 3.858 OLA -32.96 RAL 194.90 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 6.987 OPA 7.27 RAP 188.93 ECC 1.2450 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           7.27 RAP 188.93 ECC 1.2450
                                                                                                                                                     27.39
                                                                                    60.16
                                                                                                     112.74
                                                                                                                     9 52 25
                                                                                                                                         655.1
                      9 31 30 1255.05
14 1 16 5681.30
        72.39
                                                        24.52
                                                                      353.29
                                                                                                       112.73 15 35 58
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       107.61
                     14 1 16
                                                        24.54
                                                                      267.17
                                                                                        60.17
                                                                          13.29 60.16 112.74 9 52 25

17.17 60.17 112.73 15 35 58

17.18 57.25 119.01 14 44 22

19.59 62.52 106.47 16 55 27

MID-COURSE EXECUTION ACCURACY

SGT 5605.1 262 470 4 677
                     9 31 30 1255.05
14 1 16 5601.30
                                                                                                                                         655.1
                                                                                                                                                         27.39
                                                                                                                                                                        345.40
        72.39
                                                        24.52
                                                                      353.29
                                                                                                                                                                       259.28
       107.61
                                                        24.54
                                                                      267.17
                                                                                                                                        5061.3
                                                                                                                                                         27.40
                     13 6 54 5848.64
15 25 3 5423.75
                                                                                                                                                                       270.02
                    13 6 54
                                     5848.64
                                                        18.93
                                                                      277.18
                                                                                                                                       5248.6
                                                                                                                                                         22.65
       110.00
                                                                                                                                                                        240.92
                                                                                                                                       4823.8
                                                        30.39
                                                                      249.59
                                                                                                                                                         32.34
       110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 3352.9 SR 419.6 SS 995.6
CRT -.9797 CRS .9460 CST -.9913
                                                                          SGT 5605.1 SGR 432.4 SG3 232.6
RRT -.3763 RRF -.3807 RTF .9467
SGB 5621.7 R23 .0244 R13 -.9467
SGI 5607.4 SG2 400.4 THA 178.33
    TOE-2.2272 TRA 1.0085 TC3-5.3869 BAU 1.0727
    ROE .2824 RRA .0287 RC3 -.1198 FAU .03342
FOE-1.0631 FRA .8940 FC3-1.9439 BSP 17694
BOE 2.2450 BRA 1.0089 BC3 5.3903 FSP -762
                                                                                                                                   LSA 3519.4 MSA 151.8 SSA 19.7
                                                                                                                                   EL1 3378.0 ELZ 83.4 ALF 173.01
                                                                               FLIGHT TIME 184.00
                                                                                                                                               ARRIVAL DATE JAN 1 1968
   HELIOCENTRIC CONIC
                                                                               DISTANCE 530.990
    RL 152.09 LAL -.00 LOL 278.50 VL 25.994 GAL 3.03 AZL 93.44 MCA 257.10 SMA 124.09 ECC .23146 INC 3.4374 VI 29.292
RP 107.68 LAP 3.35 LOP 175.58 VP 37.355 GAP 11.05 AZP 89.23 TAL 169.85 TAP 66.95 RCA 95.37 APO 152.81 VZ 35.192
RC 159.863 GL -23.17 GP 6.69 ZAL 70.23 ZAP 166.46 ETS 27.89 ZAE 128.45 ETE 175.01 ZAC 76.80 ETC 11.87 CLP-168.19
   PLANETOCENTRIC CONIC
                                                                                                                                            5.06 RAP 190.82 ECC 1.2575
    C3 15.649 VHL 3.956 DLA -32.98 RAL 198.51 RAD 6567.6 VEL 11.706 PTH
                                                                                                           2.06 VHP 7.193 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         667.0
                                   1267.02
                                                                                     64.55
        72.35
                      9 45 36
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                                                                      354.08
                                                                                                       113.08 10 6 45
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                   14 15 53 5691.81
9 45 36 1267.02
14 15 53 5691.81
13 21 47 5658.28
15 36 55 5436.59
                                                        24.25
                                                                       267.85
                                                                                        64.55
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       107.65
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113.06 15 50 45
119.20 14 59 25
106.95 17 9 32
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        72.35
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                                                                      267.85
                                                                                        64.55
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                                                                                                                                                         27.16
       107.65
                                                                                                                                                                        270.62
                                                        18.61
                                                                      277.75
                                                                                        61.56
                                                                                                                                        5258.3
                                                                                                                                                         22.36
       110.00
                                                                      250.51
                                                                                        66.96
                                                                                                                                       4836.6
                                                                                                                                                         32.16
                                                                                                                                                                        241.88
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 5649.3 SCR 439.6 SC3 223.0

RRT -.3771 RRF -.3791 RTF .9471

SCB 5666.4 R23 .0216 R13 -.9472

SCI 5651.7 SC2 407.0 TMA 178.31
                                                                                                                                   ST 3323.7 SR 428.4 SS 957.5
CRT -.9736 CRS .9363 CST -.9914
    TOE-2.2500 TRA 1.2360 TC3-5.1691 BAU 1.0817
    RDE .2957 RRA .0264 RC3 -.1118 FAU .03100
                                                                                                                                   LSA 3481.7 MSA 156.2 SSA 19.5
    FOE-1.0075 FRA .9506 FC3-1.7149 BSP 17811
     BOE 2.2694 BRA 1.2363 BC3 5.1703 FSP
                                                                                                                                   EL1 3349.8 EL2 97.0 ALF 172.84
                                                                                                                                              ARRIVAL DATE JAN 3 1968
                                                                               FLIGHT TIME 186,00
LAUNCH DATE JUL 1 1967
                                                                              DISTANCE 536.638
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 25.951 GAL 3.54 AZL 93.36 MCA 260.34 SMA 123.83 ECC .23599 INC 3.3625 V1 29.292
RP 107.71 LAP 3.31 LOP 178.82 VP 37.317 GAP 11.45 AZP 89.44 TAL 168.39 TAP 68.72 RCA 94.61 APO 153.06 V2 35.183
RC 161.876 GL -21.92 GP 6.40 ZAL 67.36 ZAP 167.45 ETS 28.90 ZAE 128.34 ETE 175.25 ZAC 74.69 ETC 1J.69 CLP-169.18
   PLANETOCENTRIC CONIC
    C3 16.566 VHL 4.070 DLA -32.92 RAL 202.05 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 7.410 DPA
                                                                                                                                          4.87 RAP 192.75 ECC 1.2726
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   113.39 10 21 47
113.38 16 4 28
113.39 10 21 47
113.38 16 4 28
119.39 10 21 47
119.55 15 12 23
107.27 17 25 19
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                    10 0 30 1277.83
14 29 21 5706.92
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        72.46
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                     14 29 21
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       107.54
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                                                                      354.73
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        72.46
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                                                        23.85
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       107.54
                    14 29 21
                                   5706.92
                                                        23.87
                                                                      268.83
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                                  5875.90
5444.89
       110.00
                    13 34 27
                                                        18.03
                                                                      278.76
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                                                                      251.10
                                                                                       71.51
                                                                                                                                       4844.9
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                                                                                                                                                                       242.50
       110.00
                     15 54 34
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 3284.4 SR 437.0 SS 920.4

CRT -.9669 CRS ..9263 CST -.9915

LSA 3435.0 MSA 161.6 SSA 19.2

EL1 3311.5 EL2 110.7 ALF 172.66
    TOE-2.2711 TRA 1.4757 TC3-4.9274 BAU 1.0915
                                                                           SGT 5695.1 SGR 446.3 SG3 214.0
    RDE .5103 RRA .0230 RC3 -.1016 FAU .02879
FDE -.9560 FRA 1.0024 FC3-1.5047 89P 18005
                                                                           RRT -.3813 RRF -.3613 RTF .9480
SG8 5712.6 R23 .0194 R13 -.9481
SG1 5697.7 SG2 412.4 THA 178.28
    BOE 2.2922 BRA 1.4756 BC3 4.9265 FSP -705
                                                                                                                                               ARRIVAL DATE JAN 5 1968
LAUNCH DATE JUL 1 1967
                                                                               FLIGHT TIME 188.00
                                                                               DISTANCE 542.245
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 278.50 VL 25.908 GAL 4.07 AZL 93.29 MCA 263.57 SMA 123.58 ECC .24088 INC 3.2890 VI 29.292
RP 107.74 LAP 3.27 LOP 182.05 VP 37.278 GAP 11.87 AZP 89.63 TAL 166.93 TAP 70.50 RCA 93.81 APO 153.34 VZ 35.172
RC 163.875 GL -20.66 GP 6.14 ZAL 64.55 ZAP 168.40 ETS 30.17 ZAE 128.23 ETE 175.45 ZAC 72.56 ETC 11.54 CLP-170.15
   PLANETOCENTRIC CONIC
    C3 17.654 VHL 4.202 DLA -32.80 RAL 205.53 RAD 6567.7 VEL 11.791 PTH 2.08 VHP 7.638 DPA
                                                                                                                                           3.70 RAP 194.70 ECC 1.2905
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.71 10 15 59 1287.45 23.37 355.24 73.40 113.70 10 37 27 687.4 26.37 347.48 107.29 14 41 34 5726.66 23.38 270.12 73.41 113.68 16 17 1 5126.7 26.38 262.36
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                                   1287.45
5726.66
                                                                                                       113.70 10 37 27
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                   10 15 59
                                                        23.37
                                                                      355.24
                                                                                        73.40
        72.71
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       107.29
                     14 41 34
                                                        23.38
                                                                      270.12
                                                                                        73.41
                                                                                                        113.68
                                                                                                                    16 17 1
                                                                                                                                                         26.38
                                                                                                       120.02 13 55 11
107.42 17 42 34
                                                                                                                                                                        295.33
                                                                                                                                          13.0
                                                                                                                                                         21.04
                    13 44 58
                                       613.02
                                                        17.16
                                                                       302.33
                                                                                        70.06
       110.00
                                   5449.09
                                                                                                                                        4849.1
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       110.00
                     16 11 45
                                                        29.88
                                                                      251.40
                                                                                        76.13
                                                                                                                    17 42 34
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 3231.2 SR 444.7 SS 682.9
CRT -.9593 CRS .9153 CST -.9915
LSA 3374.8 MSA 168.6 SSA 18.7
                                                                          SCT 5735.3 SCR 452.1 SG3 205.5
RRT -.3675 RRF -.3657 RTF .9489
SG8 5753.1 R23 .0174 R13 -.9489
     TOE-2.2863 TRA 1.7272 TC3-4.6581 BAU 1.0996
    ROE .3261 RRA .0184 RC3 -.0906 FAU .02666
FOE -.9058 FRA 1.0537 FC3-1.3073 85P 18177
BOE 2.3094 BRA 1.7275 BC3 4.6590 FSP -680
                                                                                                                                  EL1 3259.2 EL2 124.6 ALF 172.47
                                                                           SG1 5738.0 SG2 416.5 THA 178.24
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695.8

5151.1

695.A

44.7

4850.2

5151.1

ARRIVAL DATE JAN 7 1968

25.83

25.85

25.83

25.85

20.02

31.96

ST 3166.5 SR 451.4 SS 845.9 CRT -.9508 CRS .9054 CST -.9915

LSA 3303.7 MSA 176.7 SSA 18.1 EL1 3195.5 EL2 138.6 ALF 172.27

ARRIVAL DATE JAN 9 1968

1.43 RAP 198.66 ECC 1.3363

ORBIT DETERMINATION ACCURACY

LSA 3219.1 MSA 186.3 SSA

ORBIT DETERMINATION ACCURACY

ST 3007.7 SR 460.4 SS 774.2 CRT -.9305 CRS .8755 CST -.9914

ST 3088.0 SR 456.5 SS 808.3 CRT -.9410 CRS .8895 CST -.9914

EL1 3117.8 EL2 153.0 ALF 172.06

ARRIVAL DATE JAN 11 1968

.33 RAP 200.67 ECC 1.3650

ORBIT DETERMINATION ACCURACY

347.90

264.01

297.23

242.89

17.5

LAUNCH DATE JUL 1 1967

PLANETOCENTRIC CONIC

106.89

73.11

106.89

110.00

110.00

73.11 10 32 3 1295.83 106.89 14 52 27 5751.06

13 53 35

DIFFERENTIAL CORRECTIONS

HELIOCENTRIC CONIC

PLANETOCENTRIC CONIC

DIFFERENTIAL CORRECTIONS

LAUNCH DATE JUL 1 1967

MELIOCENTRIC CONIC

PLANETOCENTRIC CONTC

DIFFERENTIAL CORRECTIONS

10 32 3 1295.83

14 52 27 5751.06 13 53 35 644.72 16 30 5 5450.16

TOE-2.2963 TRA 1.9916 TC3-4.3699 BAU 1.1064 ROE .3428 RRA .0124 RC3 -.0790 FAU .02463 FOE -.8577 FRA 1.1032 FC3-1.1260 83P 18341 BOE 2.3217 BRA 1.9917 8C3 4.3706 FSP -657

TOE-2.2967 TRA 2.2755 TC3-4.0588 BAU 1.1089 RDE .3601 RRA .0047 RC3 -.0679 FAU .02255

FOE -.8092 FRA 1.1548 FC3 -.9554 BSP 18388

TOE-2.2971 TRA 2.5694 TC3-3.7504 BAU 1.1121

BOE 2.3248 BRA 2.2755 BC3 4.0594 FSP

644.72

22.79

22.81

22.79

22.81

16.09

29.86

355.61

271.72

355.61

271.72

304.14

251.47

C3 20.434 VHL 4.520 DLA -32.36 RAL 212.17 RAD 6567.8 VEL 11.909 PTH - 2.12 VHP 8.134 DPA

C3 22.178 VHL 4.709 DLA -32.05 RAL 215.31 RAD 6567.9 VEL 11.982 PTH 2.14 VHP 8.405 DPA

-629

HELIOCENTRIC CONIC

ROE .3784 RRA -.0042 RC3 -.0569 FAU .02068 FDE -.7656 FRA 1.2032 FC3 -.8073 83P 18531 BDE 2.3281 BRA 2.5695 BC3 3.7508 FSP -607 RRT - 4150 RRF - 4086 RTF - 9517 SGB 5640.0 R23 - J0127 R13 - 9517 SG1 5824.7 SG2 421.5 THA 178.10 LSA 3133.5 MSA 196.0 SSA 16.9 EL1 3038.1 EL2 166.9 ALF 171.87 FLIGHT TIME 196.00 ARRIVAL DATE JAN 13 1968 LAUNCH DATE JUL 1 1967 **DISTANCE 564.154** HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.741 GAL 6.51 AZL 93.00 HCA 276.48 SMA 122.59 ECC .26464 INC 3.0000 VI 29.292 RP 107.88 LAP 2.98 LOP 194.98 VP 37.119 GAP 13.74 AZP 90.34 TAL 161.13 TAP 77.61 RCA 90.15 APO 155.03 V2 35.128 RC 171.722 GL -15.79 GP 5.33 ZAL 54.08 ZAP 171.90 ETS 39.06 ZAE 127.83 ETE 176.04 ZAC 63.86 ETC 11.30 CLP-173.90 PLANETOCENTRIC CONIC C3 24.204 VHL 4.920 DLA -31.69 RAL 218.31 RAD 6568.0 VEL 12.066 PTH 2.16 VHP 8.693 DPA -.76 RAP 202.69 ECC 1.3983 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.15 11 23 10 1312.45 20.55 355.78 90.89 114.66 11 45 3 712.5 23.71 348.26 114.66 11 45 3 114.65 16 53 53 75.15 11 25 10 1312.45 23.72 270.84 20.57 278.37 90.90 5252.6 15 16 20 11 23 10 5652.62 104.85 5.78 90.89 114.66 11 45 3 8.37 90.90 114.65 16 53 53 0.98 85.90 122.35 14 23 50 1.13 94.87 107.26 18 58 24 MID-COURSE EXECUTION ACCURACY 348.26 712.5 23.71 20.55 355.78 1312.45 75.15 5852.62 767.78 278.37 5252.6 23.72 270.84 20.57 15 16 20 104.65 304.38 167.6 15.89 11.71 310.98 110.00 14 11 2 17 27 39 5445.29 242.53 251.13 4845.3 32.03 29.96 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE-2.2935 TRA 2.8801 TC3-3.4391 BAU 1.1129
RDE .3973 RRA -.0147 RC3 -.0466 FAU .01868
FDE -.7245 FRA 1.2520 FC3 -.6752 BSP 18658
BDE 2.3277 BRA 2.8801 BC3 3.4395 FSP -586 ST 2922.9 SR 462.8 SS 742.2 CRT -.9189 CRS .8604 CST -.9914 SGT 5841.5 SGR 465.4 SG3 174.7 RRT - .4268 RRF - .4191 RTF .9529 SGB 5860.1 R23 .0114 R13 - .9529 LSA 3043.9 HSA 206.0 SSA 16.2 EL1 2953.8 EL2 180.6 ALF 171.69 SG1 5844.9 SG2 420.7 THA 178.04

FLIGHT TIME 190.00

DISTANCE 547.806

RL 152.09 LAL -.00 LOL 278.50 VL 25.866 GAL 4.63 AZL 93.22 HCA 266.80 SHA 123.33 ECC .24615 INC 3.2165 VI 29.292 RP 107.78 LAP 3.21 LOP 185.29 VP 37.238 GAP 12.30 AZP 89.82 TAL 165.47 TAP 72.27 RCA 92.97 APO 153.68 V2 35.162 RC 165.860 GL -19.42 GP 5.91 ZAL 61.80 ZAP 169.33 ETS 31.73 ZAE 128.13 ETE 175.63 ZAC 70.40 ETC 11.42 CLP-171.10

C3 18.935 VHL 4.351 DLA -32.61 RAL 208.91 RAD 6567.8 VEL 11.846 PTH 2.10 VHP 7.879 DPA 2.56 RAP 196.67 ECC 1.5116 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

355.61 77.83 113.98 10 53 38 271.72 77.83 113.96 16 28 18 355.61 77.83 113.96 16 28 18 304.14 74.16 120.58 14 4 20 251.47 80.81 107.46 18 0 55 MID-COURSE EXECUTION ACCURACY SGT 5770.3 5GR 456.9 4CL 107.76

SGT 5770.3 SGR 456.9 SG3 197.2 RRT -.3955 RRF -.3921 RTF .9499 SGB 5788.4 R23 .0158 R13 -.9499 SGI 5773.1 SG2 419.5 THA 178.20

FLIGHT TIME 192.00

DISTANCE 553.316

RL 152.09 LAL -.00 LOL 278.50 VL 25.824 GAL 5.23 AZL 93.14 HCA 270.03 3HA 123.08 ECC .25183 INC 3.1444 VI 29.292
RP 107.81 LAP 3.14 LOP 188.52 VP 37.199 GAP 12.76 AZP 90.00 TAL 164.02 TAP 74.04 RCA 92.08 APO 154.07 V2 35.151
RC 167.829 GL -18.18 GP 5.70 ZAL 59.13 ZAP 170.22 ETS 33.67 ZAE 128.03 ETE 175.78 ZAC 68.23 ETC 11.35 CLP-172.04

C3 20.434 VHL 4.520 OLA -32.36 RAL 212.17 RAD 6567.8 VEL 11.909 PTH 2.12 VHP 8.134 OPA 1.43 RAP 198.66 ECC 1.3363 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.65 10 48 37 1302.86 22.13 355.82 82.23 114.23 11 10 20 702.9 25.21 348.18 106.35 15 1 56 5780.17 22.14 273.62 82.23 114.22 16 38 16 5180.2 25.22 265.97 13.65 10 48 37 1302.86 22.13 355.82 82.23 114.23 11 10 20 702.9 25.21 348.18 106.35 15 1 56 5780.17 22.14 273.62 82.23 114.22 16 38 16 5180.2 25.22 265.97 110.00 14 0 36 681.80 14.79 306.23 78.17 121.17 14 11 58 81.8 18.81 299.42 110.00 16 49 7 5449.23 29.88 251.41 85.51 107.43 18 19 56 4849.2 31.97 242.82

FLIGHT TIME 194.00

DISTANCE 558.767

RL 152.09 LAL -.00 LOL 278.50 VL 25.782 GAL 5.85 AZL 93.07 MCA 273.25 SMA 122.83 ECC .25798 INC 3.0724 VI 29.292
RP 107.84 LAP 3.07 LOP 191.75 VP 37.159 GAP 13.24 AZP 90.17 TAL 162.57 TAP 75.82 RCA 91.14 APO 154.52 VZ 35.139
RC 169.783 GL -16.97 GP 5.51 ZAL 56.56 ZAP 171.08 ETS 36.08 ZAE 127.93 ETE 175.92 ZAC 66.05 ETC 11.30 CLP-172.97

C3 22.178 VHL 4.709 OLA -32.05 RAL 215.31 RAD 6567.9 VEL 11.982 PTH 2.14 VHP 8.405 OPA .33 RAP 200.67 ECC 1.3650 LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.33 11 5 39 1308.52 21.38 355.89 86.59 114.46 11 27 27 708.5 24.50 348.30 105.67 15 9 56 5813.94 21.39 275.83 86.59 114.45 16 46 50 5213.9 24.51 268.25 105.67 15 9 56 5813.94 21.39 275.83 86.59 114.46 11 27 27 708.5 24.50 348.30 105.67 15 9 56 5813.94 21.39 275.83 86.59 114.46 11 27 27 708.5 24.50 348.30 105.67 15 9 56 5813.94 21.39 275.83 86.59 114.45 16 46 50 5213.9 24.51 268.25 110.00 14 6 20 723.14 13.32 308.53 82.08 121.78 14 18 25 123.1 17.43 301.63 110.00 17 8 25 5447.31 29.92 251.27 90.20 107.36 18 39 12 4847.3 32.00 242.68 DISFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

SGT 5821.5 SGR 463.6 SG3 181.8

MID-COURSE EXECUTION ACCURACY.

SGT 5796.3 SGR 460.6 SG3 189.3 RRT -.4042 RRF -.5992 RTF .9505 SG8 5814.5 R23 .0141 R13 -.9506 SG1 5799.3 SG2 421.1 THA 178.15

1574

ARRIVAL DATE JAN 15 1968

LAUNCH DATE JUL 1 1967

HELIOCENTRIC CONIC DISTANCE 569.467 RL 152.09 LAL -.00 LOL 278.50 VL 25.700 GAL 7.21 AZL 92.93 MCA 279.70 SMA 122.35 ECC .27187 INC 2.9268 V1 29.292 RP 107.92 LAP 2.88 LOP 198.21 VP 37.080 GAP 14.28 AZP 90.49 TAL 159.71 TAP 79.41 RCA 89.09 APO 155.62 V2 35.116 RC 173.647 GL -14.63 GP 5.18 TAL 51.71 ZAP 172.68 ETS 42.79 ZAE 127.72 ETE 176.15 ZAC 61.66 ETC 11.33 CLP-174.82 PLANETOCENTRIC CONIC C3 26.551 VHL 5.153 OLA -51.29 RAL 221.16 RAD 6568.1 VEL 12.163 PTH 2.18 VMP 9.000 OPA -1.82 RAP 204.73 ECC 1.4370 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.84 12 3 8 114.83 15 31 13 114.84 12 3 8 114.83 15 31 13 122.87 14 28 30 107.23 19 17 17 95.13 348.03 22.84 19.66 355.49 714.4 76.11 11 41 13 1314.37 303.33 95.14 8.3 22.86 295.87 103.89 15 21 4 608.33 19.68 348.03 11 41 13 1314.37 19.66 355.49 95.13 714.4 22.84 76.11 19.68 15 21 4 608.33 303.33 95.14 8.3 22.86 295.87 103.89 89.62 214.9 14.24 307.03 14 14 55 814.93 9.98 313.54 110.00 4843.8 32.05 242.42 110.00 17 46 33 5443.80 29.99 251.02 99.50 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5855.9 SGR 466.2 SG3 168.0 RRT -.4393 RRF -.4305 RTF .9542 SGB 5874.4 R23 .0102 R13 -.9542 ST 2835.3 SR 463.4 SS 712.5 CRT -.9062 CRS .8443 CST -.9915 LSA 2952.0 MSA 216.2 SSA 15.6 TOE-2.2859 TRA 3.2086 TC3-3.1295 BAU 1.1109 RDE .4167 RRA -.0268 RC3 -.0373 FAU .01712 FDE -.6856 FRA 1.3014 FC3 -.5582 BSP 18757 BDE 2.3236 BRA 3.2087 BC3 3.1297 FSP -566 SG1 5859.5 SGZ 418.6 THA 177.99 EL1 2866.3 EL2 193.9 ALF 171.54 ARRIVAL DATE JAN 17 1968 FLIGHT TIME 200,00 LAUNCH DATE JUL 1 1967 DISTANCE 574.696 HELIOCENTRIC CONTC RL 152.09 LAL -.00 LOL 278.50 VL 25.660 GAL 7.96 AZL 92.85 MCA 282.92 SMA 122.12 ECC .27972 INC 2.8521 V1 29.292 RP 107.96 LAP 2.78 LOP 201.43 VP 37.040 GAP 14.85 AZP 90.64 TAL 158.30 TAP 81.22 RCA 87.96 APO 156.28 V2 35.103 RC 175.555 GL -13.52 GP 5.03 ZAL 49.44 ZAP 173.41 ETS 47.47 ZAE 127.60 ETE 176.24 ZAC 59.47 ETC 11.39 CLP-175.74 PLANETOCENTRIC CONIC C3 29.269 VHL 5.410 DLA -30.85 RAL 223.87 RAD 6568.2 VEL 12.274 PTH 2.21 VHP 9.330 DPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.98 12 21 50 114.97 15 34 55 114.98 12 21 50 114.97 15 34 55 123.31 14 32 31 107.21 19 35 40 11 59 56 1313.69 18.71 713.7 21.92 347.57 77.22 354.97 99.30 99.31 57.6 21.93 299.18 15 23 57 657.58 18.72 306.58 102.78 1313.69 713.7 347.57 11 59 56 15 23 57 18.71 354.97 99:30 21.92 77.22 657.58 99.31 57.6 21.93 299.1A 18.72 306.58 102.78 14 18 7 264.0 12.48 309.75 864.01 8.15 316.17 93.26 110.00 18 4 56 32.06 242.38 5443.30 250.99 104.07 4843.3 110.00 30.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5864.4 SCR 465.8 SC3 161.6 RRT -.4521 RRF -.4421 RTF .9555 SCB 5882.9 R23 .0089 R13 -.9555 SCI 5868.2 SC2 415.2 THA 177.93 ST 2744.6 SR 462.2 SS 684.9 CRT -.8918 CRS .8264 CST -.9915 TOE-2.2719 TRA 3.5596 TC3-2.8216 BAU 1.1042 ROE .4362 RRA -.0407 RC3 -.0294 FAU .01536 FDE -.6479 FRA 1.3532 FC3 -.4543 BSP 18755 LSA 2857.3 MSA 226.6 SSA 15.1 BOE 2.3134 BRA 3.5599 BC3 2.8218 FSP -542 EL1 2775.6 EL2 206.8 ALF 171.41 ARRIVAL DATE JAN 19 1968 FLIGHT TIME 202.00 LAUNCH DATE JUL 1 1967 DISTANCE 579.828 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.620 GAL 8.75 AZL 92.78 MCA 286.14 SMA 121.89 ECC .28827 INC 2.7755 V1 29.292
RP 107.99 LAP 2.67 LOP 204.65 VP 37.000 GAP 15.46 AZP 90.77 TAL 156.91 TAP 83.05 RCA 86.75 APO 157.03 V2 35.091
RC 177.448 GL -12.44 GP 4.90 ZAL 47.29 ZAP 174.07 ETS 53.36 ZAE 127.48 ETE 176.33 ZAC 57.28 ETC 11.50 CLP-176.66 PLANETOCENTRIC CONIC C3 32.417 VML 5.694 OLA -30.38 RAL 226.42 RAD 6568.3 VEL 12.401 PTH 2.24 VMP 9.685 OPA -3.88 RAP 208.84 ECC 1.5335 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.09 12 41 19 115.08 15 36 40 346.84 709.7 103.39 20.95 17.71 354.18 78.50 12 19 29 1309.66 115.09 12 41 19 115.08 15 36 40 123.67 14 36 0 107.24 19 55 17.73 103.40 112.9 20.96 302.89 310.23 101.50 15 24 47 712.89 20.95 346.84 17.71 103.39 709.7 354.18 78.50 12 19 29 1309.68 310.23 103.40 112.9 20.96 302.89 17.73 101.50 15 24 47 712.89 314.5 10.64 312.50 14 20 46 96.81 318.85 110.00 914.54 6.25 5444.07 19 53 25 4844.1 32.05 242,44 108.57 18 22 41 251.04 110.00 29.99 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5869.4 SGR 464.5 SG3 155.5 RRT -.4660 RRF -.4551 RTF .9572 SGB 5887.8 R23 .0077 R13 -.9572 SGI 5873.4 SG2 410.7 THA 177.88 ST 2658.9 SR 459.5 SS 661.2 CRT -.8767 CRS .8087 CST -.9917 LSA 2768.1 MSA 236.0 SSA 14.5 TOF-2,2604 TRA 3,9265 TC3-2,5295 BAU 1,0963 RDE .4562 RRA -.0560 RC3 -.0223 FAU .01373 FDE -.6148 FRA 1.4043 FC3 -.3668 BSP 18844 EL1 2689.4 EL2 218.5 ALF 171.33 BDE 2.3060 BRA 3.9269 BC3 2.5296 FSP -524 FLIGHT TIME 204.00 ARRIVAL DATE JAN 21 1968 LAUNCH DATE JUL 1 1967 DISTANCE 584.847 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.580 GAL 9.59 AZL 92.70 HCA 289.35 SMA 121.66 ECC .29759 INC 2.6965 V1 29.292
RP 108.03 LAP 2.54 LOP 207.87 VP 36.961 GAP 18.11 AZP 90.89 TAL 155.55 TAP 84.90 RCA 85.46 APO 157.87 V2 35.078
RC 179.325 GL -11.40 GP 4.78 ZAL 45.26 ZAP 174.65 ETS 60.77 ZAE 127.34 ETE 176.40 ZAC 55.09 ETC 11.66 CLP-177.59 PLANETOCENTRIC CONIC C3 36.066 VHL 6.005 OLA -29.89 RAL 228.82 RAD 6568.4 VEL 12.547 PTH 2.27 VHP 10.067 DPA -4.87 RAP 210.90 ECC 1.5936 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.00 12 40 19 1300.74 16.67 353.00 107.40 115.17 13 2 0 700.7 19.93 345.72 775.67 314.40 107.41 115.16 15 36 2 175.7 19.94 307.11 15 23 6 16.69 100.00 15 20 44 115.31 15 33 47 183.2 19.74 307.59 314.85 107.30 16.47 100.00 783.22 115.03 15 38 11 123.94 14 39 1 107.32 20 10 27 16.90 168.4 20.13 306.66 107.51 15 25 22 313.96 768.41 100.00 366.2 8.73 315.28 966.16 4.30 321.57 100.29 110.00 14 22 55 5446.28 32.02 29.94 251.20 113.00 4846.3 242.60 16 39 40 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5869.5 SCR 462.0 SC3 149.8 RRT -.4804 RRF -.4687 RTF .9590 SCB 5887.7 R23 .0066 R13 -.9591 ST 2575.9 SR 455.2 SS 640.7 CRT -.8606 CRS .7907 CST -.9920 TOE-2.2477 TRA 4.3155 TC3-2.2494 BAU 1.0846 RDE .4764 RRA -.0730 RC3 -.0165 FAU .01216 FDE -.5847 FRA 1.4571 FC3 -.2919 BSP 18915 BDE 2.2977 BRA 4.3161 BC3 2.2495 FSP -506 LSA 2681.9 MSA Z44.6 S5A 13.9 EL1 2605.7 EL2 229.2 ALF 171.29 SG1 5873.7 SG2 404.9 THA 177.82

FLIGHT TIME 198.00

ARRIVAL DATE JAN 23 1958

EL1 2308.6 EL2 256.9 ALF 171.62

LAUNCH DATE JUL 1 1967

DISTANCE 589.736 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.542 GAL 10.49 AZL 92.61 MCA 292.56 SMA 121.44 ECC .30779 INC 2.6144 VI 29.292 RP 108.07 LAP 2.41 LOP 211.08 VP 36.921 GAP 16.81 AZP 91.00 TAL 154.22 TAP 86.79 RCA 84.06 APO 158.82 V2 35.065 RC 181.185 GL -10.40 GP 4.66 TAL 43.34 ZAP 175.11 ETS 69.93 ZAE 127.19 ETE 176.47 ZAC 52.92 ETC 11.86 CLP-178.52 PLANETOCENTRIC CONIC C3 40.302 VML 6.348 OLA -29.38 RAL 231.07 RAD 6568.6 VEL 12.715 PTH 2.31 VMP 10.482 OPA -5.83 RAP 212.97 ECC 1.6633 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.81 13 3 17 1284.02 15.60 351.24 111.32 115.22 13 24 41 684.0 18.87 344.01 111.33 248.5 18.88 312.04 15 18 5 848.51 319.27 15.62 352.3 14.94 100.00 14 45 41 952.31 11.30 324.75 109.12 112.68 16 29 17 124.11 14 41 37 107.46 20 26 43 22.91 299.42 55.4 16 18 22 20.01 307.02 113.38 655.45 418.6 6.76 318.06 1018.57 14 24 39 2.30 324.31 103.68 31.96 4850.0 18 55 53 5450.00 110.00 29.87 251.46 117.34 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5864.8 SGR 458.4 SG3 144.3 RRT - 4950 RRF - .4827 RTF . .9611 SGB 5882.7 R23 .0055 R13 - .9611 SGI 5869.2 SG2 398.0 THA 177.77 ST 2496.3 SR 449.1 SS 623.2 CRT -.8435 CRS .7723 CST -.9924 LSA 2599.6 MSA 252.1 SSA 13.4 TOE-2.2345 TRA 4.7288 TC3-1.9831 BAU 1.0685 ROE .4966 RRA -.0916 RC3 -.0119 FAU .01062 FOE -.5570 FRA 1.5122 FC3 -.2281 BSP 18966 EL1 2525.2 EL2 238.5 ALF 171.29 BDE 2.2890 BRA 4.7297 BC3 1.9832 FSP - 488 ARRIVAL DATE JAN 25 1968 FLIGHT TIME 208.00 LAUNCH DATE JUL I 1967 HELIOCENTRIC CONIC DISTANCE 594.470 RL 152.09 LAL -.00 LOL 278.50 VL 25.503 GAL 11.46 ATL 92.53 HCA 295.77 SMA 121.23 ECC .51898 INC 2.5284 V1 29.292 RP 108.11 LAP 2.28 LOP 214.29 VP 36.883 GAP 17.57 AZP 91.10 TAL 152.93 TAP 88.71 RCA 82.56 APO 159.90 V2 35.052 RC 183.028 GL -9.44 GP 4.56 ZAL 41.54 ZAP 175.41 ETS 80.83 ZAE 127.02 ETE 176.53 ZAC 50.76 ETC 12.11 CLP-179.47 PLANETOCENTRIC CONIC C3 45.232 VHL 6.725 OLA -28.86 RAL 233.17 RAD 6568.7 VEL 12.907 PTH 2.35 VMP 10.932 DPA -6.77 RAP 215.03 ECC 1.7444 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.23 13 51 25 115.22 15 23 11 115.15 17.79 652.3 348.36 84.18 13 30 33 1252.27 14.50 338.4 17.80 325.37 95.82 15 7 32 938.41 14.52 115.16 118.82 14 51 55 111.88 16 56 37 323.23 444.7 1044.70 12.10 14 34 31 8.31 329.98 111.93 21.2 23.68 16 46 16 621.22 20.89 304.86 118.07 100.00 124.18 14 43 51 107.65 20 42 12 471.5 4.76 320.85 14 25 59 1071.51 5455.21 .28 327.07 107.00 110.00 4855.2 31.88 19 11 16 29.76 251.83 121.50 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET -.5100 RRF -.4972 RTF .9633 SGB 5873.3 R23 .0044 R13 -.9633 SGB 5876.4 SG2 389.9 THA 177.73 ST 2421.6 SR 441.5 SS 608.9 CRT -.8257 CRS .7539 CST -.9929 TOE-2.2222 TRA 5.1690 TC3-1.7315 BAU 1.0471 RDE .5168 RRA -.1119 RC3 -.0083 FAU .00910 FDE -.5321 FRA 1.5703 FC3 -.1742 BSP 19000 BDE 2.2815 BRA 5.1702 BC3 1.7315 FSP -471 LSA 2522.5 MSA 258.3 SSA 12.9 EL1 2449.2 EL2 246.2 ALF 171.35 ARRIVAL CATE JAN 27 1968 FLIGHT TIME 210.00 LAUNCH DATE JUL 1 1967 01STANCE 599.023 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.466 GAL 12.51 AZL 92.44 HCA 298.98 SMA 121.02 ECC .33127 INC 2.4376 VI 29.292 RP 108.16 LAP 2.13 LOP 217.50 VP 36.844 GAP 18.39 AZP 91.18 TAL 151.69 TAP 90.67 RCA 80.93 APO 161.11 V2 35.039 RC 184.853 GL -8.52 GP 4.47 ZAL 39.87 ZAP 175.51 ETS 92.98 ZAE 126.82 ETE 176.59 ZAC 48.63 ETC 12.41 CLP 179.56 PLANETOCENTRIC CONIC C3 50.986 VHL 7.140 DLA -28.33 RAL 235.12 RAD 6568.9 VEL 13.128 PTH 2.40 VHP 11.424 DPA -7.68 RAP 217.09 ECC 1.8391 ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 89.14 14 19 27 1149.14 13.39 340.26 118.88 115.20 14 38 36 549.1 16.68 333.13 115.20 14 38 36 115.19 14 52 31 16.70 501.4 13.41 336.78 118.89 14 34 10 1101.44 90.86 524.3 9.55 327.77 1124.27 334.41 114.85 14 27 7 5.68 100.00 1.5 24.10 303.61 122.48 17 9 11 601.55 21.39 100.00 2.73 323.65 1124.77 329.85 524.8 14 26 57 -1.76 110.25 110.00 31.78 4861.8 19 25 50 252.30 125.74 110.00 5461.85 29.62 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2349.3 SR 432.2 SS 597.2 CRT -.8066 CRS .7348 CST -.9934 LSA 2448.1 MSA 263.4 SSA 12.4 SCT 5842.1 SGR 447.7 SG3 134.3 RRT - .5248 RRF - .5117 RTF .9656 SGB 5859.2 R23 .0033 R13 - .9657 SG1 5846.8 SG2 380.8 THA 177.69 TDE-2.2064 TRA 5.6418 TC3-1.4928 BAU 1.0176 RDE .5367 RRA -.1340 RC3 -.0060 FAU .00755 FDE -.5087 FRA 1.6328 FC3 -.1281 BSP 18947 BDE 2.2708 BRA 5.6434 BC3 1.4928 FSP -452 ELI 2375.3 EL2 252.7 ALF 171.46 ARRIVAL DATE JAN 29 1968 FLIGHT TIME 212.00 LAUNCH DATE JUL 1 1967 DISTANCE 603.358 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 278.50 VL 25.429 GAL 13.64 AZL 92.34 MCA 302.19 SMA 120.81 ECC .34483 INC 2.3412 VI 29.292 RP 108.20 LAP 1.98 LOP 220.70 VP 36.806 GAP 19.30 AZP 91.25 TAL 150.50 TAP 92.69 RCA 79.15 APO 162.47 V2 35.025 RC 186.660 GL -7.64 GP 4.38 ZAL 38.31 ZAP 175.39 ETS 105.38 ZAE 126.59 ETE 176.64 ZAC 46.52 ETC 12.76 CLP 178.57 PLANETOCENTRIC CONIC C3 57.726 VHL 7.598 DLA -27.79 RAL 236.91 RAD 6569.1 VEL 13.382 PTH 2.45 VHP 11.964 DPA -8.55 RAP 219.14 ECC 1.9500 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 48 3 1311.82 7.76 349.32 120.25 117.32 14 7 55 711.8 11.36 342.50 90.00 15 21 53 1000.10 16.89 330.99 124.63 113.07 15 38 34 400.1 19.87 323.58 100.00 14 21 25 1197.45 3.22 338.45 117.77 119.73 14 41 23 597.5 7.15 331.87 14 21 25 1197.45 17 29 12 5877.73 14 27 34 1178.17 19 39 33 5469.78 111.10 19 7 10 124.00 14 47 12 5277.7 24.35 272.98 21.68 280.75 126.69 100.00 578.2 326.43 -3.80 332.64 113.41 .69 Z.85 129.77 108.19 21 10 43 HID-COURSE EXECUTION ACCURACY SGT 5893 7 474 110.00 31.65 4869.8 252.85 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5823.7 SGR 440.7 SG3 129.6 RRT -.5400 RRF -.5269 RTF .9682 SGB 5840.4 R23 .0023 R13 -.9682 SGI 5828.6 SG2 370.6 THA 177.65 ST 2284.2 SR 421.6 55 589.2 CRT -.7879 CRS .7175 CST -.9941 TOE-2.1976 TRA 6.1431 TC3-1.2739 BAU .9832 RDE .5566 RRA -.1575 RC3 -.0045 FAU .00606 LSA 2381.5 MSA 266.4 SSA 11.9 FDE -.4896 FRA 1.6981 FC3 -.0909 88P 18968

FLIGHT TIME 206.00

BOE 2.2670 BRA 6.1451 BC3 1.2740 FSP

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ARRIVAL DATE JAN 31 1968
                                                                           FLIGHT TIME 214.00
LAUNCH DATE JUL 1 1967
                                                                           DISTANCE 607.432
   RL 152.09 LAL -.00 LOL 278.50 VL 25.393 GAL 14.87 AZL 92.24 MCA 305.39 SMA 120.61 ECC .35982 INC 2.2378 V1 29.292 RP 108.24 LAP 1.82 LOP 223.91 VP 36.769 GAP 20.29 AZP 91.30 TAL_149.38 TAP 94.77 RCA 77.21 APO 164.01 V2 35.012 RC 188.449 GL -6.79 GP 4.30 ZAL 36.88 ZAP 175.05 ETS 116.92 ZAE 126.33 ETE 176.70 ZAC 44.45 ETC 13.18 CLP 177.55
  HELLOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 65.656 VHL 8.103 DLA -27.25 RAL 238.56 RAD 6569.2 VEL 13.675 PTH 2.50 VHP 12.558 DPA -9.39 RAP 221.18 ECC 2.0805
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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112.37 16 4 52
119.88 14 37 44
110.93 19 24 58
123.74 14 48 19
108.52 21 23 45
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19 52 26 5478.84
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       110,00
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                                                                                  133.67
                                                                   253.49
                                                    29.26
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2224.2 SR 409.8 SS 584.5

CRT -.7691 CRS .7010 CST -.9947

LSA 2320.5 MSA 267.5 SSA 11.4

EL1 2246.7 EL2 259.3 ALF 171.83
                                                                     SGT 5801.4 SGR 432.6 SG3 125.2
RRT -.5552 RRF -.5423 RTF .9709
SGB 5817.5 R23 .0014 R13 -.9709
SGI 5806.4 SG2 359.4 THA 177.62
    TOE-2.1920 TRA 6.6817 TC3-1.0708 BAU .9399
    ROE .5762 RRA -.1825 RCT -.0034 FAU .00455
    FOE -.4731 FRA 1.7686 FC3 -.0600 BSP 18974
BOE 2.2665 BRA 6.6842 BC3 1.0708 FSP -422
                                                                                                                                        ARRIVAL DATE FEB 2 1968
                                                                           FLIGHT TIME 216,00
                                                                           DISTANCE 611.190
    RL 152.09 LAL -.00 LOL 278.50 VL 25.359 GAL 16.21 AZL 92.13 MCA 308.59 SMA 120.42 ECC .37646 INC 2.1259 V1 29.292 RP 108.28 LAP 1.66 LOP 227.10 VP 36.732 GAP 21.38 AZP 91.33 TAL 148.35 TAP 96.94 RCA 75.09 APO 165.75 V2 34.999 RC 190.221 GL -5.99 GP 4.23 ZAL 35.58 ZAP 174.50 ETS 126.90 ZAE 126.03 ETE 176.75 ZAC 42.42 ETC 13.65 CLP 176.49
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                      2.56 VHP 13.216 DPA -10.19 RAP 223.19 ECC 2.2349
    C3 75.033 VHL 8.662 DLA -26.70 RAL 240.05 RAD 6569.5 VEL 14.014 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                      18.35
        90.00
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                                                                                                                                                   2.61
                                                                                                                                                                330.36
                                  1332.79
                                                                   345.88
                                                                                  123.46
                    14 12 19
                                                      -1.37
       100.00
                                                                                                  110.85 19 41 9
123.38 14 49 4
                                                                                                                                 5267.9
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                                                                                                                                                                272.32
                                                                   280.12
                                                                                  134.58
                   18 3 21
                                    5867.86
                                                      21.92
       100.00
                                                                                                                                  684.6
                                                                                                                                                 -3.37
                                                                                                                                                                331.99
                                                                                  119.50
                                                                   33A.26
                    14 27 39
                                    1284.61
                                                     -7.82
       110.00
                                                                                                   108.88 21 35 59
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                                                                                                                                                                245.73
                    20 4 30 5488.81
                                                      29.04
                                                                   254.18
                                                                                  137.43
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2168.8 SR 396.6 SS 582.6
CRT -.7506 CRS .6855 CST -.9954
                                                                       SGT 5774.4 SGR 423.2 SG3 121.0
RRT -.5704 RRF -.5578 RTF .9737
    TDE-2.1909 TRA 7.2610 TC3 -.8833 BAU .8860
    RDE .5955 RRA -.2089 RC3 -.0032 FAU .00299
                                                                       SGB 5789.9 R23 .0005 R13 -.9737
SG1 5779.5 SG2 347.3 THA 177.60
                                                                                                                             LSA 2264.7 MSA 266.9 SSA 10.9
    FOE -.4595 FRA 1.8451 FC3 -.0345 BSP 18962
BOE 2.2704 BRA 7.2640 BC3 .8833 FSP -408
                                                                                                                            EL1 2189.4 EL2 259.6 ALF 172.07
                                                                                                                                       ARRIVAL DATE FEB 4 1968
                                                                           FLIGHT TIME 218.00
LAUNCH DATE JUL 1 1967
                                                                          DISTANCE 614.561
   HELIOCENTRIC CONIC
    TELIOCENIMIC CONIC

RL 152.09 LAL -.00 LOL 278.50 VL 25.325 GAL 17.68 AZL 92.00 MCA 311.79 SMA 120.23 ECC .39497 INC 2.0036 V1 29.292

RP 108.32 LAP 1.49 LOP 230.30 VP 36.697 GAP 22.60 AZP 91.34 TAL 147.42 TAP 99.20 RCA 72.74 APO 167.72 V2 34.986

RC 191.975 GL -5.21 GP 4.16 ZAL 34.41 ZAP 173.78 ETS 135.13 ZAE 125.67 ETE 176.80 ZAC 40.44 ETC 14.19 CLP 175.38
   PLANETOCENTRIC CONIC
    C3 86.186 VHL 9.284 DLA -26.15 RAL 241.39 RAD 6569.7 VEL 14.406 PTH 2.62 VHP 13.947 DPA -10.95 RAP 225.16 ECC 2.4184
    LNCH ATATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               118.31 13 41 00 111.69 16 44 21 119.70 14 31 29 110.84 19 55 56 122.92 14 49 24 109.25 21 47 23
                                                                                                                               968.9 3.33 357.12
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                                                                               127.93
                    13 14 51 1568.94
         90.00
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                                                                                  136.90
                                                      16,66
                     16 28 49
                                    931.78
                                                                    326.76
         90.00
                                 1396.63
                                                                                                                                  796.6
                                                                                                                                                    .45
                                                                                                                                                               342.86
                                                      -3.53
                                                                   349.39
                                                                                  126.22
       100.00
                    14 8 12
                                                                                                                                                 24.57
                                                                                                                                                               272.28
                                                                                                                                 5267.4
                    18 18 9 5867.36
14 27 7 1337.31
20 15 44 5499.45
                                                   21.93.
                                                                   280.09
                                                                                  138.25
       100.00
                                                                                                                                                  -5.38
                                                                                                                                                                334.75
                                                      -9.78
                                                                    341.07
                                                                                  122.40
       110.00
                                                                                                                                                  31.16
                                                                                                                                                                246.51
                                                                                                                                 4899.4
                                                      28.81
                                                                   254.92
                                                                                  141.03
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5744.6 SGR 412.7 SG3 117.1
RRT -.5853 RRF -.5732 RTF ..9766
SGB 5759.4 R23 -.0004 R13 -.9766
SG1 5749.7 SG2 334.4 THA 177.58
                                                                                                                            ST 2116.8 SR 382.3 SS 583.9

CRT -.7321 CRS .6705 CST -.9961

LSA 2213.2 MSA 264.5 SSA 10.4
     TDE-2.1921 TRA 7.8907 TC3 -.7095 BAU .8175
    ROE .6144 RRA -.2368 RC3 -.0036 FAU .00130
FDE -.4477 FRA 1.9299 FC3 -.0131 BSP 18845
                                                                                                                             EL1 2135.5 EL2 258.2 ALF 172.36
     BDE 2.2766 BRA 7.8943 BC3 .7095 FSP -392
                                                                                                                                         ARRIVAL DATE FEB 6 1968
                                                                            FLIGHT TIME 220.00
LAUNCH DATE JUL 1 1967
                                                                            DISTANCE 617.454
    RL '152.09 LAL -.00 LOL 278.50 VL 25.293 GAL 19.31 AZL 91.87 MCA 314.98 SMA 120.06 ECC .41566 INC 1.8686 V1 29.292 RP 108.36 LAP 1.32 LOP 233.49 VP 36.662 GAP 23.95 AZP 91.32 TAL 146.60 TAP 101.59 RCA 70.15 APO 169.96 V2 34.973 RC 193.712 GL -4.47 GP 4.10 ZAL 33.39 ZAP 172.91 ETS 141.80 ZAE 125.25 ETE 176.85 ZAC 38.53 ETC 14.80 CLP 174.22
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 99.535 VHL 9.977 OLA -25.60 RAL 242.57 RAD 6569.9 VEL 14.862 PTH 2.68 VHP 14.766 DPA -11.68 RAP 227.09 ECC 2.6381
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 7 59 1639.69 -2.74 7.70 130.45 118.20 13 35 19 1039.7 1.05 1.07
                                                                                                118.20 13 35 19
111.53 17 0 30
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                     16 45 6 924.17
14 4 7 1458.42
                                     924.17
                                                      18.85
                                                                    326.28
                                                                                   140.47
         90.00
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                                                                                                               14 28 26
                                                                                                                                   858.4
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                                                      -5.61
                                                                    352.80
                                                                                   128.87
                                                                                                   119.41
        100.00
                                                                                                                                                   24.54
                                                                                                                                                                 272.37
                     18 31 38 5868.71
14 26 7 1389.42
                                                                                                   110.87 20 9 27
                                                                                                                                  5268.7
                                                      21.90
                                                                    280.17
                                                                                   141.73
        100.00
                                                                                                   122.35 14 49 16
109.64 21 57 59
                                                                                                                                                   -7.34
                                                                                                                                                                 337.51
                                                                                                                                   789.4
                                                    -11.69
                                                                    343.90
                                                                                   125.19
        110.00
                                                                                                                                  4910.5
                                                                                                                                                 30.96
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        110.00
                     20 26 8
                                    5510.48
                                                     28.56
                                                                    255.68
                                                                                   144.44
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 5709.1 SGR 401.1 SG3 113.4

RRT -.6001 RRF -.5866 RTF .9794

SGB 5723.1 R23 -.0012 R13 -.9794

SGI 5714.1 SG2 320.6 THA 177.58
                                                                                                                             ST 2070.1 SR 367.1 SS 589.0
CRT -.7154 CRS .6580 CST -.9967
     TOE-2.2058 TRA 8.5681 TC3 -.5529 BAU .7357
     RDE .6331 RRA - .2657 RC3 - .0043 FAU-.00045
FDE - .4402 FRA 2.0220 FC3 .0039 BSP 18821
BDE 2.2949 BRA 8.5722 BC3 .5529 FSP - 380
                                                                                                                            LSA 2167.8 MSA 260.0 SSA 9.9
ELI 2086.9 ELZ 254.5 ALF 172.66
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LAUNCH DATE JUL 2 1967

EL1 557.0 EL2 132.5 ALF 135.49

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DISTANCE 173.572
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 279.45 VL 24.917 GAL -5.82 AZL 93.50 HCA 74.05 SMA 118.04 ECC .30336 INC 3.5033 VI 29.292
RP 108.75 LAP -3.37 LOP 353.47 MP 36.283 GAP -17.09 AZP 90.96 TAL 193.22 TAP 267.27 RCA 82.23 APO 153.85 VZ 34.846
RC 45.237 GL -16.34 GP -4.55 ZAL 117.27 ZAP 4.65 ETS 101.42 ZAE 154.54 ETE 16.56 ZAC 92.07 ETC 13.64 CLP .96
    PLANETOCENTRIC CONIC
     C3 29.007 VHL 5.386 DLA -7.67 RAL 156.22 RAD 6568.2 VEL 12.263 PTH
                                                                                                             2.21 VHP 10.537 OPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       113.88
                        4 6 51
                                     2065.50
                                                        -15.69
                                                                         32.26
                                                                                        22.12
                                                                                                                         4 41 16
                     14 9 29
         90.00
                                      5189.31
                                                        25.98
                                                                        232.50
                                                                                          26.49
                                                                                                           78.32
                                                                                                                      15 35 58
                   5 24 30 1814.98
15 34 31 4915.06
6 24 20 1627.66
16 51 10 4675.14
        100.00
                                                                          13.29
                                                                                          21.57
                                                                                                          115.06
                                                                                                                        5 54 45
                                                        -16.85
        100.00
                                                                        212.03
                                                                                                           77.15 16 56 26
                                                        27.22
                                                                                          26.18
                                                                        192.83
                                                                                         19.93
        110.00
                                                        -19.94
                                                                                                         118.36
                                                                                                                       6 51 27
                                                                                                           73.89 18 9 6
                                                                                          25.20
        110.00
                     16 51 10
                                      4675.14
                                                         30.56
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
    TOE .3263 TRA -.4773 TC3 .3563 BAU .1413
RDE -.3666 RRA -.1366 RC3 .0760 FAU .02769
FDE -.2833 FRA .0155 FC3 -.8263 B3P 1961
BDE .4908 BRA .4966 BC3 .3644 FSP -191
                                                                            SGT 728.3 SGR 424.7 SG3 81.2
RRT -. 0929 RRF .1058 RTF -. 6645
                                                                            SGB 843.1 R23 -.0129 R13 .6658
SG1 729.9 SG2 421.9 THA 175.34
LAUNCH DATE JUL 2 1967
                                                                                 FLIGHT TIME 72.00
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 180.322
    RL 152.10 LAL -.00 LOL 279.45 VL 25.185 GAL -5.62 AZL 93.42 MCA 77.22 SMA 119.47 ECC .28888 INC 3.4249 V1 29.292
RP 108.72 LAP -3.34 LOP 356.65 VP 36.477 GAP -16.00 AZP 90.76 TAL 194.21 TAP 271.43 RCA 84.96 APO 153.99 V2 34.856
RC 46.178 GL -16.84 GP -4.82 ZAL 118.85 ZAP 4.95 ETS 76.01 ZAE 152.93 ETE 14.56 ZAC 91.10 ETC 13.65 CLP -1.15
   PLANETOCENTRIC CONIC
    C3 26.711 VHL 5.168 DLA -7.50 RAL 154.46 RAD 6568.1 VEL 12.169 PTH
                                                                                                             2.18 WHP 9.921 DPA
    LNCH A7MTH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJA7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 58 $1 2050.38 -15.28 31.35 19.05 114.14 4 32 41 1450.4 -11.89 24.31
                                                                                                       114.14
        90.00
                                                                                                           77.48
                     14 3 47
         90.00
                                     5163.35
                                                        25.61
                                                                        230.69
                                                                                          23.14
                                                                                                                      15 29 50
                     5 16 15 1799.58
15 28 44 4889.38
        100.00
                                                        -16.41
                                                                         12.36
                                                                                          18.51
                                                                                                          115.34
                                                                                                                         5 46 15
       100.00
                                                        26.82
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                                                                                                           76.28 16 50 13
                      6 16 17 1611,65
                                                        -19.42
                                                                        356.49
                                                                                          16.90
                                                                                                         118.70
                                                                                                                      6 43 8
                     16 45 12
                                     4650.09
                                                         30.08
                                                                        191.04
                                                                                         21.80
                                                                                                           72.93 18 2 42
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
    TOE .3259 TRA -.4495 TC3 .4185 BAU .1519
RDE -.3549 RRA -.1310 RC3 .0756 FAU .02986
FDE -.3000 FRA -.0155 FC3 -.9676 BSP 2081
BOE .4819 BRA .4680 BC3 .4252 FSP -218
                                                                            SGT 755.0 SGR 427.1 SG3 91.1
RRT -.1079 RRF .1227 RTF -.6836
                                                                            SG8 867.4 R23 -.0151 R13 .6852
SG1 757.1 SG2 423.4 THA 174.91
LAUNCH DATE JUL 2 1967
                                                                                FLIGHT TIME 74.00
                                                                                DISTANCE 187.080
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.430 GAL -5.64 AZL 93.35 MCA 80.39 SMA 120.82 ECC .27574 INC 3.3484 VI 29.292 RP 108.69 LAP -3.30 LOP 359.83 VP 36.655 GAP -14.96 AZP 90.56 TAL 195.24 TAP 275.63 RCA 87.50 APO 154.13 VZ 34.865 RC 47.255 GL -17.27 GP -5.12 ZAL 120.47 ZAP 6.10 ETS 56.38 ZAE 151.51 ETE 12.75 ZAC 90.20 ETC 13.67 CLP -3.32
   PLANETOCENTRIC CONTC
    C3 24.782 VHL 4.978 DLA -7.25 RAL 152.69 RAD 6568.0 VEL 12.090 PTH 2.16 VMP 9.336 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     114.32 4 23 34

76.65 15 24 12

115.54 5 37 15

75.43 16 44 28

118.95 6 34 24

72.01 17 56 40
                                                                        30.69
                                                                                     16.11
        90.00
                       3 49 34 2039.54
                                                       -14.97
                                                                                         19.91
                     13 58 35 5137.13
5 7 26 1788.34
                                                                       228.88
        90.00
                                                       25.21
                                                                                         15.58
       100.00
                                                      -16.08
                                                                        11.69
                    15 23 24
       100.00
                                    4863.56
                                                       26.39
                                                                       208.43
                                                                                         19.58
                   6 7 44 1599.53
16 39 35 4625.13
                                                                       355.77
       110.00
                                                       -19.02
                                                                                         13.99
       110.00
                                                       29.57
                                                                       189.28
                                                                                         18.53
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 779.3 SGR 428.9 SG3 102.3
RRT -.1240 RRF .1427 RTF -.6991
SGB 889.5 R25 -.0196 R13 .7011
SG1 781.9 SG2 424.2 THA 174.46
    TOE .3236 TRA -.4218 TC3_ .4807 BAU .1611
    ROE -.3446 RRA -.1260 RC3 .0728 FAU .03232
    FOE -.3181 FRA -.0519 FC3-1.1292 BSP 2174
    BOE .4727 BRA .4402 BC3 .4862 FSP
                                                                                FLIGHT TIME 76.00
LAUNCH DATE JUL 2 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 193.842
    RL 152:10 LAL -.00 LOL 279.45 VL 25.651 GAL -5.67 AZL 93.27 MCA 83.57 9MA 122.08 ECC .26387 INC 3.2732 V1 29.292
RP 108.66 LAP -3.25 LOP 3.01 VP 36.819 GAP -13.97 AZP 90.37 TAL 196.30 TAP 279.87 RCA 89.86 APO 154.29 V2 34.875
RC 48.458 GL -17.63 GP -5.45 ZAL 122.10 ZAP 7.77 ETS 43.68 ZAE 150.29 ETE 11.08 ZAC 89.38 ETC 13.70 CLP -5.55
   PLANETOCENTRIC CONIC
    C3 23.160 VHL 4.813 DLA -6.95 RAL 150.93 RAD 6567.9 VEL 12.022 PTH 2.15 VHP 8.780 DPA -.90 RAP 176.76 ECC 1.3812 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 40 10 2032.76 -14.78 30.29 13.32 114.43 4 14 3 1432.8 -11.36 23.28
                                                                                    13.32
                                                                                                      114.43 4 14 3
75.84 15 19 7
                    13 53 56 5110.76
                                                       24.78
                                                                       227.06
                                                                                         16.82
        90.00
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                       4 56 11
                                                                        11.25
                                                                                                        115.67
       100.00
                                    1761.06
                                                      -15.87
                                                                                         12.80
                                                                                                                                         1181.1
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119.12 6 25 22
71.11 17 51 6
       100.00
                   15 18 36
                                    4637.70
                                                       25.94
                                                                       206.64
                                                                                         16.48
                                                                                                                                         4237.7
                                                                                                                                                          23.57
                                                                                                                                                                          198.64
                                                                       355.28
                      5 58 51
                                    1591.14
4600.38
                                                      -18.74
                                                                                         11.24
                                                                                                                                          991.1
                                                                                                                                                        -14.72
                                                                                                                                                                          348.48
       110.00
                    16 34 26
                                                                       187.55
                                                                                                                                         4000.4
       110.00
                                                        29.03
                                                                                         15.41
                                                                                                                                                          26.18
                                                                                                                                                                          179.53
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .3210 TRA -.3944 TC3 .5448 BAU .1700 ROE -.3354 RRA -.1220 RC3 .0673 FAU .03512
                                                                          SGT 803.0 SGR 430.2 SG3 114.9
RRT -.1431 RRF .1657 RTF -.7139
SGB 911.0 R23 -.0245 R13 .7164
                                                                                                                                  ST 408.0 SR 401.8 SS 306.8
CRT -.8929 CRS -.9948 CST .9040
LSA 633.2 MSA 143.3 SSA 23.9
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FLIGHT TIME 70.00

SG1 806.3 SG2 424.1 THA 173.93

FDE -.3371 FRA -.0937 FC3-1.3126 BSP 2268 BDE .4643 BRA .4129 BC3 .5490 FSP -286

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LAUNCH DATE JUL 2 1967
                                                                                                                                       ARRIVAL DATE SEP 18 1967
                                                                           FLIGHT TIME 78.00
                                                                          DISTANCE 200.604
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 25.852 GAL -5.70 A7L 93.20 MCA 86.75 SMA 123.25 ECC .25320 INC 3.1990 V1 29.292
RP 108.63 LAP -3.19 LOP 6.19 VP 36.969 GAP -13.02 A7P 90.18 TAL 197.40 TAP 284.14 RCA 92.04 APO 154.46 V2 34.886
RC 49.776 GL -17.91 GP -5.82 TAL 123.74 TAP 9.77 ETS 35.57 TAE 149.29 ETE 9.49 TAC 88.63 ETC 13.75 CLP -7.86
   PLANETOCENTRIC CONIC
                                                                                                     2.13 VHP 8.253 DPA -1.59 RAP 177.40 ECC 1.3587
    C3 21.798 VHL 4.669 DLA -6.58 RAL 149.20 RAD 6567.9 VEL 11.966 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              4 4 17
                                                    -14.70
                                                                   30:10
                                                                                  10.69
                                                                                                114.48
                                                                                                                               1429.7
        90.00
                     3 30 27 2029.73
                                                                                                   75.05
                                                                                                             15 14 37
                                                                                                                                4484.4
                                                                                                                                                22.04
                    13 49 53 5084.37
4 48 39 1777.43
                                                                   225.26
                                                                                   13.89
        90.00
                                                    24.33
                                                                                   10.18
                                                                                                  115.73
                                                                                                             5 18 17
                                                                                                                                1177.4
                                                                                                                                                -12.17
       100.00
                                                    -15.76
                                                                    11.04
                                                                                                   73.78 16 34 33
119.22 6 16 10
70.25 17 46 2
                                                                                                                                                               196.95
                   15 14 21 4811.90
5 49 44 1586.20
16 29 46 4575.89
                                                                   204.68
                                                                                                                                4211.9
                                                                                                                                               22.99
       100.00
                                                    25.46
                                                                                   13.54
                                                                                                  119.22
                                                                                                                                                               348.20
                                                                                                                                986.2
                                                                                                                                               -14.54
      110.00
                                                   -16.58
                                                                   354.99
                                                                                    8.64
                                                                                                                                3975.9
                                                                                                                                                25.52
                                                                                                                                                               177.93
      110.00
                                                    28.48
                                                                   185.86
                                                                                  12.44
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 825.2 SCR 431.2 SC3 129.3

RRT -.1653 RRF .1926 RTF -.7277

SCB 931.1 R23 -.0297 R13 .7308

SCI 829.4 SC2 423.1 THA 173.31
                                                                                                                           ST 413.2 SR 404.1 SS 316.5

CRT -.9016 CRS -.9949 CST .8971

LSA 642.7 MSA 143.0 SSA 25.0

EL1 563.6 EL2 128.2 ALF 135.70
    TDE .3176 TRA -.3672 TC3 .6089 BAU .1783
    RDE -.3273 RRA -.1189 RC3 .0586 FAU .03830
    FOE -.3575 FRA -.1422 FC3-1.5212 89P 2362
BDE .4561 BRA .3860 BC3 .6118 FSP -328
                                                                                                                                       ARRIVAL DATE SEP 20 1967
LAUNCH DATE JUL 2 1967
                                                                           FLIGHT TIME 80.00
  HELIOCENTRIC CONIC
                                                                          DISTANCE 207.363
   RL 152.10 LAL -.00 LOL 279.45 VL 26.034 GAL -5.74 AZL 93.13 MCA 89.93 SMA 124.34 ECC .24363 INC 3.1251 V1 29.292 RP 108.59 LAP -3.13 LOP 9.38 VP 37.106 GAP -12.11 AZP 90.00 TAL 198.50 TAP 288.43 RCA 94.04 APO 154.63 VZ 34.897 RC 51.201 GL -18.10 GP -6.23 ZAL 125.35 ZAP 11.99 ETS 30.17 ZAE 148.52 ETE 7.96 ZAC 87.99 ETC 13.80 CLP -10.27
  PLANETOCENTRIC CONIC
   C3 20.653 VHL 4.545 DLA -6.16 RAL 147.54 RAD 6567.8 VEL 11.918 PTH 2.12 VHP 7.753 DPA -2.28 RAP 177.93 ECC 1.3399 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 20 34 2030.08
13 46 27 5058.08
4 38 59 1777.10
15 10 43 4786.27
5 40 33 1584.38
16 25 39 4551.76
                                                                                                                              1430.1
        90.00
                                                                   30.13
                                                                                   8.24
                                                                                                 114.47
                                                                                                              3 54 24
                                                                                                                                               -11.28
                                                                                                                                                                23.12
                                                  -14.71
                                                                                                             15 10 45
                                                                                                                                4458.1
                                                                                                                                                21.47
                                                                                                                                                               215.62
        90.00
                                                    23.86
                                                                   223.48
                                                                                   11.14
                                                                                                   74.27
                                                                                                   115.74 5 8 36
72.99 16 30 29
                                                                                                                                1177.1
                                                                                                                                                -12.16
                                                                                                                                                                4.07
      100.00
                                                   -15.75
                                                                   11.02
                                                                                    7.73
                                                                                                  115.74
                                                                                                                                                               195.28
                                                                                                                                4186.3
                                                                                                                                               22.39
      100.00
                                                    24.96
                                                                   203.13
                                                                                   10.78
                                                                                                            6 6 57
17 41 31
                                                                                                                                 984.4
      110.00
                                                   -18.52
                                                                   354.89
                                                                                    6.22
                                                                                                  119.26
                                                                                                                                              -14.48
                                                                                                                                                               348.10
                                                                                                                                                               176.37
                                                                                                                                               24.86
                                                                                                                                3951.8
      110.00
                                                    27.91
                                                                   184.21
                                                                                    9.66
                                                                                                   69.42
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 845.1 SGR 432.0 SG3 145.6
RRT -.1907 RRF .2236 RTF -.7394
SGB 949.1 R23 -.0365 R13 .7433
                                                                                                                            ST 415.9 SR 406.1 SS 325.6

CRT -.9091 CRS -.9938 CST .8891

LSA 650.1 MSA 143.6 SSA 26.1
    TOE .3131 TRA -.3411 TC3 .6703 BAU .1855
    ROE -.3202 RRA -.1168 RC3 .0463 FAU .04191
    FOE -.3790 FRA -.1975 FC3-1.7569 BSP 2442
BOE .4478 BRA .3606 BC3 .6719 FSP -376
                                                                       SG1 850.4 SG2 421.4 THA 172.61
                                                                                                                            EL1 567.9 EL2 123.9 ALF 135.75
                                                                                                                                      ARRIVAL DATE SEP 22 1967
LAUNCH DATE JUL 2 1967
                                                                          FLIGHT TIME 82.00
   HELIOCENTRIC CONIC
                                                                          DISTANCE 214.114
   RL 152.10 LAL -.00 LOL 279.45 VL 26.197 GAL -5.78 AZL 93.05 MCA 93.11 SMA 125.34 ECC .23510 INC 3.0512 V1 29.292 RP 108.56 LAP -3.05 LOP 12.56 VP 37.232 GAP -11.25 AZP 89.83 TAL 199.60 TAP 292.71 RCA 95.87 APO 154.81 V2 34.908 RC 52.722 GL -18.22 GP -6.69 ZAL 126.92 ZAP 14.40 ETS 26.40 ZAE 148.00 ETE 6.44 ZAC 87.46 ETC 13.86 CLP -12.78
   PLANETOCENTRIC CONIC
    C3 19.690 VHL 4.437 OLA -5.69 RAL 145.95 RAD 6567.8 VEL 11.877 PTH 2.11 VMP 7.281 OPA -2.98 RAP 178.36 ECC 1.3240
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1433.4
                                                                              5.97
                                                                                                                                            -11.38
                                                                                              114.42
73.53
                     3 10 40 2033.43
13 43 41 5031.94
                                                                   30.33
                                                                                                             3 44 34
                                                                                                                                                               23.32
                                                  -14.80
                    13 43 41
                                  5031.94
                                                     23.36
                                                                  221.72
                                                                                    8.58
                                                                                                             15 7 33
                                                                                                                                4431.9
                                                                                                                                               20.88
                                                                                                                                                              213.93
                                1779.71
4760.89
                    4 29 19
                                                   -15.83
                                                                   11.17
                                                                                    5.47
                                                                                                  115.69
                                                                                                              4 58 59
                                                                                                                               1179.7
                                                                                                                                               -12.24
                                                                                                                                                                4.22
                                                                                    8.22
                                                                                                   72.24
                                                                                                            16 27 4
                                                                                                                                4160.9
                                                                                                                                               21.78
                                                                                                                                                              193.64
      100.00
                   15 7 43
                                                    24.44
                                                                  201.43
                                                                                                   119.24 5 57 49
68.63 17 37 35
                     5 31 24 1585.35
16 22 7 4528.01
                                                  -18.55
                                                                                                                                 985.4
                                                                                                                                               -14.51
                                                                                                                                                              348.15
                                                                   354.94
                                                                                    3.99
                                                                                                  119.24
                                                                                    7.07
                                                                                                                                3928.0
                                                                                                                                               24.18
                                                                                                                                                              174.85
                                                    27.34
                                                                  182.60
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    TDE .3076 TRA -.3159 TC3 .7282 BAU .1918
RDE -.3138 RRA -.1158 RC3 .0299 FAU .04603
                                                                      SGT 862.2 SGR 433.0 SG3 164.2
RRT -.2202 RRF .2598 RTF -.7497
SGB 964.8 R23 -.0447 R13 .7546
                                                                                                                         ST 416.3 SR 407.7 SS 334.7
CRT -.9156 CRS -.9913 CST .8800
CLSA 655.6 MSA 145.0 SSA 27.0
   FOE -.4023 FRA -.2610 FC3-2.0238 BSP 2519
BOE .4394 BRA .3364 BC3 .7288 FSP -431
                                                                                                                            EL1 570.2 EL2 119.7 ALF 135.65
                                                                       SG1 869.1 SG2 419.0 THA 171.76
                                                                           FLIGHT TIME 84.00
                                                                                                                                       ARRIVAL DATE SEP 24 1967
                                                                          DISTANCE 220.854
   RL 152.10 LAL -.00 LOL 279.45 VL 26.344 GAL -5.83 AZL 92.98 MCA 96.29 SMA 126.26 ECC .22753 INC 2.9768 V1 29.292
RP 108.52 LAP -2.96 LOP 15.75 VP 37.346 GAP -10.42 AZP 89.67 TAL 200.68 TAP 296.97 RCA 97.53 APO 154.98 VZ 34.920
RC 54.330 GL -18.26 GP -7.20 ZAL 128.43 ZAP 16.97 ETS 23.65 ZAE 147.72 ETE 4.90 ZAC 87.05 ETC 13.93 CLP -15.40
   PLANETOCENTRIC CONIC
    C3 18.877 VHL 4.345 DLA -5.19 RAL 144.45 RAD 6567.8 VEL 11.843 PTH 2.10 VHP 6.835 DPA -3.67 RAP 178.65 ECC 1.3107
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 0 53
                                 2039.37
                                                    -14.97
                                                                   30.68
                                                                                    3.90
                                                                                                 114.32
                                                                                                               3 34 52
                                                                                                                               1439.4
                                                                                                                                              -11.56
                                                                                                                                                               23.66
       90.00
        90.00
                    13 41 34 5006.06
                                                    22.85
                                                                   220.00
                                                                                    6.22
                                                                                                   72.81
                                                                                                             15 5 0
                                                                                                                                4406.1
                                                                                                                                                20.2A
                                                                                                                                                               212.27
                                                                                                              4 49 31
                     4 19 47
                                 1784.86
                                                    -15.98
                                                                    11.48
                                                                                    3.41
                                                                                                  115.60
                                                                                                                                1184.9
                                                                                                                                                -12.40
                                                                                                                                                                4.52
      100,00
                    15 5 21 4735.81
5 22 25 1588.74
                                                                                                                                                               192.03
      100.00
                                                    23.91
                                                                   199.75
                                                                                    5.84
                                                                                                   71.51
                                                                                                             16 24 17
                                                                                                                                4135.8
                                                                                                                                               21.16
      110.00
                    5 22 25
                                                   -18.66
                                                                   355.14
                                                                                    1.95
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                                                                                                  67.88 17 34 16
                                                                                                                                               23.51
      110.00
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                   16 19 12 4504.69
                                                    26.75
                                                                   181.04
                                                                                    4.68
                                                                                                                                3904.7
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                         ST 414.0 SR 408.9 SS 343.2

CRT -.9208 CRS -.9876 CST .8693

LSA 658.7 MSA 147.4 SSA 27.7

ELI 570.2 EL2 115.8 ALF 135.38
                                                                      9GT 875.5 SGR 434.5 SG3 185.1
RRT -.2536 RRF .3013 RTF -.7576
SGB 977.3 R23 -.0548 R13 .7640
   TOE .3009 TRA -.2924 TC3 .7797 BAU .1968
RDE -.3081 RRA -.1160 RC3 .0090 FAU .05068
    FOE -.4267 FRA -.3329 FC3-2.3245 BSP 2580
BOE .4307 BRA .3146 BC3 .7797 FSP -494
                                                                      SG1 884.4 SG2 416.0 THA 170.77
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ARRIVAL DATE SEP 26 1967

ST 378.9 SR 410.3 SS 375.1 CRT -:9257 CRS -:9630 CST .8052 LSA 651.0 MSA 167.6 SSA 28.9 EL1 548.1 EL2 107.3 ALF 132.54

LAUNCH DATE JUL 2 1967

DIFFERENTIAL CORRECTIONS

<u>=</u> -- -

TDE .2610 TRA -.2225 TC3 .8943 BAU .2013 RDE -. 2896 RRA -. 1301 RC3 -. 1317 FAU .07627 FDE -.5366 FRA -.7215 FC3-3.9651 BSP 2695

BOE .3899 BRA .2578 BC3 .9040 FSP

HELIOCENTRIC CONIC

FLIGHT TIME 86.00

DISTANCE 227.582

-850

SGT 874.6 SGR 458.7 SG3 300.2 RRT -.4244 RRF .5270 RTF -.7639 SG8 987.6 R23 -.1266 R13 .7859

SG1 901.7 SG2 402.8 THA 164.23

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ARRIVAL DATE OCT 4 1967
LAUNCH DATE JUL 2 1967
                                                                           FLIGHT TIME 94.00
                                                                           DISTANCE 254.320
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.864 GAL -6.01 A7L 92.58 MCA 112.25 SMA 129.67 ECC .20130 INC 2.5798 V1 29.292 RP 108.33 LAP -2.39 LOP 31.71 VP 37.773 GAP -6.75 A7P 89.02 TAL 205.31 TAP 317.56 RCA 103.57 APO 155.78 V2 34.983 RC 63.388 GL -17.35 GP -10.86 ZAL 134.70 ZAP 32.60 ETS 16.61 ZAE 150.52 ETE 354.94 ZAC 87.58 ETC 14.14 CLP -30.93
   PLANETOCENTRIC CONIC
    C3 16.262 VHL 4.033 OLA -2.27 RAL 138.81 RAO 6567.7 VEL 11.732 PTH 2.07 VHP 4.988 DPA -7.18 RAP 177.52 ECC 1.2676
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH' INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 16 33 2095.66
13 40 52 4880.64
                                                                                                  113.33
                                                     -16.52
                                                                     34.09
                                                                                  356.43
                                                                                                               2 51 28
                                                                                                                                1495.7
                                                                                                                                               -13.22
                                                                                                                                                                26.96
        90.00
                                                                                                             15 2 12
                                                                                                                                 4280.6
                                                                                                                                                17.14
                                                                                                                                                                204.41
                                                     20.10
                                                                   211.84
                                                                                  357.35
                                                                                                    69.62
        90.00
                    3 36 50 1836.68
15 3 16 4614.85
                                                                                                               4 7 26
                                                                     14.60
                                                                                  355.98
                                                                                                   114.64
                                                                                                                                 1236.7
                                                                                                                                                -14.01
                                                                                                                                                                  7.53
                                                    -17.48
       100.00
                                                                                                             16 20 11
                                                                                                                                  4014.9
                                                                                                                                                 17.95
                                                                                                                                                                184.49
                                                     21.08
                                                                                  356.95
                                                                                                    68.30
                                                                    191.89
       100.00
                                 1630.65
                                                                                                  118.29 5 9 49
64.61 17 27 10
                                                                                                                                                -16.10
                                                                                                                                 1030.7
                                                                                                                                                                350.71
                     4 42 39
                                                    -20.03
                                                                    357.62
                                                                                  354.63
       110.00
                                                                                                                                 3793.6
                                                                                                                                                20.08
                                                                                                                                                                166.58
                                                                                  355.72
                    16 13 56
                                   4393.65
                                                     23.70
                                                                   173.86
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                       SGT 856.8 SGR 474.7 SG3 338.3
RRT -,4705 RRF .5951 RTF -.7560
SGB 979.5 R23 -.1560 R13 .7879
SG1 893.3 SG2 401.8 THA 161.52
                                                                                                                            ST 365.0 SR 410.0 SS 382.8

CRT -.9215 CRS -.9555 CST .7810

LSA 645.3 MSA 175.1 SSA 28.7
    TOE .2483 TRA -.2134 TC3 .8920 BAU .1981
    RDE -.2856 RRA -.1377 RC3 -.1855 FAU .08474
    FOE -.5660 FRA -.8464 FC3-4.5113 BSP 2693
BDE .3784 BRA .2539 BC3 .9111 FSP -973
                                                                                                                             EL1 538.2 EL2 108.0 ALF 131.39
                                                                                                                                         ARRIVAL DATE OCT 6 1967
                                                                            FLIGHT TIME 96.00
LAUNCH DATE JUL 2 1967
                                                                           DISTANCE 260.953
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.933 GAL -6.03 AZL 92.49 MCA 115.44 SMA 130.14 ECC .19790 INC 2.4910 V1 29.292
RP 108.29 LAP -2.25 LOP 34.91 VP 37.834 GAP -6.10 AZP 88.93 TAL 206.01 TAP 321.45 RCA 104.39 APO 155.90 VZ 34.996
RC 65.357 GL -16.97 GP -11.87 ZAL 135.66 ZAP 36.38 ETS 15.76 ZAE 151.61 ETE 351.91 ZAC 88.33 ETC 14.09 CLP -34.64
   PLANETOCENTRIC CONIC
    LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 8 55 2110.46 -16.91 35.00 355.48 113.05 2 44 5 1510.5 -13 EK 37 AZM
                   13 42 42 4855.86
3 29 30 1850.52
15 _4 48 4591.03
4 36 0 1642.36
                                                                                                   69.05 15 3 38
114.37 4 0 20
                                                                                   356.14
                                                                                                                                  4255.9
                                                                                                                                                                 202.89
        90.00
                                                     19.50
                                                                    210.26
                                                                                                                                  1250.5
                                                     -17.87
                                                                     15.44
                                                                                   355.04
       100.00
                                                                                                    67.73 16 21 20
118.04 5 3 22
64.04 17 27 40
                                                                                                                                                                 183.04
       100.00
                                                     20.47
                                                                    190.36
                                                                                   355.73
                                                                                                                                  3991.0
                                                                                                                                                 17.27
                                                                                                                                                                 351.37
                                                     -20.41
                                                                    358.32
                                                                                   353.72
                                                                                                   118.04
       110.00
                                                                                                                                  3772.0
                                                                                                                                                   19.38
                                                                                                                                                                 165.30
                    16 14 48
                                   4371.96
                                                      23.06
                                                                    172.50
                                                                                   354.48
       110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .2323 TRA -.2108 TC3 .8675 BAU .1919
                                                                       SGT 825.7 SGR 497.0 SG3 379.6
RRI - .5065 RRF .6623 RTF - .7380
                                                                                                                             ST 346.5 SR 409.1 SS 387.6

CRT -.9117 CRS -.9476 CST .7475

LSA 635.0 MSA 183.4 SSA 28.6
    RDE -.2813 RRA -.1469 RC3 -.2482 FAU .09388
                                                                       SGB 963.8 R23 -.1943 R13 .7866
SG1 874.7 SG2 404.5 THA 158.14
    FDE -.5907 FRA -.9774 FC3-5.1084 89P 2629
8DE .3648 BRA .2569 8C3 .9021 FSP -1103
                                                                                                                             EL1 524.5 EL2 111.1 ALF 129.82
                                                                                                                                        ARRIVAL DATE OCT 8 1967
                                                                            FLIGHT TIME 98.00
LAUNCH DATE JUL 2 1967
                                                                           DISTANCE 267.563
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.992 GAL -6.04 A7L 92.40 MCA 118.64 SMA 130.55 ECC .19496 INC 2.3974 V1 29.292 RP 108.25 LAP -2.10 LOP 38.11 VP 37.888 GAP -5.47 A7P 88.85 TAL 206.61 TAP 325.26 RCA 105.10 APO 156.00 V2 35.009 RC 67.365 GL -16.52 GP -13.00 ZAL 136.52 ZAP 40.40 ETS 14.95 ZAE 153.13 ETE 348.20 ZAC 89.33 ETC 13.99 CLP -38.60
   PLANETOCENTRIC CONTC
                                          -.98 RAL 137.50 RAD 6567.6 VEL 11.703 PTH 2.06 VHP 4.431 DPA -8.61 RAP 175.48 ECC 1.2565
    C3 15.585 VHL 3.948 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                INJ AZHI...
112.75 2 37 68.50 15 5 45
114.07 3 53 41
                                                                                                                              1526.2
                    2 1 42 2126.16
13 45 14 4830.82
3 22 35 1865.24
                                                                                 354.70
                                                                                                                                                                 28.77
                                                                    35.96
        90.00
                                                    -17.33
                                                                                                                                  4230.8
                                                                                                                                                                201.37
                                                                    208.68
                                                                                   355.09
        90.00
                                                     18.88
                                                                                                                                1265.2
                                                                                                                                                -14.87
                                                                                                                                                                  9.20
                                                                                  354.27
                                                     -18.28
                                                                    16.34
       100.00
                                                                                                             16 23 9
                                                                                                                                                                181.59
                                                                                                    67.17
                                                                                                                                  3967.0
                                                                                                                                                 16.58
                    15 7 2 4566.97
4 29 47 1654.89
16 16 19 4350.09
                                                                                   354.68
                                                                   186.87
       100.00
                                                    19.84
                                                                                                                4 57 22
                                                                                                                                                                352.09
                                                                                   352.97
                                                                                                   117.75
                                                                                                                                  1054.9
                                                                   359.07
       110.00
                                                     -20.81
                                                                                                    63.48 17 28 50
                                                                                                                                  3750.1
                                                                                                                                                                164.01
                                                                                   353.42
       110.00
                                                     22.40
                                                                   171.14
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 784.3 SGR 527.6 SG3 424.3
RRT -.5288 RRF .7265 RTF -.7082
SGB 945.2 R23 -.2386 R13 .7853
SG1 850.2 SG2 413.1 TMA 153.79
                                                                                                                            ST 326.0 SR 407.7 SS 390.7
CRT -.8954 CRS -.9395 CST .7035
LSA 622.4 MSA 192.4 SSA 28.4
    TOE .2148 TRA -.2141 TC3 .8221 BAU .1839
    ROE -.2768 RRA -.1579 RC3 -.3215 FAU .10375
FOE -.6113 FRA-1.1146 FC3-5.7634 BSP 2542
BOE .3504 BRA .2660 BC3 .8827 FSP -1246
                                                                                                                             EL1 508.9 EL2 116.3 ALF 127.93
                                                                                                                                         ARRIVAL DATE OCT 10 1967
                                                                            FLIGHT TIME 100.00
LAUNCH DATE JUL 2 1967
                                                                            DISTANCE 274.150
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.041 GAL -6.04 AZL 92.30 MCA 121.85 SMA 130.89 ECC .19244 INC 2.2978 V1 29.292 RP 108.20 LAP -1.95 LOP 41.31 VP 37.936 GAP -4.87 AZP 88.79 TAL 207.12 TAP 328.97 RCA 105.70 APO 156.06 V2 35.023 RC 69.409 GL -16.01 GP -14.24 ZAL 137.29 ZAP 44.69 ETS 14.15 ZAE 154.82 ETE 343.54 ZAC 90.60 ETC 13.81 CLP -42.82
   PLANETOCENTRIC CONIC
                                          -.30 RAL 137.05 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 4.194 DPA -9.33 RAP 174.05 ECC 1.2514
    C3 15.279 VHL 3.909 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 52 2142.81 -17.76 36.99 354.09 112.42 2 30 35 1542.8 -14.57 29.77
                                                                                                  112.42 2 30 35
67.96 15 8 35
                    1 54 52 2142.81
13 48 30 4605.24
                                                                                                                                  4205.2
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                                                     18.24
                                                                    207.08
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        90.00
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                                                                                                                                                 -15.34
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                                                                     17.30
                                                                                                   113.75
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                      3 16 4 1880.87
                                                     -18.71
       100.00
                                                                                                             16 25 41
                                                                                   353.78
                                                                                                                                                                 180.12
                                                                                                                                  3942.4
                                                                                                                                                 15.86
       100.00
                     15 9 59
                                    4542.41
                                                     19.19
                                                                    187.34
                                                                                                    66.63
                                                                                                                                                                 352.86
                                                                                                   117.44
                                                                                                                 4 51 48
                                                                                                                                  1068.2
                                                                                                                                                -17.39
                      4 24 0
                                   1668.24
                                                    -21.23
                                                                    359.88
                                                                                   352.38
       110.00
                                                                                                    62.93 17 30 40
                    16 18 32
                                                                                                                                  3727.8
                                                                                                                                                17.91
                                                                    169.78
                                                                                   352.51
                                                                                                                                                                 162.71
       110.00
                                    4327.80
                                                      21.71
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 734.7 SGR 560.6 SG3 472.5
RRT -.5318 RRF .7855 RTF -.6628
                                                                                                                            ST 305.7 SR 406.1 SS 393.4

CRT -.8714 CRS -.9316 CST .6481

LSA 609.6 MSA 201.9 SSA 28.1
    TOE .1972 TRA -.2222 TC3 .7569 BAU .1756
    RDE -.2722 RRA -.1709 RC3 -.4073 FAU .11434
FDE -.6287 FRA-1.2581 FC3-6.4789 BSP 2474
                                                                       3GB 929.0 R23 - .2808 R13 .7886
    BOE .3361 BRA .2803 BC3 .8596 FSP -1407
                                                                       SG1 823.8 SG2 429.4 THA 147.99
                                                                                                                             EL1 493.0 EL2 123.5 ALF 125.86
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ARRIVAL DATE OCT 12 1967

ELI 410.3 EL2 180.6 ALF 113.62

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DISTANCE 280.712
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 279.45 VL 27.082 GAL -6.04 AZL 92.19 MCA 125.05 SMA 131.18 ECC .19028 INC 2.1910 VI 29.292
RP 108.16 LAP -1.79 LOP 44.52 VP 37.977 GAP -4.29 AZP 88.74 TAL 207.53 TAP 332.57 RCA 106.22 APO 156.14 V2 35.036
RC 71.485 GL -15.43 GP -15.62 ZAL 137.95 ZAP 49.23 ETS 13.30 ZAE 156.58 ETE 337.63 ZAC 92.14 ETC 13.53 CLP -47.31
   PLANETOCENTRIC CONIC
     C3 14.984 VHL 3.871 DLA
                                                  .42 RAL 136.74 RAD 6567.6 VEL 11.678 PTH
                                                                                                                    2.05 VHP 3.985 OPA -10.07 RAP 172.33 ECC 1.2466
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 48 21 2160.51
13 52 32 4778.81
3 9 53 1897.50
15 13 41 4517.05
4 18 35 1682.50
16 21 29 4304.81
                                                            -18.22
                                                                              38.09
                                                                                             353.63
                                                                                                               112.06
                                                                                                                                2 24 22
                                                                                                                                                  1560.5
         90.00
                                                                                                                  67.42 15 12 11
                                                                                                                                                   4178.8
                                                            17.56
                                                                             205.45
                                                                                              353.47
                                                                                                                                                                                      198.24
         90.00
                                                                              18.33
                                                                                              353.21
                                                                                                                113.39
                                                                                                                                3 41 31
                                                                                                                                                   1297.5
                                                                                                                                                                    -15.83
        100.00
                                                            -19.16
                                                                                                                113.39 3 41 31
66.09 16 28 58
117.10 4 46 37
62.38 17 33 14
                                                                                                                                                   3917.0
                                                                             185.77
                                                                                             353.04
        100.00
                                                           18.49
                                                                                              351.95
                                                                                                                                                                                      353.68
                                                          -21.67
                                                                                 .74
                                                                                                                                                   1082.5
                                                                                                                                                                    -17.87
        110.00
                                                                             168.38
                                                                                             351.76
                                                                                                                                                   3704.8
                                                                                                                                                                    17.13
                                                            21.00
       110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                 SGT 675.1 SGR 619.5 SG3 521.4
RRT -.4951 RRF .8354 RTF -.5846
                                                                                                                                              ST 283.2 SR 403.1 SS 390.6

CRT -.8312 CRS -.9228 CST .5677

LSA 591.2 MSA 211.9 SSA 27.8
     TOE .1771 TRA - .2385 TC3 .6615 BAU .1668
    RDE -.2665 RRA -.1852 RC3 -.5055 FAU .12505
FDE -.6323 FRA-1.3938 FC3-7.2247 BSP 2375
                                                                                 SGB 916.3 R23 -.3101 R13 .8003
    BOE .3200 BRA .3020 BC3 .8325 FSP -1566
                                                                                 SG1 793.7 SG2 457.9 THA 139.92
                                                                                                                                              EL1 474.1 EL2 133.9 ALF 123.28
                                                                                      FLIGHT TIME 104.00
                                                                                                                                                           ARRIVAL DATE OCT 14 1967
LAUNCH DATE JUL 2 1967
                                                                                      DISTANCE 287.249
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.116 GAL -6.03 AZL 92.08 MCA 128.26 SMA 131.42 ECC .18845 INC 2.0753 V1 29.292 RP 108.12 LAP -1.63 LOP 47.72 VP 38.013 GAP -3.73 AZP 88.71 TAL 207.83 TAP 336.08 RCA 106.65 APO 156.18 V2 35.049 RC 73.590 GL -14.76 GP -17.12 ZAL 138.52 ZAP 54.01 ETS 12.37 ZAE 158.28 ETE 330.07 ZAC 93.94 ETC 13.12 CLP -52.06
   PLANETOCENTRIC CONIC
                                                                                                                     2.05 WHP 3.805 DPA -10.83 RAP 170.33 ECC 1.2418
    C3 14.695 VHL 3.833 OLA 1.17 RAL 136.57 RAD 6587.6 VEL 11.665 PTH 2.05 VHP 3.805 DPA -10.83 RAP 170.33 ECC 1.2418 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 57 26 4751.13 16.82 203.74 352.88 66.88 15 16 37 4151.1 13.55 -15.60 31.97 100.00 3 3 59 1915.37 -19.64 19.44 352.91 113.00 3 35 54 1315.4 -16.36 12.18 100.00 15 18 14 4490.49 17.75 184.15 352.45 65.55 16 33 5 3890.5 14.30 177.05 110.00 4 13 28 1697.86 -22.15 1.68 351.67 116.73 4 41 46 1097.9 -18.38 354.58 110.00 16 25 14 4280.76 20.23 165.93 351.15 61.84 17 36 35 3680.8 16.31 16.01
                                                1.17 RAL 136.57 RAD 6567.6 VEL 11.665 PTH
     C3 14.695 VHL 3.833 OLA
   DIFFERENTIAL CORRECTIONS
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 $6T 614.2 $GR 681.7 $G3 570.1

RRT -.4021 RRF .8763 RTF -.4571

$G8 917.6 R23 -.2886 R13 .8353
                                                                                                                                              ST 261.9 SR 398.5 SS 383.6

CRT -.7696 CRS -.9128 CST .4569

LSA 569.5 MSA 222.4 SSA 27.7
     TOE .1564 TRA -.2616 TC3 .5373 BAU .1608
    ROE -.2596 RRA -.2007 RC3 -.6174 FAU .13561
FOE -.6217 FRA-1.5190 FC3-7.9895 89P 2312
BOE .3031 BRA .3297 BC3 .8185 FSP -1726
                                                                                 SG1 771.3 SG2 497.0 THA 127.73
                                                                                                                                              EL! 453.7 EL2 146.9 ALF 120.34
                                                                                      FLIGHT TIME 106.00
                                                                                                                                                           ARRIVAL DATE OCT 16 1967
LAUNCH DATE JUL 2 1967
                                                                                     DISTANCE 293.762
   HELTOCENTRIC CONIC
    RU 152.10 LAL -.00 LOL 279.45 VL 27.142 GAL -6.00 AZL 91.95 HCA 131.47 SMA 131.60 ECC .18691 INC 1.9488 VI 29.292 RP 108.08 LAP -1.46 LOP 50.93 VP 38.044 GAP -3.19 AZP 88.71 TAL 208.03 TAP 339.50 RCA 107.00 APO 156.20 V2 35.062 RC 75.721 GL -14.00 GP -18.76 ZAL 139.00 ZAP 59.01 ETS 11.31 ZAE 159.71 ETE 320.53 ZAC 93.98 ETC 12.57 CLP -57.06
    PLANETOCENTRIC CONIC
     C3 14.406 VHL 3.796 DLA 1.98 RAL 136.54 RAD 6567.6 VEL 11.653 PTH 2.05 VHP 3.656 DPA -11.62 RAP 168.05 ECC 1.2371
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              111.21 2 12 39
66.34 15 22 0
112.56 3 30 29
65.00 16 38 6
116.31 4 37 10
61.29 17 40 47
                                                                                          353.17
                                                                                                                                               1600.2
                                                                                                                                                               -16.16
                                                                                                                                                                                      33.22
                      1 35 59 2200.15
14 3 19 4721.66
2 58 14 1934.81
                                                                             40.57
                                                           -19.22
         90.00
                                                                             201.95
                                                                                             352.43
                                                                                                                                                   4121.7
                                                                                                                                                                     12.69
                                                                                                                                                                                      194.86
          90.00
                                                            16.03
                                                                                             352.77
                                                                                                                                                   1334.8
                                                                                                                                                                                       13.35
                                                                             20,66
        100.00
                                                           -20.15
                                                                                                                                                   3862.2
                                                                                                                                                                     13.44
                     15 23 44 4462.23
4 8 36 1714.60
16 29 52 4255.22
                                                                                             351.99
        100.00
                                                           16.95
                                                                             182.44
                                                                                                                                                   1114.6
                                                                                                                                                                    -18.94
                                                                                                                                                                                     355.56
                                                                               2.72
                                                                                             351.55
        110.00
                                                           -22.66
                                                                                                                                                   3655.2
                                                                                                                                                                      15.42
                                                                                             350.69
        110.00
                                                            19.40
                                                                             165.41
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCORACY

SCT 565.9 SGR 756.3 SG3 617.6

RRT -.2327 RRF ..9088 RTF -.2594

SGB 944.6 R23 -.1629 R13 .8954

SGI 778.9 SG2 534.4 THA 109.17
                                                                                                                                            ST 245.1 SR 392.7 SS 374.0
CRT -.6821 CRS -.9019 CST .3148
LSA 546.8 MSA 233.4 SSA 27.5
     TOE .1369 TRA -.2903 TC3 .3847 BAU .1615
RDE -.2515 RRA -.2175 RC3 -.7451 FAU .14578
     FOE -.5987 FRA-1.6299 FC3-8.7604 BSP 2350
BOE .2864 BRA .3627 BC3 .8386 FSP -1891
                                                                                                                                              EL1 433.5 EL2 162.4 ALF 117.18
                                                                                                                                                            ARRIVAL DATE OCT 18 1967
                                                                                      FLIGHT TIME 108.00
LAUNCH DATE JUL 2 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 300.250
     RL 152.10 LAL -.00 LOL 279.45 VL 27.161 GAL -5.97 AZL 91.81 MCA 134.68 SMA 131.74 ECC .18562 INC 1.8091 V1 29.292
RP 108.04 LAP -1.29 LOP 54.14 VP 38.070 GAP -2.67 AZP 88.73 TAL 208.13 TAP 342.81 RCA 107.29 APO 156.19 V2 35.075
RC 77.874 GL -13.12 GP -20.52 ZAL 139.40 ZAP 64.19 ETS 10.09 ZAE 160.60 ETE 308.97 ZAC 98.22 ETC 11.85 CLP -62.30
   PLANETOCENTRIC CONIC
     C3 14.114 VHL 3.757 DLA 2.86 RAL 136.65 RAD 6567.6 VEL 11.640 PTH 2.04 VHP 3.538 DPA -12.44 RAP 165.54 ECC 1.2323
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 52 2223.00 -19.77 42.02 353.18 110.69 2 6 55 1623.0 -16.78 34.62
                                                                                          353.18
                      1 29 52 2223.00
14 10 19 4689.75
                                                                                                                  65.79 15 28 29
                                                                                                                                                    4089.7
                                                                                                                                                                      11.75
                                                                             200.02
                                                                                              352.12
          90.00
                                                            15.15
                                                                                                                                                    1356.3
                                                                              22.01
                                                                                              352.79
                                                                                                                 112.05
                                                                                                                                3 25 9
                                                                                                                                                                     -17.54
                                                                                                                                                                                        14.66
        100.00
                         2 52 33 1956.33
                                                           -20.71
                                                                                                                  64,44 16 44 12
                                                                                                                                                   3831.6
        100.00
                      15 30 20
                                       4431.65
                                                            16.06
                                                                             180.60
                                                                                              351.68
                                                                                                                115.83 4 32 44
60.72 17 45 59
                                                                                                                                                   1133.2
                                                                                                                                                                                       356.65
                                                                               3.87
                                                                                              351.59
                                                                                                                                                                    -19.55
                        4 3 51 1733.15
16 35 31 4227.59
                                                           -23.21
        110.00
                                                                             163.79
                                                                                              350.36
                                                                                                                                                   3627.6
                                                                                                                                                                     14.45
        110.00
                       16 35 31
                                                             18.49
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SCT 549.3 SCR 839.9 SC3 659.1
RRT .0302 RRF .9331 RTF .0236
SCB 1003.6 R23 .0256 R13 .9327
                                                                                                                                             ST 233.3 SR 382.9 SS 356.1
CRT -.5580 CRS -.8859 CST .1253
LSA 516.7 MSA 245.1 SSA 27.5
     TOE .1175 TRA -.3261 TC3 .1960 BAU .1712
     ROE -.2407 RRA -.2338 RC3 -.8862 FAU .15449
FOE -.3486 FRA-1.7065 FC3-9.4766 BSP 2490
BOE .2678 BRA .4012 BC3 .9076 FSP -2030
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FLIGHT TIME 102.00

SG1 840.2 SG2 548.8 THA 88.03

ARRIVAL DATE OCT 20 1967

LAUNCH DATE JUL 2 1967

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DISTANCE 306.713
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 27.175 GAL -5.93 AZL 91.65 MCA 137.89 SMA 131.83 ECC .18455 INC 1.6527 V1 29.292 RP 108.00 LAP -1.11 LOP 57.35 VP 38.091 GAP -2.16 AZP 88.77 TAL 208.13 TAP 346.02 RCA 107.50 APO 156.16 V2 35.088 RC 80.046 GL -12.11 GP -22.41 ZAL 139.70 ZAP 69.48 ETS 8.68 ZAE 160.65 ETE 296.02 ZAC 100.61 ETC 10.94 CLP -67.71
  PLANETOCENTRIC CONIC
                                                                                                          2.04 VHP 3.453 DPA -13.34 RAP 162.83 ECC 1.2274
                                           3.84 RAL 136.92 RAD 6567.5 VEL 11.628 PTH
    C3 13.815 VHL 3.717 OLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   353.36
                                                                                                                                                    -17.46
                    1 23 36 2248.81
14 18 41 4654.52
                                                      -20.38
                                                                      43.66
                                                                                                     110.09
                                                                                                                    2 1 5
                                                                                                                                      1648.8
                                                                                                                                                                       36.20
        90.00
                                                                                                       65.22 15 36 16
                                                                                                                                      4054.5
                                                                                                                                                      10.69
                                                                                                                                                                      190.94
                                                                                     351.97
                                                                      197.91
        90.00
                                                      14.15
                                                                                                                     3 19 45
                                                                                                                                      1380.6
                                                                                                                                                      -18.22
                                                                                                                                                                       16.14
                   2 46 44 1980.64
15 38 14 4397.92
                                                                       23.56
                                                                                     352.98
                                                                                                      111.46
       100.00
                                                     -21.32
                                                                                                        63.87 16 51 32
                                                                                                                                      3797.9
                                                                                                                                                                      171.69
                                                                                     351.52
                                                                                                                                                      11.42
                                                                      178.60
       100.00
                                                      15.06
                                                                                                      115.27 4 28 20
60.14 17 52 19
                   3 59 6 1754.16
16 42 22 4197.17
                                                                                                                                      1154.2
                                                                                                                                                      -20.23
                                                                                                                                                                     357.90
                                                                                     351.81
       110.00
                                                    -23.83
                                                                        5.19
                                                                                                                                                     13.37
                                                                                                                                                                     155.32
                                                                                                                                      3597.2
                                                                      162.02
                                                                                     350.19
       110.00
                                                       17.47
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         RIT - 587.8 SGR 931.6 SG3 692.2
RRT . 3265 RRF . .9510 RTF . .3311
SGB 1101.5 R23 . .1410 R13 . .9408
SG1 960.8 SG2 538.7 THA 72.81
                                                                                                                                 ST 230.1 SR 368.3 SS 331.3
CRT -.4075 CRS -.8617 CST -.0959
    TOE .1006 TRA -.3667 TC3 -.0263 BAU .1922
    ROE -.2264 RRA -.2488 RC3-1.0405 FAU .16122
FOE -.4721 FRA-1.7425 FC-10.1031 BSP 2779
BOE .2478 BRA .4431 BC3 1.0408 FSP -2141
                                                                                                                                 LSA 480.8 MSA 257.7 SSA 27.7
                                                                                                                                 EL1 385.0 EL2 201.1 ALF 109.94
                                                                                                                                              ARRIVAL DATE OCT 22 1967
                                                                              FLIGHT TIME 112.00
LAUNCH DATE JUL 2 1967
                                                                              DISTANCE 313.151
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 27.182 GAL -5.88 AZL 91.48 MCA 141.11 SMA 131.89 ECC .18368 INC 1.4755 V1 29.292 RP 107.96 LAP -.93 LOP 60.56 VP 38.109 GAP -1.68 AZP 88.85 TAL 208.04 TAP 349.15 RCA 107.66 APO 156.11 V2 35.101 RC 82.236 GL -10.92 GP -24.43 ZAL 139.92 ZAP 74.80 ETS 7.03 ZAE 159.70 ETE 282.99 ZAC 103.08 ETC 9.82 CLP -73.27
  PLANETOCENTRIC CONIC
                                                                                                          2.04 WHP 3.402 OPA -14.32 RAP 159.97 ECC 1.2223
    C3 13.508 VHL 3.675 DLA
                                           4.95 RAL 137.34 RAD 6567.5 VEL 11.614 PTH
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 16 55 2278.69 -21.07 45.58 353.73 109.37 1 54 53 1678.7 -18.24 38.06
                                                                                    353.73
                      1 16 55 2278.69
                                                                                                        103.57 1 34 35
110.75 3 14 4
63.27 17 0 25
114.59 4 23 49
59.53 18 0 2
                  14 28 44 4614.83
2 40 35 2008.81
15 47 45 4359.94
3 54 10 1778.51
16 50 39 4163.01
                                                                                      351.97
                                                                                                                                       4014.8
                                                                                                                                                                       188.65
        90.00
                                                      13.01
                                                                      195.56
                                                                                                       110.75
                                                                                                                                       1408.8
                                                                                                                                                       -18.99
                                                                                                                                                                        17.87
                                                                       25.37
                                                                                     353.36
       100.00
                                                      -22.01
                                                                                                                                                                       169.52
                                                                      176.36
                                                                                     351.51
                                                                                                                                       3759.9
                                                                                                                                                        10.21
       100 00
                                                      13.91
                                                                                                       114.59
                                                                                                                                       1178.5
                                                                                                                                                       -21.00
                                                                                                                                                                       359.37
                                                                        6.74
                                                                                     352.22
       110.00
                                                      -24.53
                                                                                                                                       3563.0
                                                                                                                                                        12.13
                                                                                                                                                                       153.44
       110.00
                                                       16.30
                                                                      160.07
                                                                                     350.16
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 687.6 SGR 1032.0 SG3 716.0
RRT .5650 RRF .9644 RTF .5737
SGB 1240.4 R23 .1850 R13 .9471
SG1 1125.8 SG2 520.0 THA 63.23
                                                                                                                                  ST 237.2 SR 349.1 SS 303.2
CRT -.2570 CRS -.8259 CST -.3160
    TOE .0889 TRA -.4098 TC3 -.2797 BAU .2242
    RDE -.2088 RRA -.2624 RC3-1.2096 FAU .16570
                                                                                                                                  LSA 442.3 MSA 271.4 SSA 28.0
    FOE -.3756 FRA-1.7391 FC-10.6198 BSP 3235
BDE .2270 BRA .4866 BC3 1.2415 FSP -2233
                                                                                                                                  EL1 358.0 EL2 223.6 ALF 106.49
                                                                                                                                             ARRIVAL DATE OCT 24 1967
                                                                              FLIGHT TIME 114.00
LAUNCH DATE JUL 2 1967
                                                                             DISTANCE 319.565
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.185 GAL -5.82 AZL 91.27 HCA 144.32 SHA 131.91 ECC .18299 INC 1.2717 V1 29.292 RP 107.92 LAP -.74 LOP 63.78 VP 38.122 GAP -1.21 AZP 88.97 TAL 207.86 TAP 352.18 RCA 107.77 APO 156.05 V2 35.113 RC 84.440 GL -9.51 GP -26.59 ZAL 140.05 ZAP 80.07 ETS 5.12 ZAE 157.74 ETE 271.27 ZAC 105.56 ETC 8.48 CLP -78.88
   PLANETOCENTRIC CONIC
    C3 13.193 VHL 3.632 DLA 6.24 RAL 137.93 RAD 6567.5 VEL 11.601 PTH 2.03 VHP 3.386 DPA -15.44 RAP 157.03 ECC 1.2171
    C3 13.193 VHL 3.632 OLA 6.24 RAL 137.93 RAD 6567.5 VEL 11.601 PTH 2.03 VMP 3.386 DPA -13.44 RAP 157.03 ECC 1.2171 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 90 55 4569.05 11.65 192.87 352.15 64.01 15 57 4 3969.1 8.07 186.03 100.00 2 33 47 2042.31 -22.80 27.54 353.97 109.87 3 7 49 1442.3 -19.89 19.96 100.00 15 59 18 4316.21 12.55 173.82 351.69 62.65 17 11 14 3716.2 8.79 167.05 110.00 3 48 48 1807.50 -25.34 8.60 352.86 113.75 4 18 56 1207.5 -21.91 1.13 110.00 17 0 46 4123.78 14.93 157.85 350.32 58.89 18 9 29 3523.8 10.70 151.30
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RRT .7207 RRF .9740 RTF .7286
SGB 1411.9 R23 .2004 R13 .9539
SGI 1320.1 SGZ 500.7 THA 56.44
                                                                                                                                  ST 253.4 SR 320.4 SS 268.3
    TOE .0834 TRA -.4544-TC3 -.5668 BAU .2644
                                                                                                                                  CRT -.1235 CRS -.7568 CST -.5376
LSA 396.0 MSA 285.0 SSA 28.9
    RDE -.1849 RRA -.2714 RC3-1.3877 FAU .16681
    FOE -.2437 FRA-1.6761 FC-10.9464 BSP 3801
BOE .2028 BRA .5293 BC3 1.4990 FSP -2268
                                                                                                                                  EL1 324.2 EL2 248.5 ALF 103.78
                                                                                                                                               ARRIVAL DATE OCT 26 1967
                                                                             FLIGHT TIME 116.00
LAUNCH DATE JUL 2 1967
                                                                              DISTANCE 325.955
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.183 GAL -5.76 AZL 91.03 MCA 147.54 SMA 131.89 ECC .18246 INC 1.0330 VI 29.292
RP 107.89 LAP -.55 LOP 67.00 VP 38.131 GAP -.75 AZP 89.13 TAL 207.59 TAP 355.13 REA 107.83 APO 155.96 V2 35.125
RC 86.655 GL -7.81 GP -28.93 ZAL 140.08 ZAP 85.19 ETS 2.92 ZAE 154.91 ETE 261.61 ZAC 107.97 ETC 6.91 CLP -84.50
   PLANETOCENTRIC CONIC
    C3 12.873 VHL 3.588 OLA 7.78 RAL 138.72 RAO 6567.5 VEL 11.587 PTH 2.03 VHP 3.407 OPA -16.75 RAP 154.05 ECC 1.2119
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    107.31
                                                                                                                                       1757.8
                                                                                                                                                                        43.04
                                                                                                                      1 40 4
                                                                                                                                                       -20.18
                                                                                      355.20
                       1 0 46
                                   2357.79
                                                      -22.77
                                                                        50.76
                                                                                                                    16 11 11
                                                                                                                                                                        182.96
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                                                                      189.74
                                                                                                         63.38
                     14 55 56
                                    4514.91
                                                       10.02
                                                                                      352.55
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                                                                                                       108.73
                                                                                                                      3 0 35
                                                                                                                                       1483.4
                                                                                                                                                        -20.95
                      2 25 51
                                     2083.36
                                                      -23.73
                                                                        30.24
                                                                                      354.86
        100,00
                                                                                                                  17 24 36
                                                                                                                                       3664.6
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                    16 13 32
                                     4264.58
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                                                                       170.86
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        100.00
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                                                                                                                                       1243.0
                                                                                                                                                       -22.98
                                                                                      353.79
                                                                                                       112.68
                      3 42 39
                                    1843.03
                                                      -26.29
                                                                        10.92
        110.00
                                                                                                                 18 21 11
                                                                                                                                                                      148.82
                                                                                                                                                         9.00
                                                                                                        58.21
                                                                                      350.68
        110.00
                    17 13 14
                                    4077.66
                                                       13.29
                                                                      155.28
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 1029.5 SGR 1241.8 SG3 721.2
RRT .8119 RRF .9811 RTF .8182
SG8 1613.1 R23 .2025 R13 .9607
SG1 1538.4 SG2 485.1 THA 51.54
                                                                                                                                   ST 278.7 SR 283.3 SS 237.9
     TOE .0878 TRA -.4966 TC3 -.8811 BAU .3110
                                                                                                                                 CRT -.0244 CRS -.6370 CST -.7367
     RDE -.1549 RRA -.2766 RC3-1.5779 FAU .16482
                                                                                                                                 LSA 364.1 MSA 284.7 SSA 30.3
     FDE -. 0920 FRA-1.5679 FC-11.0841 BSP - 4478
     BOE .1781 BRA .5684 BC3 1.8073 FSP -2270
                                                                                                                                   EL1 285.1 EL2 276.8 ALF 118.01
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FLIGHT TIME 110.00

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FLIGHT TIME 118.00
                                                                                                                                                  ARRIVAL DATE OCT 28 1967
LAUNCH DATE JUL 2 1967
                                                                                 DISTANCE 332.321
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.176 GAL -5.68 AZL 90.75 MCA 150.76 SMA 131.85 ECC .18206 INC .7479 V1 29.292
RP 107.85 LAP -.37 LOP 70.21 VP 38.138 GAP -.31 AZP 89.35 TAL 207.23 TAP 358.00 RCA 107.84 APO 155.85 V2 35.137
RC 88.880 GL -5.72 GP -31.48 ZAL 139.98 ZAP 90.04 ETS .40 ZAE 151.41 ETE 254.09 ZAC 110.22 ETC 5.10 CLP -90.04
   PLANETOCENTRIC CONIC
    C3 12.555 VHL 3.543 DLA 9.65 RAL 139.75 RAD 6567.5 VEL 11.573 PTH 2.02 VMP 3.468 DPA -18.32 RAP 151.06 ECC 1.2066 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       105.76
                                                                                                                        1 30 15
                      0 50 2 2413.00
15 14 51 4449.00
                                                                                        356.43
                                                                                                                                          1813.0
                                                                                                                                                           -21.45
                                                                                                                                                                             46.60
         an .nn
                                                        -23.84
                                                                         54.46
         90.00
                                                         7.99
                                                                        185.96
                                                                                         353.24
                                                                                                           62.74
                                                                                                                       16 29 0
                                                                                                                                           3849.0
                                                                                                                                                             4.27
                                                                                                                                                                            179.25
                                                                                                                        2 51 43
                                                                                                                                          1535.3
                                                                                                                                                                             25.87
                                                                                                          107.21
                                                                                                                                                           -22.23
       100.00
                       2 16 8 2135.34
                                                        -24.82
                                                                         33.71
                                                                                         356.11
       100.00
                     16 31 26 4201.69
                                                          8.89
                                                                        167.31
                                                                                         352.75
                                                                                                           61.34 17 41 28
                                                                                                                                          3601.9
                                                                                                                                                              5.00
                                                                                                                                                                            160.68
                                                                                        355.10 111.24 4 6 36
351.32 57.51 18 35 55
       110.00
                      3 35 10 1887.99
                                                        -27.43
                                                                         13.92
                                                                                                                                          1288.0
                                                                                                                                                           -24.30
                                                                                                                                                                              6.15
                                                                                                                                                                            145.85
                     17 28 53
                                     4022.00
                                                         11.28
                                                                        152.23
                                                                                                                                          3422.0
                                                                                                                                                             6.91
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 1242.4 SGR 1347.3 SG3 700.0
RRT .8654 RRF .9862 RTF .8699
SGB 1832.7 R23 .2017 R13 .9659
                                                                                                                                      ST 314.4 SR 232.5 SS 222.6
CRT .0643 CR5 -.4299 CST -.9100
    TOE .1057 TRA -.5337 TC3-1.2205 BAU .3613
    RDE -.1148 RRA -.2742 RC3-1.7728 FAU .15895
FDE .0918 FRA-1.4016 FC-10.9601 BSP 5205
BDE .1560 BRA .6001 BC3 2.1323 FSP -2206
                                                                                                                                      LSA 381.5 MSA 236.4 SSA 33.0
                                                                            SG1 1770.4 SG2 473.7 THA 47.68
                                                                                                                                      EL1 315.2 EL2 231.5 ALF 5.94
                                                                                 FLIGHT TIME 120.00
                                                                                                                                                   ARRIVAL DATE OCT 30 1967
LAUNCH DATE JUL 2 1967
                                                                                 DISTANCE 338.663
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.166 GAL -5.59 AZL 90.40 MCA 153.99 SMA 131.77 ECC .18180 INC .3988 VI 29.292 RP 107.82 LAP -.17 LOP 73.44 VP 38.141 GAP .12 AZP 89.64 TAL 206.79 TAP .78 RCA 107.81 APO 155.73 VZ 35.149
         91.113 GL -3.08 GP -34.34 ZAL 139.71 ZAP 94.50 ETS 357.49 ZAE 147.37 ETE 248.44 ZAC 112.23 ETC 3.01 CLP -95.46
    RC
   PLANETOCENTRIC CONIC
    C3 12.255 VHL 3.501 DLA 12.00 RAL 141.07 RAD 6567.5 VEL 11.560 PTH 2.02 VHP 3.576 DPA -20.25 RAP 148.10 ECC 1.2017
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 35 59 2485.79 -25.09 59.42 358.17 103.57 1 17 25 1885.8 -22.98 51.39
90.00 14 30 94 4464.01 4.37 181.26 354.35 62.16 16 52 11 3765.9 1.60 174.61
                                                                        181.26
                                                                                                                      16 52 11
        90.00
                     15 39 25
                                     4365.91
                                                         5.37
                                                                                         354.35
                                                                                                            62.16
                                                                                                                                           3765.9
                                                                                                                       2 40 10
                                                                                                                                           1603.7
       100.00
                       2 3 26
                                     2203.73
                                                        -26.12
                                                                         38.38
                                                                                         357.88
                                                                                                          105.08
                                                                                                                                                            -23.79
                                                                                                                                                                              30.36
                                                                                                           60.72 18 3 22
109.23 3 57 57
                   16 54 39
                                                                                                                                           3523.2
       100.00
                                     4123.21
                                                         6.30
                                                                        162.91
                                                                                        353.84
                                                                                                                                                              2.35
                                                                                                                                                                            156.35
       110.00
                      3 25 30
                                    1946.95
                                                        -28.82
                                                                         17.94
                                                                                        356.94
                                                                                                          109.23
                                                                                                                                          1346.9
                                                                                                                                                           -25.93
                                                                                                                                                                              9.96
                                                                                                           56.82 18 54 57
       110.00
                     17 49 5
                                     3952.75
                                                         8.72
                                                                        148.49
                                                                                        352.36
                                                                                                                                          3352.8
                                                                                                                                                              4.29
                                                                                                                                                                            142.20
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 1468.0 SCR 1492.4 SC3 662.9

RRT .8973 RRF .9900 RTF .9005

SCB 2065.0 R25 .2001 R13 .9700

SCI 2011.3 SC2 467.9 THA 44.66
                                                                                                                                      ST 367.7 SR 171.8 SS 247.7
CRT .2346 CRS -.2794 CST -.9819
    TOE .1429 TRA -.5614 TC3-1.5763 BAU .4135
    ROE -. 0621 RRA -. 2632 RC3-1.9713 FAU .14950
                                                                                                                                      LSA 444.0 MSA 165.8 SSA 37.7
EL1 370.4 EL2 165.7 ALF 7.83
    FOE .2977 FRA-1.1888 FC-10.5606 BSP 5968
BDE .1558 BRA .6200 BC3 2.5240 FSP -2091
                                                                                FLIGHT TIME 122.00
                                                                                                                                                  ARRIVAL DATE NOV 1 1967
LAUNCH DATE JUL 2 1967
                                                                                DISTANCE 344.982
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.151 GAL -5.49 A7L 89.96 MCA 157.21 SMA 131.67 ECC .18165 INC .0335 VI 29.292
RP 107.78 LAP .02 LOP 76.66 VP 38.141 GAP .54 A7P 90.04 TAL 206.28 TAP 3.49 RCA 107.75 APO 155.59 VZ 35.160
RC 93.352 GL .33 GP -37.62 7AL 139.18 ZAP 98.46 ETS 354.16 ZAE 142.87 ETE 244.31 ZAC 113.93 ETC .60 CLP-100.71
   PLANETOCENTRIC CONIC
    C3 12.006 VHL 3.465 DLA 15.04 RAL 142.78 RAD 6567.5 VEL 11.550 PTH 2.02 VHP 3.741 DPA -22.65 RAP 145.12 ECC 1.1976
    LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 16 10 2586.72 -26.52 66.46 .67 100.32 0 59 17 1986.7 -24.82 58.21 90.00 16 12 53 4256.30 1.86 175.12 356.14 61.74 17 23 49 3656.3 -1.94 168.49 100.00 1 45 40 2298.08 -27.62 44.99 .43 101.92 2 23 58 1698.1 -25.70 36.72 100.00 17 26 4 4020.16 2.84 157.22 355.59 60.23 18 33 4 3420.2 -1.15 150.69
                                                                                                          60.23 18 33 4
106.25 3 45 55
56.19 19 20 30
                                                                                                                                                         -27.97
                   3 12 7 2027.60
18 16 6 3863.41
       110.00
                                                        -30.50
                                                                         23.62
                                                                                        359.61
                                                                                                                                          1427.6
                                                                                                                                                                             15.34
                                                                        143.76
                                                                                       354.03
                                                                                                                                          3263.4
                                                                                                                                                              .88
                                                                                                                                                                           137.53
                                                         5.36
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
    TDE .2073 TRA -.5750 TC3-1.9382 BAU .4675
                                                                                                                                      ST 454.2 SR 133.1 SS 322.6

CRT .6972 CRS -.5916 CST -.9755

LSA 561.4 MSA 105.6 SSA 43.0
                                                                            SGT 1700.2 SGR 1563.0 SG3 612.6
    ROE .0061 RRA -.2430 RC3-2.1741 FAU .13708
FDE .5122 FRA -.9474 FC3-9.8846 BSP 6787
                                                                            RRT .9169 RRF .9929 RTF .9198
SGB 2309.5 R23 .1972 R13 .9734
SG1 2261.4 SG2 469.0 THA 42.38
                                                                                                                                      EL1 464.0 EL2 93.4 ALF 12.04
    BDE .2074 BRA .6242 BC3 2.9126 FSP -1944
LAUNCH DATE JUL 2 1967
                                                                                 FLIGHT TIME 124.00
                                                                                                                                                  ARRIVAL DATE NOV 3 1967
                                                                                DISTANCE 351.277
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.134 GAL -5.38 AZL 89.38 MCA 160.43 SMA 131.54 ECC .18161 INC .6184 VI 29.292
RP 107.75 LAP .21 LOP 79.88 VP 38.138 GAP .94 AZP 90.58 TAL 205.70 TAP 6.13 RCA 107.65 APO 155.43 V2 35.170
RC 95.596 GL 4.86 GP -41.51 ZAL 138.19 ZAP 101.75 ETS 350.31 ZAE 137.88 ETE 241.37 ZAC 115.24 ETC 357.80 CLP-105.78
   PLANETOCENTRIC CONIC
    C3 11.879 VHL 3.447 DLA 19.09 RAL 145.05 RAD 6567.5 VEL 11.544 PTH 2.01 VMP 3.985 DPA -25.69 RAP 142.05 ECC 1.1955
    UNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 41 16 2737.47 -27.90 77.27 4.35 95.07 24 26 53 2137.5 -26.90 68.75
                                                                                                       95.07 24 26 53
61.84 18 10 23
        90.00
                     17 2 2
                                     4101.05
                                                         -3.15
                                                                       166.46
                                                                                       359.15
                                                                                                                                          3501.1
                                                                                                                                                            -6.89
                                                                                                                                                                            159.78
                       1 18 17 2437.27
                                                                         55.04
                                                                                          4.20
                                                                                                           96.85
                                                                                                                        1 58 54
                                                                                                                                           1837.3
                                                                                                                                                           -27.91
                                                                                                                                                                             46.46
       100.00
                                                       -29.17
                                                                       149.33
                                                                                       358.53
                                                                                                            60.17 19 16 14
                                                                                                                                           3276.5
                                                                                                                                                            -5.99
                                                                                                                                                                            142.78
       100.00
                     18 11 37
                                     3876.49
                                                         -2.03
                                                                         32.17 3.59 101.53 3 27 43
137.43 356.79 55.82 19 56 47
HID-COURSE EXECUTION ACCURACY
                       2 51 59
                                                                                                                                          1544.1
                                                                                                                                                          -30.48
                                                                                                                                                                             23.48
       110.00
                                    2144.13
                                                      -32.41
                                                                        137.43
       110.00
                     18 54 25
                                    3742.40
                                                                                                                                          3142.4
                                                                                                                                                           -3.74
                                                                                                                                                                            131.22
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .3124 TRA -.5679 TC3-2.2838 BAU .5214
RDE .0997 RRA -.2080 RC3-2.3584 FAU .12137
FDE .7375 FRA -.6778 FC3-8.8460 BSP 7624
BDE .3279 BRA .6048 BC3 3.2830 FSP -1748
                                                                                                                                  ST 601.5 SR 204.7 SS 444.2

CRT .9851 CRS -.9519 CST -.9698

LSA 769.3 MSA 90.2 SSA 33.0

EL1 634.5 EL2 33.4 ALF 18.59
                                                                            SGT 1935.4 SGR 1674.6 SG3 547.2
                                                                          RRT .9290 RRF .9950 RTF .9323
-SGB 2559.3 R23 .1945 R13 .9761
                                                                          SG1 2514.5 SG2 477.1 THA 40.56
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ARRIVAL DATE NOV 5 1967

LAUNCH DATE JUL 2 1967

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DISTANCE 357.549
   MELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.113 GAL -5.26 AZL 88.59 HCA 163.66 SMA 131.40 ECC .18167 INC 1.4138 VI 29.292
RP 107.72 LAP .40 LOP 83.11 VP 38.133 GAP 1.33 AZP 91.36 TAL 205.04 TAP 8.70 RCA 107.53 APO 155.27 V2 35.180
RC 97.843 GL 11.07 GP -46.26 ZAL 136.35 ZAP 104.16 ETS 345.83 ZAE 132.26 ETE 239.33 ZAC 116.07 ETC 354.49 CLP-110.73
   PLANETOCENTRIC CONIC
    C3 12.041 VHL 3.470 OLA 24.63 RAL 148.24 RAD 6567.5 VEL 11.551 PTH 2.02 VHP 4.350 OPA -29.59 RAP 138.69 ECC 1.1982
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM . INJ 2 LAT INJ 2 LONG
    UNCH AZMTH UNCH TIME L-1 TIME
90.00 22 40 42 3003.28
                                                                                                     85.39 23 30 46
                                                                                                                                                  -28.32
                                                                                                                                     2403.3
                                                                                                                                                                     88.02
                                                     -27.97
                                                                     96.67
                                                                                     9.68
                                                                                                                19 31 59
                   18 27 58
                                                                                        4.82
                                                                                                       63.86
                                                                                                                                     3241.0
                                                                                                                                                     -14.71
                                                                                                                                                                     144.67
                                     3640.96
                                                                     151.68
        90.00
                                                      -11.28
                                                                                                       87.77
                                                                                                                   1 12 6
                                                                                                                                     2071.4
                                                                                                                                                     -29.81
                                                                                                                                                                      63.57
       100.00
                      0 27 34 2671.41
                                                                       72.38
                                                                                        9.80
                                                     -29.82
                                                                                                       61.57 20 28 31
93.38 2 56 16
56.29 20 53 43
                                                                                                                                     3048.1
                                                                                                                                                    -13.36
                                                                                                                                                                     129.83
       100.00
                    19 27 43 3648.06
                                                                     136.64
                                                                                        3.96
                                                      -9.64
                                                     -34.04
                                                                                        9.75
                                                                                                                                     1727.6
                                                                                                                                                   -33,19
                                                                                                                                                                      37.08
                      2 17 28 2327.57
                                                                      46.21
       110.00
                                                                                        1.76
                                                                                                                                     2964.7
                                                                                                                                                    -10.41
                    19 54 18
                                                      -6.02
                                                                     128.13
       110.00
                                    3564.66
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SCT 2171.5 SCR 1780.7 SC3 466.1
RRT .9359 RRF .9955 RTF .9405
SCB 2808.2 R23 .1924 R13 .9780
SCI 2764.6 SCZ 492.7 THA 38.98
    TOE .4851 TRA -.5281 TC3-2.5587 BAU .5729
ROE .2349 RRA -.1490 RC3-2.4736 FAU .10229
                                                                                                                                ST 852.8 SR 399.6 SS 609.2
CRT .9883 CRS -.9966 CST -.9768
    FDE ,9691 FRA -.3858 FC3-7.3544 BSP 8421
BDE .5390 BRA .5487 BC3 3.5589 FSP -1491
                                                                                                                                 LSA 1116.1 MSA 110.4 SSA
                                                                                                                                                                         16.3
                                                                                                                                 EL1 940.2 EL2 55.3 ALF 24.94
                                                                             FLIGHT TIME 128,00
                                                                                                                                             ARRIVAL DATE NOV 7 1967
LAUNCH DATE JUL 2 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 363.795
    RL 152.10 LAL -.00 LOL 279.45 VL 27.090 GAL -5.13 AZL 87.41 MCA 166.88 SMA 131.23 ECC .18182 INC 2.5882 V1 29.292 RP 107.69 LAP .59 LOP 86.34 VP 38.125 GAP 1.72 AZP 92.52 TAL 204.32 TAP 11.20 RCA 107.37 APO 155.10 V2 35.190 RC 100.092 GL 19.80 GP -52.22 ZAL 132.87 ZAP 105.41 ETS 340.57 ZAE 125.73 ETE 237.86 ZAC 116.28 ETC 350.46 CLP-115.71
   PLANETOCENTRIC CONIC
    C3 12.937 VHL 3.597 DLA 32.36 RAL 153.03 RAD 6567.5 VEL 11.590 PTH 2.03 VHP 4.926 DPA -34.62 RAP 134.66 ECC 1.2129
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TYME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       68.62 19 50 55
68.61 23 50 37
                                                                                                                                                    -27.57
        73.63 18 46 52
106.37 23 0 5
                                    3842.64
                                                     -24.90
                                                                     158.08
                                                                                     15.98
                                                                                                                                     3242.6
                                                                                                                                                                     150.09
                                                                      97.98
                                                                                                                                      2432.2
                                                                                                                                                      -27.56
                                                                                                                                                                      90.00
                                    3032.19
       106.37
                                                      -24.88
                                                                                      15.97
                                                                                                       68.61 23 50 37
68.62 19 50 55
68.61 23 50 37
76.63 1 36 7
60.66 22 52 40
                   18 46 52 3842.64
23 0 5 3032.19
0 51 5 2701.63
                                                                     158.08
                                                                                                                                      3242.6
                                                                                                                                                     -27.57
                                                                                                                                                                     150.09
        73.63
                                                     -24.90
                                                                                      15.98
                                                                                                                                      2432.2
                                                                                                                                                                      90.00
                                                                                                                                                     -27.56
       106.37
                                                     -24.88
                                                                      97.98
                                                                                      15.97
                                                                       74.97
                                                                                                                                     2101.6
                                                                                                                                                                       66.07
       110.00
                                                     -31.76
                                                                                      18.41
                                                                                                                                                     -33.27
                   21 58 59
                                                                     109.20
                                                                                                                                     2621.2
                                                                                                                                                     -22.15
       110.00
                                    3221.19
                                                    -18.38
                                                                                      12.66
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 2419.2 SGR 1880.4 SG3 372.8
RRT .9392 RRF .9973 RTF .9468
SGB 3064.1 R23 .1890 R13 .9797
SG1 3020.1 SG2 517.4 THA 37.42
                                                                                                                                 ST 1259.4 SR 689.4 SS 794.3
CRT .9880 CRS -.9998 CST -.9860
    TDE .7743 TRA -.4373 TC3-2.6562 BAU .6225
    ROE .4311 RRA -.0556 RC3-2.4292 FAU .08075
                                                                                                                                LSA 1635.5 MSA 130.8 SSA
    FOE 1.1687 FRA -.1019 FC3-5.4039 BSP 9305
BOE .8862 BRA .4409 BC3 3.5994 FSP -1210
                                                                                                                                                                          8.1
                                                                                                                                EL1 1432.6 EL2 93.5 ALF 28.54
                                                                                                                                            ARRIVAL DATE NOV 9 1967
                                                                             FLIGHT TIME 130.00
LAUNCH DATE JUL 2 1967
                                                                            DISTANCE 370.011
   MELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.064 GAL -4.99 AZL 85.49 MCA 170.09 SMA 131.05 ECC .18206 INC 4.5083 V1 29.292 RP 107.66 LAP .78 LOP 89.57 VP 38.115 GAP 2.09 AZP 94.44 TAL 203.53 TAP 13.62 RCA 107.19 APO 154.91 V2 35.199 RC 102.344 GL 32.03 GP -59.90 ZAL 126.51 ZAP 105.09 ETS 334.19 ZAE 117.84 ETE 236.33 ZAC 115.71 ETC 345.24 CLP-121.28
   PLANETOCENTRIC CONIC
    C3 15.970 VML 3.996 DLA 42.89 RAL 161.17 RAD 6567.6 VEL 11.720 PTH 2.06 VMP 5.934 DPA -41.07 RAP 129.12 ECC 1.2628 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        56.33 17 48 25 4156.85

123.67 1 7 24 2811.19

56.33 17 48 25 4156.85

123.67 1 7 24 2811.19

56.33 17 48 25 4156.85

123.67 1 7 24 2811.19
                                                                                 31.39
                                                                                                  58.47 18 57 42
58.46 1 54 15
58.47 18 57 42
58.46 1 54 15
                                                                                                                                                 -34.66
                                                                                                                                                                 178.96
                                                     -30.74
                                                                    186.84
                                                                                                                                    3556.9
                                                                                                                                                                      75.52
                                                                                                                                                    -34.65
       123.67
                                                     -30.72
                                                                      83.39
                                                                                      31.38
                                                                                                                                     2211.2
                                                     -30.74
                                                                     186.84
                                                                                      31.39
                                                                                                                                     3556.9
                                                                                                                                                    -34.66
                                                                                                                                                                    178.96
       123.67
                                                     -30.72
                                                                      83.39
                                                                                      31.38
                                                                                                       1 54 15
58.47 18 57 42
58.46
                                                                                                       58.46
                                                                                                                 1 54 15
                                                                                                                                    2211.2
                                                                                                                                                   -34.65
                                                                                                                                                                      75.52
                                                                                                                                                   -34.66
                                                                                                                                                                    178.96
                                                    -30.74
                                                                     186.84
                                                                                      31.39
                                                                                                                                     3556.9
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    -34.65
                                                                                                                                                                      75.52
                                                     -30.72
                                                                      83.39
                                                                                                                                    2211.2
       123.67
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1882.4 SR 1043.7 SS 961.8
                                                                        SCT 2690.3 SGR 1922.7 SG3 268.1
RRT .9373 RRF .9971 RTF .9520
SGB 3306.8 R23 .1867 R13 .9808
SGI 3260.2 SG2 553.0 THA 34.97
    TOE 1.3087 TRA -.2377 TC3-2.3410 BAU .6580
                                                                                                                                CRT .9905 CRS -.9999 CST -.9919
    ROE .7258 RRA .1115 RC3-2.0044 FAU .05662
FOE 1.3055 FRA .1692 FC3-3.0694 BSP 10016
BOE 1.4965 BRA .2626 BC3 3.0819 FSP -875
                                                                                                                               LSA 2352.6 MSA 150.9 SSA 4.1
EL1 2148.7 EL2 125.7 ALF 28.88
LAUNCH DATE JUL 2 1967
                                                                              FLIGHT TIME 132.00
                                                                                                                                            ARRIVAL DATE NOV 11 1967
                                                                             DISTANCE 376.185
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 27.036 GAL -4.83 AZL 81.76 MCA 173.29 SMA 130.86 ECC .18235 INC 8.2421 V1 29.292
RP 107.63 LAP .96 LOP 92.80 VP 38.103 GAP 2.44 AZP 98.19 TAL 202.66 TAP 15.95 RCA 106.99 APO 154.72 V2 35.208
RC 104.596 GL 47.86 GP -69.99 ZAL 116.22 ZAP 102.72 ETS 325.14 ZAE 107.75 ETE 232.60 ZAC 114.19 ETC 336.95 CLP-130.07
  PLANETOCENTRIC CONIC
    C3 27.129 VHL 5.209 DLA 55.15 RAL 177.11 RAD 6568.1 VEL 12.186 PTH 2.19 VHP 8.037 DPA -49.11 RAP 119.86 ECC 1.4465
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     3413.9
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                    17 58 28 4413.93
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17 58 28 4413.93
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                                                                       MID-COURSE EXECUTION ACCURACY
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                                   2807.51
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                                                                      84.12
  DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       SGT 3052.3 SGR 1781.2 SG3 165.0

RRT .9215 RRF .9919 RTF .9596

SGB 3534.0 R23 .1827 R13 .9820

SG1 3481.5 SG2 606.6 THA 29.24
                                                                                                                               ST 2615.1 SR 1155.8 SS 977.4
CRT .9876 CRS -.9988 CST -.9941
    TOE 2.3738 TRA .2332 TC3-1.4547 BAU .6565
    RDE 1.0274 RRA .4143 RC3-1.0771 FAU .03238
                                                                                                                              LSA 3016.0 MSA 183.0 SSA 2.2
EL1 2854.3 EL2 166.1 ALF 23.67
    FOE 1.2628 FRA .3885 FC3-1.0334 BSP 10765
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FLIGHT TIME 126.00

-548

BOE 2.5866 BRA .4755 BC3 1.8100 FSP

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FLIGHT TIME 134.00
                                                                                                                                   ARRIVAL DATE NOV 13 1967
LAUNCH DATE JUL 2 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 382.257
    RL 152.10 LAL -.00 LOL 279.45 VL 27.005 GAL -4.65 A7L 71.46 HCA 176.40 SMA 130.64 ECC .18261 INC18.5354 VI 29.292
RP 107.61 LAP 1.14 LOP 96.04 VP 38.089 GAP 2.77 AZP 108.50 TAL 201.68 TAP 18.09 RCA 106.79 APO 154.50 VZ 35.216
RC 106.849 GL 62.93 GP -81.99 ZAL 103.31 ZAP 97.99 ETS 292.38 ZAE 92.99 ETE 204.67 ZAC 111.97 ETC 303.68 CLP-176.14
   PLANETOCENTRIC CONIC
                                                                                                  2.65 VHP 14.205 DPA -57.55 RAP 98.67 ECC 2.5197
    C3 92.340 VHL 9.609 DLA 61.85 RAL 205.75 RAD 6569.8 VEL 14.618 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 32.41 19 31 40 4753.53 -17.28 233.26 106.18 29.61 20 50 53 4153.5 -24.19 229.35
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                                 3065.63
                                                  -17.27
                                                                  93.63
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        32.41
                   19 31 40
                                  4753.53
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                                                                    HID-COURSE EXECUTION ACCURACY
                     5 19 50 3065.83
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   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                       ST 2597.9 SR 511.2 SS 752.2
CRT -.8609 CRS .8083 CST -.9954
                                                                   SGT 3653.5 SGR 641.9 SG3 85.9
RRT -.0646 RRF .0758 RTF .9899
SG8 3709.5 R23 -.1421 R13 -.9896
    TOE 4.1534 TRA 2.0694 TC3 -.3190 BAU .4027
    RDE -.8355 RRA .3031 RC3 -.0680 FAU .00958
FDE .9457 FRA .6335 FC3 -.0898 BSP 10791
                                                                                                                       LSA 2739.3 MSA 269.0 SSA .9
EL1 2635.2 EL2 256.4 ALF 170.29
    BOE 4.2366 BRA 2.0914 BC3 .3262 FSP
                                                                     SG1 3653.8 SG2 640.5 THA 179.33
                                                                         FLIGHT TIME 136.00
                                                                                                                                   ARRIVAL DATE NOV 15 1967
LAUNCH DATE JUL 2 1967
                                                                        DISTANCE 387.397
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.973 GAL -4.28 AZL 7.48 HCA 178.67 SHA 130.42 ECC .18172 INC82.5103 V1 29.292
RP 107.59 LAP 1.32 LOP 99.27 VP 38.073 GAP 2.83 AZP 172.52 TAL 199.94 TAP 18.61 RCA 106.72 APO 154.12 V2 35.223
RC 109.101 GL 45.88 GP -49.49 ZAL 93.14 ZAP 92.31 ETS 185.19 ZAE 51.80 ETE 101.93 ZAC 112.07 ETC 186.30 CLP 93.55
  PLANETOCENTRIC CONIC
                                                                                                  3.55 WHP 49.869 OPA -41.77 RAP 37.91 ECC23.7163
    C31380.305 VHL 37.152 DLA 39.40 RAL 206.15 RAD 6573.1 VEL 38.750 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.37 21 9 55 4829.17 .81 219.27 117.15 50.60 22 30 24 4229.2 -4.27 213.50
                     3 44 43
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                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 1060,1 SGR 2828,2 SG3 53.5
RRT .6374 RRF -.9994 RTF -.8179
SGB 3020.3 R23 -.0951 R13 -.9954
                                                                                                                        ST 783.1 SR 1347.9 SS 1211.1
CRT .9319 CRS .9992 CST .9163
LSA 1954.4 MSA 278.1 SSA .6
    TDE-5.0484 TRA-1.3742 TC3 -.0895 BAU 4.1291
    RDE-7.7820 RR-10.3219 RC3 -.2051 FAU-.07078
FDE 1.5831 FRA 2.3207 FC3 .0444 BSP 6512
BDE 9.2593 BRA10.4130 BC3 .2238 FSP -125
                                                                                                                        ELI 1538.9 ELZ 248.8 ALF 60.73
                                                                     SG1 2969.5 SG2 551.9 THA 71.93
                                                                                                                                   ARRIVAL DATE NOV 17 1967
                                                                        FLIGHT TIME 138.00
LAUNCH DATE JUL 2 1967
   HELIOCENTRIC CONIC
                                                                       DISTANCE 395.159
    RL 152.10 LAL -.00 LOL 279.45 VL 26.939 GAL -4.41 AZL 116.04 MCA 183.41 SMA 130.19 ECC .18455 INC26.0362 VI 29.292
RP 107.57 LAP 1.50 LOP 102.51 VP 38.055 GAP 3.62 AZP 64.00 TAL 200.20 TAP 23.61 RCA 106.16 APO 154.21 V2 35.230
RC 111.351 GL -64.72 GP 80.31 ZAL 99.25 ZAP 99.64 ETS 116.50 ZAE 88.17 ETE 201.11 ZAC 85.28 ETC 99.58 CLP 174.18
   PLANETOCENTRIC CONIC
    C3 169.997 VHL 13.038 DLA -52.41 RAL 133.07 RAD 6570.8 VEL 17.068 PTH 2.93 VHP 15.023 DPA 75.23 RAP 278.37 ECC 3.7977
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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141.84 12 7 9
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                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 2617.3 SCR 2848.2 SC3 88.2
RRT .9698 RRF .9719 RTF .9998
SCB 3868.1 R23 -.1240 R13 .9922
SCI 3839.0 SC2 473.7 THA 47.49
                                                                                                                        ST 2299.0 SR 2137.6 55 1156.3
    TOE-5.1550 TRA-1.8133 TC3 -.0424 BAU
                                                      .0966
                                                                                                                      CRT .9940 CRS -.9945 CST-1.0000
LSA 3340.6 MSA 178.2 55A .7
    ROE-4.6741 RRA-2.7393 RC3 .0033 FAU .00429
    FOE-1.9959 FRA -.7219 FC3 -.0218 BSP 11775
BDE 6.9585 BRA 3.2851 BC3 .0425 FSP -273
                                                                                                                        EL1 3134.5 EL2 171.0 ALF 42.90
                                                                                                                                   ARRIVAL DATE NOV 19 1967
                                                                         FLIGHT TIME 140.00
LAUNCH DATE JUL 2 1967
                                                                        DISTANCE 401.163
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.904 GAL -4.19 AZL 104.83 MCA 186.52 SMA 129.95 ECC .18506 INC14.8343 VI 29.292 RP 107.55 LAP 1.67 LOP 105.75 VP 38.036 GAP 3.92 AZP 75.26 TAL 199.08 TAP 25.60 RCA 105.90 APO 153.99 VZ 35.236 RC 113.598 GL -60.41 GP 66.88 ZAL 104.61 ZAP 108.70 ETS 56.65 ZAE 103.59 ETE 144.69 ZAC 89.35 ETC 41.03 CLP-144.72
   PLANETOCENTRIC CONIC
                                                                                                  2.48 VHP 8.427 OPA 72.66 RAP 212.28 ECC 2.0271
    C3 62.411 VHL 7.900 DLA -46.60 RAL 132.05 RAD 6569.2 VEL 13.556 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               133.58 4 6 50
133.58 13 4 15
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                                                                                23.62
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                     3 34 51
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                                                                                                                                            23.86
       128.69
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                     ST 2762.1 SR 1023.4 SS 1171.2
CRT -.9759 CRS .9929 CST -.9949
LSA 3161.9 MSA 225.0 SSA 1.7
EL1 2938.2 EL2 209.7 ALF 160.01
                                                                    SGT 3801.0 SGR 1077.6 SG3 167.7
RRT -.8537 RRF -.9443 RTF .9761
SGB 3950.8 R23 .1793 R13 -.9829
SG1 3913.0 SG2 545.1 THA 166.12
    TDE-3.6615 TRA-2.3984 TC3 -.6288 BAU .5449
    ROE 1.4086 RRA .1899 RC3 .1761 FAU .02747
FOE-2.1829 FRA -.8974 FC3 -.3810 BSP 12164
    BOE 3.9231 BRA 2.4059 BC3 .6530 FSP -531
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LAUNCH DATE JUL 2 1967

ARRIVAL DATE NOV 21 1967

DISTANCE 407.242 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 279.45 VL 26.867 GAL -3.98 A7L 100.91 MCA 189.72 SMA 129.70 ECC .18579 INC10.9081 V1 29.292 RP 107.53 LAP 1.83 LOP 108.99 VP 38.015 GAP 4.24 AZP 79.24 TAL 197.98 TAP 27.70 RCA 105.60 APO 153.79 V2 35.241 RC 115.842 GL -55.20 GP 54.55 ZAL 107.84 ZAP 116.98 ETS 47.70 ZAE 113.34 ETE 141.45 ZAC 93.57 ETC 32.85 CLP-141.46 PLANETOCENTRIC CONIC C3 38.147 VHL 6.176 DLA -41.65 RAL 134.66 RAD 6568.5 VEL 12.630 PTH 2.29 VHP 6.393 DPA 63.51 RAP 187.96 ECC 1.6278 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 126.34 4 40 13 126.34 12 47 17 126.34 4 40 13 126.34 12 47 17 126.34 12 47 17 126.34 4 40 13 126.34 12 47 17 21.93 21.95 17.73 58.08 4 11 47 1705.67 28.13 1105.7 26.51 21.36 121.92 11 12 30 5687.13 266.05 17.74 5087.1 26.52 259.26 58.08 4 11 47 1705.67 21.93 28.13 17.73 1105.7 26.51 21.36 121.92 11 12 30 5687.13 21.95 266.05 17.74 5067.1 26.52 259.26 58.08 4 11 47 1705.67 21.93 28.13 17.73 1105.7 26.51 21.36 266.05 121.92 11 12 30 5687.13 21.95 17.74 5087.1 26.52 259.26 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY QRBIT DETERMINATION ACCURACY TOE-2.6739 TRA-1.9712 TC3-1.2224 BAU .6534 SGT 3797.7 SGR 1220.2 SG3 253.0 ST 2587.2 SR 1074.4 SS 1284.5 RRT -.9105 RRF -.9838 RTF .9661 SGB 3988.9 R23 .2165 R13 -.9746 SGI 3959.4 SGZ 483.9 THA 163.44 CRT -.9819 CRS .9979 CST -.9921 LSA 3074.0 MSA 220.5 SSA 2.4 ROE 1.1526 RRA .2803 RC3 .3837 FAU .04725 FOE-2.4736 FRA-1.0044 FC3-1.0723 BSP 12319 BDE 2.9117 BRA 1.9910 BC3 1.2812 FSP -809 EL1 2795.1 EL2 188.3 ALF 157.71 FLIGHT TIME 144.00 ARRIVAL DATE NOV 23 1967 HELIOCENTRIC CONIC **DISTANCE 413.327** RL 152.10 LAL -.00 LCL 279.45 VL 26.830 GAL -3.77 AZL 98.92 MCA 192.94 SMA 129.44 ECC .18664 INC 8.9179 V1 29.292
RP 107.52 LAP 1.99 LOP 112.24 VP 37.993 GAP 4.56 AZP 81.31 TAL 196.86 TAP 29.80 RCA 105.28 APO 153.60 V2 35.246 RC 118.080 GL -51.00 GP 44.91 ZAL 109.58 ZAP 123.92 ETS 43.51 ZAE 119.83 ETE 144.13 ZAC 96.77 ETC 29.29 CLP-141.99 PLANETOCENTRIC CONIC C3 28.514 VML 5.340 DLA -38.04 RAL 137.47 RAD 6568.1 VEL 12.243 PTH 2.20 VHP 5.555 OPA 55.00 RAP 178.37 ECC 1.4693 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 63.45 4 47 52 1562.05 22.91 16.72 14.76 5 13 54 121.24 962.1 26.87 9.47 10 58 51 5684.19 22.93 116.55 266.51 14.77 121.23 12 33 36 5084.2 26.89 14.76 63.45 4 47 52 1562.05 22.91 16.72 121.24 5 13 54 962.1 26.87 5684.19 121.23 12 33 36 116.55 10 58 51 22.93 14.77 5084.2 266.51 26.89 259.26 63.45 4 47 52 1562.05 22.91 14.76 5 13 54 16.72 121.24 962.1 26.87 9.47 121.23 12 33 36 10 58 51 5684.19 14.77 5084.2 116.55 22.93 266.51 26.89 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 3900.7 SGR 1092.6 SG3 319.6 RRT -.9157 RRF -.9667 RTF ..9614 SGB 4050.8 R23 ..2381 R13 -.9683 SGI 4028.5 SG2 425.1 THA 165.45 ST 2539.5 SR 929.7 SS 1352.0 CRT -.9818 CRS .9986 CST -.9904 TDE-2.2710 TRA-1.7443 TC3-1.7840 BAU .7034 ROE .8626 RRA .2127 RC3 .4712 FAU .06209 FOE-2.5969 FRA-1.0028 FC3-1.8852 BSP 12610 LSA 3015.7 MSA 217.5 SSA BOE 2.4293 BRA 1.7572 BC3 1.8452 FSP -1036 EL1 2699.3 EL2 166.1 ALF 160.15 ARRIVAL DATE NOV 25 1967 L'AUNCH DATE JUL 2 1967 FLIGHT TIME 146.00 DISTANCE 419:401 RL 152.10 LAL -.00 LOL 279.45 VL 26.791 GAL -3.55 AZL 97.71 MCA 196.17 SMA 129.18 ECC .18762 INC 7.7115 V1 29.292 RP 107.50 LAP 2.14 LOP 115.48 VP 37.969 GAP 4.89 AZP 82.59 TAL 195.72 TAP 31.89 RCA 104.94 APO 153.41 V2 35.250 RC 120.312 GL -47.72 GP 37.47 ZAL 110.32 ZAP 129.58 ETS 40.43 ZAE 124.04 ETE 148.06 ZAC 98.88 ETC 26.77 CLP-143.40 PLANETOCENTRIC CONIC C3 23.518 VHL 4.850 DLA -35.46 RAL 140.16 RAD 6568.0 VEL 12.037 PTH 2.15 VHP 5.177 DPA 48.00 RAP 173.78 ECC 1.3871 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.70 5 21 6 1447.97 23.04 7.59 13.48 117.73 5 45 14 848.0 26.56 .09 112.30 10 47 3 3703.04 23.05 268.10 13.49 117.73 12 22 6 5103.0 26.57 260.60 67.70 5 21 6 1447.97 23.04 7.59 13.48 117.73 5 45 14 848.0 26.56 .09 112.30 10 47 3 5703.04 23.05 268.10 13.49 117.73 12 22 6 5103.0 26.57 260.60 .09 112.30 10 47 3 5703.04 23.05 268.10 13.49 117.73 12 22 6 5103.0 26.57 260.60 .09 5 21 6 1447.97 10 47 3 5703.04 117.73 5 45 14 117.73 12 22 6 7.59 13.48 848.0 26.56 .09 67.70 23.04 5103.0 112.30 23.05 268.10 13.49 26.57 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4102.3 SGR 964.8 SG3 373.4 RRT -.9188 RRF -.9651 RTF ..9612 SGB 4214.2 R23 .2395 R13 -.9660 SG1 4197.7 SG2 372.1 THA 167.71 ST 2569.0 SR 802.9 SS 1407.6 CRT -.9820 CRS .9989 CST -.9898 LSA 3029.8 MSA 213.9 SSA 4.1 TOE-2.0899 TRA-1.6222 TC3-2.3500 BAU .7554 RDE .6768 RRA .1628 RC3 .5006 FAU .07385 FDE-2.6385 FRA -.9770 FC3-2.7185 BSP 13741 BOE 2.1968 BRA 1.6303 BC3 2.4027 FSP -1300 EL1 2687.6 EL2 145.1 ALF 162.89 FLIGHT TIME 148.00 ARRIVAL DATE NOV 27 1967 LAUNCH DATE JUL 2 1967 HELIOCENTRIC CONIC **DISTANCE 425.472** RL 152.10 LAL -.00 LOL 279.45 VL 26.751 GAL -3.32 A7L 96.90 MCA 199.41 SMA 128.91 ECC .18868 INC 6.8984 V1 29.292 RP 107.49 LAP 2.29 LOP 118.73 VP 37.944 GAP 5.21 A7P 83.49 TAL 194.54 TAP 33.95 RCA 104.59 APO 153.23 V2 35.253 RC 122.538 GL -45.13 GP 31.74 ZAL 110.34 ZAP 134.19 ETS 37.88 ZAE 126.69 ETE 152.01 ZAC 100.08 ETC 24.70 CLP-145.05 PLANETOCENTRIC CONIC C3 20.486 VHL 4.526 DLA -33.64 RAL 142.75 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 5.012 DPA 42.34 RAP 171.46 ECC 1.3372 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.04 5 51 5 1354.99 22.93 .23 13.25 115.31 6 13 40 755.0 26.14 352.59 13.25 115.31 108.96 10 37 44 5729.28 22.94 270.10 13.26 115.30 12 13 14 5129.3 26.15 262.46 26.14 71.04 5 51 5 1354.99 22.93 13.25 115.31 6 13 40 755.0 352.59 .23 10 37 44 115.30 12 13 14 119.07 11 35 14 111.60 13 3 6 108.96 5729.28 22.94 270.10 13.26 5129.3 262.46 26.15 9 57 42 5851.78 110.00 18.83 277.37 11.00 5251.8 22.56 270.22 110.00 11 30 18 5568.52 27.16 259.62 15.28 4968.5 29.85 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2514.0 SR 656.9 SS 1350.4 CRT -.9797 CRS .9989 CST -.9880 LSA 2920.6 MSA 213.1 SSA 5.0 EL1 2595.2 EL2 127.7 ALF 165.61 SCT 4098.4 SCR 770.2 SG3 375.7 RRT -.8975 RRF -.9747 RTF .9541 SGB 4170.1 R23 .2554 R13 -.9577 TOE-1.9154 TRA-1.4475 TC3-2.7227 BAU .7545 RDE .5178 RRA .0923 RC3 .4191 FAU .07393 FOE-2.4476 FRA -.7534 FC3-3.1241 BSP 12718 BOE 1.9841 BRA 1.4504 BC3 2.7548 FSP -1186 SG1 4156.7 SG2 334.9 THA 170.36

FLIGHT TIME 142.00

ARRIVAL DATE NOV 29 1967

EL1 2714.9 EL2 74.8 ALF 171.09

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LAUNCH DATE JUL 2 1967
                                                                  DISTANCE 431.523
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.710 GAL -3.07 ATL 96.31 HCA 202.65 SMA 128.64 ECC .18986 INC 6.3103 V1 29.292 RP 107.49 LAP 2.43 LOP 121.98 VP 37.917 GAP 5.52 AZP 84.17 TAL 193.33 TAP 35.98 RCA 104.21 APO 153.06 V2 35.256
   RC 124.755 GL -43.03 GP 27.27 7AL 109.84 ZAP 138.02 ETS 35.71 7AE 128.30 ETE 155.61 ZAC 100.60 ETC 22.95 CLP-146.75
  PLANETOCENTRIC CONIC
   C3 18.457 VHL 4.296 DLA -32.35 RAL 145.29 RAD 6567.7 VEL 11.825 PTH 2.09 VHP 4.960 DPA 37.75 RAP 170.36 ECC 1.3038
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.79 354.29 13.72 113.61 6 39 13 678.7 25.78 346.47
   LNCH AZMTH LNCH TIME L-1 TIME
                   6 17 55 1278.70
       73.66
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      110.00
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                                657.94
                12 18 26 5424.93
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                                                           249.68
                                                                         16.81
      110.00
                                               30.36
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 4222.7 SGR 654.7 SG3 383.9
RRT -.8818 RRF -.9605 RTF ..9521
SGB 4273.2 R23 ..2470 R13 -.9546
                                                                                                             ST 2539.2 SR 569.9 SS 1334.1

CRT -.9795 CRS .9990 CST -.9873

LSA 2916.8 MSA 210.1 SSA 6.1
   TOE-1.8425 TRA-1.3401 TC3-3.1482 BAU .7819
   ROE .4267 RRA .0610 RC3 .3596 FAU .07533
FOE-2.3233 FRA -.6105 FC3-3.5332 BSP 13085
BDE 1.8913 BRA 1.3415 BC3 3.1687 FSP -1220
                                                              SG1 4262.2 SG2 305.9 THA 172.17
                                                                                                             EL1 2600.0 EL2 112.0 ALF 167.58
                                                                                                                       ARRIVAL DATE DEC 1 1967
                                                                  FLIGHT TIME 152,00
LAUNCH DATE JUL 2 1967
                                                                  DISTANCE 437.558
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.669 GAL -2.82 ATL 95.86 HCA 205.89 SMA 128.36 ECC .19115 INC 5.8626 VI 29.292 RP 107.48 LAP 2.56 LOP 125.22 VP 37.890 GAP 5.84 ATP 84.72 TAL 192.10 TAP 38.00 RCA 103.82 APO 152.90 V2 35.258
   RC 126.964 GL -41.28 GP 23.73 ZAL 108.94 ZAP 141.27 ETS 33.87 ZAE 129.24 ETE 158.73 ZAC 100.58 ETC 21.44 CLP-148.44
  PLANETOCENTRIC CONIC
                                                                                                                   33.96 RAP 170.01 ECC 1.2798
   C3 17.004 VHL 4.124 DLA -31.48 RAL 147.82 RAD 6567.7 VEL 11.764 PTH
                                                                                          2.08 VHP
                                                                                                      4.973 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 6 41 25 1217.79
10 27 54 5778.97
                                                                                                  7 1 43
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      75.63
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                 12 46 28
                               5348.46
                                               31.71
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                              ST 2579.0 SR 506.5 SS 1314.7
CRT - 9803 CRS .9992 CST - 9868
                                                              SGT 4347.7 SGR 565.1 SG3 384.0
RRT -.8590 RRF -.9381 RTF ..9505
SGB 4384.3 R23 ..2305 R13 -.9522
   TOE-1.8031 TRA-1.2395 TC3-3.5450 BAU .8086
   ROE .3642 RRA .0405 RC3 .2942 FAU .07483 FOE-2.1951 FRA -.4680 FC3-3.8099 BSP 13496
                                                                                                              LSA 2931.5 MSA 206.8 SSA
                                                                                                                                                7.2
                                                              SG1 4374.9 SG2 287.5 THA 173.60
                                                                                                              EL1 2626.4 EL2 98.4 ALF 169.09
   BOE 17.8395 BRA 1.2402 BC3 3.5572 FSP -1229
                                                                                                                       ARRIVAL DATE DEC 3 1967
                                                                  FLIGHT TIME 154.00
LAUNCH DATE JUL 2 1967
                                                                 DISTANCE 443.577
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.627 GAL -2.56 AZL 95.51 HCA 209.14 SMA 128.08 ECC .19255 INC 5.5086 VI 29.292 RP 107.48 LAP 2.68 LOP 128.47 VP 37.861 GAP 6.15 AZP 85.18 TAL 190.85 TAP 39.98 RCA 103.42 APO 152.74 V2 35.259
   RC 129.165 GL -39.80 GP 20.90 TAL 107.72 TAP 144.07 ETS 32.31 TAE 129.76 ETE 161.37 TAC 100.16 ETC 20.13 CLP-150.08
  PLANETOCENTRIC CONIC
    C3 15.915 VHL 3.989 DLA -30.92 RAL 150.40 RAD 6567.6 VEL 11.717 PTH 2.06 VHP 5.025 DPA 30.76 RAP 170.18 ECC 1.2619
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                  13 6 39
                                               32.41
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 2626.8 SR 460.1 SS 1292.6
CRT -.9818 CRS ..9995 CST -.9866
                                                              SCT 4462.9 SCR 496.5 SC3 378.1
RRT -.8265 RRF -.9051 RTF ..9468
SCB 4490.5 R23 ..2093 R13 -.9500
    TOE-1.7841 TRA-1.1373 TC3-3.9089 BAU .8331
    ROE .3202 RRA .0271 RC3 .2278 FAU .07293
FOE-2.0686 FRA -.3271 FC3-3.9674 BSP 13856
BOE 1.8126 BRA 1.1376 BC3 3.9156 FSP -1213
                                                                                                             LSA 2956.6 MSA 202.9 SSA
                                                                                                                                                8.2
                                                              SG1 4481.8 SG2 278.3 THA 174.73
                                                                                                             EL1 2665.4 EL2 86.1 ALF 170.23
                                                                                                                       ARRIVAL DATE DEC 5 1967
                                                                  FITCHT TIME 156.00
LAUNCH DATE JUL 2 1967
                                                                  DISTANCE 449.579
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.584 GAL -2.28 A7L 95.22 MCA 212.38 SMA 127.80 ECC .19407 INC 5.2198 V1 29.292 RP 107.48 LAP 2.79 LOP 131.72 VP 37.832 GAP 6.47 A7P 85.59 TAL 189.56 TAP 41.94 RCA 103.00 APO 152.61 V2 35.259 RC 131.355 GL -36.49 GP 18.59 7AL 106.22 7AP 146.54 ETS 30.99 7AE 130.01 ETE 163.60 7AC 99.43 ETC 18.99 CLP-151.66
   PLANETOCENTRIC CONIC
                                                                                         2.05 WHP 5.105 DPA 28.00 RAP 170.70 ECC 1.2481
    C3 15.076 VHL 3.883 DLA -30.61 RAL 153.03 RAD 6567.6 VEL 11.682 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   540.2
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                                 718.41
                                               13.49
                                                           308.27
      110.00
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                                                                                                                                            229.32
                                                           238.40
                  13 22 24 5271.64
                                               32.79
      110.00
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SGT 4573.7 SGR 446.9 SG3 369.1
RRT -.7849 RRF -.8608 RTF .9473
                                                                                                              ST 2682.2 SR 426.8 SS 1270.9

CRT -.9841 CRS ..9997 CST -.9865

LSA 2992.0 MSA 198.4 SSA 9.3
    TOE-1.7804 TRA-1.0330 TC3-4.2476 BAU .8568
    RDE .2891 RRA .0193 RC3 .1659 FAU .07038
FDE-1.9506 FRA -.1957 FC3-4.0417 BSP 14208
                                                              SGB 4595.5 R23 .1849 R13 -.9482
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FLIGHT TIME 150.00

BOE 1.8037 BRA 1.0331 BC3 4.2508 FSP -1186

SG1 4587.2 SG2 276.1 THA 175.60

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LAUNCH DATE JUL 2 1967
                                                                              FLIGHT TIME 158.00
                                                                                                                                             ARRIVAL DATE DEC 7 1967
   HELIOCENTRIC CONIC
                                                                              DISTANCE 455.565
     RL 152.10 LAL -.00 LOL 279.45 VL 26.541 GAL -2.00 AZL 94.98 MCA 215.63 SMA 127.52 ECC .19571 INC 4.9785 VL 29.292 RP 107.48 LAP 2.90 LOP 134.97 VP 37.801 GAP 6.78 AZP 85.95 TAL 188.26 TAP 43.89 RCA 102.57 APO 152.48 V2 35.259
     RC 133.537 GL -37.31 GP 16.69 ZAL 104.49 ZAP 148.74 ETS 29.88 ZAE 130.09 ETE 165.47 ZAC 98.46 ETC 17.98 CLP-153.18
    PLANETOCENTRIC CONIC
     C3 14.420 VHL 3.797 DLA -30.48 RAL 155.75 RAD 6567.6 VEL 11.654 PTH 2.05 VHP 5.202 DPA 25.59 RAP 171.50 ECC 1.2373 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   110.64
                       7 31 34
                                    1122.08
                                                       22.94
                                                                     342.52
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        101.78
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                                    1122.08
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                                      715.23
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                                  5255.02
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       110.00
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                                                       32.98
                                                                      237.14
                                                                                      22.82
                                                                                                                                                      33.95
                                                                                                                                                                     228.03
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 4679.2 SGR 412.8 SG3 358.3
RRT -.7348 RRF -.8064 RTF ..9460
SGB 4697.4 R23 ..1604 R13 -.9466
SGI 4689.1 SG2 279.4 THA 176.28
     TOE-1.7895 TRA -.9236 TC3-4.5592 BAU
                                                                                                                                ST 2745.2 SR 403.6 SS 1251.0

CRT -.9870 CRS .9996 CST -.9866

LSA 3037.5 MSA 193.5 SSA 10.5

EL1 2774.0 EL2 64.1 ALF 171.74
                                                           .8792
    ROE .2674 RRA .0152 RC3 .1091 FAU .06739
FDE-1.8435 FRA -.0722 FC3-4.0459 BSP 14544
BDE 1.8094 BRA .9238 BC3 4.5605 FSP -1152
LAUNCH DATE JUL 2 1967
                                                                              FLIGHT TIME 160.00
                                                                                                                                             ARRIVAL DATE DEC 9 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 461.533
    RL 152.10 LAL -.00 LOL 279.45 VL 26.498 GAL -1.70 AZL 94.77 MCA 218.87 SMA 127.24 ECC .19749 INC 4.7726 V1 29.292 RP 107.48 LAP 2.99 LOP 138.22 VP 37.769 GAP 7.09 AZP 86.28 TAL 186.93 TAP 45.80 RCA 102.11 APO 152.37 V2 35.257 RC 135.709 GL -36.22 GP 15.10 ZAL 102.56 ZAP 150.74 ETS 28.97 ZAE 130.06 ETE 167.04 ZAC 97.29 ETC 17.10 CLP-154.64
   PLANETOCENTRIC CONIC
    C3 13.909 WHL 3.729 DLA -30.50 RAL 158.57 RAD 6567.5 VEL 11.632 PTH
                                                                                                          2.04 VHP 5.313 DPA 23.43 RAP 172.50 ECC 1.2289
    LNCH AZMTH LNCH TIME L-I TIME
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                       23.14
        78.17
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                                                                                                                                                                     227.50
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SCT 4774.2 SCR 390.8 SC3 346.0

RRT - 6788 RRF - .7447 RTF .9446

SCB 4790.2 R23 .1378 R13 - .9450

SCI 4781.6 SC2 286.5 THA 176.81
    TOE-1.8066 TRA -.8068 TC3-4.8378 BAU .8996
                                                                                                                                ST 2810.9 SR 387.7 SS 1230.7
CRT -.9902 CRS .9992 CST -.9867
    RDE .2523 RRA .0135 RC3 .0580 FAU .06409
    FOE-1.7441 FRA .0442 FC3-3.9690 BSP 14821
BOE 1.8241 BRA .8069 BC3 4.8361 FSP -1109
                                                                                                                                LSA 3087.1 MSA 188.2 SSA 11.6
                                                                                                                                 EL1 2837.0 EL2 53.6 ALF 172.22
LAUNCH DATE JUL 2 1967
                                                                             FLIGHT TIME 162.00
                                                                                                                                            ARRIVAL DATE DEC 11 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 467.482
    RL 152.10 LAL -.00 LOL 279.45 VL 26.454 GAL -1.39 A7L 94.59 MCA 222.12 SMA 126.96 ECC .19941 INC 4.5937 V1 29.292 RP 107.49 LAP 3.08 LOP 141.47 VP 37.737 GAP 7.41 A7P 86.59 TAL 185.59 TAP 47.70 RCA 101.64 APO 152.28 V2 35.255 RC 137.871 GL -35.18 GP 13.77 ZAL 100.43 ZAP 152.56 ETS 28.22 ZAE 129.97 ETE 168.37 ZAC 95.95 ETC 16.31 CLP-156.03
   PLANETOCENTRIC CONIC
    C3 13.517 VHL 3.677 DLA -30.63 RAL 161.50 RAD 6567.5 VEL 11.615 PTH 2.04 VHP 5.435 DPA 21.48 RAP 173.67 ECC 1.2225
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 51 23 1117.66
11 7 1 5776.15
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110.37 8 10 1
110.36 12 43 17
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   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SCT 4874.3 SCR 379.0 SC3 334.4

RRT -.6236 RRF -.6819 RTF .9438

SCB 4889.0 R23 .1166 R13 -.9442

SCI 4880.0 SC2 296.0 THA 177.21
    TDE-1.8341 TRA -.6864 TC3-5.0965 BAU .9210
                                                                                                                               ST 2884.7 SR 378.1 SS 1214.2
CRT -.9933 CRS .9982 CST -.9871
    RDE .2426 RRA .0140 RC3 .0145 FAU .06094
FDE-1.6575 FRA .1476 FC3-3.9029 B3P 15174
BDE 1.8500 BRA .6865 BC3 5.0966 FSP -1076
                                                                                                                               LSA 3147.2 MSA 182.4 SSA 12.7
                                                                                                                                EL1 2909.0 EL2 43.4 ALF 172.58
LAUNCH DATE JUL 2 1967
                                                                             FLIGHT TIME 164.00
                                                                                                                                            ARRIVAL DATE DEC 13 1967
  HELIOCENTRIC CONIC
                                                                             DISTANCE 473.413
   RL 152.10 LAL -.00 LOL 279.45 VL 26.410 GAL -1.06 A7L 94.44 MCA 225.36 SMA 126.68 ECC .20147 INC 4.4360 V1 29.292
RP 107.50 LAP 3.16 LOP 144.73 VP 37.704 GAP 7.73 AZP 86.88 TAL 184.22 TAP 49.58 RCA 101.16 APO 152.20 V2 35.253
RC 140.023 GL -34.16 GP 12.63 ZAL 98.15 ZAP 154.25 ETS 27.63 ZAE 129.84 ETE 169.49 ZAC 94.48 ETC 15.61 CLP-157.38
  PLANETOCENTRIC CONIC
   C3 13.230 VHL 3.637 DLA -30.85 RAL 164.54 RAD 6567.5 VEL 11.602 PTH 2.03 VHP 5.565 DPA 19.68 RAP 174.97 ECC 1.2177 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.22 7 59 17 1126.40 25.65 343.14 27.35 110.40 8 18 3 526.4 26.22 335.20
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110.39 12 59 21
110.40 8 18 3
110.39 12 59 21
                    11 23 23 5758.08
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  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       SGT 4967.9 SGR 374.4 SG3 322.5
RRT -.5710 RRF -.6215 RTF ..9432
SGB 4982.0 R23 ..0984 R13 -.9435
SG1 4972.5 SG2 307.0 THA 177.53
    TDE-1.8673 TRA -.5574 TC3-5.3208 BAU
                                                                                                                               ST 2959.7 SR 373.0 SS 1197.6
CRT -.9959 CRS .9964 CST -.9875
LSA 3209.6 MSA 176.4 SSA 13.8
                                                          .9411
    ROE .2387 RRA .0156 RC3 -.0228 FAU .05774
FOE-1.5779 FRA .2447 FC3-3.7787 8SP 15483
BOE 1.8822 BRA .5576 BC3 5.3208 FSP -1038
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EL1 2982.9 EL2 33.5 ALF 172.85

ARRIVAL DATE DEC 15 1967

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FLIGHT TIME 166.00
LAUNCH DATE JUL 2 1967
                                                                       DISTANCE 479.325
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.366 GAL -.73 A7L 94.30 HCA 228.61 SMA 126.40 ECC .20369 INC 4.2950 V1 29.292 RP 107.51 LAP 3.22 LOP 147.98 VP 37.669 GAP 8.05 AZP 87.16 TAL 182.84 TAP 51.45 RCA 100.65 APO 152.14 V2 35.249
    RC 142.165 GL -33.15 GP 11.66 ZAL 95.71 ZAP 155.82 ETS 27.18 ZAE 129.69 ETE 170.45 ZAC 92.90 ETC 14.99 CLP-158.67
   PLANETOCENTRIC CONIC
    C3 13.038 VHL 3.611 DLA -31.12 RAL 167.69 RAD 6567.5 VEL 11.594 PTH 2.03 VHP 5.703 DPA 18.00 RAP 176.38 ECC 1.2146 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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110.50 13 16 40
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                    8 6 50 1139.15
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120.80 10 45 47
100.10 15 40 1
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                   11 41 0 5739.04
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      103.49
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                  10 34 49
                                                                 304.89
                                                                                26.13
                                   658.03
                                                   15.62
      110.00
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                                                                                                                                            33.88
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      110.00
                  14 12 12
                                  5268.16
                                                   32.83
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 3037.0 SR 371.8 SS 1182.5
CRT -.9978 CRS .9939 CST -.9881
                                                                    SCT 5059.3 SGR 375.1 SG3 311.0
RRT -.5249 RRF -.5676 RTF .9430
SGB 5073.2 R23 .0831 R13 -.9432
SG1 5063.2 SG2 319.1 THA 177.76
    TDE-1.9068 TRA -.4216 TC3-5.5097 BAU
                                                      .9605
    RDE .2342 RRA .0180 RC3 -.0537 FAU .05462
                                                                                                                       LSA 3275.8 MSA 170.4 SSA 14.9
   FOE-1.5070 FRA .3329 FC3-3.6269 BSP 15816
BDE 1.9211 BRA .4219 BC3 5.5100 FSP -1005
                                                                                                                        EL1 3059.6 EL2 24.3 ALF 173.04
                                                                                                                                   ARRIVAL DATE DEC 17 1967
                                                                         FLIGHT TIME 168.00
LAUNCH DATE JUL 2 1967
                                                                        DISTANCE 485.216
  HEL TOCENTRIC CONTC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.322 GAL -.37 AZL 94.17 MCA 231.85 SMA 126.12 ECC .20608 INC 4.1675 VI 29.292
RP 107.52 LAP 3.28 LOP 151.23 VP 37.635 GAP 8.37 AZP 87.42 TAL 181.44 TAP 53.30 RCA 100.13 APO 152.11 V2 35.245
RC 144.295 GL -32.12 GP 10.82 ZAL 93.15 ZAP 157.29 ETS 26.86 ZAE 129.54 ETE 171.27 ZAC 91.22 ETC 14.43 CLP-159.91
   PLANETOCENTRIC CONIC
                                                                                                                               16.42 RAP 177.89 ECC 1.2129
    C3 12.939 VHL 3.597 OLA -31.43 RAL 170.97 RAD 6567.5 VEL 11.590 PTH
                                                                                                   2.03 WHP 5.849 DPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             110.70
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                  11 59 25 5720.55
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                                 5284.65
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       110.00
                                                                    NID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5140.9 SCR 379.2 SC3 299.3
RRT -.4849 RRF -.5207 RTF .9428
SCB 5154.9 R23 .0704 R13 -.9429
SCI 5144.2 SC2 331.4 THA 177.94
                                                                                                                        ST 3107.7 SR 373.1 SS 1164.6

CRT - 19989 CRS .9906 CST - .9886

LSA 3335.6 MSA 164.5 SSA 75.9
    TOE-1.9472 TRA -.2752 TC3-5.6540 BAU .9782
    ROE .2341 RRA .0206 RC3 -.0790 FAU .05149
    FOE-1.4387 FRA .4168 FC3-3.4452 BSP 16032
BDE 1.9612 BRA .2759 BC3 5.6546 FSP -962
                                                                                                                        EL1 3130.0 EL2 17.7 ALF 173.16
                                                                                                                                   ARRIVAL DATE DEC 19 1967
                                                                        FLIGHT TIME 170.00
LAUNCH DATE JUL 2 1967
                                                                        DISTANCE 491.090
    RL 152.10 LAL -.00 LOL 279.45 VL 26.278 GAL -.01 AZL 94.05 MCA 235.10 SMA 125.84 ECC .20865 INC 4.0508 VI 29.292 RP 107.53 LAP 3.32 LOP 154.48 VP 37.599 GAP 8.69 AZP 87.68 TAL 180.03 TAP 55.12 RCA 99.58 APO 152.10 V2 35.240 RC 146.414 GL -31.08 GP 10.08 ZAL 90.46 ZAP 158.68 ETS 26.68 ZAE 129.38 ETE 171.97 ZAC 89.46 ETC 13.93 CLP-161.11
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 12.932 VHL 3.596 DLA -31.76 RAL 174.36 RAD 6567.5 VEL 11.590 PTH 2.03 VHP 6.000 DPA 14.92 RAP 179.47 ECC 1.2128
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         27.07
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                    8 22 44 1170.94
12 18 16 5703.71
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                                 5304.78
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                                                                                 39.73
                                                                 240.89
       110.00
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                    14 26 56
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    RET -,4407 -RRF -.4653 RTF ..9341
SGB 5213.2 R23 .0578 R13 -.9343
SGI 5202.0 SG2 341.1 THA 178.15
                                                                                                                        ST 3154.1 SR 371.3 SS 1112.A
CRT -.9989 CRS .9845 CST -.9870
LSA 3360.9 MSA 169.4 SSA 16.8
     TOE-1.9778 TRA -.1037 TC3-5.7438 BAU .9932
    ROE .2330 RRA .0192 RC3 -.1028 FAU .04766
FDE-1.3327 FRA .5444 FC3-3.1908 BSP 17819
BDE 1.9914 BRA .1054 BC3 5.7447 FSP -1112
                                                                                                                        EL1 3175.8 EL2 17.1 ALF 173.29
                                                                                                                                   ARRIVAL DATE DEC. 21 1967
                                                                         FLIGHT TIME 172.00
 LAUNCH DATE JUL 2 1967
                                                                        DISTANCE 496.933
    HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 26.233 GAL .37 AZL 93.94 HCA 238.34 SHA 125.56 ECC .21140 INC 3.9431 VI 29.292
RP 107.55 LAP 3.36 LOP 157.73 VP 37.563 GAP 9.03 AZP 87.93 TAL 178.61 TAP 56.95 RCA 99.02 APO 152.11 V2 35.234
RC 148.521 GL -30.00 GP 9.44 ZAL 87.69 ZAP 159.99 ETS 26.62 ZAE 129.23 ETE 172.57 ZAC 87.62 ETC 13.48 CLP-162.28
    PLANETOCENTRIC CONIC
     C3 13.015 VHL 3.608 DLA -32.08 RAL 177.82 RAD 6567.5 VEL 11.593 PTH 2.03 VHP 6.159 DPA 13.48 RAP 181.12 ECC 1.2142
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Ž LAT INJ 2 LONG 14.26 8 31 44 1187.37 24.64 348.16 40.76 111.21 8 51 32 587.4 27.30 340 18
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                    12 36 54
                                                                  267.90
                                                                                 40.76
                                                                                                111.20
                                   5690.06
                                                    24.65
        105.74
                                                                                                119.75 13 11 36
102.59 16 3 6
                                                                                                                                                          272.36
                                                                                                                             5286.7
                                                                                                                                            21.49
                                                    17.66
                                                                  279.40
                                                                                 37.19
                    11 33 29
                                   5886.69
        110.00
                                                                                                                             4726.8
                                                    32.05
                                                                  242.55
                                                                                 43.31
                                   5326.78
        110.00
                    14 34 19
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 3230.7 SR 381.8 SS 1120.6
CRT -.9980 CRS .9812 CST -.9894
                                                                     SGT 5291.1 SGR 393.0 SG3 276.3
RRT -.4261 RRF -.4498 RTF .9421
SGB 5305.7 R23 .0514 R13 -.9422
     TOE-2.0327 TRA' .0454 TC3-5.8090 BAU 1.0110
     RDE .2402 RRA .0252 RC3 -.1129 FAU .04542
                                                                                                                         LSA 3437.2 MSA 155.4 SSA 17.9
     FOE-1.3097 FRA .5722 FC3-5.0210 BSP 16578
BOE 2.0468 BRA .0519 BC3 5.8101 FSP -892
                                                                     SG1 5293.8 SG2 355.4 THA 178.18
                                                                                                                         EL1 3253.1 EL2 24.2 ALF 173.27
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ARRIVAL DATE DEC 23 1967

EL1 3359.8 EL2 71.2 ALF 173.02

LAUNCH DATE JUL 2 1967

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DISTANCE 502.756
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.189 GAL .77 AZL 93.84 MCA 241.58 SMA 125.29 ECC .21437 INC 3.8427 VI 29.292
RP 107.57 LAP 3.38 LOP 160.97 VP ..37.526 GAP 9.37 AZP 86.17 TAL 177.18 TAP 58.76 RCA 98.43 APO 152.15 V2 35.228
RC 150.615 GL -28.89 GP 8.88 ZAL 84.84 ZAP 161.24 ETS 26.69 ZAE 129.08 ETE 173.10 ZAC 85.73 ETC 13.08 CLP-163.40
   PLANETOCENTRIC CONIC
    C3 13.196 VML 3.633 DLA -32.37 RAL 181.38 RAD 6567.5 VEL 11.601 PTH 2.03 VMP 6.325 DPA 12.09 RAP 182.83 ECC 1.2172
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.62 8 41 38 1203.76 24.78 349.47 44.62 111.52 9 1 41 603.8 27.48 341.50
                                                                                                     111.52 9 1 41

111.51 14 30 3

111.52 9 1 41

111.51 14 30 3

111.51 14 30 3

119.41 13 32 1

103.57 16 11 11
                                                                                                                                          5079.6
                                                                                                                                                           27.49
                                                                                                                                                                          259,19
                                                        24.79
                                                                       267.16
                                                                                         44.62
                     12 55 24 5679.62
       106.38
                                                                                         44.62
                                                                                                                                          603.8
                                                                                                                                                           27.48
                                                                                                                                                                           341.50
                                                                       349.47
                                                       24.76
        73.62
                      8 41 38
                                     1203.76
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                                                        24.79
                                                                       267.16
       106.38
                     12 55 24
                                     5679.62
                                                                                                                                          5268.9
                                                                                                                                                           22.04
                                                                                                                                                                           271.27
                                                                                         41.28
       110,00
                                                                       278.37
                     11 54 12 5868.90
                                                        18.26
                     14 42 0 5350.51
                                                                                                                                        4750.5
                                                                                                                                                           33.22
                                                                                                                                                                          235.39
                                                                                         47.09
                                                                       244.28
       110.00
                                                       31.68
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 3276.8 SR 388.5 SS 1094.6

CRT -.9960 CRS .9753 CST -.9898

LSA 3473.2 MSA 152.1 SSA 18.6
                                                                            SGT 5362.3 SGR 401.3 SG3 265.7
RRT -.4076 RRF -.4253 RTF .9425
    TDE-2.0745 TRA .2199 TC3-5.8202 BAU 1.0270
    ROE .2461 RRA .0271 RC3 -.1212 FAU .04270
                                                                           SG8 5377.3 R23 -.0430 R13 -.9426
SG1 5364.8 SG2 366.3 THA 178.24
    FDE-1.2488 FRA .6417 FC3-2.8016 BSP 16827
BDE 2.0890 BRA .2215 BC3 5.8214 FSP -860
                                                                                                                                     EL1 3299.5 EL2 34.4 ALF 173.26
                                                                                                                                                  ARRIVAL DATE DEC 25 1967
                                                                                FLIGHT TIME 176.00
LAUNCH DATE JUL 2 1967
                                                                               DISTANCE 508.553
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 26.145 GAL 1.18 AZL 93.75 HCA 244.82 SMA 125.02 ECC .21755 INC 3.7483 V1 29.292 RP 107.59 LAP 3.39 LOP 164.22 VP 37.489 GAP 9.71 AZP 88.40 TAL 175.73 TAP 60.55 RCA 97.82 APO 152.21 V2 35.221 RC 152.696 GL -27.74 GP 8.38 ZAL 81.93 ZAP 162.42 ETS 26.90 ZAE 128.95 ETE 173.55 ZAC 83.78 ETC 12.72 CLP-164.49
   PLANETOCENTRIC CONIC
    C3 13.477 VHL 3.671 DLA -32.63 RAL 185.00 RAD 6567.5 VEL 11.613 PTH 2.03 VHP 6.497 DPA 10.75 RAP 184.58 ECC 1.2218 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      48.64
                                                                                                      111.85
                                                                                                                                                         27.59
                                                                                                                                                                           342.75
                     8 52 28 1219.53
13 13 27 5673.01
                                                                        350.71
                                                                                                                        9 12 48
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                                                         24.85
        73.07
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                                                                       266.69
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       106.93
                                                         24.87
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5673.01
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        73.07
                       8 52 28
                                                         24.65
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                     13 13 27
                                                         24.87
                                                                        266.69
                                                                                         48.64
       106.93
                                                                                                         119.12 13 52 21
104.54 16 19 53
                                                                                                                                          5254.1
                                                                                                                                                                           270.36
                                                                                                                                                            22.49
       110.00
                    12 14 47 5854.06
14 50 19 5374.52
                                                         18.75
                                                                        277.50
                                                                                         45.51
                                                                                                                                                          32.96
                                                                                                                                                                           237.22
                                                                                                                                         4774.5
                                                                        246.04
                                                                                         51.03
                                                         31.28
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5431.6 SGR 410.2 SG3 255.6

RRT -.3952 RRF -.4083 RTF ..9432

SGB 5447.1 R23 .0368 R13 -.9433

SGI 5434.0 SG2 376.7 THA 178.28
                                                                                                                                     ST 3313.2 SR 396.7 SS 1068.4
CRT -.9932 CRS .9688 CS7 -.9902
     TOE-2.1164 TRA .4032 TC3-5.7837 BAU 1.0424
    RDE .2540 RRA .0284 RC3 -.1249 FAU .04010
FDE-1.1927 FRA .7057 FC3-2.5756 BSP 17087
BDE 2.1316 BRA .4042 BC3 5.7850 FSP -831
                                                                                                                                     LSA 3500.4 MSA 149.7 SSA 19.3
                                                                                                                                      EL1 3336.5 EL2 45.9 ALF 173.22
                                                                                                                                                 ARRIVAL DATE DEC 27 1967
                                                                                FLIGHT TIME 178.00
LAUNCH DATE JUL 2 1967
                                                                               OISTANCE 514.324
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 TOL 279.45 VL 26.101 GAL 1.62 A7L 93.66 MCA 248.06 SMA 124.75 ECC .22097 INC 3.6588 VI 29.292 RP 107.62 LAP 3.39 LOP 167.47 VP 37.451 GAP 10.07 A7P 88.63 TAL 174.28 TAP 62.34 RCA 97.18 APO 152.31 V2 35.214
    RC 154.762 GL -26.56 GP 7.93 ZAL 78.99 ZAP 163.56 ETS 27.25 ZAE 128.82 ETE 173.95 ZAC 81.79 ETC 12.41 CLP-165.55
   PLANETOCENTRIC CONIC
    C3 13.868 VHL 3.724 DLA -32.84 RAL 188.67 RAD 6567.5 VEL 11.630 PTH 2.04 VHP 6.678 DPA 9.45 RAP 186.39 ECC 1.2282
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
12.64 9 4 20 1234.32 24.84 341.84 52.80 112.10 9 24.54 64 3 27.63 343.40
                                                                                                       112.19
                     9 4 20 1234.32
13 30 50 5670.71
        72.54
                                                       24.84
                                                                                                         112.18 15 5 20
                                                                                                                                          5070.7
                                                                                                                                                            27.64
                                                                                                                                                                           258.56
                                                                                         52.81
                                                         24.85
                                                                       266.50
       107.36
                                                                                                                                           634.3
                                                                                                                                                            27.63
                                                                                                                                                                           343.90
                     9 4 20 1234.32
13 30 50 5670.71
                                                                                         52.80
                                                                                                         112.19
                                                                                                                       9 24 54
                                                         24.84
                                                                        351.84
        72.64
                                                                                                         112.18 15 5 20
                                                                                                                                          5070.7
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                                                                                         52.781
                                                         24.85
                                                                       266.50
       107.36
                                                                                                         118.90 14 12 7
105.45 16 29 35
                     12 34 43 5843.56
14 59 37 5397.50
                                                                                                                                          5243.6
                                                                                                                                                            22.81
                                                                                                                                                                           269.71
                                                                                         49.85
                     12 34 43
                                                         19.10
                                                                       276.89
                                                                                                                                                         32.69
                                                                                                                                          4797.5
                                                                                                                                                                          238.95
                                                                                         55.13
                                                         30.88
                                                                        247,71
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5489.6 SGR 418.9 SG3 245.5

RRT - ,3865 RRF - .3959 RTF .9437

SGB 5505.6 R23 .0318 R13 - .9438

SGI 5492.0 SG2 386.2 THA 178.30
                                                                                                                                     ST 3330.9 SR 405.3 SS 1037.7
CRT -.9894 CRS .9615 CST -.9905
     TOE-2.1527 TRA .6000 TC3-5.6899 BAU 1.0552
    ROE .2632 RRA .0289 RC3 -.1250 FAU .03747
FDE-1.1359 FRA .7687 FC3-2.3393 BSP 17262
                                                                                                                                     LSA 3509.0 MSA 149.0 SSA 19.7
EL1 3354.9 EL2 58.3 ALF 173.13
     BOE 2.1687 BRA .6007 BC3 5.6913 FSP -798
                                                                                                                                                  ARRIVAL DATE DEC 29 1967
                                                                                 FLIGHT TIME 180,00
LAUNCH DATE JUL 2 1967
                                                                                01STANCE 520.065
    RL 152.10 LAL -.00 LOL 279.45 VL 26.057 GAL 2.07 A7L 93.57 MCA 251.30 SMA 124.48 ECC .22465 INC 3.5734 V1 29.292
RP 107.64 LAP 3.38 LOP 170.71 VP 37.413 GAP 10.43 A7R 88.85 TAL 172.82 TAP 64.12 RCA 96.52 APO 152.44 V2 35.205
RC 156.813 GL -25.34 GP 7.54 7AL 76.03 7AP 164.65 ETS 27.76 7AE 128.69 ETE 174.29 7AC 79.75 ETC 12.13 CLP-166.59
   PLANETOCENTRIC CONIC
     C3 14.376 VHL 3.792 DLA -32.98 RAL 192.35 RAD 6567.6 VEL 11.652 PTH 2.05 VHP 6.866 DPA
                                                                                                                                              8.18 RAP 188.23 ECC 1.2366
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.34 9 17 6 1248.21 24.74 352.86 57.08 112.54 9 37 54 648.2 27.57 344.94 107.66 13 47 27 5672.68 24.75 266.61 57.09 112.52 15 22 0 5072.7 27.58 258.69 72.34 9 17 6 1248.21 24.74 352.86 57.08 112.54 9 37 54 648.2 27.57 344.94
                                                                                                          112.52 15 22 0
118.81 14 30 43
106.24 16 40 37
                                                                                                                                           5072.7
                                                                                                                                                            27.58
                                                                                                                                                                           258.69
                                                                                          57.09
                      13 47 27 5672.68
12 53 24 5838.96
15 10 19 5417.97
        107.66
                                                         24.75
                                                                        266.61
                                                                                                                                           5239.0
                                                                                                                                                            22.94
                                                                                                                                                                            269.42
                                                                        276.61
        110.00
                                                         19.25
                                                                                          54.24
                                                                                                                                           4618.0
                                                                                                                                                            32.42
                                                                                                                                                                            240.49
                                                                                          59.57
                                                          30.50
                                                                        249.1A
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5547.3 SGR 427.3 SG3 235.8
RRT -.3823 RRF -.3884 RTF .9445
                                                                                                                                    ST 3334.9 SR 414.4 SS 1005.1
CRT -.9849 CRS .9535 CST -.9907
LSA 3504.4 MSA 149.9 SSA 19.9
     TOE-2.1864 TRA .8059 TC3-5.5556 BAU 1.0680
     RDE .2741 RRA .0285 RC3 -.1213 FAU .03502
                                                                            SGB 5563.7 R23 .0276 R13 -.9445
     FDE-1.0810 FRA .8275 FC3-2.1087 BSP 17485
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FLIGHT TIME 174.00

-770

BDE 2.2036 BRA .8064 BC3 5.5569 FSP

SG1 5549.7 SG2 394.7 THA 178.30

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LAUNCH DATE JUL 2 1967
                                                                            FLIGHT TIME 182.00
                                                                                                                                         ARRIVAL DATE DEC 31 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 525.774
    RL 152.10 LAL -.00 LOL 279.45 VL 26.013 GAL 2.54 AZL 93.49 MCA 254.53 SMA 124.21 ECC .22860 INC 3.4912 V1 29.292
RP 107.67 LAP 3.36 LOP 173.96 VP 37.374 GAP 10.80 AZP 89.07 TAL 171.35 TAP 65.89 RCA 95.82 APO 152.61 V2 35.197
RC 158.850 GL -24.11 GP 7.18 ZAL 73.07 ZAP 165.70 ETS 28.44 ZAE 128.58 ETE 174.59 ZAC 77.68 ETC 11.89 CLP-167.60
   PLANETOCENTRIC CONIC
                                                                                                                                     6.93 RAP 190.10 ECC 1.2471
     C3 15.014 VHL 3.875 DLA -33.06 RAL 196.02 RAD 6567.6 VEL 11.679 PTH 2.05 VMP 7.063 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                112.87 9 51 46
112.86 15 37 46
                    9 30 45 1260.96
14 3 7 5679.24
        72.16
                                                                                61.45
                                                                                                                                             27.42
                                                                                                                                                             345.87
                                                    24.54
                                                                    353.75
                                                                                                                9 51 46
                                                                                                                                   661.0
                                                      24.55
                                                                    267.02
                                                                                     61.46
                                                                                                                                  5079.2
                                                                                                                                                   27.43
       107.82
                                                                                                                                                                 259.13
                                                                                                  112.87 9 51 46
112.86 15 37 46
118.86 14 47 39
106.88 16 53 19
        72.18
                     9 30 45 1260.96
                                                      24.54
                                                                    353.75
                                                                                     61.45
                                                                                                                                   661.0
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                                                                                                                                                                 345.87
       107.82
                    14 3 7
                                   5679.24
                                                      24.55
                                                                    267.02
                                                                                     61.46
                                                                                                                                   5079.2
                                                                                                                                                   27.43
                                                                                                                                                                 259.13
                   13 10 18 5841.63
                                                                    276.77
                                                                                     58.64
                                                                                                                                  5241.6
       110.00
                                                      19.16
                                                                                                                                                   22.86
                                                                                                                                                                 269.59
                                                                    250.37
                                                                                     63.74
                                                                                                                                  4834.6
       110.00
                   15 22 45
                                    5434.61
                                                                                                                                                   32.19
                                                                                                                                                                 241.73
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    TOE-2.2162 TRA 1.0229 TC3-5.3794 BAU 1.0800

RDE .2863 RRA .0271 RC3 -.1148 FAU .03268

FDE-1.0284 FRA .8837 FC3-1.8842 BSP 17694

BDE 2.2347 BRA 1.0233 BC3 5.3807 FSP -743
                                                                       SCT 5601.4 SCR 435.3 SC3 226.6
RRT - 3816 RRF - 3851 RTF .9453
SC8 5618.3 R23 .0243 R13 - .9454
SC1 5603.9 SC2 402.2 THA 178.29
                                                                                                                            ST 3323.9 SR 423.7 SS 971.3

CRT -.9796 CRS .9448 CST -.9909

LSA 3485.3 MSA 152.4 SSA 19.9

EL1 3349.7 EL2 84.5 ALF 172.88
                                                                            FLIGHT TIME 184,00
                                                                                                                                          ARRIVAL DATE JAN 2 1968
  HELIOCENTRIC CONIC
                                                                            DISTANCE 531.448
   RL 152.10 LAL -.00 LOL 279.45 VL 25.970 GAL 3.04 A7L 93.41 HCA 257.77 SHA 123.95 ECC .23285 INC 3.4115 V1 29.292
RP 107.70 LAP 3.33 LOP 177.20 VP 37.335 GAP 11.19 A7P 89.28 TAL 169.89 TAP 67.65 RCA 95.09 APO 152.81 V2 35.187
RC 160.871 GL -22.85 GP 6.86 ZAL 70.13 ZAP 166.71 ETS 29.33 ZAE 128.47 ETE 174.86 ZAC 75.58 ETC 11.68 CLP-168.59
   PLANETOCENTRIC CONIC
        15.793 WHL 3.974 DLA -33.06 RAL 199.67 RAD 6567.6 VEL 11.712 PTH
                                                                                                        2.06 VHP 7.270 DPA
                                                                                                                                      5.71 RAP 192.01 ECC 1.2599
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                113.20
                                                                                                                                   672.5
        72.17
                      9 45 14
                                   1272.54
                                                      24.24
                                                                    354.51
                                                                                    65.88
                                                                                                                10 6 26
                                                                                                   113.20 10 6 26
113.19 15 52 33
113.20 10 55 2 33
113.19 15 52 33
119.09 15 2 32
107.33 17 7 53
                   14 17 42 5690.45
                                                                    267.75
                                                                                     65.89
                                                      24.25
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                                                                                    65.88
                      9 45 14
                                   1272.54
                                                                                                                                    672.5
        72.17
                                                      24.24
                  14 17 42 5690.45
                                                                    267.75
                                                                                     65.89
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                                                      24.25
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                                                                                                                                                                  259.90
                  13 25 0 5652.51
15 37 7 5446.52
                                  5652.51
                                                                    277,41
                                                                                    63.01
                                                                                                                                   5252.5
                                                                                                                                                                  270.26
       110.00
                                                      18.81
                                                                                                                                                   22.54
                                                                    251.22
                                                                                    68.24
                                                                                                                                  4846.5
       110.00
                                                                                                                                                  32.01
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 5643.1 SGR 442.3 SG3 217.3
RRT -.3827 RRF -.3837 RTF .9458
                                                                                                                              ST 3290.9 SR 432.3 SS 933.3
CRT -.9733 CRS .9347 CST -.9909
    TOE-2.2363 TRA 1.2559 TC3-5.1541 BAU 1.0885
    ROE .2997 RRA .0243 RC3 -.1067 FAU .03028
                                                                       SG8 5660.4 R23 .0215 R13 -.9458
SG1 5645.6 SG2 408.5 THA 178.27
    FOE -.9737 FRA .9403 FC3-1.6601 BSP 17794
                                                                                                                             LSA 3444.2 MSA 157.1 SSA 19.6
    BOE 2.2562 BRA 1.2561 BC3 5.1552 FSP
                                                                                                                              EL1 3317.7 EL2 98.4 ALF 172.71
                                                                            FLIGHT TIME 186.00
                                                                                                                                         ARRIVAL DATE JAN 4 1968
LAUNCH DATE JUL 2 1967
                                                                           DISTANCE 537.084
    RL 152.10 LAL -.00 LOL 279.45 VL 25.927 GAL 3.56 AZL 93.33 MCA 261.00 SMA 123.69 ECC .23744 INC 3.3339 V1 29.292
RP 107.73 LAP 3.29 LOP 180.44 VP 37.296 GAP 11.59 AZP 89.48 TAL 168.42 TAP 69.42 RCA 94.32 APO 153.06 V2 35.178
RC 162.878 GL -21.59 GP 6.57 ZAL 67.24 ZAP 167.68 ETS 30.44 ZAE 128.37 ETE 175.09 ZAC 73.46 ETC 11.51 CLP-169.56
   PLANETOCENTRIC CONIC
    C3 16.730 VHL 4.090 DLA -33.00 RAL 203.25 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 7.488 DPA 4.52 RAP 193.94 ECC 1.2753
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                  113.52 10 21 46
113.50 16 6 15
                    10 0 23 1283.03
                                                     23.84
                                                                   355.12
                                                                                   70.34
                                                                                                                                   683.0
        72.31
                   14 31 8
                                   5706.26
                                                      23.85
                                                                   268.78
                                                                                    70.35
                                                                                                                                  5106.3
                                                                                                                                                                 260.97
       107.69
                                                                                                  113.52 10 21 46
113.50 16 6 15
119.47 15 15 12
107.59 17 24 15
        72.31
                   10 0 23 1283.03
                                                     23.84
                                                                   355.12
                                                                                    70.34
                                                                                                                                   683.0
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                  14 31 8 5706.26
                                                     23.85
                                                                   268.78
                                                                                    70.35
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       107.69
                  13 37 20 5871.78
15 53 22 5453.55
                                                                                    67.31
                                                                                                                                  5271.8
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                                                                                                                                                                 271.45
                                                                   278.54
       110.00
                                                      18.16
                                                                   251.71
                                                                                                                                  4853.5
       110.00
                                                                                    72.84
                                                                                                                                                   31:91
                                                     29.79
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5687.9 SGR 448.8 SG3 208.8
RRT -.3871 RRF -.3861 RTF .9467
SGB 5705.6 R23 .0191 R13 -.9468
                                                                                                                            ST 3248.4 SR 440.6 SS 896.6
CRT -.9664 CRS .9243 CST -.9910
LSA 3394.5 MSA 162.9 SSA 19.2
    TDE-2.2547 TRA 1.4969 TC3-4.9089 BAU 1.0982
    ROE .3144 RRA .0205 RC3 -.0965 FAU .02814
FOE -.9232 FRA .9924 FC3-1.4560 BSP 17988
    BOE 2.2765 BRA 1.4971 BC3 4.9099 FSP -688
                                                                       SG1 5690.6 SG2 413.6 THA 178.24
                                                                                                                             EL1 3276.2 EL2 112.3 ALF 172.52
                                                                           FLIGHT TIME 188.00
                                                                                                                                         ARRIVAL DATE JAN 6 1968
LAUNCH DATE JUL 2 1967
                                                                           DISTANCE 542.677
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 279.45 VL 25.884 GAL 4.10 A7L 93.26 MCA 264.23 SMA 123.44 ECC .24238 INC 3.2577 V1 29.292
RP 107.76 LAP 3.24 LOP 183.67 VP 37.256 GAP 12.01 A7P 89.67 TAL 166.95 TAP 71.18 RCA 93.52 APO 153.35 V2 35.167
RC 164.869 GL -20.32 GP 6.32 TAL 64.41 ZAP 168.62 ETS 31.82 ZAE 128.28 ETE 175.29 ZAC 71.31 ETC 11.37 CLP-170.52
  PLANETOCENTRIC CONIC
    C3 17.844 VHL 4.224 DLA -32.86 RAL 206.75 RAD 6567.7 VEL 11.799 PTH 2.09 VHP 7.717 DPA
                                                                                                                                     3.35 RAP 195.90 ECC 1.2937
   LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.59 10 16 11 1292.27 23.34 355.60 74.81 113.81 10 37 43 692.3 26.35 347.84
       72.59 10 16 11 1292.27
107.41 14 43 17 5726.60
                                                                                 74.81
                                                                                                   113.80 16 18 44
113.81 10 37 43
                                                     23.35
                                                                   270.12
                                                                                    74.82
                                                                                                                                  5126.8
                                                                                                                                                   26.37
       107.41
                  10 16 11 1292.27
                                                     23.34
                                                                   355.60
                                                                                    74.81
                                                                                                  113.81
                                                                                                                                   692.3
                                                                                                                                                   26.35
        72.59
                   14 43 17 5726.80
                                                                                                   113.80 16 18 44
119.98 13 57 38
107.69 17 42 8
                                                     23.35
                                                                                    74.82
                                                                                                                                  5126.8
                                                                                                                                                   26.37
                                                                                                                                                                 262.36
                                                                   270.12
      107.41
                   13 47 27
                                     610.73
                                                      17.25
                                                                    302.19
                                                                                    71.52
                                                                                                                                                   21.11
       110.00
                                   5456.34
                                                                   251.91
                                                                                    77.52
                                                                                                                                  4856.3
                   16 11 12
                                                     29.74
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 5727.1 SGR 454.4 SG3 200.6
RRT -.3936 RRF -.3908 RTF .9478
SGB 5745.1 R23 .0171 R13 -.9478
SGI 5729.9 SG2 417.5 THA 178.20
                                                                                                                            ST 3192.4 SR 448.0 SS 860.0
CRT -.9586 CRS .9129 CST -.9910
LSA 3332.1 MSA 170.2 SSA 18.7
    TOE-2.2674 TRA 1.7515 TC3-4.6365 BAU 1.1062
    RDE .3302 RRA .0154 RC3 -.0854 FAU .02608
FDE -.8745 FRA 1.0434 FC3-1.2652 BSP 18166
BDE 2.2913 BRA 1.7515 BC3 4.6373 FSP -665
                                                                                                                            EL1 3221.2 EL2 126.5 ALF 172.33
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ARRIVAL DATE JAN 8 1968

EL1 2905.1 EL2 183.8 ALF 171.55

JPL TM 33-99

LAUNCH DATE JUL 2 1967

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HELLOCENTRIC CONTC
                                                                                      DISTANCE 548.224
     RL 152.10 LAL -.00 LOL 279.45 VL 25.841 GAL 4.87 AZL 93.18 MCA 267.46 SMA 123.18 ECC .24771 INC 3.1823 VI 29.292
RP 107.79 LAP 3.18 LOP 186.91 VP 37.216 GAP 12.45 AZP 89.86 TAL 165.48 TAP 72.94 RCA 92.67 APO 153.70 V2 35.156
RC 166.846 GL -19.07 GP 6.08 ZAL 61.64 ZAP 169.53 ETS 33.53 ZAE 128.18 ETE 175.47 ZAC 69.14 ETC 11.27 CLP-171.46
    PLANETOCENTRIC CONIC
     C3 19.155 VHL 4.377 DLA -32.65 RAL 210.16 RAD 6567.8 VEL 11.855 PTH 2.10 VHP 7.959 DPA
                                                                                                                                                       2.20 RAP 197.88 ECC 1.3152
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      10 32 33 1300.26
14 54 4 5752.06
10 32 33 1300.26
14 54 4 5752.06
13 55 39 644.28
16 30 9 5456.04
                                                                                                                                                                    25.80
                                                                                                              114.08 10 54 13
         73.03
                                                              22.74
                                                                             355.92
                                                                                                79.27
                                                                                                                                                      700.3
                                                                                                                                                                                       348.23
                                                                             271.77
                                                                                                79.28
                                                                                                                 114.07
                                                                                                                               16 29 56
                                                                                                                                                     5152.1
                                                                                                                                                                        25.81
                                                                                                                                                                                        264.07
                                                              22.76
                                                                                                79.27
          73.03
                                                              22.74
                                                                             355.92
                                                                                                                 114.08
                                                                                                                               10 54 13
                                                                                                                                                      700.3
                                                                                                                                                                        25.80
                                                                                                                                                                                        348.23
                                                                                                               114.07 16 29 56
                                                                                                                                                    5152.1
                                                                                                                                                                        25.81
                                                                                                                                                                                        264.07
                                                             22.76
                                                                             271.77
                                                                                                79.28
                                                                                                               120.57 14 6 23 44.3
107.68 18 1 5 4856.0
                                                                                                75.64
                                                                                                                                                                        20.04
                                                                                                                                                                                        297.20
        110.00
                                                             16.10
                                                                             304.11
                                                                                                                                                      44.3
                                                                                                                                                                     31.87
                                                                            251.89
                                                                                                82.25
                                                                                                                                                                                        243.32
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5760.2 SGR 459.0 SC3 192.6
RRT -.4015 RRF -.3971 RTF .9488
SCB 5778.5 R23 .0154 R13 -.9488
                                                                                                                                               ST 3124.2 SR 454.2 SS 823.3
CRT -.9498 CRS .9003 CST -.9910
     TOE-2.2737 TRA 2.0201 TC3-4.3435 BAU 1.1124
     RDE .3469 RRA .0090 RC3 -.0741 FAU .02407
FDE -.8271 FRA 1.0935 FC3-1.0881 BSP 18313
                                                                                                                                               LSA 3257.7 MSA 178.6 SSA 18.1
                                                                                  561 5763.2 SG2 420.2 THA 178.16
                                                                                                                                                EL1 3153.9 EL2 140.8 ALF 172.12
     BOE 2.3000 BRA 2.0202 BC3 4.3441 FSP -641
                                                                                       FLIGHT TIME 192.00
                                                                                                                                                             ARRIVAL DATE JAN 10 1968
LAUNCH DATE JUL 2 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 553.718
    RL 152.10 LAL -.00 LOL 279.45 VL 25.799 GAL 5.27 AZL 93.11 MCA 270.69 SMA 122.93 ECC .25347 INC 3.1074 V1 29.292 RP 107.83 LAP 3.11 LOP 190.14 VP 37.176 GAP 12.91 AZP 90.04 TAL 164.01 TAP 74.70 RCA 91.77 APO 154.09 V2 35.145 RC 168.808 GL -17.83 GP 5.87 ZAL 58.96 ZAP 170.40 ETS 35.63 ZAE 128.09 ETE 175.62 ZAC 66.96 ETC 11.20 CLP-172.39
   PLANETOCENTRIC CONIC
                                                                                                                      2.12 VHP 8.216 DPA
     C3 20.689 VHL 4.549 DLA -32.38 RAL 213.44 RAD 6567.8 VEL 11.919 PTH
                                                                                                                                                         1.07 RAP 199.88 ECC 1.3405
    C3 20.689 VHL 4.549 DLA -32.38 RAL 213.44 RAO 6567.8 VEL 11.919 PTH 2.12 VHP 8.216 DPA 1.07 RAP 199.88 ECC 1.3405 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.60 10 49 25 1306.90 22.06 356.10 83.70 114.33 11 11 11 706.9 25.15 348.46 106.40 15 3 24 5782.07 22.07 273.73 83.71 114.31 16 39 46 5182.1 25.16 266.10 106.40 15 3 24 5782.07 22.07 273.73 83.71 114.33 11 11 11 706.9 25.15 348.46 106.40 15 3 24 5782.07 22.07 273.73 83.71 114.31 16 39 46 5182.1 25.16 266.10 110.00 14 2 16 683.08 14.75 306.30 79.65 121.19 14 13 39 83.1 18.77 299.50 110.00 16 49 43 5453.88 29.79 251.74 86.99 107.60 18 20 37 4853.9 31.90 243.16
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5785.1 SGR 462.5 SG3 185.1
RRT -.4103 RRF -.4041 RTF .9496
SG8 5803.6 R23 .0137 R13 -.9496
SG1 5788.2 SG2 421.5 THA 178.11
                                                                                                                                                ST 3043.5 SR 458.9 SS 786.6
CRT -.9396 CRS .8859 CST -.9909
     TDE-2.2712 TRA 2.3072 TC3-4.0299 BAU 1.1148
     ROE .3643 RRA .0008 RC3 -.0633 FAU .02205
FOE .7797 FRA 1.1453 FC3 -.9226 BSP 18362
BOE 2.3002 BRA 2.3072 BC3 4.0304 FSP -615
                                                                                                                                               LSA 3171.1 MSA 188.6 SSA 17.5
EL1 3073.9 EL2 155.5 ALF 171.92
                                                                                                                                                            ARRIVAL DATE JAN 12 1968
LAUNCH DATE JUL 2 1967
                                                                                      FLIGHT TIME 194.00
                                                                                     DISTANCE 559.154
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.757 GAL 5.91 AZL 93.03 MCA 273.91 SMA 122.69 ECC .25970 INC 3.0324 V1 29.292 RP 107.86 LAP 3.03 LOP 193.37 VP 37.136 GAP 13.39 AZP 90.21 TAL 162.56 TAP 76.47 RCA 90.83 APO 154.55 V2 35.134 RC 170.755 GL -16.61 GP 5.67 ZAL 56.37 ZAP 171.23 ETS 38.23 ZAE 127.99 ETE 175.76 ZAC 64.77 ETC 11.17 CLP-173.31
   PLANETOCENTRIC CONTC
     C3 22.476 VML 4.741 DLA -32.05 RAL 216.59 RAD 6567.9 VEL 11.994 PTH 2.14 VMP 8.488 DPA
                                                                                                                                                        -.04 RAP 201.89 ECC 1.3699
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.32 11 6 45 1312.04 21.29 356.11 88.09 114.55 11 28 37 712.0 24.42 348.54
                                                                                                             INJ AZMTM INJ TIME
114.55 11 28 37
114.53 16 48 10
114.55 11 28 37
114.53 16 48 10
121.81 14 19 45
107.49 18 40 20
                                                                                                                                                                                       268.44
                                                                                                                                                                       24.43
                    15 11 13
11 6 45
                                                                                                88.09
                                                                                                                                                    5216.9
        105.68
                                       5816.90
                                                             21.30
                                                                            276.01
                                                                                                                                                    712.0
                                                                                                                                                                                       348.54
                                                                                                                                                                       24.42
                                                                                                88.09
         74.32
                                       1312.04
                                                            21.29
                                                                             356.11
                                                                                                                                                                                       268.44
                    15 11 13 5816.90
                                                                                                                                                    5216.9
                                                                                                                                                                       24.43
        105.68
                                                           21.30
                                                                             276.01
                                                                                                88.09
                                                                                                                                                                                       301.99
                     14 7 39 725.97
17 9 29 5450.96
                                                                                                                                                     126.0
                                                                                                                                                                      17.33
        110.00
                                                             13.22
                                                                             308.69
                                                                                                83.57
                                                                                                                                                    4851.0
                                                                                                                                                                                       242.95
        110.00
                                                        29.85
                                                                             251.53
                                                                                               91.73
                                                                                                                                                                       31.95
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RET -,4209 RRF -,4134 RTF ,9508
SGB 5827.5 R23 ,0123 R13 -,9508
SGI 5812.2 SG2 421.7 THA 178.06
                                                                                                                                             ST 2960.6 SR 462.3 SS 753.1

CRT - .9286 CRS .8711 CST - .9909

LSA 3083.3 MSA 198.6 SSA 16.8

EL1 2991.7 EL2 169.8 ALF 171.72
     TOE-2.2679 TRA 2.6052 TC3-3.7186 BAU 1.1175
    ROE .3825 RRA -.0086 RC3 -.0525 FAU .02021
FOE -.7369 FRA 1.1943 FC3 -.7786 BSP 18500
BOE 2.2999 BRA 2.6052 BC3 3.7189 FSP -594
                                                                                                                                                            ARRIVAL DATE JAN 14 1958
LAUNCH DATE JUL 2 1967
                                                                                      FLIGHT TIME 196,00
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 564.523
    RL 152.10 LAL -.00 LOL 279.45 VL 25.715 GAL 6.58 A7L 92.96 MCA 277.14 SMA 122.45 ECC .26645 INC 2.9569 V1 29.292
RP 107.90 LAP 2.93 LOP 198.60 VP 37.096 GAP 13.90 AZP 90.37 TAL 161.11 TAP 78.25 RCA 89.82 APO 155.07 V2 35.122
RC 172.686 GL -15.42 GP 5.50 ZAL 53.89 ZAP 172.03 ETS 41.45 ZAE 127.90 ETE 175.88 ZAC 62.58 ETC 11.18 CLP-174.23
   PLANETOCENTRIC CONTC
    C3 24.553 VHL 4.955 DLA -31.68 RAL 219.60 RAD 6568 D VEL 12.080 PTM 2.16 VMP 8.779 DPA -1.12 RAP 203.93 ECC 1.4041
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              114.74 11 46 29
114.72 16 55 1
                                                                                                                                                      715.5
                                                                                                                                                                                        348.45
                      11 24 34 1315.47
15 17 25 5856.63
                                                                                                                                                                        23.61
        75.17
                                                             20.44
                                                                             355.96
                                                                                               92.41
                                                             20.46
                                                                            278.62
                                                                                                92.42
                                                                                                                                                    5256.6
                                                                                                                                                                        23.62
                                                                                                                                                                                        271.11
        104.63
                                                                                                                 114.74 11 46 29
114.72 16 55 1
122.40 14 24 56
107.39 18 59 53
                                                                             355.96
                                                                                                                                                      715.5
                                                                                                                                                                        23.61
                                                                                                                                                                                        348.45
         75.17
                       11 24 34
                                       1315.47
                                                             20.44
                                                                                                92.41
                                                                                                                                                                                        271.11
        104.83
                       15 17 25 5856.63
                                                           20.46
                                                                             278.62
                                                                                                92.42
                                                                                                                                                    5256.6
                                                                                                                                                                        23.62
                                                                                                                                                                        15.75
                                                                                                                                                                                        304.62
        110.00
                      14 12 4
17 29 5
                                          771.96
                                                          29.90
                                                             11.56
                                                                                                87.39
                                                                                                                                                     172.0
                                                                             311.21
                                       5448.14
                                                                                                                                                    4848.1
                                                                                                                                                                        31.99
                                                                                                                                                                                        242.74
                                                                                                96.43
       110.00
                                                                            251.33
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                            ST 2873.7 SR 464.1 SS 721.8
CRT -.9164 CRS .8551 CST -.9909
LSA 2991.7 MSA 209.0 SSA 16.2
    TDE-2.2603 TRA 2.9200 TC3-3.4050 BAU 1.1178
                                                                               SGT 5827.4 SGR 466.7 SG3 171.0
RRT -.4324 RRF -.4237 RTF .9520
SGB 5846.1 R23 .0110 R13 -.9521
    RDE .4013 RRA -.0196 RC3 -.0426 FAU .01843
FDE -.6963 FRA 1.2437 FC3 -.6499 BSP 18614
BDE 2.2957 BRA 2.9201 BC3 3.4052 FSP -574
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FLIGHT TIME 190.00

SG1 5830.9 SG2 420.6 THA 178.01

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ARRIVAL CATE JAN 16 1968
                                                                                      FLIGHT TIME 198.00
LAUNCH DATE JUL 2 1967
                                                                                      CISTANCE 569.816
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.674 GAL 7.29 AZL 92.88 MCA 280.36 SMA 122.21 ECC .27378 INC 2.8805 V1 29.292
RP 107.94 LAP 2.83 LOP 199.82 VP 37.056 GAP 14.44 AZP 90.52 TAL 159.68 TAP 80.04 RCA 88.75 APO 155.66 V2 35.110
RC 174.603 GL -14.27 GP 5.34 ZAL 51.51 ZAP 172.78 ETS 45.44 ZAE 127.79 ETE 175.99 ZAC 60.38 ETC 11.22 CLP-175.14
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 26.961 WHL 5.192 DLA -31.26 RAL 222.46 RAD 6568.1 VEL 12.179 PTH 2.19 VHP 9.090 DPA -2.18 RAP 205.97 ECC 1.4437
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.17 11 42 56 1316.71 19.54 355.60 96.67 114.90 12 4 53 716.7 22.73 348.16
103.83 15 21 52 613.59 19.55 303.67 96.68 114.89 15 32 5 13.6 22.74 296.22
76.17 11 42 56 1316.71 19.54 355.60 96.67 114.90 12 4 53 716.7 22.73 348.16
103.83 15 21 52 613.59 19.55 303.67 96.68 114.89 15 32 5 13.6 22.74 296.22
110.00 14 15 41 820.30 9.78 313.83 91.11 122.92 14 29 22 220.3 14.05 307.33
110.00 17 48 17 5446.03 29.95 251.18 101.09 107.31 19 19 3 4846.0 32.02 242.58
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RIT - 4448 RRT - 4350 RTF . .9535
SGB 5859.6 R23 .0097 R13 - .9535
SGI 5844.7 SGZ 418.2 THA 177.95
                                                                                                                                              ST 2785.2 SR 464.3 SS 693.3
CRT -.9030 CRS .8381 CST -.9909
LSA 2899.1 MSA 219.5 SSA 15.6
     TDE-2.2495 TRA 3.2525 TC3-3.0945 BAU 1.1155
     ROE .4206 RRA -.0322 RC3 -.0337 FAU .01672
    FOE -.6585 FRA 1.2935 FC3 -.5369 BSP 18718
                                                                                                                                               EL1 2816.7 EL2 197.3 ALF 171.40
     BOE 2.2885 BRA 3.2527 BC3 3.0947 FSP -554
                                                                                      FLIGHT TIME 200.00
                                                                                                                                                             ARRIVAL DATE JAN 18 1968
LAUNCH DATE JUL 2 1967
                                                                                      DISTANCE 575.024
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.633 GAL 8.04 AZL 92.80 HCA 283.58 SHA 121.97 ECC .28174 INC 2.8024 VI 29.292 RP 107.97 LAP 2.72 LOP 203.04 VP 37.016 GAP 15.01 AZP 90.66 TAL 158.27 TAP 81.84 RCA 87.61 APO 156.34 V2 35.097 RC 176.504 GL -13.15 GP 5.19 ZAL 49.24 ZAP 173.48 ETS 50.43 ZAE 127.68 ETE 176.09 ZAC 58.18 ETC 11.31 CLP-176.05
   PLANETOCENTRIC CONIC
     C3 29.751 WHL 5.454 DLA -30.81 RAL 225.17 RAD 6568.2 VEL 12.293 PTH 2.21 VHP 9.423 DPA -3.22 RAP 208.03 ECC 1.4896 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.33 12 1 58 1315.33 18.57 355.02 100.86 115.03 12 23 54 715.3 21.79 347.64
                                                                                                               115.03 12 23 54
115.02 15 35 30
                     12 1 56 1315.33
                                                                              307.00
                                                                                                                                                                        21.80
                                                                                               100.86
                                                             18.59
        102.67
                      15 24 26
                                          664.12
                                                                                                                 115.03 12 23 54
115.02 15 35 30
123.36 14 33 11
107.27 19 37 39
                                                                              355.02
                                                                                               100.86
                                                                                                                                                      715.3
                                                                                                                                                                        21.79
                     12 1 58
15 24 26
                                                             18.57
         77.33
                                        1315.33
                                                                              307.00
                                                                                                                                                                        21.80
                                                                                                                                                                                        299.61
                                                                                               100.86
        102.67
                                          664.12
                                                             18.59
                                                                                                94.75
                                                                                                                                                      270.4
                                                               7.91
                                                                                                                                                                        12.25
                                                                                                                                                                                        310.10
        110.00
                      14 18 41
                                          870.40
                                                                              316.51
                                                                                                                                                    4845.1
                                                                                                                                                                        32.03
                                                                                                                                                                                        242.51
                      18 6 54
                                                             29.97
                                                                             251.11
                                                                                               105.66
        110.00
                                        5445.08
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                           3GT 5848.3 SGR 466.5 SG3 158.4

RRT -.4573 RRF -.4463 RTF .9549

SGB 5866.9 R23 .0084 R13 -.9549

SGI 5852.2 SG2 414.6 THA 177.90
                                                                                                                                               $T 2693.7 SR 462.5 55 666.5
CRT -.8877 CRS .8191 CST -.9910
     TOE-2.2316 TRA 3.6082 TC3-2.7857 BAU 1.1080
     RDE .4400 RRA -.0466 RC3 -.0262 FAU .01499
FDE -.6214 FRA 1.3461 FC3 -.4361 BSP 18709
BDE 2.2745 BRA 3.6085 BC3 2.7858 FSP -531
                                                                                                                                             LSA 2803.7 MSA 230.2 SSA 15.0
                                                                                                                                               EL1 2725.0 EL2 210.5 ALF 171.28
                                                                                                                                                            ARRIVAL DATE JAN 20 1968
                                                                                       FLIGHT TIME 202.00
LAUNCH DATE JUL 2 1967
                                                                                      DISTANCE 580.131
    RL 152.10 LAL -.00 LOL 279.45 VL 25.593 GAL 8.85 AZL 92.72 MCA 286.79 SMA 121.74 ECC .29042 INC 2.7223 VI 29.292
RP 108.01 LAP 2.61 LOP 206.26 VP 36.976 GAP 15.63 AZP 90.79 TAL 156.87 TAP 83.67 RCA 86.39 APO 157.10 V2 35.084
RC 178.389 GL -12.07 GP 5.06 ZAL 47.09 ZAP 174.10 ETS 56.66 ZAE 127.56 ETE 176.17 ZAC 55.98 ETC 11.43 CLP-176.97
   PLANETOCENTRIC CONIC
     C3 32.984 VHL 5.743 DLA -30.33 RAL 227.72 RAD 6568.3 VEL 12.424 PTH 2.25 VHP 9.782 DPA -4.23 RAP 210.09 ECC 1.5428
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               115.13 12 43 47
115.12 15 36 51
115.13 12 43 47
115.12 15 36 51
123.72 14 36 30
107.29 19 55 34
                                                                                           104.96
                                                                                                                                                     710.2
          78.67 12 21 57 1310.21
                                                            17.56
                                                                             354.14
                                                                                              104.97
                                                                                                                                                      121.1
                                                             17.57
                                                                             310.77
        101.33
                       15 24 49
                                          721.11
                     12 21 57
                                                                                               104.96
                                                                                                                                                     710.2
                                                                                                                                                                       20.80
                                                                                                                                                                                        346.81
                                                             17.56
                                                                             354,14
          78.67
                                        1310.21
                                                                                                                                                     121.1
                                                                                                                                                                       20.81
                                                                                                                                                                                        303.44
                                                                                              104.97
                                                             17.57
                                                                             310.77
        101.33
                       15 24 49
                                          721.11
                                                                                                                                                                       10.37
                                                                                                                                                                                        312.89
                     14 21 8
                                                                                                                                                      321.8
                                                               5.98
                                                                             319.23
                                                                                               98.31
                                         921.82
                                                                                                                                                     4845.5
                                                                                                                                                                       32.03
                                                                             251.15
                                                             29.96
                                                                                               110.20
        110.00
                       18 24 48
                                        5445.53
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5852.1 SGR 464.9 SG3 152.6

RRT - .4710 RRF - .4592 RTF .9567

SGB 5870.5 R23 .0072 R13 - .9567

SG1 5856.2 SG2 409.8 THA 177.85
                                                                                                                                               ST 2607.9 SR 459.2 S5 644.0
CRT -.8718 CRS .8005 CST -.9912
LSA 2714.6 MSA 239.7 SSA 14.4
     TOE-2.2166 TRA 3.9795 TC3-2.4935 BAU 1.0996
     ROE .4598 RRA -.0623 RC3 -.0196 FAU .01339
FOE -.5892 FRA 1.3978 FC3 -.3515 BSP 18793
                                                                                                                                               EL1 2638.7 EL2 222.3 ALF 171.21
     BOE 2.2638 BRA 3.9799 BC3 2.4936 FSP -514
                                                                                                                                                             ARRIVAL DATE JAN 22 1968
                                                                                       FLIGHT TIME 204.00
LAUNCH DATE JUL 2 1967
                                                                                      DISTANCE 585.123
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOU 279.45 VL 25.554 GAL 9.70 A7L 92.64 MCA 290.01 SMA 121.52 ECC .29990 INC 2.6395 VI 29.292 RP 108.05 LAP 2.48 LOP 209.47 VP 36.937 GAP 16.28 A7P 90.90 TAL 155.51 TAP 85.52 RCA 85.07 APO 157.96 V2 35.071 RC 180.257 GL -11.03 GP 4.93 ZAL 45.06 ZAP 174.63 ETS 64.38 ZAE 127.43 ETE 176.25 ZAC 53.79 ETC 11.61 CLP-177.89
    PLANETOCENTRIC CONIC
     C3 36.735 VHL 6.061 DLA -29.82 RAL 230.12 RAD 6568.4 VEL 12.574 PTH 2.28 VHP 10.169 DPA -5.22 RAP 212.17 ECC 1.6046
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                     19.76
                                                                                                                115.20 13 4 57
                                                                                                                                                      699.A
                                        1299.85
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          80.23
                       12 43 17
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                                                                                                                 115.19 15 35 42
116.21 15 20 57
                                                              16.52
                                                                              315.07
                                                                                               108.99
                       15 22 36
                                          785.85
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                                           835.62
                                                             14.92
                                                                              317.97
                                                                                               108.18
        100.00
                       15 7 1
                                                                                                                 114.19 15 55 39
123.98 14 39 23
107.37 20 12 43
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                      15 41 33
                                         725.31
                                                            18.12
                                                                              311.34
                                                                                               109.76
        100.00
                                                                                                                                                      374.2
                     14 23 8 974.20
18 41 55 5447.53
                                                               3.99
                                                                              321.99
                                                                                               101.78
        110.00
                                                                                                                                                                       32.00
                                                                                                                                                    4847.5
                                                                              251.29
                                                                                               114.65
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 5851.1 SGR 462.1 SG3 147.0
RRT - 4849 RRF - 4725 RTF .9586
SGB 5869.3 R23 .0062 R13 - .9587
SGI 5855.4 SG2 403.8 THA 177.80
                                                                                                                                              ST 2524.9 SR 454.3 S5 624.4
CRT -.8548 CRS .7814 CST -.9916
LSA 2628.6 MSA 248.4 SSA 13.9
     TDE-2.1999 TRA 4.3733 TC3-2.2140 BAU 1.0873
     RDE .4798 RRA -.0798 RC3 -.0142 FAU .01184
FDE -.5596 FRA 1.4515 FC3 -.2791 BSP 18869
                                                                                                                                              EL1 2554.9 EL2 233.0 ALF 171.18
     BOE 2.2517 BRA 4.3740 BC3 2.2140 FSP -496
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LAUNCH DATE JUL 2 1967

ARRIVAL DATE JAN 24 1968

DISTANCE 589.980 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 279.45 VL 25.514 GAL 10.62 AZL 92.55 MCA 293.22 SMA 121.29 ECC .31027 INC 2.5532 V1 29.292
RP 108.09 LAP 2.35 LOP 212.69 VP 36.897 GAP 17.00 AZP 91.01 TAL 154.18 TAP 87.40 RCA 83.66 APO 158.93 V2 35.058
RC 182.108 GL -10.04 GP 4.82 ZAL 43.15 ZAP 175.04 ETS 73.73 ZAE 127.28 ETE 176.32 ZAC 51.62 ETC 11.83 CLP-178.82 PLANETOCENTRIC CONIC C3 41.093 VHL 6.410 DLA -29.30 RAL 232.36 RAD 6568.6 VEL 12.746 PTH 2.32 VMP 10.589 DPA -6.18 RAP 214.24 ECC 1.6763 C3 41.093 VML 6.410 ULA -29.30 RAL 232.30 RAU 0308.0 VEL 12.140 FIN 2.142 VIII 10.25 OIN CITY OF CST TIM INJ 2 LAT INJ 2 LONG 82.14 13 7 3 1280.68 15.42 350.90 112.91 115.23 13 28 24 680.7 18.69 343.68 15 31 5 14 59 29 861.65 261.7 18.70 312.93 15 16 43 320.16 115.22 97.86 15.43 112.91 318.81 10.78 368.7 14.45 100.00 14 43 20 968.68 325.6A 110.52 118.05 23.06 298.99 48.9 100.00 16 23 7 648.89 20.16 306.61 115.12 14 24 44 1027.26 427.3 318.52 110.00 1.97 324.76 105.18 6.44 18 58 12 5451.12 4851.1 31.94 242.96 110.00 29.84 251.54 110.00 DIFFERENTIAL GORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2446.0 SR 447.7 SS 607.9

CRT -.8366 CRS .7619 CST -.9920

LSA 2547.0 MSA 256.0 SSA 13.3

EL1 2474.8 EL2 242.4 ALF 171.21 SGT 5845.6 SGR 458.2 SG3 141.8 RRT -.4992 RRF -.4862 RTF .9608 TOE-2.1827 TRA 4.7926 TC3-1.9479 BAU 1.0701 ROE .4997 RRA -.0988 RC3 -.0100 FAU .01032 FOE -.5324 FRA 1.5077 FC3 -.2174 BSP 18912 SG8 5863.5 R23 .0051 R13 -.9608 SG1 5850:1 SG2 396.7 THA 177.75 BDE 2.2392 BRA 4.7936 BC3 1.9479 FSP -479 LAUNCH DATE JUL 2 1967 FLIGHT TIME 208.00 ARRIVAL DATE JAN 26 1968 HELIOCENTRIC CONIC DISTANCE 594.678 RL 152.10 LAL -.00 LOL 279.45 VL 25.476 GAL 11.61 AZL 92.46 MCA 296.43 SMA 121.08 ECC .32164 INC 2.4628 V1 29.292
RP 108.13 LAP 2.21 LOP 215.90 VP 36.858 GAP 17.76 AZP 91.10 TAL 152.89 TAP 89.31 RCA 82.13 APO 160.02 V2 35.045
RC 183.942 GL -9.08 GP 4.72 ZAL 41.36 ZAR 175.28 ETS 84.58 ZAE 127.10 ETE 176.38 ZAC 49.46 ETC 12.10 CLP-179.77 PLANETOCENTRIC CONIC C3 46.169 VHL 6.795 DLA -28.77 RAL 234.45 RAD 6568.7 VEL 12.943 PTH 2.36 VHP 11.047 DPA -7.10 RAP 216.31 ECC 1.7598 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.22 13 56 40 115.21 15 20 26 17.59 13 35 57 1243.78 347.64 116.74 643.A 340.47 84.70 14.31 357.2 319.48 95.30 15 4 26 957.20 14.33 326.66 116.74 17.61 14 50 28 17 0 34 14 43 58 20 44 34 14 32 49 1059.18 324.06 100.00 7.84 330.79 113.36 118.94 459.2 11.64 100.00 16 50 17 617.03 21.00 304.59 119.78 111.78 17.0 23.77 296.89 110.00 14 25 57 1080.75 -.OA 327.55 108.50 124.18 480.8 4.41 321.34 110.00 19 13 36 5456.26 29.74 251.90 123.25 107.69 4856.3 31.87 243.34 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 5835.6 SGR 453.0 SG3 136.8 RRT -.5135 RRF -.5000 RTF .9630 SGB 5853.2 R23 .0039 R13 -.9630 SGI 5840.3 SG2 388.4 THA 177.71 ST 2370.0 SR 439.4 SS 594.0 CRT -.8170 CRS .7413 CST -.9924 TDE-2.1618 TRA 5.2424 TC3-1.6938 BAU 1.0455 RDE .5194 RRA -.1197 RC3 -.0070 FAU .00875 FDE -.5065 FRA 1.5683 FC3 -.1641 BSP 18836 BDE 2.2234 BRA 5.2438 BC3 1.6938 FSP -460 LSA 2468.5 MSA 262.6 SSA 12.8 ELI 2397.3 EL2 250.5 ALF 171.29 FLIGHT TIME 210.00 ARRIVAL DATE JAN 28 1968 LAUNCH DATE JUL 2 1967 DISTANCE 599.188 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 279.45 VL 25.438 GAL 12.67 AZL 92.37 HCA 299.63 SMA 120.87 ECC .33416 INC 2.3673 V1 29.292 RP 108.18 LAP 2.06 LOP 219.10 VP 36.819 GAP 18.60 AZP 91.17 TAL 151.64 TAP 91.28 RCA 80-48 APO 161.26 V2 35.032 4.62 7AL 39.69 7AP 175.32 ETS 96.35 7AE 126.91 ETE 176.44 7AC 47.33 ETC 12.42 CLP 179.27 -8.17 GP RC 185.758 GL PLANETOCENTRIC CONIC C3 52.098 VHL 7.218 DLA -28.23 RAL 236.38 RAD 6568.9 VEL 13.170 PTH 2.41 VHP 11.546 DPA -8.00 RAP 218.38 ECC 1.8574 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 116.12 14 28 5 114.26 15 5 27 119.56 14.77 90.00 594.7 335.59 14 8 10 1194.71 11.35 342.59 14 47 40 466.6 327.76 90.00 1066.61 15.07 335.02 121.35 18.22 119.48 14 44 38 111.32 18 50 59 538.1 328.55 100.00 14 25 39 1138.11 5.21 335.18 116.29 9.10 273.56 100.00 17 12 52 5886.47 21.46 281.31 124.18 5286.5 24.17 124.12 14 45 43 107.93 20 59 15 110.00 14 26 49 1134.48 19 28 12 5462.87 -2.13 330.36 111.74 534.5 2.36 324.15 4862.9 110.00 29.60 252.37 127.39 31.76 243.83 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2301.4 SR 429.7 SS 583.9 CRT -.7974 CRS .7227 CST -.9931 LSA 2398.1 MSA 267.0 SSA 12.3 SGT 5821.2 SGR 446.8 SG3 132.1 RRT -.5282 RRF -.5147 RTF .9656 SGB 5838.4 R23 .0030 R13 -.9656 SGI 5826.0 SG2 379.1 TMA 177.67 TDE-2.1468 TRA 5.7180 TC3-1.4602 BAU 1.0171 RDE .5392 RRA -.1419 RC3 -.0048 FAU .00728 FDE -.4853 FRA 1.6305 FC3 -.1210 BSP 18886 BDE 2.2135 BRA 5.7198 BC3 1.4502 FSP -445 EL1 2327.1 EL2 256.4 ALF 171.43 ARRIVAL DATE JAN 30 1968 LAUNCH DATE JUL 2 1967 FLIGHT TIME 212,00 HELIOCENTRIC CONIC DISTANCE 603.473 RL 152.10 LAL -.00 LOL 279.45 VL 25.402 GAL 13.82 ATL 92.27 MCA 302.84 SMA 120.66 ECC .34797 INC 2.2655 V1 29.292
RP 108.22 LAP 1.90 LOP 222.31 VP 36.781 GAP 19.52 AZP 91.23 TAL 150.46 TAP 93.30 RCA 78.68 APO 162.65 V2 35.019
RC 187.557 GL -7.29 GP 4.54 ZAL 38.14 ZAP 175.15 ETS 108.09 ZAE 126.68 ETE 176.50 ZAC 45.22 ETC 12.81 CLP 178.27 PLANETOCENTRIC CONIC C3 59.051 VHL 7.684 OLA -27.68 RAL 238.16 RAD 6569.1 VEL 13.432 PTH 2.46 VHP 12.095 OPA -8.87 RAP 220.43 ECC 1.9718 LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAPATH INJ TIME PO CST TIM INJ 2 LAT INJ 343.72 330.37 15 44 12 390.1 15 27 42 126.42 112.88 20.11 322.94 990.09 17.15 90.00 14 20 5 1211.00 14 40 16 339.20 119.22 119.78 6.70 332.63 100.00 2.76 611.0 17 32 40 5875.28 21.74 5275.3 24.41 272.81 100.00 280.60 128.38 14 27 19 1188.25 588.3 326.96 110.00 -4.18 333.17 114.91 31.64 29.43 4870.8 110.00 19 41 54 5470.80 252.93 131.42 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5801.2 SCR 439.4 SC3 127.6 RRT -.5429 RRF -.5295 RTF .9682 SCB 5817.8 R23 .0020 R13 -.9683 ST 2237.9 SR 418.7 SS 576.9 TDE-2.1341 TRA 6.2255 TC3-1.2425 BAU .9809 CRT -.7777 CRS .7045 CST -.9938 LSA 2333.1 MSA 269.8 SSA 11.8 RDE .5588 RRA -.1656 RC3 -.0034 FAU .00581 FOE -.4665 FRA 1.6973 FC3 -.0851 BSP 18907 BDE 2.2061 BRA 6.2277 BC3 1.2425 FSP -430 EL1 2261.7 EL2 260.5 ALF 171.61 SG1 5806.1 SG2 368.7 THA 177.64

FLIGHT TIME 206,00

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ARRIVAL CATE FEB 1 1968
                                                                                   FLIGHT TIME 214.00
LAUNCH DATE JUL 2 1967
                                                                                  DISTANCE 607.488
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.366 GAL 15.08 AZL 92.16 MCA 306.04 SMA 120.46 ECC .36325 INC 2.1563 VI 29.292
RP 108.26 LAP 1.74 LOP 225.51 VP 36.744 GAP 20.53 AZP 91.27 TAL 149.35 TAP 95.39 RCA 76.70 APO 164.22 V2 35.005
RC 189.337 GL -6.45 GP 4.46 ZAL 36.73 ZAP 174.76 ETS 118.89 ZAE 126.41 ETE 176.55 ZAC 43.16 ETC 13.25 CLP 177.25
   PLANETOCENTRIC CONIC
                                                                                                                2.51 VHP 12.700 OPA -9.69 RAP 222.47 ECC 2.1066
    C3 67.241 VHL 8.200 DLA -27.13 RAL 239.79 RAD 6569.3 VEL 13.733 PTH
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                                          118.04 13 53 26
112.24 16 9 23
119.89 14 36 40
110.88 19 28 13
123.68 14 48 10
108.55 21 26 5
                    13 29 38 1427.61
15 53 25 958.11
14 15 20 1279.97
17 50 24 5869.02
14 27 28 1241.88
                                                                                       124.14
                                                                                                                                                                                349.15
                                                           4.09
                                                                                                                                            827.6
                                                                                                                                                                  7.82
                                                                          355.86
        90.00
                                                                                                                                                358.1
                                                                                                                                                                 20.85
                                                                                                                                                                                320.89
                                                           17.99
                                                                          328.40
                                                                                          130.76
        90.00
                                                                          342.98
                                                                                         122.10
                                                                                                                                                680.0
                                                                                                                                                                  4.40
                                                                                                                                                                                336.45
                                                             .42
       100.00
                                                                                          132.40
                                                                                                                                               5269.0
                                                                                                                                                                 24.54
                                                                                                                                                                                272.39
                                                          21.89
                                                                          280.19
       100.00
                                                                                                                                                                 -1.74
                                                                                                                                                                                 329.75
                                                                                          117.99
                                                                                                                                                641.9
       110,00
                                                                          335.99
                                                           -6.21
                                                                                                                                               4879.9
                                                                                                                                                                 31.49
                                                                                                                                                                                245.08
                                                           29.24
                                                                          253.56
                                                                                           135.31
       110,00
                                      5479.87
                     19 54 45
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5777.7 SGR 430.8 SGS 123.3
RRT -.5577 RRF -.5445 RTF ..9710
SGB 5793.8 R23 .0011 R13 -.9710
SGI 5782.7 SGZ 357.3 THA 177.61
                                                                                                                                         ST 2179.5 SR 406.4 SS 573.0
CRT -.7579 CRS .6872 CST -.9946
    TOE-2.1247 TRA 6.7713 TC3-1.0413 BAU .9360
    ROE .5781 RRA -.1908 RC3 -.0028 FAU .00430
FOE -.4504 FRA 1.7692 FC3 -.0554 BSP 18911
BOE 2.2019 BRA 6.7740 BC3 1.0413 FSP -416
                                                                                                                                         LSA 2273.8 MSA 270.7 SSA 11.3
                                                                                                                                          EL1 2201.5 EL2 262.5 ALF 171.84
                                                                                                                                                       ARRIVAL DATE FEB 3 1968
                                                                                   FLIGHT TIME 216.00
LAUNCH DATE JUL 2 1967
                                                                                   DISTANCE 611.173
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.331 GAL 16.45 A7L 92.04 HCA 309.24 SMA 120.27 ECC .38022 INC 2.0379 V1 29.292 RP 108.30 LAP 1.58 LOP 228.70 VP 36.708 GAP 21.64 A7P 91.29 TAL 148.32 TAP 97.56 RCA 74.54 APO 166.00 V2 34.992 RC 191.100 GL -5.65 GP 4.38 ZAL 35.44 ZAP 174.19 ETS 128.19 ZAE 126.10 ETE 176.61 ZAC 41.13 ETC 13.76 CLP 176.19
   PLANETOCENTRIC CONIC
    C3 76.938 VHL 8.771 DLA -26.58 RAL 241.27 RAD 6569.5 VEL 14.081 PTH
                                                                                                                  2.57 WHP 13.371 DPA -10.48 RAP 224.48 ECC 2.2662
    C3 76,938 VHL 8.771 OLA -26.58 RAL 241.27 RAO 6569.5 VEL 14,081 PTH 2.57 VMP 13.371 DPA -10.48 RAP 224.48 ECC 2.2662
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 20 26 1509.47 1.46 .43 126.75 118.28 13 45 36 909.5 5.23 355.78
90.00 16 14 23 939.55 18.46 327.24 134.78 111.86 16 30 2 339.5 21.27 319.69
100.00 14 11 2 1346.02 -1.82 346.61 124.92 119.84 14 33 28 746.0 2.17 340.09
100.00 18 6 27 5866.26 21.96 280.02 136.23 110.81 19 44 14 5266.3 24.59 272.21
110.00 14 27 14 1295.19 -8.21 338.82 120.98 123.30 14 48 49 695.2 -3.78 332.54
110.00 20 6 45 5489.86 29.02 254.26 139.06 108.91 21 38 15 4889.9 31.32 245.81
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5750.1 SGR 421.1 SG3 119.3
RRT -.5723 RRF -.5596 RTF .9739
SGB 5765.5 R23 .0002 R13 -.9739
SGI 5755.2 SG2 345.0 THA 177.59
                                                                                                                                          ST 2125.8 SR 392.9 S5 572.3
CRT -.7384 CRS .6711 CST -.9953
    TDE-2.1194 TRA 7.3595 TC3 -.8556 BAU .8800
    RDE .5971 RRA -.2173 RC3 -.0028 FAU .00274
FDE -.4370 FRA 1.8476 FC3 -.0309 BSP 18894
BDE 2.2019 BRA 7.3627 BC3 .8556 FSP -402
                                                                                                                                          LSA 2219.9 MSA 269.7 SSA 10.8
                                                                                                                                          EL1 2145.8 EL2 262.5 ALF 172.11
                                                                                                                                                      ARRIVAL DATE FEB 5 1968
                                                                                   FLIGHT TIME 218.00
LAUNCH DATE JUL 2 1967
                                                                                   DISTANCE 614.457
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 279.45 VL 25.298 GAL 17.95 AZL 91.91 MCA 312.43 SMA 120.09 ECC .39913 INC 1.9082 V1 29.292 RP 108.34 LAP 1.41 LOP 231.90 VP 36.672 GAP 22.88 AZP 91.29 TAL 147.40 TAP 99.83 RCA 72.16 APO 168.01 V2 34.979 RC 192.846 GL -4.89 GP 4.31 ZAL 34.29 ZAP 173.46 ETS 135.92 ZAE 125.74 ETE 176.66 ZAC 39.17 ETC 14.34 CLP 175.07
   PLANETOCENTRIC CONIC
     C3 88.485 VML 9.407 DLA -26.03 RAL 242.58 RAD 6569.7 VEL 14.486 PTH 2.63 VHP 14.117 DPA -11.23 RAP 226.45 ECC 2.4562
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           118.30 13.39.16
111.62 16.47.56
119.65 14.30.26
110.80 19.58.51
122.81 14.49.4
109.29 21.49.35
                                                                                                                                                                              357.98
                                                                                                                                              984.3
                                                                                                                                                                  2.84
                                                           -.95
                                                                                         129.34
                    13 12 52 1584.31
                                                                             4.61
         90.00
                                                                                                                                                                                 318.95
                                                                           326.53
                                                                                          138.55
                                                                                                                                                328.2
                                                                                                                                                                 21.52
                                                           18.75
                      16 32 28
                                        928.17
         90.00
                     14 6 56 1409.71
18 21 5 5855 0
                                                                                                                                                                               343.58
                                                                                                                                                809.7
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                                                                          350.11
                                                                                          127.66
                                                           -3.97
        100.00
                     14 6 56
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                                                                          280.00
                                                                                          139.68
                                                                                                                                               5266.0
                                                                                                                                                                 24.60
                                                           21.96
        100.00
                                                                                           123.88
                                                                                                                                               748.0
                                                                                                                                                                 -5.78
                                                                                                                                                                                335.32
                     14 26 36 1348.01
20 17 54 5500.50
                                                                           341.65
                                                         -10.18
        110.00
                                                                                                                                               4900.5
                                                                                                                                                                31.14
                                                                                                                                                                                246.58
                                                                                           142.63
                                                                          254.99
                                                           28.78
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2075.8 SR 378.2 SS 574.6

CRT -.7189 CRS .6555 CST -.9960

LSA 2170.5 MSA 266.9 SSA 10.3
                                                                              SGT 5719.3 SGR 410.2 SG3 115.5
RRT -.5867 RRF -.5745 RTF ..9768
SGB 5733.9 R23 -.0007 R13 -.9768
     TOE-2.1167 TRA 7.9984 TC3 -.6838 BAU .8089
    ROE .6156 RRA -.2452 RC3 -.0034 FAU .00105
FOE -.4255 FRA 1.9344 FC3 -.0103 BSP 18777
                                                                               SG1 5724.3 SG2 331.9 THA 177.58
                                                                                                                                          ELI 2093.8 EL2 260.6 ALF 172.42
     BOE 2.2044 BRA 8.0021 BC3 .6838 FSP -387
                                                                                    FLIGHT TIME 220.00
                                                                                                                                                       ARRIVAL DATE FEB 7 1968
LAUNCH DATE JUL 2 1967
                                                                                   DISTANCE 617.243
    HELIOCENTRIC CONIC
    RL 152:10 LAL -.00 LOL 279.45 VL 25.265 GAL 19.61 ATL 91.76 HCA 315.63 SMA 119.91 ECC .42027 INC 1.7647 VI 29.292
RP 108.58 LAP 1.23 LOP 235.09 VP 36.637 GAP 24.27 ATP 91.26 TAL 146.60 TAP 102.23 RCA 69.52 APO 170.30 V2 34.966
RC 194.574 GL -4.15 GP 4.25 ZAL 33.29 ZAP 172.57 ETS 142.24 ZAE 125.31 ETE 176.72 ZAC 37.26 ETC 14.99 CLP 173.90
    PLANETOCENTRIC CONIC
     C3 102.328 VHL 10.116 DLA -25.47 RAL 243.74 RAD 6570.0 VEL 14.956 PTH 2.70 VHP 14.954 DPA -11.94 RAP 228.38 ECC 2.6841
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           INJ AZMIN INJ TIME
118.15 13 33 42
111.47 17 3 46
119.33 14 27 21
110.84 20 12 11
122.22 14 48 51
109.68 22 0 4
                                                                                        131.85
                                                                                                                                                                    , 5A
                                                                                                                                             1054.4
                                                           -3.21
                                                                             8.52
                      13 6 8 1654.41
                                                                           326.10
                                                                                           142.09
                                                                                                                                                321.2
                                                                                                                                                                  21.67
                                                                                                                                                                                 314.50
                                                           18.92
                      16 48 25
                                        921.24
          90.00
                                                                                                                                                 871.3
                                                                                                                                                                  -2.08
                                                                                                                                                                                 346.96
                                                                           353.52
                                                                                          130.30
                       14 2 50
                                       1471.30
                                                           -6.04
        100.00
                                                                                                                                               5267.6
                                                                                                                                                                 24.56
                                                                                                                                                                                 272.30
                                                                                           143.33
                                                           21.93
                                                                           280.10
        100.00
                      18 34 24
                                       5867.62
                                                                                                                                                                                 338.08
                                                                                                                                                800.2
                                                                                                                                                                  -7.75
                                                                                           126.65
                                                                           344.48
        110.00
                       14 25 31 1400.16
                                                          -12.09
                                                                           255.75
                                                                                            146.02
                                                                                                                                               4911.5
                                                                                                                                                                 30.94
                                                                                                                                                                                 247.38
                     20 28 13 5511.52
        110.00
                                                           28.53
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SCT 5682.8 SGR 398.1 SG3 111.9
RRT -.6009 RRF -.5894 RTF .9797
SGB 5696.7 R23 -.0014 R13 -.9797
                                                                                                                                         ST 2030.8 SR 362.7 SS 580.6
CRT -.7014 CRS .6426 CST -.9967
      TDE-2.1264 TRA 8.6861 TC3 -.5292 BAU .7240
      RDE .6339 RRA -.2738 RC3 -.0042 FAU-.00072
                                                                                                                                        LSA-2127.0 MSA 262.0 SSA 9.8
EL1 2047.0 EL2 256.5 ALF 172.74
     FOE -.4183 FRA 2.0288 FC3 .0061 BSP 18757
BOE 2.2189 BRA 8.6904 BC3 .5293 FSP -375
                                                                               SG1 5687.9 SG2 317.9 THA 177.58
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LAUNCH DATE JUL 3 1967
                                                                           FLIGHT TIME 70.00
                                                                                                                                      ARRIVAL DATE SEP 11 1967
    HELIOCENTRIC CONIC
                                                                          DISTANCE 174.531
     RL 152.10 LAL -.00 LOL 280.40 VL 25.065 GAL -6.00 A7L 93.48 HCA 74.68 SMA 118.83 ECC .29743 INC 3.4792 V1 29.291
RP 108.74 LAP -3.36 LOP 355.06 VP 36.390 GAP -16.62 AZP 90.92 TAL 194.58 TAP 269.26 RCA 83.49 APO 154.17 V2 34.851
RC 45.690 GL -16.41 GP -4.86 ZAL 119.50 ZAP 4.86 ETS 89.01 ZAE 153.72 ETE 15.16 ZAC 91.57 ETC 13.64 CLP -.04
    PLANETOCENTRIC CONIC
     C3 28.687 VHL 5.356 DLA -7.21 RAL 154.93 RAD 6568.2 VEL 12.250 PTH 2.20 VHP 10.282 DPA
                                                                                                                                     .62 RAP 174.79 ECC 1.4721
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG --16.01 32.96 20.70 113.67 4 28 53 1477.1 --12.68 25.87
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                               INJ Azm...
113.67 4 28 55
77.76 15 30 6
114.85 5 42 35
                     3 54 16 2077.12
14 3 54 5172.14
                                                                                20.70
         90.00
         90.00
                                                     25,74
                                                                   231.30
                                                                                   24.80
                                                                                                                               4572.1
                                                                                                                                              23.79
                                                                                                                                                             223.17
                     5 12 9
        100.00
                                 1825.86
                                                     -17.17
                                                                    13.94
                                                                                  20.16
                                                                                                                              1225.9
                                                                                                                                              -13.67
                                                                                                                                                                6.89
        100.00
                    15 28 42
                                   4898.64
                                                    26.97
                                                                   210.88
                                                                                                  76.59 16 50 21
118.16 6 39 47
73.32 18 2 31
                                                                                   24.49
                                                                                                                               4298.6
                                                                                                                                                             202.71
                                                                                                                                              24.86
        110.00
                      6 12 30
                                 1636.90
                                                     -20.23
                                                                   357.99
                                                                                  18.55
                                                                                                  118.16
                                                                                                                              1036.9
                                                                                                                                              -16.31
                                                                                                                                                             351.06
        110,00
                                                                                                                                             27.70
                     16 44 50
                                   4660.36
                                                     30.28
                                                                   191.77
                                                                                  23.48
                                                                                                                               4060.4
                                                                                                                                                             183.53
    DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
     TDE .3193 TRA -.4583 TC3 .3717 BAU .1452
                                                                      SGT 720.7 SGR 424.3 SG3 83.8
RRT -.0994 RRF .1147 RTF -.6604
SGB 836.3 R23 -.0151 R13 .6621
                                                                                                                          ST 372.5 SR 393.1 SS 265.0

CRT -.8664 CRS -.9904 CST .9098

LSA 585.2 MSA 143.7 SSA 21.0

EL1 523.3 EL2 139.8 ALF 133.22
     RDE -.3652 RRA -.1359 RC3 .0718 FAU .02855
     FOE -.2776 FRA -.0138 FC3 -.8617 BSP 1920
BOE .4851 BRA .4781 BC3 .3786 FSP -197
                                                                      SG1 722.6 SG2 421.1 THA 174.92
 LAUNCH DATE JUL 3 1967
                                                                          FLIGHT TIME 72.00
                                                                                                                                      ARRIVAL DATE SEP 13 1967
                                                                          DISTANCE 181.289
    RL 152.10 LAL -.00 LOL 280.40 VL 25.324 GAL -5.99 AZL 93.40 HCA 77.85 SHA 120.24 ECC .28349 INC 3.3981 VI 29.291
RP 108.71 LAP -3.32 LOP 358.24 VP 36.578 GAP -15.55 AZP 90.72 TAL 195.62 TAP 273.47 RCA 86.15 APO 154.32 VZ 34.860
    RC 46.700 GL -16.85 GP -5.15 TAL 121.11 ZAP 5.59 ETS 66.33 ZAE 152.21 ETE 13.28 ZAC 90.66 ETC 13.66 CLP -2.19
   PLANETOCENTRIC CONIC
    C3 26.528 VML 5.151 DLA -6.99 RAL 153.17 RAD 6568.1 VEL 12.162 PTH 2.18 VMP 9.675 DPA -. 06 RAP 175.60 ECC 1.4366 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                      3 45 27
                                                                                17.70
                                                                                                                            1464.9
                                 2064.92
                                                    -15.68
                                                                    32.22
                                                                                                 113.49
                                                                                                               4 19 52
                                                                                                                                            -12.32
23.28
                                                                                                                                                              25.16
         90.00
                    13 58 37 5145.40
                                                   25.34
                                                                  229.45
                                                                                  21.51
                                                                                                  76.91
                                                                                                            15 24 23
                                                                                                                               4545.4
                                                                                                                                                             221.38
                    5 3 28 1813.28
15 23 18 4872.27
       100.00
                                                    -16.81
                                                                    13.18
                                                                                  17.17
                                                                                                 115.09
                                                                                                               5 33 41
                                                                                                                               1213.3
                                                                                                                                              -13.29
                                                                                                                                                               6.16
       100.00
                                                                                                            16 44 30
                                                   26.54
                                                                   209.03
                                                                                                   75.72
                                                                                  21.18
                                                                                                                               4272.3
                                                                                                                                              24.32
                                                                                                                                                             200.94
                                                                                                             6 31 8
       110.00
                      6 4 4
                                  1623.51
                                                   -19.80
                                                                   357.19
                                                                                  15.58
                                                                                                 118.45
                                                                                                                               1023.5
                                                                                                                                              -15.85
                                                                                                                                                             350.30
                                                                                                           17 56 26
       110.00
                   16 39 11 4634.81
                                                    29.77
                                                                   189.96
                                                                                  20.14
                                                                                                  72.36
                                                                                                                                              27.07
                                                                                                                               4034 B
                                                                                                                                                             181.81
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SCT 746.5 SCR 426.7 SC3 94.1
RRT -.1139 RRF .1332 RTF -.6790
SCB 859.9 R23 -.0195 R13 .6810
    TOE .3175 TRA -.4312 TC3 .4330 BAU .1556
                                                                                                                          ST 382.0 SR 396.7 SS 274.7
CRT -.8766 CRS -.9931 CST .9038
LSA 598.2 MSA 143.0 SSA 22.2
    ROE -.3544 RRA -.1307 RC3 .0700 FAU .03087
    FOE -.2937 FRA -.0483 FC3-1.0073 BSP 2027
                                                                      SG1 748.8 SG2 422.6 THA 174.52
     BOE .4758 BRA .4506 BC3 .4386 FSP
                                                         -226
                                                                                                                           EL1 533.5 EL2 136.7 ALF 133.77
LAUNCH DATE JUL 3 1967
                                                                          FLIGHT TIME 74.00
                                                                                                                                     ARRIVAL DATE SEP 15 1967
                                                                         DISTANCE 188.054
    RL 152.10 LAL -.00 LOL 280.40 VL 25.560 GAL -6.00 AZL 93.32 HCA 81.03 SMA 121.55 ECC .27089 INC 3.3189 V1 29.291
RP 108.68 LAP -3.28 LOP 1.42 VP 36.750 GAP -14.52 AZP 90.52 TAL 196.70 TAP 277.73 RCA 88.63 APO 154.48 V2 34.870
RC 47.841 GL -17.22 GP -5.47 ZAL 122.74 ZAP 7.02 ETS 50.42 ZAE 150.90 ETE 11.56 ZAC 89.81 ETC 13.69 CLP -4.41
   PLANETOCENTRIC CONIC
    C3 24.717 VHL 4.972 DLA -6.69 RAL 151.40 RAD 6568.0 VEL 12.087 PTH 2.16 VHP 9.100 DPA
                                                                                                                                 -.74 RAP 176.35 ECC 1.4068
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 36 8 2056.87
13 53 52 5118.51
        90.00
                                                                               14.85
                                                                                                                                          -12.08
                                                                                                                                                            24.68
                                                  -15.46
                                                                  31.74
                                                                                              114.03
                                                                                                             4 10 25
                                                                                                                           1456.9
                    13 53 52
        90.00
                                                  24.91
                                                                 227.59
                                                                                  18.35
                                                                                                 76.08 15 19 11
                                                                                                                              4518.5
                                                                                                                                              22.75
                                                                                                                                                            219.59
                                 1804.75
4845.86
       100.00
                    4 54 17
                                                                                                                                             -13.02
                                                  -16.56
                                                                  12.67
                                                                                 14.32
                                                                                                115.25
                                                                                                            5 24 22
                                                                                                                              1204.7
                                                                                                                                                             5,67
       100.00
                   15 18 24
                                                                                                                                              23.75
                                                  26.08
                                                                 207.20
                                                                                 18.02
                                                                                                 74.86 16 39 10
                                                                                                                              4245.9
                                                                                                                                                            199.18
                     5 55 14 1613.91
16 33 56 4609.46
       110.00
                                                                                                118.65 6 22 8
71.43 17 50 46
                                                  -19.49
                                                                 356.62
                                                                                 12.75
                                                                                                                              1013.9
                                                                                                                                            -15.51
                                                                                                                                                            349.76
                   16 33 56
       110.00
                                                                                                                              4009.5
                                                  29.23
                                                                 188.18
                                                                                 16.94
                                                                                                                                                            180.13
                                                                                                                                              26.42
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
    TDE .3152 TRA -.4037 TC3 .4944 BAU .1648
                                                                                                                          ST 389.7 SR 399.9 SS 284.0
CRT -.8864 CRS -.9945 CST .8972
LSA 609.7 MSA 142.3 SSA 23.4
                                                                     SCT 770.1 SCR 428.7 SC3 105.8
RRT -.1319 RRF .1548 RTF -.6951
SCB 881.3 R23 -.0236 R13 .6977
    ROE - 3449 RRA - 1264 RC3 .0657 FAU .03349
FOE - 3108 FRA - 0883 FC3-1.1730 BSP 2122
BOE .4672 BRA .4230 BC3 .4987 FSP -259
                                                                     SG1 773.0 SG2 423.3 THA 173.99
                                                                                                                          EL1 542.3 EL2 133.0 ALF 134.17
LAUNCH DATE JUL 3 1967
                                                                         FLIGHT TIME 76.00
                                                                                                                                     ARRIVAL DATE SEP 17 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 194.820
   RL 152.10 LAL -.00 LOL 280.40 VL 25.773 GAL -6.02 AZL 93.24 HCA 84.21 SMA 122.79 ECC .25954 INC 3.2410 V1 29.291
RP 108.64 LAP -3.22 LOP 4.60 VP 36.909 GAP -13.54 AZP 90.33 TAL 197.81 TAP 282.02 RCA 90.92 APO 154.65 V2 34.881
RC 49.103 GL -17.51 GP -5.83 ZAL 124.38 ZAP 8.87 ETS 40.19 ZAE 149.80 ETE 9.94 ZAC 89.04 ETC 13.73 CLP -6.70
  PLANETOCENTRIC CONIC
   C3 23.197 VML 4.816 DLA -6.33 RAL 149.66 RAD 6567.9 VEL 12.024 PTH 2.15 VMP 8.553 DPA -1.43 RAP 177.01 ECC 1.3818
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 26 27 2052.70 -15.34 31.48 12.15 114.10 4 0 39 1452.7 -11.96 24.44
                   13 49 41
                                  5091.58
                                                   24.46
                                                                 225.75
                                                                                                 75.26 .15 14 33
                                                                                 15.35
                                                                                                                              4491.6
                                                                                                                                                            217.81
                                                                                                                                              22.19
                     4 44 47
       100.00
                                 1800.00
                                                  -16.42
                                                                  12.39
                                                                                 11.63
                                                                                                115.33
                                                                                                             5 14 47
                                                                                                                              1200.0
                                                                                                                                             -12.87
                                                                                                                                                             5.39
                   15 14 3
                                  4819.52
                                                  25.60
                                                                                                74.02 16 34 22
118.78 6 12 56
70.54 17 45 35
                                                                 205.40
                                                                                 15.00
                                                                                                                              4219.5
                                                                                                                                             23.16
                                                                                                                                                            197.45
                     5 46 8
                                 1607.87
                                                  -19.29
                                                                 356.27
                                                                                 10.09
                                                                                                                              1007.9
                                                                                                                                             -15.30
                                                                                                                                                            349.42
                   16 29 10
                                  4584.39
                                                   28.68
                                                                 186.44
                                                                                 15.90
                                                                                                                              3984.4
                                                                                                                                             25.75
                                                                                                                                                            178.48
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                      ST 397.2 SR 402.7 SS 293.6
CRT -.8968 CRS -.9946 CST .8907
LSA 620.8 MSA 141.6 SSA 24.6
EL1 540 8 C.2 100 7 C.2
   TOE .3138 TRA -.3751 TC3 .5588 BAU .1742
ROE -.3365 RRA -.1232 RC3 .0584 FAU .03650
FOE -.3298 FRA -.1352 FC3-1.3622 BSP .2254
BDE .4601 BRA .3948 BC3 .5619 FSP .299
                                                                    SGT 794.1 SGR 430.2 SG3 119.2
RRT -.1550 RRF .1805 RTF -.7123
                                                                    SGB 903.2 R23 -.0266 R13 .7153
SG1 798.0 SG2 423.0 THA 173.31
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ELI 550.8 EL2 128.5 ALF 134.56

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ARRIVAL DATE SEP 19 1967
                                                                                           FILIGHT TIME 78.00
LAUNCH DATE JUL 3 1967
                                                                                          DISTANCE 201.584
    RL 152.10 LAL -.00 LOL 280.40 VL 25.966 GAL -6.05 A7L 93.16 HCA 87.39 SMA 123.93 ECC .24937 INC 3.1640 V1 29.291 RP 108.61 LAP -3.16 LOP 7.78 VP 37.054 GAP -12.61 A7P 90.14 TAL 198.94 TAP 286.33 RCA 93.03 APO 154.84 V2 34.891 RC 50.476 GL -17.72 GP -6.23 TAL 126.01 TAP 10.99 ETS 33.48 TAE 148.93 ETE 8.38 TAC 88.37 ETC 13.78 CLP -9.07
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 21.920 VHL 4.682 DLA -5.92 RAL 147.98 RAD 6567.9 VEL 11.971 PTH 2.13 VHP 8.036 DPA -2.12 RAP 177.58 ECC 1.3608 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 16 33 2052.04
13 46 8 5064.76
4 35 5 1798.68
15 10 16 4793.35
5 36 55 1605.10
16 24 56 4559.69
                                                                                                9.63
                                                                                                                                        3 50 45
                                                                                                                                                            1452.0
                                                               -15.32
                                                                                 31.45
                                                                                                                     114.11
         90.00
                                                                                                                        74,47 15 10 32
                                                                                                                                                                                                  216.06
                                                                                                                                                             4464.8
                                                                                 223.93
                                                                                                     12.52
                                                               23.98
          90.00
                                                                                                                       115.36 5 5 4
75.21 16 30 10
118.84 6 3 40
69.69 17 40 56
                                                                                                                                                             1198.7
                                                                                                                                                                                                    5.31
                                                              -16.38
                                                                                   12.31
                                                                                                       9.12
        100.00
                                                                                                                                                                                                  195.74
                                                                                                                                                             4193.4
                                                              25.10
                                                                                 203.61
                                                                                                      12.17
        100.00
                                                                                                                                                                              -15.21
                                                                                                                                                             1005.1
                                                                                                                                                                                                 349.26
                                                                                                       7.60
                                                                                 356.10
                                                              -19.20
        110.00
                                                                                                                                                             3959.7
                                                                                                      11.04
                                                               28.10
                                                                                 184.75
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 400.5 SR 405.1 SS 301.9
CRT -.9046 CRS -.9932 CST .8819
LSA 628.3 MSA 142.0 SSA 25.7
                                                                                      SCT 814.6 SGR 431.5 SG3 134.2
RRT - 1786 RRF 2094 RTF - 7251
SGB 921.8 R23 - 0329 R13 7289
     TDE .3095 TRA -.3489 TC3 .6189 BAU .1819
     ROE -.3290 RRA -.1208 RC3 ..0478 FAU .03988
FOE -.3489 FRA -.1881 FC3-1.5751 BSP 2340
BOE .4517 BRA .3692 BC3 .6207 FSP -343
                                                                                                                                                       EL1 555.9 EL2 124.4 ALF 134.64
     BOE .4517 BRA .3692 BC3 .6207 FSP
                                                                                       SG1 819.6 SG2 422.0 THA 172.63
                                                                                                                                                                      ARRIVAL DATE SEP 21 1967
                                                                                            FLIGHT TIME 80.00
LAUNCH DATE JUL 3 1967
                                                                                            DISTANCE ZD8.343
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 280.40 VL 26.140 GAL -6.08 AZL 93.09 MCA 90.57 SMA 124.99 ECC .24029 INC 3.0873 V1 29.291
RP 108.58 LAP -3.09 LOP 10.97 VP 37.186 GAP -11.71 AZP 89.97 TAL 200.07 TAP 290.64 RCA 94.95 APO 155.02 V2 34.903
RC 51.950 GL -17.85 GP -6.67 ZAL 127.59 ZAP 13.31 ETS 28.88 ZAE 148.29 ETE 6.85 ZAC 87.80 ETC 13.84 CLP -11.54
   PLANETOCENTRIC CONIC
                                                                                                                                                                 -2.82 RAP 178.04 ECC 1.3431
     C3 20.848 VHL 4.566 DLA -5.45 RAL 146.36 RAO 6567.8 VEL 11.926 PTH 2.12 VHP 7.546 DPA -2.82 RAP 178.04 ECC 1.3431 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 3 6 36 2054.52 -15.39 31.59 7.29 114.07 3 40 50 1454.5 -12.01 24.55 90.00 13 43 12 5038.13 23.48 222.14 9.89 73.70 15 7 10 4438.1 21.02 214.33 100.00 4 25 22 1800.43 -16.43 12.41 6.79 115.33 4 55 22 1200.4 -12.89 5.42 100.00 15 7 7 4767.46 24.58 201.87 9.52 72.43 16 26 34 4167.5 21.94 194.06 110.00 5 27 42 1605.24 -19.21 356.11 5.30 118.84 5 54 28 1005.2 -15.21 349.27 110.00 16 21 16 4535.41 27.52 183.10 8.37 68.87 17 36 51 3935.4 24.40 175.32
     C3 20.848 VHL 4.566 DLA -5.45 RAL 146.36 RAD 6567.8 VEL 11.926 PTH
                                                                                                                             2.12 VHP 7.546 DPA
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ST 401.4 SR 407.1 SS 310.0

CRT -.9114 CRS -.9903 CST .8717

LSA 633.8 MSA 143.3 SSA 26.7
                                                                                       SGT 832.6 SGR 432.8 SG3 151.2
RRT -.2056 RRF .2431 RTF -.7362
SGB 938.3 R23 -.0407 R13 .7410
      TDE .3043 TRA -.3236 TC3 .6760 BAU .1886
      RDE -.3224 RRA -.1196 RC3 .0334 FAU .04373
FDE -.3693 FRA -.2488 FC3-1.8160 BSP 2412
BDE .4433 BRA .3450 BC3 .6768 FSP -393
                                                                                                                                                        EL1 558.8 EL2 120.3 ALF 134.56
                                                                                       SG1 838.9 SG2 420.3 THA 171.84
      BOE .4433 BRA .3450 BC3 .6768 FSP
                                                                                                                                                                      ARRIVAL DATE SEP 23 1967
                                                                                            FLIGHT TIME 82.00
LAUNCH DATE JUL 3 1967
     RL 152.10 LAL -.00 LOL 280.40 VL 26.296 GAL -6.11 A7L 93.01 HCA 93.75 SMA 125.96 ECC .23222 INC 3.0104 V1 29.291 RP 108.54 LAP -3.00 LOP 14.16 VP 37.307 GAP -10.86 A7P 89.80 TAL 201.19 TAP 294.94 RCA 96.71 APO 155.21 V2 34.914 RC 53.515 GL -17.91 GP -7.17 7AL 129.12 7AP 15.81 ETS 25.59 7AE 147.91 ETE 5.31 7AC 87.35 ETC 13.90 CLP -14.13
                                                                                           DISTANCE 215.093
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 19.946 VHL 4.466 DLA -4.95 RAL 144.84 RAC 6567.8 VEL 11.888 PTH 2.11 VHP 7.083 DPA -3.52 RAP 178.38 ECC 1.3283
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                    113.98 3 31 2
72.97 15 4 27
115.25 4 45 48
71.68 16 23 37
118.78 5 45 25
68.10 17 33 22
                                                                                                   5.15
                                                                                                                                                          1459.7 -12.17
                                                               -15.53
                                                                                   31.91
                           2 56 43 2059.73
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                                                                                  220.38
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                        13 40 55
                                                                22.97
                                            5011.79
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                                                                                                        4.66
                                                               -16.56
                                                                                   12.68
                           4 15 43 1804.85
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                                                                                  200.16
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                                                                24.04
                         15 4 36
                                           4741.90
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                                                                                   356.27
                                                                                                        3.20
                        5 18 37 1607.90
16 18 11 4511.59
                                                               -19.29
                                                                                                                                                                                 23.71
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                                                                                                                                                              3911.6
                                                                                                        5.90
                                                                                   181,50
                                                                26.92
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 399.7 SR 408.6 SS 317.7
CRT -.9170 CRS -.9861 CST .8598
LSA 637.0 MSA 145.5 SSA 27.6
                                                                                      SGT 847.1 SGR 434.4 SG3 170.5
RRT -.2365 RRF .2817 RTF -.7451
SGB 952.0 R23 -.0501 R13 .7513
      TOE .2978 TRA -.2998 TC3 .7278 BAU .1941

ROE -.3165 RRA -.1195 RC3 .0150 FAU .04810

FOE -.3907 FRA -.3177 FC3-2.0876 BSP 2477

BOE .4346 BRA .3227 BC3 .7279 FSP -450
                                                                                                                                                        EL1 559.6 EL2 116.4 ALF 134.31
                                                                                       SG1 855.3 SG2 418.0 THA 170.89
                                                                                                                                                                       ARRIVAL DATE SEP 25 1967
                                                                                             FLIGHT TIME 84.00
 LAUNCH DATE JUL 3 1967
      PELIOCENINIC CONIC

RL 152.10 LAL -.00 LOL 280.40 VL 26.436 GAL -6.15 A7L 92.93 MCA 96.93 SMA 126.85 ECC .22508 INC 2.9330 VI 29.291

RP 108.50 LAP -2.91 LOP 17.34 VP 37.417 GAP -10.04 A7P 89.65 TAL 202.28 TAP 299.21 RCA 98.30 APO 155.40 V2 34.926

RC 55.163 GL -17.88 GP -7.73 7AL 130.59 7AP 18.48 ETS 23.13 7AE 147.77 ETE 3.72 7AC 87.03 ETC 13.97 CLP -16.84
                                                                                            DISTANCE 221.832
     PLANETOCENTRIC CONIC
      C3 19.183 VHL 4.380 DLA -4.42 RAL 143.42 RAD 6567.8 VEL 11.856 PTH 2.10 VMP 6.647 DPA -4.22 RAP 178.58 ECC 1.3157
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 47 1 2067.26 -15.74 32.36 3.20 113.84 3 21 28 1467.3 -12.39 25.29
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72.26 15 2 23
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4 6 17 1811.55
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70.97 16 21 19
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          100,00
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67.36 17 30 31
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          110.00
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                                          1612.78
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                         16 15 42 4488.25
                                                                 26.32
          110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 395.8 SR 409.7 SS 325.4
CRT -.9213 CRS -.9805 CST .8462
                                                                                       SGT 858.0 SGR 436.8 SG3 192.5 ST 395.8 SR 409.7 SS 325.4 RT -.2717 RRF .3264 RTF -.7522 CRT -.9213 CRS -.9805 CST .8462 SGB 962.8 R23 -.0617 R13 .7603 LSA 638.4 MSA 148.9 SSA 28.3 SG1 868.7 SG2 415.2 THA 169.76 ELI 558.4 ELZ 112.9 ALF 133.92
       TDE .2904 TRA -.2776 TC3 .7737 BAU .1984 RDE -.3111 RRA -.1207 RC3 -.0082 FAU .05307
       FOE -.4136 FRA -.3963 FC3-2.3950 BSP 2534
BDE .4256 BRA .3027 BC3 .7737 FSP -517
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ARRIVAL DATE SEP 27 1967

EL1 532.0 EL2 107.4 ALF 130.57

JPL TM 33-99

LAUNCH DATE JUL 3 1967

HELIOCENTRIC CONIC DISTANCE 228.556 RL 152.10 LAL -.00 LOL 280.40 VL 26.560 GAL -6.19 AZL 92.85 HCA 100.12 SMA 127.65 ECC .21878 INC 2.8544 VI 29.291 RP 108.46 LAP -2.81 LOP 20.54 VP 37.517 GAP -9.25 AZP 89.50 TAL 203.32 TAP 303.44 RCA 99.72 APO 155.58 V2 34.938 RC 56.885 GL -17.78 GP -8.35 ZAL 131.97 ZAP 21.33 ETS 21.24 ZAE 147.90 ETE 2.02 ZAC 86.87 ETC 14.03 CLP -19.69 PLANETOCENTRIC CONIC C3 IA.535 VHL 4.305 DLA -3.85 RAL 142.11 RAD 6567.8 VEL 11.829 PTH 2.09 VHP 6.237 CPA -4.92 RAP 178.62 ECC 1.3050 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1:46 1476.7 2 37 35 2076.74 -16.00 32.94 113.68 3 12 12 -12.67 25.85 90.00 13 38 19 4960.11 21.90 216.97 3.17 71.58 15 0 59 4360.1 19.16 209.35 3 57 6 15 1 28 4691.55 5 1 14 1619.48 7 13 51 4465.37 114.96 4 27 28 1220.2 -13.50 -17.00 13.60 .98 100.00 2.78 70.28 16 19 40 118.54 5 28 14 4091.9 20.04 189.26 22.93 195.86 100,00 359.57 350.07 -19.67 356.95 110.00 66.66 17 28 16 110.00 178.46 1.58 3865.4 22.33 25.71 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 863.8 SGR 440.5 SG3 217.3 RRT -.3107 RRF .3769 RTF -.7566 SGB 969.6 R23 -.0761 R13 .7674 ST 389.2 SR 410.4 SS 332.6 CRT -.9241 CRS -.9736 CST .8303 LSA 637.4 MSA 153.3 SSA 28.7 TOE .2815 TRA -.2578 TC3 .8109 BAU .2011 RDE -.3062 RRA -.1232 RC3 -.0366 FAU .05869 FDE -.4371 FRA -.4844 FC3-2.7410 BSP 2573 BDE .4159 BRA .2857 BC3 .8117 FSP -592 BDE .4159 BRA .2857 BC3 .8117 FSP SG1 877.7 SG2 412.0 THA 168.41 EL1 554.8 EL2 110.1 ALF 133.35 ARRIVAL DATE SEP 29 1967 FLIGHT TIME 88.00 LAUNCH DATE JUL 3 1967 HELIOCENTRIC CONIC DISTANCE 235.263 RL 152.10 LAL -.00 LOL 280.40 VL 26.671 GAL -6.22 A7L 92.77 MCA 103.31 SMA 128.38 ECC .21325 INC 2.7742 V1 29.291 RP 108.43 LAP -2.70 LOP 23.73 VP 37.606 GAP -8.50 A7P 89.36 TAL 204.31 TAP 307.62 RCA 101.00 APO 155.75 V2 34.951 RC 58.673 GL -17.62 GP -9.05 ZAL 133.27 ZAP 24.36 ETS 19.74 ZAE 148.30 ETE ..17 ZAC 86.89 ETC 14.08 CLP -22.71 PLANETOCENTRIC CONIC C3 17.980 VHL 4.240 DLA -3.27 RAL 140.94 RAD 6567.7 VEL 11.805 PTH 2.09 VHP 5.853 DPA -5.63 RAP 178.48 ECC 1.2959 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 3 19 15 0 14 2 28 31 2087.85 13 37 59 4934.78 113.48 1487.8 33.61 359.90 -12.99 26.50 90.00 -16.31 13 37 59 215.32 70.93 4334.8 18.54 207.76 21.34 1.33 90.00 1830.38 4667.48 114.77 4 18 50 1230.4 7.16 100.00 3 48 20 -17.30 14.22 359.44 -13.81 69.63 16 18 39 15 0 52 .93 4067.5 19.39 100.00 22.36 195.27 118.36 5 20 12 65.99 17 26 39 1627.71 1027.7 350.54 110.00 4 55 4 -19.94 357.44 358.05 118.36 -15.99 16 12 36 21.64 177,00 359.72 3842.9 169.56 110.00 25.10 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 865.5 SGR 446.5 SG3 245.5 RRT -.3554 RRF .4342 RTF -.7596 SGB 973.9 R23 -.0923 R13 .7741 ST 381.8 SR 410.9 SS 340.7 CRT -.9260 CRS -.9658 CST .8132 LSA 636.1 MSA 158.7 SSA 29.0 TDE .2728 TRA - .2395 TC3 .8406 BAU .2028 RDE -.3017 RRA -.1272 RC3 -.0710 FAU .06507 FDE -.4628 FRA -.5844 FC3-3.1330 BSP 2630 BDE .4067 BRA .2711 BC3 .8436 FSP -681 EL1 550.5 EL2 107.6 ALF 132.73 SG1 884.1 SG2 408.5 THA 166.72 ARRIVAL DATE OCT 1 1967 LAUNCH DATE JUL 3 1967 FLIGHT TIME 90.00 HELIOCENTRIC CONIC DISTANCE 241.952 RL 152.10 LAL -.00 LOL 280.40 VL 26.768 GAL -6.25 AZL 92.69 MCA 106.50 SMA 129.03 ECC .20842 INC 2.6918 VI 29.291
RP 108.39 LAP -2.58 LOP 26.92 VP 37.687 GAP -7.78 AZP 89.23 TAL 205.23 TAP 311.73 RCA 102.14 APO 155.92 V2 34.964
RC 60.521 GL -17.38 GP -9.83 ZAL 134.46 ZAP 27.59 ETS 18.50 ZAE 148.96 ETE 358.10 ZAC 87.10 ETC 14.12 CLP -25.91 PLANETOCENTRIC CONIC C3 17.499 VHL 4.183 DLA -2.67 RAL 139.89 RAO 6567.7 VEL 11.785 PTH 2.08 VHP 5.495 DPA -6.33 RAP 178.15 ECC 1.2880 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -13.35 1500.3 358.54 27.24 90.00 2 19 51 2100.2A -16.64 34.37 2 54 51 4309.7 206.20 13 38 18 4909.73 20.78 213.70 359.69 17.90 90.00 -14.17 7.83 3 39 57 1841.89 -17.62 14.92 358.09 1241.9 100,00 15 0 54 4643.35 21.78 193.71 359.28 4043.3 18.73 186.24 100.00 4 45 21 118.15 5 12 38 65.36 17 25 40 4 45 21 1637.19 16 12 0 4420.82 -20.24 358.01 356.71 1037.2 -16.32 351.08 175.58 358.05 3820.8 20.95 168.21 110.00 24.48 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ST 369.9 SR 410.7 SS 347.1 CRT -.9245 CRS -.9571 CST .7905 LSA 630.7 MSA 165.4 SSA 29.1 SGT 858.1 SGR 455.6 SG3 277.0 RRT -.3992 RRF .4958 RTF -.7569 SGB 971.5 R23 -.1152 R13 .7773 TOE .2609 TRA -.2262 TC3 .8555 BAU .2018 ROE -.2972 RRA -.1326 RC3 -.1118 FAU .07218 FOE -.4871 FRA -.6938 FC3-3.5712 BSP 2628 BOE .3955 BRA .2622 BC3 .8628 FSP -778 EL1 542.3 EL2 106.8 ALF 131.77 SG1 882.5 SG2 406.1 THA 164.72 FLIGHT TIME 92.00 ARRIVAL DATE OCT 3 1967 LAUNCH DATE JUL 3 1967 DISTANCE 248.620 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 26.853 GAL -6.27 AZL 92.61 HCA 109.70 SMA 129.60 ECC .20421 INC 2.6066 V1 29.291
RP 108.35 LAP -2.45 LOP 30.12 VP 37.760 GAP -7.08 AZP 89.12 TAL 206.07 TAP 315.76 RCA 103.14 APO 156.07 V2 34.977
RC 62.420 GL -17.08 GP -10.70 ZAL 135.56 ZAP 31.04 ETS 17.45 ZAE 149.89 ETE 355.70 ZAC 87.52 ETC 14.13 CLP -29.31 PLANETOCENTRIC CONIC C3 17.076 VHL 4.132 OLA -2.05 RAL 138.98 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 5.163 DPA -7.04 RAP 177.61 ECC 1.2810 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 1513.8 -13.74 90.00 2 11 37 2113.82 -17.00 35.20 357.36 112.99 2 46 51 28.04 204.67 90.00 13 39 16 4884.88 20.20 212.11 358.23 69.72 15 0 41 4284.9 17.26 100.00 3 32 1 1854,50 -17.98 356.92 114.29 4 2 55 1254.5 -14.55 8.57 15.68 21.19 100.00 15 1 34 4619.43 192.18 357.82 68.41 16 18 33 4019.4 18.07 184.77 117.91 5 5 32 64.76 17 25 19 110.00 4 38 4 1647.72 16 12 0 4398.97 -20.58 358.64 355.56 1047.7 -16.69 351.68 110.00 23.85 174.19 356.58 3799.0 20.25 166.90 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 355.5 SR 410.1 SS 392.7 CRT -.9200 CRS -.9476 CST .7624 LSA 623.1 MSA 173.1 SSA 29.1 TDE .2475 TRA -.2173 TC3 .8558 BAU .1988 SGT 842.0 SGR 468.9 SG3 311.9 RRT -.4418 RRF .5611 RTF -.7488 SGB 963.8 R23 -.1441 R13 .7783 RDE -.2928 RRA -.1397 RC3 -.1601 FAU .08007 FDE -.5103 FRA -.8131 FC3-4.0595 BSP 2601 BDE .3834 BRA .2583 BC3 .8707 FSP -887

FLIGHT TIME 86.00

SG1 874.5 SG2 405.0 THA 162.25

ARRIVAL DATE OCT 5 1967

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FLIGHT TIME 94.77
LAUNCH DATE JUL 3 1967
                                                                           DISTANCE 255.267
   HELIOCENTRIC CONIC
    RL 152.17 LAL -.77 LOL 247.47 VL 26.927 GAL -6.29 AZL 92.52 MCA 112.89 SMA 137.11 ECC .27756 INC 2.5178 V1 29.291
RP 178.31 LAP -2.32 LOP 33.31 VP 37.825 GAP -6.42 AZP 89.72 TAL 276.82 TAP 319.71 RCA 174.71 APO 156.27 V2 34.997
RC 64.367 GL -16.72 GP -11.68 ZAL 136.56 ZAP 34.72 ETS 16.52 ZAE 151.77 ETE 352.86 ZAC 88.17 ETC 14.11 CLP -32.93
   PLANETOCENTRIC CONIC
    C3 16.697 VHL 4.086 DLA -1.42 RAL 138.20 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 4.857 DPA -7.76 RAP 176.82 ECC 1.2748
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                                               -14.16
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                                                                    36.09
        90.00
                     2 3 50 2128.31
                                                   -17.39
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64.17 17 25 36
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                                   4377.24
                                                      23.21
                                                                    172.83
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 816.8 SGR 488.2 SG3 357.5
RRT -.4800 RRF .6281 RTF -.7339
SG8 951.5 R23 -.1793 R13 .7780
                                                                                                                              ST 339.1 SR 409.1 SS 357.7
    TOE .2328 TRA -.2129 TC3 .8471 BAU .1937
                                                                                                                              CRT -.9116 CRS -.9377 CST .7276
    ROE -.2883 RRA -.1486 RC3 -.2168 FAU .08877
FOE -.5320 FRA -.9424 FC3-4.6027 BSP 2554
BOE .3706 BRA .2596 BC3 .8676 FSP -1009
                                                                                                                             LSA 613.6 MSA 181.6 SSA 29.0
                                                                        SG1 867.3 SG2 476.6 THA 159.12
                                                                                                                              EL1 520.0 EL2 109.7 ALF 129.15
                                                                            FLIGHT TIME 96.00
                                                                                                                                         ARRIVAL DATE OCT 7 1967
LAUNCH DATE JUL 3 1967
                                                                           DISTANCE 261.891
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.991 GAL -6.30 AZL 92.42 HCA 116.09 SMA 130.55 ECC .19741 INC 2.4247 VI 29.291
RP 108.27 LAP -2.18 LOP 36.51 VP 37.882 GAP -5.78 AZP 88.93 TAL 207.48 TAP 323.57 RCA 104.78 APO 156.32 V2 35.003
RC 66.356 GL -16.30 GP -12.76 ZAL 137.46 ZAP 38.64 ETS 15.66 ZAE 152.48 ETE 349.42 ZAC 89.07 ETC 14.02 CLP -36.79
   PLANETOCENTRIC CONIC
    C3 16.352 VHL 4.044 DLA -.77 RAL 137.57 RAD 6567.7 VEL 11.736 PTH 2.07 VHP 4.579 DPA -8.48 RAP 175.77 ECC 1.2691 LNOW AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 56 28 2143.66 -17.79 37.04 355.53 112.40 2 32 12 1543.7 -14.60 29.82
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113.71 3 46 50
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                                                                    208.95
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117.37 4 52 44
63.61 17 26 31
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       110.00
                   16 13 55 4355.44
                                                      22.56
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 783.9 SGR 515.3 SG3 393.2
RRT -.5107 RRF .6946 RTF -.7110
SG8 938.1 R23 -.2187 R13 .7787
SG1 842.8 SG2 412.1 THA 155.11
                                                                                                                              ST 322.5 SR 407.9 SS 363.0
    TOE .2181 TRA -.2127 TC3 .8092 BAU .1875
RDE -.2838 RRA -.1596 RC3 -.2838 FAU .09837
                                                                                                                             CRT -.8989 CRS -.9279 CST .6861
LSA 604.1 HSA 190.9 SSA 28.7
    FOE -.5531 FRA-1.0821 FC3-5.2081 BSP 2518
BOE .3579 BRA .2659 BC3 .8575 FSP -1149
                                                                                                                              EL1 507.4 EL2 113.6 ALF 127.61
                                                                                                                                         ARRIVAL DATE OCT 9 1967
                                                                           FLIGHT TIME 98.00
LAUNCH DATE JUL 3 1967
                                                                            DISTANCE 268.491
    RL 152.10 LAL -.00 LOL 280.40 VL 27.045 GAL -6.31 AZL 92.33 MCA 119.29 SMA 130.92 ECC .19469 INC 2.3262 V1 29.291 RP 108.22 LAP -2.03 LOP 39.71 VP 37.933 GAP -5.16 AZP 88.86 TAL 208.04 TAP 327.33 RCA 105.43 APO 156.41 V2 35.016 RC 68.382 GL -15.81 GP -13.96 ZAL 138.26 ZAP 42.82 ETS 14.82 ZAE 154.08 ETE 345.16 ZAC 90.23 ETC 13.87 CLP -40.90
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                           -.10 RAL 137.07 RAD 6567.6 VEL 11.722 PTH 2.07 VMP 4.327 OPA -9.20 RAP 174.46 ECC 1.2638
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 49 31 2159.90 -18.21 38.05 354.86 112.07 2 25 31 1559.9 -15.08 30.70
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68.05 15 6 18
3 42 26
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                    13 46 8 4809.85
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                                   4547.32
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16 15 52 4333.39
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       110.00
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                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 738.3 SGR 550.7 SG3 438.1
RRT -.5189 RRF .7554 RTF -.6699
SGB 921.1 R23 -.2632 R13 .7791
                                                                                                                             ST 302.4 SR 405.7 S5 364.3
CRT - 8762 CRS - 9172 CST .6270
LSA 589.6 MSA 200.8 SSA 28.5
    TOE .2003 TRA - .2203 TC3 .7530 BAU .1790
    RDE -.2787 RRM -.1721 RC3 -.3610 FAU .10844
FDE -.5652 FRA-1.2228 FC3-5.8567 89P 2425
                                                                                                                              EL1 491.5 EL2 120.3 ALF 125.61
                                                                        SGI 816.9 SG2 425.4 THA 149.91
    BOE .3432 BRA .2796 BC3 .8350 FSP -1293
                                                                                                                                         ARRIVAL DATE OCT 11 1967
                                                                            FLIGHT TIME 100.00
LAUNCH DATE JUL 3 1967
                                                                            DISTANCE 275.067
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.090 GAL -6.30 AZL 92.22 MCA 122.49 SMA 131.24 ECC .19237 INC 2.2213 VI 29.291

RP 108.18 LAP -1.87 LOP 42.92 VP 37.977 GAP -4.57 AZP 88.81 TAL 208.49 TAP 330.99 RCA 105.99 APO 156.49 V2 35.029

RC 70.443 GL -15.26 GP -15.28 ZAL 138.96 ZAP 47.25 ETS 13.95 ZAE 155.80 ETE 339.78 ZAC 91.65 ETC 13.62 CLP -45.27
   PLANETOCENTRIC CONIC
                                             .60 RAL 136.70 RAO 6567.6 VEL 11.709 PTH 2.06 VHP 4.104 DPA -9.93 RAP 172.86 ECC 1.2588
    C3 15.723 VHL 3.965 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 42 55 2177.06 -18.64 39.12 354.35 111.71 2 19 12 1577.1 -15.53 31.83
                                                                                                     67.52
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                                                                                                                                   4183.9
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                                                      17.69
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                                                                                   354.11
                                    4783.91
                    13 49 50
         90.00
                                                                                                                                                 -16.31
                                                                                                                 3 36 26
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                                                                                                    113.03
                                                                     19.34
                                                                                   353.93
                                   1913.78
                                                     -19.60
        100.00
                       3 4 32
                                                                                                     66.20 16 26 16
                                                                                                                                   3922.4
                                                                                                                                                  15.27
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                                                                    186.10
                                                                                   353.68
                                                                                                   116.72 4 41
12 4 41
17 30 21
                    15 10 54
                                   4522.43
                                                      18.64
        100.00
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                       4 13 25
                                   1698.17
                                                                      1.70
                                                                                   352.66
                                                     -22.16
        110.00
                                                                                                                                   3710.8
                                                                                                                                                                 161.73
                    16 18 30
                                    4310.81
                                                                    168.74
                                                                                   352.38
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .1816 TRA -.2343 TC3 .6730 BAU .1702

RDE -.2727 RRA -.1863 RC3 -.4501 FAU .11892

FDE -.5686 FRA-1.3631 FC3-6.5481 BSP 2333

BOE .3277 BRA .2994 BC3 .8097 FSP -1446
                                                                        SGT 684.4 SGR 596.0 SG3 485.1
RRT -.4971 RRF .8092 RTF -.6039
SGB 907.5 R23 -.2991 R13 .7869
                                                                                                                              ST 281.9 SR 402.4 SS 363.1
                                                                                                                           CRT -.8410 CRS -.9056 CST .5477
LSA 572.5 MSA 211.3 55A 28.3
                                                                                                                              EL1 474.0 EL2 129.5 ALF 123.30
                                                                   SG1 788.9 SG2 448.7 THA 142.80
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ARRIVAL DATE OCT 13 1967

JPL TM 33-99

LAUNCH DATE JUL 3 1967

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HELIOCENTRIC CONIC
                                                                                             DISTANCE 281.618,
    RL 152.10 LAL -.00 LOL 280.40 VL 27.127 GAL -6.29 AZL 92.11 MCA 125.70 SMA 131.50 ECC .19039 INC 2.1085 VI 29.291 RP 108.14 LAP -1.71 LOP 46.12 VP 38.016 GAP -3.99 AZP 88.77 TAL 208.84 TAP 334.54 RCA 106.46 APO 156.54 V2 35.042 RC 72.534 GL -14.63 GP -16.72 ZAL 139.57 ZAP 51.92 ETS 13.02 ZAE 157.51 ETE 332.95 ZAC 93.34 ETC 13.26 CLP -49.91
   PLANETOCENTRIC CONIC
                                                    1.33 RAL 136.48 RAD 6567.6 VEL 11.697 PTH 2.06 VHP 3.910 DPA -10.68 RAP 170.97 ECC 1.2538
     C3 15.424 VHL 3.927 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 36 36 2195.34 -19.10 40.27 353.99 111.51 2 13 11 1595.3 -16.03 32.93
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66.99 15 13 37
                                                                                                       353.47
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          90.00
                         13 54 20
                                           4756.97
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                                                                                                                           112.64 3 30 44
65.67 16 30 0
116.35 4 36 46
61.99 17 33 20
                                          1930.97
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                                                                                     20.42
                                                                                                      353.58
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         100.00
                           2 58 34
                        15 15 3
                                                                                    184.52
                                                                                                       353.03
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                                           4496.58
                                                                 17.92
         100.00
                                          1712.92
                                                                                                                                                                  1112.9
                                                                                                                                                                                    -18.88
                                                                                                                                                                                                        355.46
                                                                                       2.61
                                                                                                      352.33
                                                                 -22.61
                           4 8 13
        110.00
                                                                                                                                                                  3687.4
                                                                                                                                                                                     16.54
                                                                                                                                                                                                        160.38
                        16 21 53
                                                                  20.44
                                                                                    167.33
                                                                                                       351.72
        110.00
                                           4287.39
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 628.1 SGR 653.2 SG3 533.6
RRT .4321 RRF .8549 RTF .5004
SGB 906.2 R23 -.2997 R13 .8137
                                                                                                                                                           ST 263.4 SR 398.6 SS 360.7

CRT -.7896 CRS -.8942 CST .4468

LSA 555.1 MSA 222.4 SSA 28.0
     TDE .1634 TRA -.2542 TC3 .5694 BAU .1637
    ROE -.2662 RRA -.2024 RC3 -.5529 FAU .12966
FDE -.5649 FRA-1.5001 FC3-7.2776 BSP 2287
BOE .3124 BRA .3249 BC3 .7937 FSP -1610
                                                                                         SG1 767.2 SG2 482.3 THA 132.41
                                                                                                                                                            EL1 456.4 EL2 141.2 ALF 120.82
                                                                                              FLIGHT TIME 104.00
                                                                                                                                                                           ARRIVAL DATE OCT 15 1967
LAUNCH DATE JUL 3 1967
                                                                                              DISTANCE 288.144
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.156 GAL -6.27 AZL 91.99 MCA 128.91 SMA 131.71 ECC .18872 INC 1.9862 V1 29.291
RP 108.10 LAP -1.55 LOP 49.33 VP 38.049 GAP -3.44 AZP 88.75 TAL 209.09 TAP 338.00 RCA 106.85 APO 156.56 V2 35.056
RC 74.652 GL -13.92 GP -18.29 ZAL 140.09 ZAP 56.83 ETS 11.99 ZAE 159.05 ETE 324.29 ZAC 95.28 ETC 12.77 CLP -54.81
   PLANETOCENTRIC CONIC
                                                    2.10 RAL 136.39 RAD 6567.6 VEL 11.684 PTH
                                                                                                                                 2.05 WHP
                                                                                                                                                 3.746 DPA -11.45 RAP 168.82 ECC 1.2490
     C3 15.128 WHL 3.889 DLA
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       353.78
                                                                                                                                             2 7 25
                                                                                                                                                                 1615.0
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                                           4728.59
          90.00
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        100.00
                                           1949.47
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                                           4469.36
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15.68
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         110.00
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                         16 26 5
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        110.00
                                            4262.76
                                                                  19.65
                                                                                    165.86
                                                                                                       351.20
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 576.0 SGR 720.0 SG3 579.9
RRT -.2928 RRF .8911 RTF -.3302
                                                                                                                                                            ST 246.1 SR 392.1 SS 351.8

CRT -.7099 CRS -.8792 CST .3045

LSA 531.5 MSA 234.1 SSA 27.9
     TOE .1436 TRA -.2822 TC3 .4336 BAU .1611
     RDE -.2577 RRA -.2190 RC3 -.6680 FAU .13980
FDE -.5409 FRA-1.6172 FC3-8.0003 BSP 2273
                                                                                         SGB 922.0 R23 -.2166 R13 .8674
                                                                                                                                                            EL1 435.9 EL2 155.9 ALF 117.89
     BOE .2951 BRA .3572 BC3 .7964 FSP -1762
                                                                                         SG1 760.4 SG2 521.4 THA 116.23
                                                                                                                                                                          ARRIVAL DATE OCT 17 1967
                                                                                              FLIGHT TIME 106.00
LAUNCH DATE JUL 3 1967
                                                                                             DISTANCE 294.645
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.179 GAL -6.24 AZL 91.85 MCA 132.12 SMA 131.87 ECC .18731 INC 1.8522 V1 29.291
RP 108.06 LAP -1.37 LOP 52.53 VP 38.077 GAP -2.91 AZP 88.76 TAL 209.24 TAP 341.36 RCA 107.17 APO 156.57 V2 35.069
RC 76.795 GL -13.11 GP -19.99 ZAL 140.51 ZAP 61.93 ETS 10.81 ZAE 160.17 ETE 313.64 ZAC 97.43 ETC 12.11 CLP -59.95
    PLANETOCENTRIC CONIC
     C3 14.830 VHL 3.851 DLA 2.94 RAL 136.44 RAO 6567.6 VEL 11.671 PTH 2.05 VHP 3.614 DPA -12.24 RAP 166.41 ECC 1.2441
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                           1 24 28 2236.49
                                                                                                      353.73
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          90.00
                                                                 -20.09
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          90.00
                                           4698.19
                                                                                                                             111.73 3 20 1
64.60 16 40 7
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                           2 47 11
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                                                                 -21.05
                                                                                     22.86
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                                          1969.70
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                                                                  16.31
                                                                                   181.11
                                                                                                       352.16
         100.00
                         15 26 6
                                           4440.22
                                                                                                                                                                                    -19.97
                                                                                                                           115.48 4 27 41
60.90 17 41 49
                                                                                                                                           4 27 41
                                                                                                                                                                                                        357.43
                         3 58 35 1746.25
16 31 12 4236.43
                                                                                                                                                                  1146.3
                                                                 -23.60
                                                                                      4.69
                                                                                                       352.13
                                                                                                                                                                  3636.4
                                                                                                                                                                                       14.76
                                                                  18.78
                                                                                    164.31
                                                                                                       350.62
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 234.9 SR 383.9 SS 340.7
CRT -.6035 CRS -.8622 CST .1325
LSA 507.1 MSA 246.4 SSA 27.8
                                                                                         SGT 547.3 SGR 796.6 SG3 623.7

RRT -.0719 RRF .9195 RTF -.0847

SGB 968.1 R23 -.0389 R13 .9188

SG1 800.4 SG2 544.6 THA 95.26
     TOE .1262 TRA -.3156 TC3 .2699 BAU .1670
     ROE -.2477 RRA -.2364 RC3 -.7961 FAU .14923
FOE -.5040 FRA-1.7151 FC3-8.7120 BSP 2382
BOE .2780 BRA .3943 BC3 .8425 FSP -1916
                                                                                                                                                            EL1 415.5 EL2 173.1 ALF 114.87
                                                                                                                                                                           ARRIVAL DATE OCT 19 1967
                                                                                               FLIGHT TIME 108.00
 AUNCH DATE JUL 3 1967
                                                                                              DISTANCE 301.121
     RL 152.10 LAL -.00 LOL 280.40 VL 27.195 GAL -6.20 AZL 91.70 MCA 135.33 SMA 131.98 ECC .18613 INC 1.7038 V1 29.291
RP 108.02 LAP -1.20 LOP 55.75 VP 38.100 GAP -2.40 AZP 88.79 TAL 209.29 TAP 344.62 RCA 107.41 APO 156.55 V2 35.082
RC 78.958 GL -12.18 GP -21.80 ZAL 140.85 ZAP 67.16 ETS 9.45 ZAE 160.60 ETE 301.29 ZAC 99.75 ETC 11.28 CLP -65.29
    PLANETOCENTRIC CONIC
     C3 14.526 VML 3.811 DLA 3.85 RAL 136.63 RAD 6567.6 VEL 11.658 PTH 2.05 VMP 3.513 DPA -13.09 RAP 163.80 ECC 1.2391
     C3 14.526 VML 3.811 DLA 3.85 RAL 130.83 RAU 0301.0 VEL 11.030 FM 44.07 FM 4
          90.00
                           1 18 24 2260.42
                                                                                                                                           15 31 30
                                                                                                                                                                   4065.1
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                         14 13 45
                                             4665.07
                                                                  14.45
                                                                                    198.54
                                                                                                       352.39
          90.00
                                                                                                                            111.17
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         100.00
                          2 41 33
                                             1992.23
                                                                 -21.61
                                                                                     24.30
                                                                                                       353.45
                                                                                                                                            3 14 45
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         100.00
                         15 33 17
                                             4408.49
                                                                  15.37
                                                                                    179.22
                                                                                                       351.93
                                                                                                                              114.95 4 23 21
60.34 17 47 31
                        3 53 56 1765.68
16 37 23 4207.60
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                                                                                                                            114.95
         110.00
                                                                 -24.16
                                                                                       5.92
                                                                                                       352.28
                                                                                                                                                                   3607.8
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         110.00
                                                                  17.83
                                                                                    162.64
                                                                                                       350.58
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 230.1 SR 371.0 SS 321.9
CRT -.4644 CRS -.8360 CST -.0814
LSA 475.4 MSA 259.6 SSA 27.9
                                                                                         SGT 563.3 SGR 884.5 SG3 659.9
RRT .2153 RRF .9405 RTF .2177
     TOE .1094 TRA -.3557 TC3 .0712 BAU .1830
     ROE -.2344 RRA -.2527 RC3 -.9397 FAU .15684
     FOE -.4394 FRA-1.7731 FC3-9.3475 B3P 2607
BOE .2587 BRA .4364 BC3 .9424 F3P -2036
                                                                                        SGB 1048.6 R23 .1081 R13 .9344
SG1 897.7 SG2 542.0 THA 77.62
                                                                                                                                                         EL1 391.5 EL2 193.1 ALF 111.55
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FLIGHT TIME 102.00

ARRIVAL DATE OCT 21 1967

LAUNCH DATE JUL 3 1967

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DISTANCE 307.571
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.204 GAL -6.16 AZL 91.54 HCA 138.54 SMA 132.05 ECC .18516 INC 1.5374 V1 29.291
RP 107.98 LAP -1.02 LOP 58.96 VP 38.119 GAP -1.90 AZP 88.85 TAL 209.23 TAP 347.78 RCA 107.60 APO 156.50 V2 35.094
RC 81.139 GL -11.10 GP -23.73 ZAL 141.11 ZAP 72.47 ETS 7.87 ZAE 160.10 ETE 288.28 ZAC 102.18 ETC 10.24 CLP -70.79
   PLANETOCENTRIC CONIC
    C3 14.215 VHL 3.770 DLA 4.88 RAL 136.97 RAD 6967.6 VEL 11.645 PTH 2.04 VHP 3.446 DPA -14.00 RAP 161.02 ECC 1.2339 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               109.14 1 50 11
64.82 15 39 57
110.51 3 9 20
63.47 16 54 45
114.33 4 19 0
59.76 17 54 26
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                     1 12 3 2287.66
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                                                                   196.35
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                                                                                                                                 4028.3
                                                                                                                                                 9.89
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        90.00
                    14 22 48
                                  4628.25
                   2 35 42 2017.88
                                                                                                                                                                18.43
       100.00
                                                    -22.23
                                                                    25.95
                                                                                  353.75
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       100.00
                   15 41 51
                                  4373.26
                                                     14.31
                                                                   177.14
                                                                                  351.86
                                                                                                                                 3773.3
                                                                                                                                                10.64
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                                                                                 352.60
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       110.00
                     3 49 12 1787.83
                                                    -24.79
                                                                     7.33
       110.00
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                   16 44 50
                                   4176.08
                                                     16.75
                                                                   160.81
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 638.6 SCR 976.9 SC3 686.9
RRT .4796 RRF .9561 RTF .4885
SCB 1167.1 R23 .1742 R13 .9408
SCI 1042.3 SC2 525.2 THA 66.20
                                                                                                                            ST 234.4 SR 352.9 SS 298.0
CRT -.3129 CRS -.7956 CST -.3097
    TOE .0964 TRA -.3999 TC3 -.1593 BAU .2099
    ROE -.2173 RRA -.2672 RC3-1.0930 FAU .18221
FOE -.3498 FRA-1.7877 FC3-9.8788 BSP 2980
BOE .2377 BRA .4809 BC3 1.1045 FSP -2130
                                                                                                                            LSA 438.8 MSA 273.7 SSA 28.2
                                                                                                                            EL1 364.9 EL2 215.3 ALF 108.31
                                                                                                                                        ARRIVAL DATE OCT 23 1967
LAUNCH DATE JUL 3 1967
                                                                           FLIGHT TIME 112.00
                                                                           DISTANCE 313.997
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 27.209 GAL -6.10 AZL 91.35 MCA 141.76 SMA 132.08 ECC .18438 INC 1.3482 V1 29.291
RP 107.94 LAP -.83 LOP 62.17 VP 38.134 GAP -1.42 AZP 88.94 TAL 209.09 TAP 350.85 RCA 107.73 APO 156.44 V2 35.107
RC 83.336 GL -9.83 GP -25.78 ZAL 141.27 ZAP 77.75 ETS 6.06 ZAE 158.59 ETE 276.00 ZAC 104.65 ETC 9.01 CLP -76.38
   PLANETOCENTRIC CONIC
    C3 13.897 VHL 3.728 DLA
                                          6.05 RAL 137.47 RAD 6567.5 VEL 11.631 PTH
                                                                                                      2.04 WHP 3.413 DPA -15.01 RAP 158.13 ECC 1.2287
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                    -21.97
                                                                    48.24
                                                                                  354.60
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        90.00
                      1 5 11
                                  2319.46
                  1 7 11 2519.40
14 33 41 4586.47
2 29 24 2047.85
15 52 10 4333.31
3 44 12 1813.72
16 53 50 4140.21
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                                                                                  352.41
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        90.00
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                                                                                                                                 1447.8
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                                                                                                                                                                 20.30
                                                    -22.93
                                                                    27.90
      100.00
                                                                                  351.94
                                                                                                                                 3733.5
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      100.00
                                                    13.09
                                                                   174.81
                                                                                  353.12
                                                                                                  113.57
                                                                                                                                 1213.7
                                                                                                                                                -22.10
                                                                                                                                                                 1.51
      110.00
                                                    -25.51
                                                                     9.01
                                                                   156.77
                                                                                350.56
                                                                                                                                 3540.2
                                                                                                                                                 11.30
                                                                                                                                                               152.19
      110.00
                                                     15.51
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 768.5 SGR 1075.9 SG3 703.5
RRT .6638 RRF .9678 RTF .6735
SGB 1322.2 R23 .1965 R13 .9485
SG1 1221.4 SG2 506.4 THA 58.66
                                                                                                                           ST 248.3 SR 329.3 SS 272.6
CRT -.1763 CRS -.7347 CST -.5214
    TOE .0894 TRA -.4456 TC3 -.4189 BAU .2464
    ROE -.1961 RRA -.2793 RC3-1.2565 FAU .16507
FOE -.2408 FRA-1.7580 FC-10.2836 BSP 3500
                                                                                                                           LSA 400.8 MSA 288.0 SSA 28.8
EL1 335.5 EL2 239.9 ALF 105.83
    BOE .2156 BRA .5259 BC3 1.3264 FSP -2199
                                                                                                                                       ARRIVAL DATE OCT 25 1967
                                                                           FEIGHT TIME 114.00
LAUNCH DATE JUL 3 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 320.399
   RL 152.10 LAL -.00 LOL 280.40 VL 27.208 GAL -6.03 AZL 91.13 MCA 144.98 SMA 132.08 ECC .18376 INC 1.1297 V1 29.291
RP 107.91 LAP -.65 LOP 65.39 VP 38.145 GAP -.96 AZP 89.07 TAL 208.85 TAP 353.83 RCA 107.81 APO 156.35 V2 35.119
RC 85.546 GL -8.33 GP -27.96 ZAL 141.34 ZAP 82.93 ETS 3.97 ZAE 156.18 ETE 265.48 ZAC 107.07 ETC 7.55 CLP -81.99
   PLANETOCENTRIC CONIC
                                         7.41 RAL 138.15 RAD 6567.5 VEL 11.617 PTH 2.04 VHP 3.415 DPA -16.17 RAP 155.19 ECC 1.2233
    C3 13.571 VHL 3.684 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                107.31 1 36 41
63.63 16 2 32
108.72 2 57 1
62.27 17 16 9
                                                                                                                               1757.6
                                                                                                                                             -20.18
                                                                                                                                                                43.03
                                                    -22.76
                                                                    50.75
                                                                                355.32
                      0 57 23 2357.63
        90.00
                                                                                                                                                               184.27
                   14 46 54
                                  4537.94
                                                    10.72
                                                                   191.07
                                                                                 352.70
                                                                                                                                 3937.9
                                                                                                                                                  7.09
        90.00
                                                                                                                                                                22.57
                                                                                                                                                -20.96
                                                                                 354,98
                                                                                                                                1483.8
                     2 22 17
                                  2083.80
                                                    -23.74
                                                                    30.27
       100.00
                   16 4 42 4287.00
3 38 39 1844.80
                                                                                 352.22
                                                                                                                                                  7.83
                                                                                                                                                               165.41
                                                    11.63
                                                                   172.14
                                                                                                                                 3687.0
       100.00
                                                                                                                                                                 3.43
                                                    -26.34
                                                                    11.04
                                                                                 353.90
                                                                                                  112.62
                                                                                                              4 9 24
                                                                                                                                 1244.8
                                                                                                                                               -23.04
       110.00
                                                                                                    58.51 18 13 7
                  17 4 49
                                                                   156.45
                                                                                350.81
                                                                                                                                3496.8
                                                                                                                                                  9.78
                                                                                                                                                               149.95
                                   4098.77
                                                    14.05
       110.00
                                                                       SGT 941.0 SGR 1174.8 SG3 705.1
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 270.8 SR 295.9 SS 246.1
CRT -.0631 CRS -.6239 CST -.7234
    TOE .0902 TRA -.4913 TC3 -.7081 BAU .2895
    ROE -.1882 RRA -.2862 RC3-1.4300 FAU .16443
FDE -.1003 FRA-1.6699 FC-10.4892 83P 4104
                                                                       RRT .7770 RRF .9762 RTF .7849
SGB 1505.2 R23 .2036 R13 .9556
SG1 1423.6 SG2 488.9 THA 53.03
                                                                                                                           LSA 367.3 MSA 292.6 SSA 29.9
EL1 298.6 EL2 267.8 ALF 107.71
    BOE .1908 BRA .5686 BC3 1.5957 FSP -2208
                                                                           FLIGHT TIME 116.00
                                                                                                                                        ARRIVAL DATE OCT 27 1967
LAUNCH DATE JUL 3 1967
                                                                           DISTANCE 326.776
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.203 GAL -5.96 AZL 90.87 MCA 148.20 SMA 132.04 ECC .18328 INC .8729 V1 29.291
RP 107.87 LAP -.46 LOP 68.61 VP 38.152 GAP -.51 AZP 89.26 TAL 208.53 TAP 356.73 RCA 107.84 APO 156.24 V2 35.131
RC 87.767 GL -6.51 GP -30.32 ZAL 141.30 ZAP 87.90 ETS 1.58 ZAE 153.03 ETE 257.07 ZAC 109.38 ETC 5.87 CLP -87.57
   PLANETOCENTRIC CONIC
                                          9.05 RAL 139.04 RAD 6567.5 VEL 11.603 PTH 2.03 VHP 3.455 DPA -17.54 RAP 152.25 ECC 1.2180
    C3 13.244 WHL 3.639 DLA
    LNOH AZMITH LNCH TIME L-I TIME INI LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 48 5 2404.88 -23.69 53.91 556.35 105.99 1 28 10 1804.9 -21.27 46.07
                      0 48 5 2404.88
                   15 3 16 4480.08
2 13 51 2128.28
                                                                                                    63.02 16 17 56
                                                                                                                                                                181.00
                                    4480.08
                                                      8.95
                                                                   187.74
                                                                                  353.22
                                                                                                                                 3880.1
                                                                                                                                                 5.26
        90.00
                                                                                                                                                                 25.42
                                                                                  356.02
                                                                                                   107.43
                                                                                                               2 49 19
                                                                                                                                 1528.3
                                                                                                                                                -22.06
                                                    -24.66
                                                                    33.24
       100.00
                                                                                                    61.64 17 30 45
                                                                                  352.74
                                                                                                                                 3631.9
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                                                                                                                                                               162.35
                                                       9.67
                                                                   169.00
                   16 20 11
                                    4231.91
       100.00
                                                                                                  111.40 4 3 32
57.85 18 25 52
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                      3 32 9
                                   1883.23
                                                    -27.32
                                                                                  354.98
                                                                                                                                 1283.2
                                                                    13.60
       110.00
                                                                                                                                                               147.33
                                                                                                                                 3449.7
                                                                                                                                                  7.95
                   17 18 22
                                                     12.29
                                                                   153.74
                                                                                  351.30
                                    4049.72
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 302.5 SR 254.3 SS 231.4

CRI .0263 CRS -.4625 CST -.8814

LSA 376.0 MSA 259.5 SSA 31.6

EL1 302.8 EL2 254.0 ALF 4.28
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FLIGHT TIME 110.00

SGT 1140.5 SGR 1277.2 SG3 693.9 RRT .8434 RRF .9825 RTF .8494 SGB 1712.3 R23 .2034 R13 .9620

SG1 1644.9 SG2 475.9 THA 48.83

TDE .1024 TRA -.5332 TC3-1.0210 BAU .5377

RDE -.1338 RRA -.2885 RC3-1.6112 FAU .16073 FDE .0554 FRA-1.5374 FC-10.5069 BSP 4804 BDE .1685 BRA .6063 BC3 1.9075 F3P -2187

ARRIVAL DATE OCT 29 1967

AUNCH DATE JUL 3 1967

DISTANCE 333.129 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 27.194 GAL -5.87 AZL 90.56 HCA 151.42 SMA 131.98 ECC .18294 INC .5651 V1 29.291
RP 107.83 LAP -.27 LOP 71.83 VP 38.156 GAP -.07 AZP 89.50 TAL 208.12 TAP 359.54 RCA 107.83 APO 156.12 V2 .35.143
RC 89.996 GL -4.25 GP -32.91 ZAL 141.11 ZAP 92.55 ETS 358.87 ZAE 149.33 ETE 250.60 ZAC 111.48 ETC 3.95 CLP -93.03 PLANETOCENTRIC CONTC 2.03 VHP 3.537 OPA -19.19 RAP 149.34 ECC 1.2127 C3 12.925 VHL 3.595 DLA 11.05 RAL 140.17 RAD 6567.5 VEL 11.589 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 357.77 58.02 104.20 1 17 27 1865.4 -22.56 50.04 -24.76 90.00 0 36 22 2465.42 90.00 15 24 0 4409.00 6.73 62.43 16 37 29 3609.0 2.99 177.01 354.08 183.69 -25.78 357.47 105.68 2 39 41 1585.2 -23.38 29.13 37.11 100.00 2 3 15 2185.19 61.02 17 49 13 109.74 3 56 16 57.17 18 41 59 3564.5 3.74 158.62 353.58 100.00 16 39 48 4164.47 7.67 165.21 1332.3 -25.54 9.00 356.50 109.74 110.00 3 24 4 1932.31 -28.49 16.93 144.17 3390.1 5.71 110.00 17 35 29 150.50 352.10 11.0006 10.11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1357.8 SGR 1376.2 SG3 666.4 RRT .8833 RRF .9871 RTF .8876 SG8 1933.3 R23 .2024 R13 .9667 SG1 1876.0 SG2 467.0 TMA 45.44 ST 347.0 SR 200.7 SS 241.9 CRT .1445 CRS -.2865 CST -.9736 TOE .1299 TRA -.5685 TC3-1.3545 BAU .3884 RDE -. 0884 RRA -. 2825 RC3-1.7939 FAU .15333 FDE .2385 FRA-1.3505 FC-10.2704 BSP 5534 BOE .1571 BRA .6348 BC3 2.2478 FSP -2103 LSA 422.7 MSA 198.2 SSA 34.7 EL1 348.8 EL2 197.6 ALF 7.06 ARRIVAL DATE OCT 31 1967 FLIGHT TIME 120.00 LAUNCH DATE JUL 3 1967 **DISTANCE 339.458** HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 27.181 GAL -5.77 AZL 90.19 HCA 154.64 SMA 131.88 ECC .18271 INC .1854 VI 29.291
RP 107.80 LAP -.08 LOP 75.05 VP 38.157 GAP .35 AZP 89.83 TAL 207.64 TAP 2.28 RCA 107.79 APO 155.98 V2 35.154
RC 92.232 GL -1.41 GP -35.83 ZAL 140.73 ZAP 96.76 ETS 355.77 ZAE 145.18 ETE 245.77 ZAC 113.32 ETC 1.76 CLP -98.35 PLANETOCENTRIC CONIC C3 12.635 VHL 3.555 OLA 13.58 RAL 141.61 RAD 6567.5 VEL 11.577 PTH - 2.02 VHP 3.668 OPA -21.22 RAP 146.46 ECC 1.2079 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 20 39 2546.33 -25.99 63.62 359.77 101.65 1 3 5 1946.3 -24.12 55.45 101.65 1 3 5 61.92 17 3 14 15 51 16 4318.37 1 49 7 2260.99 17 5 28 4078.94 3 13 23 1997.34 3718.4 .07 171.96 90.00 3.65 178.59 355.44 2 26 48 1661.0 -24.98 34.19 359.51 103.19 100.00 -27.07 42.37 3478.9 1397.3 354.90 60.46 18 13 27 .85 153.92 100.00 4.82 160.46 -27.23 107.39 3 46 40 13.30 21.47 356.63 110,00 -29.90 56.52 19 2 57 3315.4 2.87 140.25 7,32 110.00 17 57 42 3915.36 146.50 353.36 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1583.7 SGR 1478.8 SG3 626.2 RRT .9076 RRF .9906 RTF .9111 SGB 2166.8 R23 .2003 R13 .9706 SG1 2116.4 SG2 464.6 THA 42.84 ST 413.9 SR 149.1 SS 290.5 CRT .4272 CRS -.3583 CST -.9835 TDE .1788 TRA -.5926 TC3-1.6992 BAU .4410 ROE -.0314 RRA -.2687 RC3-1.9821 FAU .14301 LSA 507.8 MSA 136.4 SSA 39.2 FOE .4300 FRA-1.1308 FC3-9.7986 83P 6324 80E .1816 BRA .6507 8C3 2.6108 FSP -1989 EL1 419.4 EL2 133.0 ALF ARRIVAL DATE NOV 2 1967 FLIGHT TIME 122.00 LAUNCH DATE JUL 3 1967 DISTANCE 345.764 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 27.164 GAL -5.67 AZL 89.70 HCA 157.87 SMA 131.76 ECC .18260 INC .2958 V1 29.291
RP 107.77 LAP .11 LOP 78.27 VP 38.155 GAP .76 AZP 90.27 TAL 207.08 TAP 4.94 RCA 107.70 APO 155.82 V2 35.165
RC 94.474 GL 2.28 GP -39.20 ZAL 140.01 ZAP 100.41 ETS 552.23 ZAE 140.60 ETE 242.25 ZAC 114.81 ETC 359.25 CLP-103.48 PLANETOCENTRIC CONIC C3 12.418 VHL 3.524 DLA 16.87 RAL 143.49 RAD 6567.5 VEL 11.567 PTH 2.02 VHP 3.861 DPA -23.77 RAP 143.55 ECC 1.2044 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 53 54 2660.61 -27.31 71.73 2.63 97.79 24 38 14 2060.6 -25.95 63.32
90.00 16 29 4 4196.70 -.07 171.80 357.61 61.68 17 39 1 3596.7 -3.85 165.16
100.00 1 28 47 2367.29 -28.49 49.95 2.43 99.45 2 8 14 1767.3 -26.89 41.51 60.12 18 46 53 -3.00 147.68 17 40 48 3965.25 2 58 15 2087.39 18 27 49 3817.92 3365.3 17 40 48 . 98 154.20 357.03 3 33 2 -29.33 1487.4 110.00 -31.56 27.96 1.70 103.88 55,99 19 31 27 3217.9 -.86 18 27 49 3.63 141.37 355.37 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 1812.9 SGR 1577.5 SGS 570.7 RRT .9227 RRF .9932 RTF .9260 SGB 2403.2 R25 .1992 R13 .9734 SG1 2357.2 SG2 467.6 THA 40.70 ST 522.8 SR 151.2 SS 383.3 CRT .9003 CRS -.8134 CST -.9719 TOE .2594 TRA -.6001 TC3-2.0410 BAU .4932
RDE .0459 RRA -.2419 RC3-2.1584 FAU .12927
FOE .6409 FRA -.8729 FC3-9.0120 BSP 7092
BDE .2634 BRA .6470 BC3 2.9706 FSP -1814 LSA 657.7 MSA 94.1 SSA 40.0 EL1 540.4 EL2 63.7 ALF 14.80 ARRIVAL DATE NOV 4 1967 LAUNCH DATE JUL 3 1967 FLIGHT TIME 124,00 DISTANCE 352.046 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 27.144 GAL -5.55 AZL 89.07 MCA 161.09 SMA 131.62 ECC .18259 INC .9335 V1 29.291
RP 107.73 LAP .30 LOP 81.50 VP 38.151 GAP 1.16 AZP 90.88 TAL 206.44 TAP 7.54 RCA 107.59 APO 155.65 V2 35.175
RC 96.719 GL 7.19 GP -43.23 ZAL 138.72 ZAP 103.32 ETS 348.15 ZAE 135.54 ETE 239.75 ZAC 115.89 ETC 356.35 CLP-108.44 PLANETOCENTRIC CONIC C3 12.369 VHL 3.517 DLA 21.25 RAL 146.01 RAD 6567.5 VEL 11.565 PTH 2.02 VHP 4.141 DPA -26.99 RAP 140.52 ECC 1.2036 UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIK INJ 2 LAT INJ 2 LONG 90.00 23 16 15 2637.71 -28.28 84.58 6.79 91.43 24 3 33 2237.7 -27.79 75.95 23 16 15 2837.71 17 26 47 4017.92 18 33 45 3417.9 -9.48 161.79 1.33 62.24 90.00 -5.61 93.34 1 38 8 60.42 19 37 2 1928.8 -28.94 53.07 O 55 59 2528.77 -29.72 61.78 6.72 100.00 -8.45 18 33 40 3802.09 -4.54 145.24 .63 3202.1 100.00 98.24 3 11 75.45 20 12 50 -31.80 28.99 1619.9 2 34 43 2219.92 -33.29 37.90 6.29 110.00 3083.7 -5.97 -1.50 110.00 19 11 26 3663.71 134.36 358.74 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2042.6 SGR 1675.9 SG3 502.1 RRT .9318 RRF .9952 RTF .9358 SG8 2642.1 R23 .1980 R13 .9756 SG1 2598.5 SG2 478.3 THA 38.97 ST 703.0 SR 271.4 SS 514.4 CRT .9927 CRS -.9820 CST -.9725 TOE .3874 TRA -.5832 TC3-2.3510 BAU .5444 RDE .1509 RRA -.1985 RC3-2.3046 FAU .11265 LSA 906.8 MSA 97.3 SSA 25.1 EL1 752.9 EL2 30.5 ALF 21.00 FOE .8555 FRA -.5934 FC3-7.8848 BSP 7866 BDE .4157 BRA .6160 BC3 3.2922 FSP -1599

FLIGHT TIME 118.00

ARRIVAL DATE NOV 6 1967

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LAUNCH DATE JUL 3 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 358.304
    RL 152:10 LAL -.00 LOL 280.40 VL 27.121 GAL -5.42 AZL 88.18 HCA 164.32 SHA 131.46 ECC .18267 INC 1.8226 V1 29.291 RP 107.70 LAP .49 LOP 84.73 VP 38.144 GAP 1.55 AZP 91.76 TAL 205.74 TAP 10.06 RCA 107.45 APO 155.47 V2 35.185
                       13.94 GP -48.18 ZAL 136.38 ZAP 105.30 ETS 343.44 ZAE 129.83 ETE 238.01 ZAC 116.46 ETC 352.92 CLP-113.30
   PLANETOCENTRIC CONIC
    C3 12.713 VHL 3.566 DLA 27.25 RAL 149.57 RAD 6567.5 VEL 11.580 PTH 2.03 VHP 4.561 OPA -31.11 RAP 137.12 ECC 1.2092
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 43 57 3211.02 -25.94 111.52 12.15 78.23 22 37 28 2611.0 -27.30 103.11
                                                                                                 66.70 20 28 25
                                                                                                                             3056.3
        90.00
                    19 27 29
                                  3656.32
                                                  -16.56
                                                                 140.69
                                                                                  8.97
                                                                                                                                            -19.57
                                                                                                                                                           133.31
                                                                                                23 42 17
                                2829.54
                                                 -28.83
                                                                  84.02
                                                                                 12.72
                                                                                                                             2229.5
                                                                                                                                           -29.67
                                                                                                                                                           75.32
       100.00
       100.00
                    20 11 50
                                  3513.04
                                                  -13.90
                                                                 128.88
                                                                                  7.68
                                                                                                                            2913.0
                                                                                                                                            -17.38
                                                                                                                                                          121.82
                                                                                 13.26
                     1 51 32 2437.36
                                                  -34.15
                                                                  54.78
                                                                                                                            1837.4
                                                                                                                                                            45.54
       110.00
                  20 23 0
                                  3477.98
                                                    -9.27
                                                                 123.52
                                                                                  4.97
                                                                                                                             2878.0
                                                                                                                                           -13.56
                                                                                                                                                           117.04
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   TOE .5928 TRA -.5300 TC3-2.5697 BAU .5944

RDE .2980 RRA -.1315 RC3-2.3717 FAU .09357

FDE 1.0577 FRA -.3097 FC3-6.3717 BSP 8675

BDE .6635 BRÁ .5461 BC3 3.4969 FSP -1355
                                                                                                                        ST 996.5 SR 486.8 SS 675.1
CRT .9883 CRS -.9985 CST -.9809
LSA 1293.1 MSA 116.3 SSA 12.9
                                                                     SGT 2276.7 SGR 1773.8 SG3 421.9
                                                                     RRT .9368 RRF .9965 RTF .9428
SGB 2886.1 R23 .1958 R13 .9774
SGI 2843.0 SG2 496.9 THA 37.47
                                                                                                                         ELI 1107.0 EL2 66.7 ALF 25.87
                                                                                                                                    ARRIVAL DATE NOV 8 1967
                                                                         FLIGHT TIME 128.00
LAUNCH DATE JUL 3 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 364.535
   RL 152.10 LAL -.00 LOL 280.40 VL 27.096 GAL -5.29 AZL 86.84 MCA 167.53 SMA 131.28 ECC .18283 INC 3.1580 VI 29.291 RP 107.67 LAP .68 LOP 87.96 VP 38.134 GAP 1.92 AZP 93.08 TAL 204.98 TAP 12.51 RCA 107.28 APO 155.28 VZ 35.195 RC 101.218 GL 23.36 GP -54.42 ZAL 132.10 ZAP 106.02 ETS 337.90 ZAE 123.16 ETE 236.65 ZAC 116.40 ETC 348.70 CLP-118.31
  PLANETOCENTRIC CONIC
    C3 14:059 WHL 3,750 DLA 35.52 RAL 155.05 RAG 6567.6 VEL 11.638 PTH 2:04 VHP 5.231 DPA -36.39 RAP 132.91 ECC 1.2314 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  18 14 8
23 41 1
                                  3973.39
                                                  -26.69
                                                                                                           19 20 21
        67.60
                                                                 169.09
                                                                                 20.31
                                                                                                 65.63
                                                                                                                             3373.4
                                                                                                 65.62 24 29 58
65.63 19 20 21
65.62 24 29 58
65.63 19 20 21
65.62 24 29 58
                                                  -26.67
      112.40
                                  2937.66
                                                                  91.47
                                                                                 20.30
                                                                                                                             2337.7
                    18 14 8
                                  3973.39
                                                  -26.69
                                                                 169.09
                                                                                 20.31
                                                                                                                             3373.4
                                                                                                                                            -29.74
                                                                                                                                                           161.12
        67.60
                  23 41 1
                                 2937.66
                                                  -26.67
                                                                                                                             2337.7
      112.40
                                                                  91.47
                                                                                 20.30
                                                                                                                                            -29.73
                                                                                                                                                            83.49
                                                  -26.69
                    18 14 8
                                                                                                                             3373.4
        67.60
                                  3973.39
                                                                 169.09
                                                                                 20.31
                                                                                                                                            -29.74
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                   23 41 1
                                                                                                                                           -29.73
      112.40
                                  2937.66
                                                   -26.67
                                                                  91.47
                                                                                 20.30
                                                                                                                             2337.7
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE .9420 TRA -.4125 TC3-2.5592 BAU .6362
ROE .5144 RRA -.0204 RC3-2.2310 FAU .07190
                                                                   SGT 2520.9 SGR 1846.9 SG3 329.7
RRT .9380 RRF .9971 RTF .9481
SG8 3126.3 R23 .1937 R13 .9788
                                                                                                                         ST 1459.2 SR 767.7 SS 850.6
CRT .9892 CRS -.9999 CST -.9885
    FOE 1.2296 FRA -. 0289 FC3-4.4275 BSP 9432
                                                                                                                         LSA 1858.7 MSA 135.7 SSA
                                                                                                                                                               6.6
    BOE 1.0753 BRA .4131 BC3 3.3951 FSP -1066
                                                                     SG1 3082.0 SG2 524.3 THA 35.72
                                                                                                                         EL1 1655.1 ELZ 101.9 ALF 28.22
                                                                         FLIGHT TIME 130.00
                                                                                                                                   ARRIVAL DATE NOV 10 1967
LAUNCH DATE JUL 3 1967
                                                                        DISTANCE 370.735
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.068 GAL -5.14 AZL 84.60 MCA 170.74 SMA 131.08 ECC .18307 INC 5.4041 VI 29.291
RP 107.65 LAP .87 LOP 91.19 VP 38.122 GAP 2.29 AZP 95.33 TAL 204.14 TAP 14.89 RCA 107.09 APO 155.08 VZ 35.204
RC 103.470 GL 36.28 GP -62.47 ZAL 124.66 ZAP 105.08 ETS 331.08 ZAE 113.01 ETE 234.87 ZAC 115.55 ETC 343.07 CLP-124.26
   PLANETOCENTRIC CONIC
    C3 18.416 VHL 4.291 OLA 46.41 RAL 164.59 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 6.436 DPA -43.10 RAP 126.84 ECC 1.3031
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               54.09 18 50 23
54.09 18 50 23
54.08 2 22 4
54.09 18 50 23
54.08 2 22 4
54.09 18 50 23
54.08 2 22 4
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                 17 39 45 4237.88
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                                                 -31.66
                                                                194.96
                                                                               38.67
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       51.55
                                                                 82.71
                                                                                 38.66
                                                                                                                            2195.9
                                                                                                                                           -36.09
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                    1 35 28
                                                 -31.65
      128.45
                                 2795.94
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                                                                                                                            3637.9
                                                                                                                                          -36.10
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                  17 39 45 4237.88
                                                 -31.66
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        51.55
                  17 39 45 4237.88
                                                 -31.66
                                                                 194.96
                                                                    HID-COURSE EXECUTION ACCURACY
SGT 2804-6 809 1420
                                                                                                                            2195.9
                                                                                                                                           -36.09
                                                                  82.71
      128.45
                    1 35 28 2795.94
                                                 -31.65
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 2804.6 SGR 1892.7 SGS 230.7
RRT .9333 RRF .9962 RTF .9554
SGB 3361.3 R23 .1910 R13 .9799
SGI 3313.8 SG2 563.0 THA 32.72
                                                                                                                        ST 2119.0 SR 1094.9 SS 977.5
    TOE 1.5849 TRA -.1664 TC3-2.1114 BAU .6679
    ROE .8161 RRA .1693 RC3-1.7036 FAU .04882
FOE 1.3125 FRA .2196 FC3-2.2950 BSP 10219
                                                                                                                               .9907 CRS -.9998 CST -.9930
                                                                                                                        CRT
                                                                                                                        LSA 2573.0 MSA 155.4 SSA
                                                                                                                        EL1 2381.5 EL2 132.5 ALF 27.20
    BOE 1.7827 BRA .2374 BC3 2.7130 FSP
                                                     - 760
                                                                         FLIGHT TIME 132.00
                                                                                                                                    ARRIVAL DATE NOV 12 1967
LAUNCH DATE JUL 3 1967
                                                                        DISTANCE 376.884
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 27.038 GAL -4.97 AZL 80.01 HCA 173.93 SMA 130.87 ECC .18335 INC 9.9921 V1 29.291
RP 107.82 LAP 1.05 LOP 94.42 VP 38.109 GAP 2.64 AZP 99.94 TAL 203.23 TAP 17.16 RCA 106.88 APO 154.87 V2 35.212
RC 105.723 GL 52.13 GP -72.99 ZAL 113.49 ZAP 102.06 ETS 320.27 ZAE 104.40 ETE 229.34 ZAC 113.81 ETC 332.94 CLP-135.58
   PLANETOCENTRIC CONIC
    C3 33.054 VHL 5.921 DLA 57.86 RAL 183.41 RAD 6568.4 VEL 12.507 PTH 2.26 VHP 9.067 OPA -51.25 RAP 116.05 ECC 1.5769
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 37.18 18 10 43 4496.46 -29.58 219.98 72.53 37.72 19 25 40 3896.5 -35.78 214.38
                                 2853.61
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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 3198.2 SCR 1584.8 SC3 137.6
RRT .9026 RRF .9831 RTF .9636
SCB 3569.3 R23 .1835 R13 .9819
SCI 3514.9 SC2 620.8 THA 24.93
    TOE 2.8677 TRA .4637 TC3-1.1380 BAU .6376
                                                                                                                        ST 2786.9 SR 979.8 SS 929.7
                                                                                                                       CRT .9809 CRS -.9961 CST -.9942
    RDE .9710 RRA .5065 RC3 -.7457 FAU .02599
FOE 1.2021 FRA .4282 FC3 -.6418 BSP 10808
                                                                                                                        LSA 3090.8 MSA 195.5 SSA
                                                                                                                                                               1.9
                                                                                                                        EL1 2948.7 EL2 179.9 ALF 19.10
    BOE 3.0276 BRA .6867 BC3 1.3605 FSP -457
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FLIGHT TIME 126.00

ARRIVAL DATE NOV 14 1967

LAUNCH DATE JUL 3 1967

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DISTANCE 382.886
   HELFOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 27.006 GAL -4.77 AZL 65.82 MCA 176.99 SMA 130.65 ECC .18353 INC24.1848 VI 29.291 RP 107.60 LAP 1.23 LOP 97.66 VP 38.093 GAP 2.94 AZP 114.16 TAL 202.17 TAP 19.17 RCA 106.67 APO 154.63 V2 35.220 RC 107.975 GL 64.52 GP -81.78 ZAL 100.68 ZAP 96.79 ETS 259.48 ZAE 87.77 ETE 173.05 ZAC 111.82 ETC 271.02 CLP 145.75
   PLANETOCENTRIC CONIC
    C3 149.159 VHL 12.213 OLA 60.79 RAL 211.68 RAD 6570.6 VEL 16.447 PTH 2.87 VHP 17.641 OPA -58.41 RAP 89.24 ECC 3.4548
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 33.66 19 54 27 4844.36 -11.44 235.19 115.20 29.86 21 15 12 4244.4 -18.34 231.42
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  .DIFFERENTIAL CORRECTIONS
                                                                   SGT 3122.9 SGR 1930.4 SG3 71.9
RRT -.9347 RRF -.9238 RTF .9994
                                                                                                                        ST 1859.0 SR 1585.4 SS 728.1
CRT -.9767 CRS .9704 CST -.9996
    TOE 3.5915 TRA 2.7236 TC3 -.0982 BAU
                                                      .1967
    ROE-3.2977 RRA-1.2007 RC3 .0093 FAU .00375
    FOE .9106 FRA .7411 FC3 -.0218 BSP 11230
BOE 4.8759 BRA 2.9765 BC3 .0986 FSP -236
                                                                    SG8 3671.4 R23 -.1261 R13 -.9919
                                                                                                                       LSA 2534.8 MSA 272.8 SSA
                                                                     SG1 3623.4 SGZ 591.5 THA 149:07
                                                                                                                         EL1 2429.3 EL2 260.1 ALF 139.65
                                                                         FLIGHT TIME 136.00
                                                                                                                                   ARRIVAL DATE NOV 16 1967
LAUNCH DATE JUL 3 1967
                                                                        DISTANCE 390.395
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.972 GAL -4.86 AZL 160.77 MCA 181.49 SMA 130.42 ECC .18605 INC70.7719 V1 29.291
RP 107.58 LAP 1.41 LOP 100.89 VP 38.076 GAP 3.66 AZP 19.23 TAL 202.21 TAP 23.71 RCA 106.15 APO 154.68 V2 35.227
RC 110.226 GL -50.97 GP 59.21 ZAL 94.04 ZAP 93.57 ETS 177.19 ZAE 58.08 ETE 259.71 ZAC 88.80 ETC 156.78 CLP 96.99
  PLANETOCENTRIC CONIC
    C31067.056 VHL 32.666 OLA -46.89 RAL 156.82 RAD 6573.0 VEL 34.472 PTH
                                                                                                   3.51 VHP 40.920 DPA 55.18 RAP 339.80 ECC18.5610
    LNOW AZMTH LNOW TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SGT 1191.6 SGR 3068.9 SG3 55.2
RRT -.8883 RRF .9992 RTF -.8741
                                                                                                                        ST 803.6 SR 2680.9 SS 2012.1
CRT -.9794 CRS-1.0000 CST .9778
LSA 3443.7 MSA 161.1 SSA 1.7
    TOE 4.4435 TRA 2.6386 TC3 -.0910 BAU 3.3775
    RO-19.2624 RRA-1.7963 RC3 .2185 FAU-.05257
FDE-3.2412 FRA -.3236 FC3 .0427 89P 8685
BDE15.8961 BRA 3.1931 BC3 .2368 FSP -151
                                                                     SG8 3292.1 R23 -. 0856 R13 .9960
                                                                     SG1 3251.3 SG2 516.6 THA 109.54
                                                                                                                         EL1 2795.0 EL2 156.1 ALF 106.45
LAUNCH DATE JUL 3 1967
                                                                        FLIGHT TIME 138.00
                                                                                                                                   ARRIVAL DATE NOV 18 1967
                                                                       DISTANCE 395.823
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.936 GAL -4.53 A7L 112.99 MCA 184.05 SMA 130.17 ECC .18559 INC22.9929 V1 29.291
RP 107.56 LAP 1.58 LOP 104.13 VP 38.057 GAP 3.80 A2P 67.06 TAL 200.66 TAP 24.72 RCA 106.01 APO 154.33 V2 35.233
RC 112.475 GL -64.29 GP 78.35 ZAL 100.62 ZAP 101.47 ETS 95.52 ZAE 91.51 ETE 180.14 ZAC 86.04 ETC 77.84 CLP-169.99
   PLANETOCENTRIC CONIC
    C3 135.530 VHL 11.642 DLA -51.51 RAL 132.39 RAD 6570.5 VEL 16.027 PTH 2.83 VHP 13.221 DPA 76.30 RAP 263.66 ECC 3.2305
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            140.63 3 46 35
140.62 13 24 40
140.63 3 46 35
140.62 13 24 40
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                  3 11 16 2118.46
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  DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                    $6T 3527.7 $6R 1610.6 $63 97.9

RRT .9326 RRF .9021 RTF .9968

$6B 3877.9 R23 -.1365 R13 .9904
                                                                                                                        ST 2907.6 SR 964.7 SS 1110.3
    TOF-5.7712 TRA-2.6200 TC3 -.1250 BAU .2290
    ROE-1.7787 RRA-1.7087 RC3 -.0189 FAU .00875
                                                                                                                        CRT .9763 CRS -.9692 CST -.9995
    FOE-1.9413 FRA -.7527 FC3 -.0559 BSP 11737
HOF 6.0391 BRA 3.1279 BC3 .1264 FSP -303
                                                                                                                        LSA 3251.9 MSA 205.9 SSA
    BDE 6.0391 BRA 3.1279 BC3 .1264 FSP
                                                                    SG1 3841.0 SG2 533.9 THA 23.55
                                                                                                                        EL1 3057.0 ELZ 198.7 ALF 18.03
                                                                                                                                   ARRIVAL DATE NOV 20 1967
                                                                        FLIGHT TIME 140.00
LAUNCH DATE JUL 3 1967
                                                                        DISTANCE 401.841
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.900 GAL -4.31 AZL 104.12 MCA 187.19 SMA 129.92 ECC .18613 INC14.1203 V1 29.291
RP 107.54 LAP 1.75 LOP 107.37 VP 38.038 GAP 4.10 AZP 75.99 TAL 199.53 TAP 26.71 RCA 105.74 APO 154.10 V2 35.239
RC 114.720 GL -59.45 GP 64.73 ZAL 105.58 ZAP 110.41 ETS 55.63 ZAE 105.20 ETE 144.04 ZAC 90.09 ETC 39.01 CLP-144.77
  PLANETOCENTRIC CONIC
   C3 57.735 WHL 7.598 DLA -45.73 RAL 132.64 RAD 6569.1 VEL 13.383 PTH 2.45 VHP 8.080 DPA 71.33 RAP 206.43 ECC 1.9502 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SGT 3801.1 SGR 1074.0 SG3 175.7
RRT -.8612 RRF -.9518 RTF ..9738
SGB 3950.0 R23 .1900 R13 -.9807
SG1 3914.2 SG2 530.2 THA 166.06
                                                                                                                      ST 2706.7 SR 1007.2 SS 1162.1
CRT -.9759 CRS .9937 CST -.9942
LSA 3105.0 HSA 224.6 SSA 1.8
    TOE-3.4421 TRA-2.3671 TC3 -.7131 BAU
                                                      . 571A
    ROE 1.3326 RRA .2091 RC3 .2005 FAU .03021
FOE-2.1722 FRA -.9162 FC3 -.4551 83P 12136
BOE 3.6911 BRA 2.3763 BC3 .7407 FSP -557
                                                                                                                       EL1 2880.6 EL2 206.6 ALF 159.93
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FLIGHT TIME 134.00

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ARRIVAL DATE NOV 22 1967
                                                                        FLIGHT TIME 142.00
LAUNCH DATE JUL 3 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 407.914
    RL 152.10 LAL -.00 LOL 280.40 VL 26.861 GAL -4.10 AZL 100.65 HCA 190.39 SMA 129.66 ECC .18686 INCID.6546 VI 29.291
RP 107.52 LAP 1.91 LOP 110.62 VP 38.013 GAP 4.42 AZP 79.52 TAL 198.40 TAP 28.79 RCA 105.43 APO 153.89 V2 35.244
RC 116.961 GL -54.46 GP 53.10 ZAL 108.57 ZAP 118.43 ETS 48.04 ZAE 114.14 ETE 142.27 ZAC 93.98 ETC 32.10 CLP-142.45
   PLANETOCENTRIC CONIC
    C3 37.061 VHL 6.088 DLA -41.06 RAL 135.28 RAD 6568.4 VEL 12.587 PTH 2.28 VHP 6.332 DPA 62.21 RAP 186.32 ECC 1.6099
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
58.92 4 1 2 2 1688.17 21.95 26.64 17.71 125.62 4 42 10 1088.2 26.45 19.80
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      121.08
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 3826.3 SCR 1152.3 SC3 253.8
RRT -.9055 RRF -.9822 RTF ..9646
SCB 3996.0 R23 .2243 R13 -.9726
    TOE-2.6080 TRA-1.9865 TC3-1.2899 BAU .6661
                                                                                                                        ST 2565.3 SR 1010.3 SS 1260.5
   ROE 1.0684 RRA .2585 RC3 .3787 FAU .04847 FOE-2.4153 FRA-1.0003 FC3-1.1321 BSP 12335 BOE 2.8184 BRA 2.0033 BC3 1.3443 FSP -812
                                                                                                                        CRT -.9804 CRS .9977 CST -.9914
L5A 3023.5 MSA 221.0 SSA 2.5
                                                                    SG1 3968.1 SG2 471.5 THA 164.52
                                                                                                                        EL1 2750.8 EL2 185.6 ALF 158.79
                                                                         FLICHT TIME 144.00
                                                                                                                                    ARRIVAL DATE NOV 24 1967
                                                                        DISTANCE 413.989
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.822 GAL -3.88 AZL 98.81 MCA 193.61 SMA 129.39 ECC .18773 INC 8.8129 VI 29.291
RP 107.51 LAP 2.07 LOP 113.86 VP 37.990 GAP 4.74 AZP 81.43 TAL 197.26 TAP 30.87 RCA 105.10 APO 153.68 V2 35.248
RC 119.197 GL -50.45 GP 43.98 ZAL 110.17 ZAP 125.12 ETS 44.08 ZAE 120.14 ETE 145.07 ZAC 96.86 ETC 28.73 CLP-143.08
  PLANETOCENTRIC CONIC
    C3 28.273 VHL 5.317 DLA -37.66 RAL 138.05 RAD 6586.1 VEL 12.233 PTH
                                                                                                   2.20 VHP 5.581 DPA
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                             5 15 9
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 3930.2 SGR 1028.7 SG3 312.9
RRT -.9096 RRF -.9645 RTF ..9600
SGB 4062.6 R23 ..2440 R13 -.9663
                                                                                                                        ST 2522.0 SR 875.0 SS 1315.4
CRT -.9801 CRS .9984 CST -.9898
    TOE-2.2415 TRA-1.7715 TC3-1.8327 BAU .7132
   ROE .8086 RRA .1957 RC3 .4492 FAU .06179
FDE-2.5033 FRA -.9833 FC3-1.8921 B3P 12620
                                                                                                                        LSA 2968.0 MSA 218.3 SSA 3.4
    BOE 2.3829 BRA 1.7822 BC3 1.8869 FSP -1014
                                                                     SG1 4041.3 SG2 415.6 THA 166.46
                                                                                                                         EL1 2664.5 EL2 164.2 ALF 161.14
                                                                                                                                   ARRIVAL DATE NOV 26 1967
LAUNCH DATE JUL 3 1967
                                                                        FLIGHT TIME 146.00
                                                                        DISTANCE 420.053
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 26.782 GAL -3.66 AZL 97.67 HCA 196.85 SMA 129.12 ECC .18870 INC 7.6665 V1 29.291
RP 107.50 LAP 2.22 LOP 117.11 VP 37.965 GAP 5.06 AZP 82.66 TAL 196.09 TAP 32.94 RCA 104.76 APO 153.49 V2 35.252
RC 121.426 GL -47.30 GP 36.90 ZAL 110.82 ZAP 130.59 ETS 41.10 ZAE 124.06 ETE 148.87 ZAC 98.72 ETC 26.27 CLP-144.45 -
   PLANETOCENTRIC CONIC
    C3 23.542 VML 4.852 DLA -35.21 RAL 140.71 RAD 6568.0 VEL 12.038 PTH 2.15 VHP 5.236 DPA 47.27 RAP 173.93 ECC 1.3874
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4115.5 SGR 906.0 SG3 359.1
RRT -.9111 RRF -.9621 RTF ..9593
SGB 4214.0 R23 .2453 R13 -.9637
SG1 4196.1 SG2 366.1 THA 168.57
                                                                                                                        ST 2545.4 SR 757.6 SS 1358-2
CRT -.9801 CRS ..9987 CST -.9890
LSA 2975.2 MSA 215.1 SSA 4.3
    TDE-2.0682 TRA-1.6469 TC3-2.3739 BAU .7615
    ROE .6392 RRA .1483 RC3 .4668 FAU .07194
FDE-2.5182 FRA -.9401 FC3-2.6454 BSP 13605
BDE 2.1647 BRA 1.6535 BC3 2.4194 FSP -1235
                                                                                                                         EL1 2651.9 EL2 144.2 ALF 163.69
                                                                         FLIGHT TIME 148,00
                                                                                                                                    ARRIVAL DATE NOV 28 1967
LAUNCH DATE JUL 3 1967
                                                                        DISTANCE 426.113
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 26.741 GAL -3.42 AZL 96.88 HCA 200.08 SMA 128.84 ECC .18976 INC 6.8807 V1 29.291
RP 107.49 LAP 2.36 LOP 120.35 VP 37.938 GAP 5.38 AZP 83.53 TAL 194.88 TAP 34.97 RCA 104.39 APO 153.29 V2 35.255
RC 123.648 GL -44.79 GP 31.41 ZAL 110.78 ZAP 135.06 ETS 38.60 ZAE 126.54 ETE 152.64 ZAC 99.72 ETC 24.24 CLP-146.04
   PLANETOCENTRIC CONIC
    C3 20.605 VHL 4.539 DLA -33.48 RAL 143.29 RAD 6567.8 VEL 11.916 PTH 2.12 VHP 5.084 DPA 41.80 RAP 171.89 ECC 1.3391
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.34 5 51 9 1350.68 22.79 359.83 13.83 115.22 6 13 40 750.7 25.99 352.19
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       110.00
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                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2498.5 SR 628.1 SS 1306.9

CRT -.9779 CRS .9987 CST -.9872

LSA 2880.8 MSA 214.0 SSA 5.3
     TDE-1.9058 TRA-1.4789 TC3-2.7476 BAU
                                                                     SGT 4125.2 SGR 732.5 SG3 361.7
                                                       .7646
    ROE .4966 RRA .0858 RC3 .3923 FAU .07212
FDE-2.3413 FRA -.7319 FC3-3.0301 BSP 12770
BOE 1.9694 BRA 1.4813 BC3 2.7755 FSP -1141
                                                                     RRT -.8891 RRF -.9704 RTF .9525
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SG8 4189.7 R23 .2579 R13 -.9558

SGI 4176.6 SG2 331.1 THA 170.97

EL1 2573.1 EL2 127.4 ALF 166.15

ARRIVAL DATE NOV 30 1967

EL1 2698.5 EL2 75.9 ALF 171.18

FLIGHT TIME 150.00 LAUNCH DATE JUL 3 1967 HELIOCENTRIC CONIC DISTANCE 432.153 #L 152.10 LAL -.00 LOL 280.40 VL 26.699 GAL -3.17 AZL 96.31 HCA 203.32 SMA 128.57 ECC .19095 INC 6.3055 VI 29.291
RP 107.48 LAP 2.49 LOP 123.60 VP 37.911 GAP 5.69 AZP 84.21 TAL 193.66 TAP 36.98 RCA 104.02 APO 153.11 V2 35.257
RC 125.861 GL -42.74 GP 27.10 ZAL 110.25 ZAP 138.79 ETS 36.48 ZAE 128.07 ETE 156.07 ZAC 100.09 ETC 22.52 CLP-147.69 PLANETOCENTRIC CONIC C3 18.609 VHL 4.314 OLA -32.26 RAL 145.83 RAD 6567.8 VEL 11.832 PTH 2.10 VHP 5.038 DPA 37.33 RAP 170.96 ECC 1.3063 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.59 6 38 42 113.58 12 4 8 113.59 6 38 42 113.58 12 4 8 120.93 9 37 7 106.34 13 49 1 14.36 346.36 676.6 25.67 6 17 25 1276.62 22.68 354.08 264.78 22.69 272.50 14.37 5162.1 25.68 106.15 5762.09 676.6 25.67 346.36 73.85 6 17 25 1276.62 22.68 354.08 14.36 264.78 106.15 10 28 6 5762.09 22.69 272.50 14.37 5162.1 25.68 298.51 9 26 1 15.34 305.36 10.37 66.3 19.32 666.26 240.68 249.36 17.52 4820.4 32.39 110.00 12 18 41 5420.45 30.45 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2524.6 SR 549.7 SS 1291.6 CRT -.9779 CRS .9989 CST -.9865 LSA 2880.9 MSA 211.1 SSA 6.3 SCT 4248.4 SCR 627.2 SC3 369.0 RRT -.8720 RRF -.9545 RTF .9504 SCB 4294.4 R23 .2481 R13 -.9527 SCI 4283.6 SCZ 304.4 THA 172.63 TOE-1.8364 TRA-1.3708 TC3-3.1664 BAU .7922 ROE .4134 RRA .0572 RC3 .3356 FAU .07327 FDE-2.2231 FRA -.5931 FC3-3.4090 BSP 13157 BDE 1.8824 BRA 1.3720 BC3 3.1841 FSP -1173 EL1 2581.3 EL2 112.3 ALF 167.96 ARRIVAL DATE DEC 2 1967 FLIGHT TIME 152.00 DISTANCE 438.178 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 26.656 GAL -2.91 AZL 95.86 MCA 206.57 SMA 128.28 ECC .19224 INC 5.8637 V1 29.291 RP 107.48 LAP 2.62 LOP 126.85 VP 37.882 GAP 6.00 A2P 84.75 TAL 192.40 TAP 38.97 RCA 103.62 APO 152.94 V2 35.258 RC 128.066 GL -41.04 GP 23.68 ZAL 109.32 ZAP 141.96 ETS 34.67 ZAE 128.99 ETE 159.05 ZAC 99.96 ETC 21.03 CLP-149.32 PLANETOCENTRIC CONIC 2.08 WHF 5.053 OPA 33.61 RAP 170.73 ECC 1.2824 C3 17.162 VHL 4.143 DLA -31.44 RAL 148.37 RAD 6567.7 VEL 11.771 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.62 349.58 15.38 112.43 7 0 42 617.7 25.47 341.81 75.74 6 40 24 1217.70 112.42 12 1 51 112.43 7 0 42 5183.3 25.48 266.32 104.26 10 25 27 5783.32 22.64 274.09 15.38 617.7 25.47 341 .61 75.74 6 40 24 1217.70 22.62 349.58 274.09 15.38 112.42 12 1 51 5183.3 25.48 266.32 104.26 10 25 27 5783.32 22.64 121.46 9 31 11 103.47 14 14 40 101.0 18.17 300.54 110.00 9 19 30 700.99 14.11 307.30 10.82 18.68 12 45 32 5348.03 4748.0 33.24 235.20 31.72 244.10 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4370.8 SGR 545.5 SG3 368.9 RRT -.8476 RRF -.9300 RTF .9487 SG8 4404.7 R23 .2307 R13 -.9504 SG1 4395.3 SG2 287.9 THA 173.94 ST 2564.1 SR 492.5 SS 1273.7 CRT -.9788 CRS .9991 CST -.9861 TOE-1.7984 TRA-1.2682 TC3-3.5582 BAU ALAA ROE: .3558 RRA .0384 RC3 .2738 FAU .07271 FOE-2.1022 FRA -.4547 FC3-3.6679 BSP 13571 LSA 2897.6 MSA 207.7 SSA 7.4 BDE 1.8332 BRA 1.2688 BC3 3.5687 FSP -1183 ELI 2609.1 EL2 99.1 ALF 169.34 ARRIVAL DATE DEC 4 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 3 1967 DISTANCE 444.187 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 280.40 VL 26.613 GAL -2.64 AZL 95.51 MCA 209.81 SMA 128.00 ECC .19364 INC 5.5119 V1 29.291 RP 107.48 LAP 2.74 LOP 130.10 VP 37.853 GAP 6.32 AZP 85.21 TAL 191.12 TAP 40.93 RCA 103.21 APO 152.79 V2 35.259 RC 130.261 GL -39.57 GP 20.92 ZAL 108.07 ZAP 144.71 ETS 33.14 ZAE 129.50 ETE 161.58 ZAC 99.45 ETC 19.75 CLP-150.90 PLANETOCENTRIC CONIC C3 16.069 VHL 4.009 DLA -30.92 RAL 150.97 RAD 6567.6 VEL 11.724 PTH 2.07 VHP 5.106 DPA 30.46 RAP 170.98 ECC 1.2645 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.63 16.78 7 19 32 573.5 25.38 338.45 346.26 77.04 6 59 58 1173.54 22.65 16.79 111.61 12 3 11 5197.3 25.39 267.34 275.16 102.96 10 26 34 5797.32 22.66 7 19 32 25.38 338.45 16.78 111.63 573.5 346.26 77.0 6 59 58 1173.54 22.65 16.79 111.61 12 3 11 5197.3 25.39 267.34 5797.32 275.16 102.96 10 26 34 22.66 9 32 31 116.0 17.67 301.42 12.00 121.68 110.00 9 20 35 716.04 13.58 308.14 101.58 14-33 30 5302.82 4702.8 33.64 231.73 110.00 240.74 20.05 13 5 7 32.39 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4482.7 SGR 482.9 SG3 353.2 RRT -.8134 RRF -.8947 RTF .9470 SGB 4508.6 R23 .2088 R13 -.9481 SG1 4499.9 SG2 279.8 THA 174.97 ST 2610.4 SR 450.4 SS 1252.5 CRT -.9806 CRS .9994 CST -.9858 LSA 2923.0 MSA 203.7 SSA 8.5 TDE-1.7792 TRA-1.1635 TC3-3.9185 BAU .8430 RDE .3149 RRA .0261 RC3 .2111 FAU .07085 FDE-1.9820 FRA -.3178 FC3-5.8170 BBP 13918 BDE 1.8069 BRA 1.1638 BC3 3.9242 FSP -1166 EL1 2647.5 EL2 87.1 ALF 170.39 ARRIVAL DATE DEC 6 1967 FLIGHT TIME 156,00 LAUNCH DATE JUL 3 1967 DISTANCE 450.180 HELLOCENTRIC CONTC RL 152:10 LAL -.00 LOL 280:40 VL 26:570 GAL -2:36 AZL 95:22 MCA 213:05 SMA 127:71 ECC .19517 INC 5:2235 V1 29:291
RP 107:48 LAP 2:85 LOP 133:35 VP 37:822 GAP 6:63 AZP 85:62 TAL 189:82 TAP 42:87 RCA 102:79 APO 152:64 VZ 35:259
RC 132:447 GL -38:28 GP 18:66 ZAL 106:54 ZAP 147:12 ETS 31:85 ZAE 129:76 ETE 163:72 ZAC 98:64 ETC 18:63 CLP-152:43 PLANETOCENTRIC CONIC C3 15.222 VHL 3.902 OLA -30.63 RAL 153.63 RAD 6567.6 VEL 11.688 PTH 2.06 VHP 5.185 DPA 27.73 RAP 171.57 ECC 1.2505 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.81 7 16 9 1143.67 22.75 344.06 18.51 111.08 7 35 13 543.7 25.41 336.21 10 31 36 22.76 275.60 18.52 111.06 12 8 19 5202.7 25.42 267.75 5602.70 102.19 7 35 13 25.41 18.51 111.08 543.7 336.21 1143.67 22.75 344.06 77.81 7 16 9 111.06 12 8 19 121.72 9 38 25 100.39 14 48 25 25.42 267.75 275.60 5202.7 10 31 36 22.76 5602.70 18.52 102.19 17.55 301.62 308.33 13.67 119.5 110.00 9 26 25 719.49 13.45 4674,9 5274.88 21.69 33.84 229.57 32.75 236.64 110.00 13 20 31 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2666.6 SR 420.7 SS 1233.5 CRT -.9832 CRS .9996 CST -.9857 LSA 2961.4 MSA 199.2 SSA 9.6 SGT 4591.4 SGR 438.2 SG3 354.9 RRT -.7703 RRF -.8486 RTF .9454 TOE-1.7768 TRA-1.0563 TC3-4.2549 BAU .8664 TOE-1.7768 TRA-1.0363 TC3-4.2349 DRO 1.06837 FROE 1.8727 FRA -.1892 FC3-3.8887 83P 14258 FDE 1.7997 BRA 1.0565 BC3 4.2576 FSP -1140

SGB 4612.3 R23 .1844 R13 -.9463 SG1 4603.9 SG2 278.7 THA 175.78

ARRIVAL DATE DEC 8 1967

EL1 2965.4 EL2 34.3 ALF 172.79

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LAUNCH DATE JUL 3 1967

FLIGHT TIME 158.00

SG1 4980.1 SG2 310.5 THA 177.57

.9496

TOE-1.8632 TRA -.5687 TC3-5.3254 BAU

ROE .2382 RRA .0160 RC3 -.0267 FAU .05619 FDE-1.5211 FRA .2425 FC3-3.6470 BSP 15490 BOE 1.6784 BRA .5690 BC3 5.3254 FSP -1000

ARRIVAL DATE DEC 16 1967

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LAUNCH DATE JUL 3 1967
                                                                                        DISTANCE 479.875
    RL 152.10 LAL -.00 LOL 280.40 VL 26.348 GAL -.77 A7L 94.29 MCA 229.28 SMA 126.29 ECC .20484 INC 4.2896 V1 29.291
RP 107.51 LAP 3.25 LOP 149.60 VP 37.655 GAP 8.19 A7P 87.20 TAL 183.00 TAP 52.28 RCA 100.42 APO 152.15 V2 35.247
RC 143.232 GL -32.93 GP 11.82 ZAL 95.90 ZAP 156.25 ETS 28.15 ZAE 129.57 ETE 170.36 ZAC 91.87 ETC 14.71 CLP-159.25
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 13.141 VHL 3.625 DLA -31.22 RAL 168.47 RAD 6567.5 VEL 11.599 PTH 2.03 VHP 5.781 DPA 17.72 RAP 177.43 ECC 1.2163 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 3018.7 SR 373.3 SS 1151.8
CRT -.9977 CRS .9937 CST -.9875
                                                                                    SGT 5067.1 SGR 376.9 SG3 300.6
RRT -.5173 RRF -.5598 RTF .9412
     TDE-1.9024 TRA -.4314 TC3-5.5170 BAU .9693
     ROE .2361 RRA .0185 RC3 -.0557 FAU .05322
                                                                                                                                                    LSA 3248.0 MSA 170.3 SSA 15.1
                                                                                    SGB 5081.1 R23 .0829 R13 -.9414
SG1 5070.9 SG2 322.3 THA 177.79
    FOE-1.4537 FRA .3274 FC3-3.5065 BSP 15842
BDE 1.9170 BRA .4318 BC3 5.5173 FSP -972
                                                                                                                                                    EL1 3041.6 EL2 25.0 ALF 172.97
                                                                                                                                                                 ARRIVAL DATE DEC 18 1967
                                                                                         FLIGHT TIME 168.00
LAUNCH DATE JUL 3 1967
    RL 152.10 LAL -.00 LOL 280.40 VL 26.303 GAL -.41 A7L 94.16 MCA 232.52 SMA 126.00 ECC .20724 INC 4.1597 V1 29.291
RP 107.53 LAP 3.30 LOP 152.85 VP 37.619 GAP 8.51 AZP 87.47 TAL 181.59 TAP 54.11 RCA 99.89 APO 152.11 V2 35.243
RC 145.356 GL -31.90 GP 10.98 ZAL 93.30 ZAP 157.69 ETS 27.87 ZAE 129.44 ETE 171.16 ZAC 90.16 ETC 14.16 CLP-160.46
                                                                                        DISTANCE 485.757
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 13.037 VHL 3.611 DLA -31.54 RAL 171.78 RAD 6567.5 VEL 11.594 PTH 2.03 VHP 5.925 DPA 16.13 RAP 178.96 ECC 1.2146

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

75.49 8 12 4 1161.60 24.24 346.04 34.58 110.83 8 31 26 561.6 26.85 338.07

104.51 12 0 32 5716.54 24.25 269.74 34.58 110.81 13 35 48 5116.5 26.86 261.77

75.49 8 12 4 1161.60 24.24 346.04 34.58 110.83 8 31 26 561.6 26.85 338.07

104.51 12 0 32 5716.54 24.25 269.74 34.58 110.81 13 35 48 5116.5 26.86 261.77
                                                                                                                     120.38 11 5 21
101.16 15 45 12
                       10 54 48
                                                                16.48
                                                                                303.49
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        110.00
                                             633.33
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                                                                                                                                                         4692.8
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                                                                                                    37.27
                                                                32.52
                                                                                239.99
        110.00
                        14 16 59
                                          5292.82
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SCT 5143.9 SGR 381.1 SG3 289.6

RRT -,4796 RRF -.5142 RTF .9405

SGB 5158.0 R23 .0697 R13 -.9406

SGI 5147.1 SG2 334.2 THA 177.96
                                                                                                                                                     ST 3086.2 SR 375.0 SS 1132.7
CRT -.9988 CRS .9901 CST -.9879
     TDE-1.9408 TRA -.2782 TC3-5.6600 BAU .9866
     RDE .2362 RRA .0205 RC3 -.0793 FAU .05023
FDE-1.3859 FRA .4159 FC3-3.3356 BSP 16046
BDE 1.9552 BRA .2790 BC3 5.6605 FSP -930
                                                                                                                                                     LSA 3304.6 MSA 165.1 55A
                                                                                                                                                                                                   16.2
                                                                                                                                                     EL1 3108.8 EL2 18.1 ALF 173.08
                                                                                                                                                                 ARRIVAL DATE DEC 20 1967
                                                                                         FLIGHT TIME 170.00
LAUNCH DATE JUL 3 1967
                                                                                        DISTANCE 491.617
     RL 152.10 LAL -.00 LOL 280.40 VL 26.258 GAL -.04 AZL 94.04 HCA 235.77 SHA 125.72 ECC .20983 INC 4.0406 V1 29.291
RP 107.54 LAP 3.34 LOP 156.10 VP 37.583 GAP 8.84 AZP 87.72 TAL 180.16 TAP 55.93 RCA 99.34 APO 152.10 V2 35.237
    HELIOCENTRIC CONIC
     RC 147.469 GL -30.84 GP 10.25 7AL 90.58 7AP 159.05 ETS 27.71 7AE 129.30 ETE 171.85 7AC 88.37 ETC 13.67 CLP-161.64
    PLANETOCENTRIC CONIC
      C3 13.026 VHL 3.609 DLA -31.87 RAL 175.21 RAD 6567.5 VEL 11.594 PTH 2.03 VHP 6.077 DPA 14.62 RAP 180.56 ECC 1.2144
      LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   111.07 8 40 8
111.05 13 54 26
                        8 20 30 1177.84
12 19 26 5699.95
8 20 30 1177.84
                                                                                                 38.09
                                                                               347.37
                                                                24.49
          74.73
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                                                                                                    38.10
                                                                                268.58
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         105.27
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13 54 26
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           74.73
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                       12 19 26 5699.95
11 14 54 612.42
14 24 13 5313.37
                                                                                                    38.10
                                                                                                                      111.05
                                                                                                                                 11 25 6
                                                                24.50
                                                                                268.58
         105.27
                                                                                                                                                                              21.05
                                                                                                                                                            12.4
                                                                                                                                                                                              295.29
                                                                                                    34.37
                                                                                                                      120.01
                                                                17.20
                                                                                 302.29
         110.00
                                                                                                                                                                             33.56
                                                                                                                                                                                              232.55
                                                                                                                                    15 52 46
                                                                                                    40.71
                                                                                                                      102.03
                                                                32.24
                                                                                 241.53
         110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 3177.6 SR 382.0 SS 1131.5
CRT -.9989 CRS .9870 CST -.9895
                                                                                    SGT 5250.5 SGR 390.9 SG3 280.1
RRT -.4555 RRF -.4867 RTF .9445
SGB 5265.1 R23 .0613 R13 -.9446
SGI 5253.6 SG2 547.8 THA 178.05
      TOE-1.9994 TRA -.1463 TC3-5.7819 BAU 1.0070
      ROE .2405 RRA .0256 RC3 -.0962 FAU .04757
FDE-1.3472 FRA .4574 FC3-3.1617 BSP 16815
BDE 2.0138 BRA .1465 BC3 5.7827 FSP -954
                                                                                                                                                    LSA 3391.0 MSA 154.8 SSA 17.2
                                                                                                                                                     EL1 3200.4 EL2 17.6 ALF 173.15
                                                                                                                                                                   ARRIVAL DATE DEC 22 1967
                                                                                           FLIGHT TIME 172.00
 LAUNCH DATE JUL 3 1967
                                                                                         DISTANCE 497.453
     RL 152.10 LAL -.00 LOL 280.40 VL 26.213 GAL .34 AZL 93.93 MCA 239.01 SMA 125.44 ECC .21260 INC 3.9304 VI 29.291 RP 107.56 LAP 5.37 LOP 159.35 VP 37.546 GAP 9.17 AZP 87.97 TAL 178.72 TAP 57.73 RCA 98.77 APO 152.11 V2 35.231 RC 149.570 GL -29.75 GP 9.61 ZAL 87.78 ZAP 160.34 ETS 27.69 ZAE 129.17 ETE 172.45 ZAC 86.51 ETC 13.23 CLP-162.77
     PLANETOCENTRIC CONIC
      C3 13.110 VHL 3.621 DLA -32.19 RAL 178.73 RAD 6567.5 VEL 11.597 PTH 2.03 VHP 6.235 DPA 13.17 RAP 182.23 ECC 1.2158
      C3 13.110 VHL 3.621 DLA -32.19 RAL 178.73 RAD 6567.5 VEL 11.597 PTH 2.03 VHP 6.235 DPA 15.17 RAP 182.25 ECC 1.2136 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.01 8 29 43 1194.34 24.69 348.71 41.81 111.35 8 49 37 594.3 27.36 340.74 105.99 12 38 20 5686.21 24.70 267.62 41.82 111.33 14 13 6 5086.2 27.37 259.65 105.99 12 38 20 5686.21 24.70 267.62 41.82 111.35 14 13 6 5086.2 27.37 259.65 110.00 11 35 42 5880.23 17.88 279.03 38.33 119.63 13 13 42 5880.2 21.69 271.97 110.00 14 31 31 5336.35 31.90 243.24 44.34 102.98 16 0 27 4736.4 33.36 234.31
                                                                 51.90
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5294.5 SGR 395.8 SG3 268.1
RRT - 4258 RRF - .4480 RTF .9406
SGB 5309.2 R23 .0505 R13 - .9407
SGI 5297.2 SGZ 357.9 THA 178.17
      TOE-2.0260 TRA .0449 TC3-5.8160 BAU 1.0195
ROE .2431 RRA .0252 RC3 -.1107 FAU .04440
FOE-1.2649 FRA .5639 FC3-2.9318 BSP 16579
                                                                                                                                                      ST 3209.9 SR 385.0 SS 1092.2
CRT -.9980 CRS .9806 CST -.9889
                                                                                                                                                     LSA 3408.8 MSA 155.2 SSA 18.1
                                                                                                                                                      EL1 3232.8 EL2 24.4 ALF 173.17
       BOE 2.0413 BRA .0515 BC3 5.8170 FSP -865
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FLIGHT TIME 166.00

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LAUNCH DATE JUL 3 1967
                                                                                       FLIGHT TIME 174.00
                                                                                                                                                             ARRIVAL DATE DEC 24 1967
    HELIOCENTRIC CONIC
                                                                                       DISTANCE 503.266
      RL 152.10 LAL -.00 LOL 280.40 VL 26.168 GAL .75 AZL 93.83 MCA 242.25 SMA 125.16 ECC .21559 INC 3.8275 VI 29.291
RP 107.58 LAP 3.39 LOP 162.60 VP 37.509 GAP 9.51 AZP 88.22 TAL 177.27 TAP 59.52 RCA 98.18 APO 152.15 V2 35.225
RC 151.657 GL -28.63 GP 9.05 ZAL 84.89 ZAP 161.57 ETS 27.81 ZAE 129.04 ETE 172.96 ZAC 84.59 ETC 12.84 CLP-163.88
     PLANETOCENTRIC CONIC
     C3 13.292 VHL 3.646 DLA -32.49 RAL 182.34 RAD 6567.5 VEL 11.605 PTH 2.03 VHP 6.400 OPA 11.78 RAP 183.95 ECC 1.2187 LNCH AZHTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                            INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              111.66 9 0 3
111.64 14 31 33
111.66 9 0 3
111.64 14 31 33
119.27 13 34 31
103.98 16 8 31
          73.37
                         8 39 52 1210.48
                                                                                              45.72
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         106.63
                       12 56 57
                                        5676.03
                                                              24.84
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                        8 39 52 1210.48
          73.37
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        106.63
                                        5676.03
                                                              24.84
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                      11 56 49
         110.00
                                        5861.83
                                                              18.50
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                                                                                                                                                                                        270.84
                       14 39 11
        110.00
                                        5360.72
                                                              31.52
                                                                              245.03
                                                                                                 48.16
                                                                                                                                                     4760.7
                                                                                                                                                                        33.11
    DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
     TOE-2.0690 TRA .2214 TC3-5.8236 BAU 1.0351

RDE .2494 RRA .0269 RC3 -.1185 FAU .04169

FDE-1.2087 FRA .6315 FC3-2.7156 BSP 16852

BDE 2.0840 BRA .2230 BC3 5.8250 FSP -837
                                                                                 SGT 5364.3 SGR 404.5 SG3 257.9

RRT -.4088 RRF -.4261 RTF .9410

SGB 5379.5 R23 .0433 R13 -.9411

SGI 5366.9 SG2 369.0 THA 178.23
                                                                                                                                              ST 3256.5 SR 392.3 SS 1068.9
CRT -.9960 CRS .9748 CST -.9894
                                                                                                                                              LSA 3446.4 MSA 151.7 SSA 18.9
                                                                                                                                               EL1 3279.8 EL2 34.6 ALF 173.16
LAUNCH DATE JUL 3 1967
                                                                                       FLIGHT TIME 176.00
                                                                                                                                                             ARRIVAL DATE DEC 26 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 509.053
     RL 152.1D LAL -.00 LOL 280.40 VL 26.123 GAL 1.17 AZL 93.73 MCA 245.49 SMA 124.89 ECC .21880 INC 3.7305 V1 29.291
RP 107.60 LAP 3.39 LOP 165.85 VP 37.471 GAP 9.85 AZP 88.45 TAL 175.82 TAP 61.30 RCA 97.56 APO 152.21 V2 35.217
     RC 153.730 GL -27.46 GP 8.55 ZAL 81.95 ZAP 162.74 ETS 28.07 ZAE 128.92 ETE 173.41 ZAC 82.62 ETC 12.49 CLP-164.95
   PLANETOCENTRIC CONIC
     C3 13.578 VHL 3.685 DLA -32.74 RAL 186.01 RAD 6567.5 VEL 11.617 PTH 2.04 VMP 6.573 DPA 10.43 RAP 185.72 ECC 1.2235 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C9T TIM INJ 2 LAT INJ 2 LONG
                                                                                                             111.99 9 11 28
111.97 14 49 34
111.97 14 49 34
111.97 14 49 34
118.96 13 55 13
104.97 16 17 16
                      8 51 3 1225.67
13 15 4 5669.90
         72.63
                                                                                           49.80
                                                                                                                                                                    27.65 343.26
                                                             24.90
                                                                              351.22
                                                                                                                                                     625.9
        107.17
                                                                                                                                                     5069.9
                                                             24.91
                                                                              266.47
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                      8 51 3 1225.87
13 15 4 5669.90
         72.83
                                                             24.90
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        107.17
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                                                                              266.47
                                                                                                 49.80
                                                                                                                                                     5069.9
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                     12 17 46 5846.55
14 47 31 5385.25
        110.00
                                                             19.00
                                                                              277.06
                                                                                                 46.77
                                                                                                                                                     5246.6
                                                                                                                                                                        22.72
                                                                                                                                                                                         269.89
        110.00
                                                             31.10
                                                                             246.82
                                                                                                52.14
                                                                                                                                                     4785.3
                                                                                                                                                                        32.84
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    TOE-2.1065 TRA .4119 TC3-5.7757 BAU 1.0486

RDE .2572 RRA .0277 RC3 -.1217 FAU .03907

FOE-1.1517 FRA .6987 FC3-2.4914 BSP 17024

BOE 2.1222 BRA .4128 BC3 5.7770 FSP -804
                                                                                9GT 5424.6 SGR 413.1 SG3 248.1

RRT -.3968 RRF -.4091 RTF .9414

SG8 5440.3 R23 .0368 R13 -.9415

SG1 5427.1 SG2 379.0 THA 178.26
                                                                                                                                              ST 3285.9 SR 400.3 SS 1041.0
                                                                                                                                             CRT -.9931 CRS .9679 CST -.9897
LSA 3466.8 MSA 149.9 SSA 19.5
EL1 3309.9 EL2 46.5 ALF 173.10
LAUNCH DATE JUL 3 1967
                                                                                       FLIGHT TIME 178.00
                                                                                                                                                            ARRIVAL DATE DEC 28 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 514.813
    RL 152.10 LAL -.00 LOL 280.40 VL 26.079 GAL 1.61 AZL 93.64 MCA 248.73 SMA 124.61 ECC .22225 INC 3.6385 VI 29.291 RP 107.63 LAP 3.39 LOP 169.09 VP 37.432 GAP 10.21 AZP 88.68 TAL 174.35 TAP 63.08 RCA 96.92 APO 152.31 V2 35.210 RC 155.789 GL -26.27 GP 8.10 ZAL 78.97 ZAP 163.86 ETS 28.48 ZAE 128.80 ETE 173.80 ZAC 80.61 ETC 12.19 CLP-165.99
   PLANETOCENTRIC CONIC
     C3 15.975 VHL 3.738 OLA -32.94 RAL 189.72 RAD 6567.6 VEL 11.634 PTH 2.04 VHP 6.753 OPA
                                                                                                                                                       9.12 RAP 187.54 ECC 1.2300
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              112.32 9 23 51
112.31 15 7 1
112.32 9 23 51
112.31 15 7 1
118.74 14 15 14
105.88 16 27 5
                                                                                            54,01
                      9 3 11 1240.44
13 32 33 5667.96
                                                            24.88
                                                                             352.33
                                                                                                                                                                    27.68
                                                                                                                                                                                    344.39
         72.42
                                                                                                                                                      640.4
        107.58
                                                             24.89
                                                                             266,31
                                                                                                54.02
                                                                                                                                                    5068.0
                                                                                                                                                                                       258.37
                                                                                                                                                                       27.69
                      9 3 11 1240.44
13 32 33 5667.96
                                                                                                                                                                                    344.39
         72.42
                                                             24.88
                                                                             352.33
                                                                                                54.01
                                                                                                                                                      640.4
        107.56
                                                             24.89
                                                                             266.31
                                                                                                54.02
                                                                                                                                                    5068.0
                                                                                                                                                                       27.69
                                                                                                                                                                                       258.37
                      12 37 58 5835.95
14 56 56 5408.48
        110.00
                                                             19.35
                                                                             276.44
                                                                                                51.16
                                                                                                                                                    5236.0
                                                                                                                                                                       23.03
        110.00
                                                             30.68
                                                                             248.50
                                                                                                56.28
                                                                                                                                                    4608.5
                                                                                                                                                                       32.55
                                                                                                                                                                                       239.78
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 SCT 5485.9 SCR 421.9 SC3 238.6

RRT -.3896 RRF -.3982 RTF .9421

SCB 5502.1 R23 .0319 R13 -.9421

SCI 5488.3 SG2 388.4 THA 178.28
                                                                                                                                              ST 3304.2 SR 409.2 SS 1011.9
CRT -.9894 CRS .9604 CST -.9900
     TDE-2.1432 TRA .6097 TC3-5.6848 BAU 1.0623
    RDE .2668 RRA .0279 RC3 -.1211 FAU .03657 FOE-1.0980 FRA .7598 FC3-2.2655 BSP 17248
                                                                                                                                               LSA 3476.6 MSA 149.2 SSA 19.9
     BOE 2.1597 BRA .6103 BC3 5.6861 FSP -775
                                                                                                                                              EL1 3328.9 EL2 59.1 ALF 173.01
LAUNCH DATE JUL 3 1967
                                                                                      FLIGHT TIME 180.00
                                                                                                                                                            ARRIVAL DATE DEC 30 1967
   HELIOCENTRIC CONTC
                                                                                      01STANCE 520.542
    RL 152.10 LAL -.00 LOL 280.40 VL 26.034 GAL 2.07 AZL 93.55 MCA 251.96 SMA 124.34 ECC .22596 INC 3.5505 V1 29.291
RP 107.65 LAP 3.38 LOP 172.33 VP 37.393 GAP 10.57 AZP 88.90 TAL 172.88 TAP 64.84 RCA 96.25 APO 152.44 V2 35.201
RC 157.834 GL -25.04 GP 7.71 ZAL 75.98 ZAP 164.93 ETS 29.05 ZAE 128.70 ETE 174.14 ZAC 78.56 ETC 11.92 CLP-167.01
   PLANETOCENTRIC CONIC
     C3 14.493 VHL 3.807 DLA -33.08 RAL 193.45 RAD 6567.6 VEL 11.657 PTH 2.05 VHP 6.942 DPA 7.84 RAP 189.39 ECC 1.2385
    C3 14.493 WL 3.807 DLA -35.08 RAL 193.45 RAD 6507.6 VEL 11.657 PTH 2.05 VPP 6.942 DPA 7.84 RAP 189.39 ECC 1.2385 LNCH AZMTH LNCH TIME L-1 TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.14 9 16 16 1254.00 24.77 353.32 58.34 112.67 9 37 10 654.0 27.62 345.41 107.86 13 49 12 5670.47 24.78 266.45 58.35 112.65 15 23 43 5070.5 27.63 258.53 72.14 9 16 16 1254.00 24.77 353.32 58.34 112.67 9 37 10 654.0 27.62 345.41 107.86 13 49 12 5670.47 24.78 266.45 58.35 112.65 15 23 43 5070.5 27.63 258.53 110.00 12 56 46 5831.68 19.49 276.18 55.61 118.65 14 33 58 5231.7 23.16 266.97 110.00 15 7 53 5428.84 30.29 249.96 60.57 106.66 16 38 21 4828.8 32.27 241.30
   DIFFERENTIAL CORRECTIONS
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                SGT 5543.8 SGR 430.3 SG3 229.6
RRT -.3865 RRF -.3919 RTF .9430
SGB 5560.5 R23 .0276 R13 -.9431
SGI 5546.3 SG2 396.6 THA 178.27
                                                                                                                                             ST 3307.0 SR 418.4 SS 980.7

CRT -.9646 CRS .9523 CST -.9903

LSA 3471.4 MSA 150.2 SSA 20.1
     TOE-2.1761 TRA .8183 TC3-5.5485 BAU 1.0753
    ROE .2778 RRA .0272 RC3 -.1168 FAU .03422
     FDE-1.0458 FRA .8180 FC3-2.0443 85P 17474
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EL1 3332.6 EL2 72.1 ALF 172.89

80E 2.1938 BRA .8188 BC3 5.5497 FSP -750

ARRIVAL DATE JAN 1 1968

EL1 3180.9 EL2 128.6 ALF 172.18

LAUNCH DATE JUL 3 1967

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DISTANCE 526.240
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.990 GAL 2.55 AZL 93.47 MCA 255.20 SMA 124.08 ECC .22996 INC 3.4658 V1 29.291
RP 107.68 LAP 3.35 LOP 175.58 VP 37.354 GAP 10.95 AZP 89.11 TAL 171.40 TAP 66.60 RCA 95.54 APO 152.61 V2 35.192
RC 159.863 GL -23.79 GP 7.35 ZAL 72.99 ZAP 165.96 ETS 29.81 ZAE 128.59 ETE 174.44 ZAC 76.47 ETC 11.69 CLP-168.00
   PLANETOCENTRIC CONIC
                                                                                                                                   6.58 RAP 191.28 ECC 1.2492
    C3 15.144 VHL 3.891 OLA -33.15 RAL 197.17 RAD 6567.6 VEL 11.685 PTH
                                                                                                     2.06 VHP 7.139 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.00
                   9 30 14 1266.42
14 4 53 5677.64
                                                     24.55
                                                                  354.18
                                                                                   62.76
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        72.00
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                                                                                                                                5077.6
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                                                     24.57
      108.00
                  9 30 14 1266.42
14 4 53 5677.64
                                                                                   62.76
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118.73 14 50 51
107.27 16 51 27
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                                                                  266.91
      108.00
                                                     24.57
                  13 13 36 5835.22
15 20 42 5444.88
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                                                                  276.39
                                                                                   60.05
      110.00
                                                     19.38
                                                                                                                                                32.04
                                                                                                                                                             242.50
                                                                  251.10
                                                                                   64.99
                                                                                                                               4844.9
                                                     29.97
      110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                     SGT 5595.9 SGR 438.0 SG3 220.7

RRT - .3863 RRF - .3888 RTF .9440

SGB 5613.0 R23 .0241 R13 - .9440

SGI 5598.4 SG2 403.8 THA 178.26
                                                                                                                            ST 3292.2 SR 427.4 SS 946.7
CRT -.9794 CRS .9433 CST -.9905
    TOE-2.2032 TRA 1.0389 TC3-5.3679 BAU 1.0870
    ROE .2902 RRA .0254 RC3 -.1100 FAU .03193
FOE -.9938 FRA .8742 FC3-1.8257 BSP 17676
                                                                                                                           LSA 3448.7 MSA 153.1 SSA 20.0
                                                                                                                            ELI 3318.7 EL2 85.7 ALF 172.75
    BOE 2.2222 BRA 1.0392 BC3 5.3690 FSP -724
                                                                                                                                       ARRIVAL DATE JAN 3 1968
LAUNCH DATE JUL 3 1967
                                                                           FLIGHT TIME 184.00
                                                                          DISTANCE 531,902
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.946 GAL 3.05 AZL 93.38 HCA 258.43 SMA 123.81 ECC .23426 INC 3.3835 V1 29.291
RP 107.71 LAP 3.31 LOP 178.82 VP 37.315 GAP 11.33 AZP 89.32 TAL 169.92 TAP 68.35 RCA 94.81 APO 152.82 V2 35.183
RC 161.876 GL -22.52 GP 7.03 ZAL 70.03 ZAP 166.95 ETS 30.78 ZAE 128.50 ETE 174.70 ZAC 74.36 ETC 11.49 CLP-168.98
  PLANETOCENTRIC CONIC
                                                                                                                                    5.36 RAP 193.19 ECC 1.2623
                                                                                                     2.06 VHP 7.347 OPA
    C3 15.940 VHL 3.992 DLA -33.14 RAL 200.85 RAD 6567.6 VEL 11.719 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                113.32 10 6 18
                                                                                                                                  677.7
                                                                                                                                               27.18
                                                                                                                                                             347.06
                     9 45 1 1277.70
                                                                                   67.23
                                                     24.24
        72.02
                                                                  354.90
                                                                                                                                                               259.83
                                                                   267.67
                                                                                   67.23
                                                                                                  113.31
                                                                                                              15 54 18
                                                                                                                                 5089.5
                                                                                                                                                 27.19
      107.98
                   14 19 28 5689.49
                                                     24.25
                                                                                                  113.32 10 6 18
113.31 15 54 18
118.98 15 5 30
107.67 17 6 32
                                                                                                                                  677.7
                                                                                                                                                 27.18
                                                                                                                                                               347.06
                                  1277.70
                                                     24.24
                                                                   354.90
                                                                                   67.23
        72.02
                     9 45 1
                                                                                                                                                               259.83
                   14 19 28 5689.49
13 28 3 5847.49
                                                     24.25
                                                                  267.67
                                                                                   67.23
                                                                                                                                 5089.5
                                                                                                                                                 27.19
      107.98
                                                                                   64.45
                                                                                                                                5247.5
                                                                                                                                                22.69
                                                     18.97
                                                                   277.12
      110.00
                   15 35 36
                                  5455.74
                                                                                                                                4855.7
                                                                                                                                                 31.87
      110.00
                                                    29.75
                                                                  251.67
                                                                                   69.54
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5637.3 SGR 444.8 SG3 211.9
RRT -.3879 RRF -.3878 RTF .9446
                                                                                                                            ST 3256.4 SR 435.9 SS 909.4
CRT -.9730 CRS .9329 CST -.9905
    TOE-2.2210 TRA 1.2749 TC3-5.1400 BAU 1.0956
    RDE .3036 RRA .0222 RC3 -.1016 FAU .02963
                                                                      SGB 5654.8 R23 .0211 R13 -.9446
SGI 5640.0 SGZ 409.8 THA 178.24
                                                                                                                            LSA 3405.3 MSA 158.1 SSA 19.7
    FOE -.9406 FRA .9306 FC3-1.6092 8SP 17784
BDE 2.2417 BRA 1.2751 BC3 5.1410 FSP -695
                                                                                                                            EL1 3284.0 EL2 99.8 ALF 172.57
                                                                                                                                       ARRIVAL DATE JAN 5 1968
                                                                          FLIGHT TIME 186.00
LAUNCH DATE JUL 3 1967
                                                                          DISTANCE 537.525
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.903 GAL 3.58 AZL 93.30 MCA 261.67 SMA 123.55 ECC .23889 INC 3.3032 VI 29.291
RP 107.74 LAP 3.27 LOP 182.05 VP 37.275 GAP 11.74 AZP 89.52 TAL 168.44 TAP 70.11 RCA 94.04 APO 153.07 V2 35.172
RC 163.875 GL -21.25 GP 6.74 ZAL 67.11 ZAP 167.91 ETS 32.00 ZAE 128.41 ETE 174.93 ZAC 72.22 ETC 11.33 CLP-169.94
   PLANETOCENTRIC CONIC
    C3 16.898 VML 4.111 DLA -33.06 RAL 204.46 RAC 6567.7 VEL 11.759 PTH 2.08 VMP 7.565 DPA
                                                                                                                                   4.16 RAP 195.13 ECC 1.2781
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.18 10 0 29 1287.81 23.82 355.48 71.73 113.63 10 21 57 687.8 26.81 347.69
107.82 14 32 51 5706.06 23.83 268.75 71.74 113.61 16 7 57 5106.1 26.82 260.95
                                                                                               113.63 10 21 57
113.63 10 21 57
113.63 10 21 57
113.61 16 7 57
113.61 16 7 57
119.40 15 17 49
107.88 17 23 31
                                                                                                                                 687.6
                                                                                                                                                 26.81
                                  1287.81
                                                     23.82
                                                                   355.48
                                                                                   71.73
        72.18
                    10 0 29
                                                                                                                                                               260.95
                                                                                                                                5106.1
                                                                                                                                                 26.82
                   14 32 51 5706.06
                                                    23.83
                                                                  268.75
                                                                                   71.74
                    13 40 1 5868.52
15 52 30 5461.39
                                                                                                                                5268.5
                                                                                                                                                 22.05
                                                                                                                                                               271.25
       110.00
                    13 40 1
                                                     18.27
                                                                   278.35
                                                                                   68.77
                                                                                                                                4861.4
                                                                                                                                                 31.79
                                                    29.63
                                                                  252.26
                                                                                   74.19
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      ST 3210.7 SR 443.9 SS 873.3

CRT -.9658 CRS .9221 CST -.9905

LSA 3352.7 MSA 164.2 SSA 19.3

EL1 3239.2 EL2 114.1 ALF 172.38
    TDE-2.2367 TRA 1.5196 TC3-4.8892 BAU 1.1047
    RDE .3184 RRA .0180 RC3 -.0914 FAU .02751
FOE -.8913 FRA .9828 FC3-1.4093 BSP 17966
BOE 2.2593 BRA 1.5197 BC3 4.8900 FSP -671
                                                                                                                                       ARRIVAL DATE JAN 7 1968
LAUNCH DATE JUL 3 1967
                                                                           FLIGHT TIME 188.00
                                                                          DISTANCE 543.105
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 25.859 GAL 4.13 AZL 93.22 MCA 264.90 SMA 123.29 ECC .24389 INC 3.2242 V1 29.291
RP 107.78 LAP 3.21 LOP 185.29 VP 37.235 GAP 12.16 AZP 89.71 TAL 166.96 TAP 71.85 RCA 93.22 APO 153.36 V2 35.162
RC 165.860 GL -19.97 GP 6.48 ZAL 64.26 ZAP 168.83 ETS 33.50 ZAE 128.32 ETE 175.13 ZAC 70.06 ETC 11.20 CLP-170.88
   PLANETOCENTRIC CONIC
                                                                                                                                    2.99 RAP 197.10 ECC 1.2968
    C3 18.037 VHL 4.247 DLA -32.90 RAL 208.00 RAD 6567.7 VEL 11.808 PTH 2.09 VHP 7.796 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.91
                                                                                                                                                 26.33
                                                                                                              10 36 13
                                                                                                                                  696.6
                                                                                    76.24
        72.50
                    10 16 37 1296.64
                                                     23.30
                                                                   355.91
                                                                                                  113.90
                                                                                                              16 20 22
                                                                                                                                 5127.5
                                                                                                                                                 26.34
                                                                                    76.25
       107.50
                    14 44 54
                                   5727.46
                                                     23.31
                                                                   270.15
                                                                                                  113.91
                                                                                                               10 36 13
                                                                                                                                  696.6
                                                                                                                                                 26.33
        72.50
                    10 16 37
                                  1296.64
                                                     23.30
                                                                   355.91
                                                                                    76.24
                                                                                                  113.90
                                                                                    76.25
                                                                                                             16 20 22
                                                                                                                                 5127.5
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       107.50
                    14 44 54
                                  5727.46
                                                    23.31
                                                                   270.15
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107.93 17
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                    13 49 42
                                                                                    72.00
       110.00
                                     609.38
                                                     17.30
                                                                   302.12
                    16 10 59 5462.72
                                                                                                              17 42 2
                                                                                                                                 4862.7
                                                                                    76.93
       110.00
                                                     29.60
                                                                   252.36
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 5717.8 SCR 456.3 SC3 195.8
RRT -.3991 RRF -.3952 RTF .9466
SC8 5736.0 R23 .0168 R13 -.9467
                                                                                                                          ST 3151.4 SR 451.0 SS 837.0
CRT -.9577 CRS .9101 CST -.9905
LSA 3287.1 MSA 171.9 SSA 18.7
    TDE-2.2462 TRA 1.7777 TC3-4.6127 BAU 1.1125
    RDE .3343 RRA .0125 RC3 -.0804 FAU .02549
FDE -.8434 FRA 1.0340 FC3-1.2234 BSP 18133
BDE 2.2709 BRA 1.7777 BC3 4.6134 FSP -649
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FLIGHT TIME 182.00

SG1 5720.7 SG2 418.4 THA 178.17

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FLIGHT TIME 190.00
                                                                                                                                                       ARRIVAL CATE JAN 9 1968
LAUNCH DATE JUL 3 1967
                                                                                   DISTANCE 548.637
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 25.816 GAL 4.71 AZL 93.15 MCA 268.12 SMA 123.04 ECC .24928 INC 3.1461 VI 29.291 RP 107.81 LAP 3.14 LOP 188.52 VP 37.194 GAP 12.59 AZP 89.90 TAL 165.48 TAP 73.61 RCA 92.37 APO 153.71 V2 35.151 RC 167.829 GL -18.71 GP 6.25 ZAL 61.48 ZAP 169.71 ETS 35.35 ZAE 128.23 ETE 175.31 ZAC 67.88 ETC 11.11 CLP-171.81
    PLANETOCENTRIC CONIC
    C3 19.379 VHL 4.402 DLA -32.68 RAL 211.42 RAD 6567.8 VEL 11.864 PTH 2.10 VHP 8.039 DPA 1.83 RAP 199.09 ECC 1.3189 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              10 33 16 1304.21
14 55 34 5753.62
                                                                                                                                                 704.2
                                                                                                                                                                  25.75
         72.97
                                                           22.69
                                                                           356.20
                                                                                                                                                                                 348.51
        107.03
                                                           22.70
                                                                           271.86
                                                                                                                                                5153.6
                                                                                                                                                                  25.77
                                                                                                                                                                                  264.17
                     10 33 16
                                                                                                                                                 704.2
         72.97
                                       1304.21
                                                           22.69
                                                                           356.20
                                                                                                                                                                  25.75
                                                                                                                                                                                  348.51
        107.03
                      14 55 34
                                      5753.62
                                                          22.70
                                                                           271.86
                                                                                                                                                5153.6
                                                                                                                                                                  25.77
                                                                                                                                                                                 264.17
                     13 57 28
        110.00
                                         544.79
                                                          16.08
                                                                           304.14
                                                                                                                                                 44 A
                                                                                                                                                                  20.02
                                                                                                                                                                                  297.23
        110.00
                     16 30 33 5461.04
                                                           29.64
                                                                          252.24
                                                                                                                                                4861.0
                                                                                                                                                                  31.79
                                                                                                                                                                                 243.69
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 5749.4 SCR 460.9 SC3 186.2

RRT -.4070 RRF -.4016 RTF .9477

SCB 5767.8 R23 .0150 R13 -.9477

SCI 5752.5 SC2 420.8 THA 178.12
                                                                                                                                          5T 3080.3 SR 456.8 SS 801.0
CRT -.9485 CRS .8969 CST -.9905
     TOE-2.2493 TRA 2.0500 TC3-4.3156 BAU 1.1182
    RDE .3510 RRA .0055 RC3 -.0693 FAU .02352
    FOE -.7969 FRA 1.0846 FC3-1.0509 BSP 18282
BOE 2.2766 BRA 2.0500 BC3 4.3161 FSP -627
                                                                                                                                          LSA 3210.2 MSA 180.7 SSA 18.1
                                                                                                                                           ELI 3110.7 EL2 143.2 ALF 171.98
                                                                                    FLIGHT TIME 192.00
                                                                                                                                                        ARRIVAL DATE JAN 11 1968
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 554.117
    RL 152.10 LAL -.00 LOL 280.40 VL 25.774 GAL 5.32 AZL 93.07 HCA 271.35 SHA 122.79 ECC .25512 INC 3.0684 VI 29.291
RP 107.84 LAP 3.07 LOP 191.75 VP 37.154 GAP 13.06 AZP 90.07 TAL 164.01 TAP 75.36 RCA 91.46 APO 154.12 V2 35.139 -
RC 169.783 GL -17.46 GP 6.03 ZAL 58.78 ZAP 170.56 ETS 37.63 ZAE 128.15 ETE 175.46 ZAC 65.70 ETC 11.06 CLP-172.73
   PLANETOCENTRIC CONIC
    C3 20.951 VHL 4.577 DLA -32.39 RAL 214.72 RAD 6567.9 VEL 11.930 PTH
                                                                                                                  2.12 VHP 8.298 OPA
                                                                                                                                                       .71 RAP 201.10 ECC 1.3448
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ABC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          114.41 11 12 17
114.40 16 41 9
114.41 11 12 17
114.40 16 41 9
121.23 14 15 8
107.74 18 21 36
        73.58
                      10 50 26 1310.40
                                                           21.98
                                                                          356.33
                                                                                          85.19
                                                                                                                                                710.4
                                                                                                                                                                 25.09
                                                                                                                                                                                 348.70
        106.42
                      15 4 45 5784.59
                                                           21.99
                                                                           273.89
                                                                                             85.20
                                                                                                                                                5184.6
                                                                                                                                                                  25.10
                                                                                                                                                                                  266.26
        73.58
                      10 50 26
                                       1310.40
                                                           21.98
                                                                           356.33
                                                                                             85.19
                                                                                                                                                 710.4
                                                                                                                                                                  25.09
                                                                                                                                                                                  348.70
                    15 4 45 5784.59
14 3 43 685.29
       106.42
                                                           21.99
                                                                           273.89
                                                                                             85.20
                                                                                                                                                5184.6
                                                                                                                                                                  25.10
                                                                                                                                                                                  266.26
       110.00
                                        685.29
                                                           14.67
                                                                           306.43
                                                                                             81.13
                                                                                                                                                 85.3
                                                                                                                                                                  18.70
                                                                                                                                                                                  299.63
       110.00
                     16 50 39
                                      5457.71
                                                           29.71
                                                                           252.01
                                                                                            88.50
                                                                                                                                               4857.7
                                                                                                                                                                  31.84
                                                                                                                                                                                  243.45
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5773.2 SGR 464.2 SG3 180.9

RRT -.4157 RRF -.4086 RTF .9486

SGB 5791.9 R23 .0133 R13 -.9486

SGI 5776.5 SG2 421.9 THA 178.08
                                                                                                                                          ST 2997.1 SR 461.0 SS 765.0

CRT -.9380 CRS .8818 CST -.9903

LSA 3121.5 MSA 191.0 SSA 17.5

EL1 3028.2 EL2 158.2 ALF 171.77
    TOE-2.2436 TRA 2.3405 TC3-3.9996 BAU 1.1204
    ROE .3683 RRA -.0031 RC3 -.0587 FAU .02154
    FOE -.7505 FRA 1.1364 FC3 -.8902 BSP 18330
    BOE 2.2736 BRA 2.3405 BC3 4.0000 FSP
                                                             -602
                                                                                   FLIGHT TIME 194.00
                                                                                                                                                       ARRIVAL DATE JAN 13 1968
LAUNCH DATE JUL 3 1967
                                                                                   DISTANCE 559.535
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 25.731 GAL 5.96 AZL 92.99 MCA 274.57 SMA 122.54 ECC .26143 INC 2.9904 VI 29.291
RP 107.88 LAP 2.98 LOP 194.98 VP 37.113 GAP 13.54 AZP 90.24 TAL 162.54 TAP 77.12 RCA 90.51 APO 154.58 VZ 35.128
RC 171.722 GL -16.24 GP 5.84 ZAL 56.18 ZAP 171.38 ETS 40.42 ZAE 128.06 ETE 175.60 ZAC 63.50 ETC 11.04 CLP-173.64
   PLANETOCENTRIC CONIC
     C3 22.782 VHL 4.773 DLA -32.05 RAL 217.89 RAD 6567.9 VEL 12.007 PTH 2.14 VHP 8.573 DPA
                                                                                                                                                   -.40 RAP 203.12 ECC 1.3749
    C3 22.782 VHL 4.773 DLA -32.05 RAL 217.89 RAD 6567.9 VEL 12.007 PTH 2.14 VHP 8.573 DPA -.40 RAP 203.12 ECC 1.3749 LNCH AZHTH LNCH TIME L-| TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.33 11 8 5 1314.99 21.19 356.29 89.60 114.61 16 49 21 5220.5 24.34 268.68 74.33 11 8 5 1314.99 21.19 356.29 89.60 114.61 16 49 21 5220.5 24.34 268.68 105.67 15 12 20 5820.51 21.20 276.24 89.60 114.62 11 30 0 715.0 24.33 348.73 105.67 15 12 20 5820.51 21.20 276.24 89.60 114.61 16 49 21 5220.5 24.34 268.68 110.00 14 8 46 729.67 13.09 308.89 85.05 121.86 14 20 55 129.7 17.20 302.20 110.00 17 10 51 5453.83 29.79 251.73 93.27 107.60 18 41 44 4853.8 31.90 243.16
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SCT 5796.2 SCR 466.6 SC3 174.0
RRT -.4263 RRF -.4178 RTF .9498
SC8 5814.9 R23 .0118 R13 -.9499
SCI 5799.6 SC2 421.8 THA 178.02
                                                                                                                                         ST 2912.3 SR 464.0 SS 732.4

CRT -.9264 CRS .8661 CST -.9903

LSA 3031.9 MSA 201.4 SSA 16.8

EL1 2944.0 EL2 172.8 ALF 171.58
     TDE-2.2369 TRA 2.6425 TC3-3.6859 BAU 1.1228
     RDE .3865 RRA -.0131 RC3 -.0483 FAU .01975
    FOE -.7085 FRA 1.1860 FC3 -.7504 BSP 18462
    BOE 2.2701 BRA 2.6425 BC3 3.6862 FSP -582
                                                                                                                                                       ARRIVAL DATE JAN 15 1968
LAUNCH DATE JUL 3 1967
                                                                                   FLIGHT TIME 196.00
                                                                                   DISTANCE 564.886
    RL 152.10 LAL -.00 LOL 280.40 VL 25.689 GAL 6.65 AZL 92.91 MCA 277.80 SMA 122.30 ECC .26827 INC 2.9118 V1 29.291 RP 107.92 LAP 2.88 LOP 198.21 VP 37.073 GAP 14.05 AZP 90.40 TAL 161.09 TAP 78.89 RCA 89.49 APO 155.11 V2 35.116 RC 173.647 GL -15.05 GP 5.66 ZAL 53.69 ZAP 172.15 ETS 43.87 ZAE 127.97 ETE 175.73 ZAC 61.30 ETC 11.06 CLP-174.55
   PLANETOCENTRIC CONIC
    C3 24.912 VHL 4.991 DLA -31.65 RAL 220.91 RAD 6568.0 VEL 12.095 PTH 2.16 VHP 8.866 DPA -1.48 RAP 205.17 ECC 1.4100
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ 2 LAT INJ 2 LONG
                                                                                                          114.80 11 48 10
114.79 16 56 0
114.60 11 48 10
114.79 16 56 0
114.79 16 56 0
122.45 14 25 50
107.47 19 1 38
                                                                                                                                                 717.9
                                                                                                                                                                 23.50
                                                                                                                                                                                 348.58
        75.23 11 26 12 1317.89
                                                           20.33
                                                                          356.08
                                                                                            93.95
                                                                                                                                                                                 271.42
                                                                                                                                                5261.4
                                                                                                                                                                  23.52
        104.77
                      15 18 19
                                       5861.36
                                                           20.34
                                                                          278.92
                                                                                             93.95
                    11 26 12
                                                                                                                                                 717.9
                                       1317.89
                                                           20.33
                                                                          356.08
                                                                                             93.95
                                                                                                                                                                  23.50
                                                                                                                                                                                 348.58
                      15 18 19
                                       5861.36
                                                           20.34
                                                                          278.92
                                                                                             93.95
                                                                                                                                               5261.4
                                                                                                                                                                  23.52
                                                                                                                                                                                 271.42
        104.77
                     14 12 55
                                                                                                                                                177.0
                                                                                                                                                                  15.57
                                                                                                                                                                                 304.90
                                        776.97
                                                           11.37
                                                                          311.48
                                                                                            88.87
        110.00
                                                                                                                                               4850.3
                                                                                                                                                                  31.96
                                                                                                                                                                                 242.90
        110.00
                      17 30 48
                                      5450.27
                                                           29.86
                                                                          251.48
                                                                                             98.01
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 2824.0 SR 465.3 SS 702.2
CRT -.9136 CRS .8493 CST -.9903
LSA 2939.3 MSA 212.1 SSA 16.2
                                                                        SCT 5813.6 SCR 467.9 SC3 167.5
RRT -.4377 RRF -.4281 RTF .9513
SCB 5832.4 R23 .0106 R13 -.9513
     TOE-2.2260 TRA 2.9612 TC3-3.3706 BAU 1.1227
    RDE .4052 RRA -.0246 RC3 -.0367 FAU .01801
FDE -.6691 FRA 1.2358 FC3 -.6260 85P 18578
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SG1 5817.2 SG2 420.5 THA 177.97

ELI 2856.0 EL2 187.1 ALF 171.40

BOE 2.2626 BRA 2.9613 BC3 3.3709 FSP -562

ARRIVAL DATE JAN 17 1968

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FLIGHT TIME 198.00
LAUNCH DATE JUL 3 1967
                                                                       DISTANCE 570.160
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.648 CAL 7.37 AZL 92.83 MCA 281.02 SMA 122.06 ECC .27570 INC 2.8321 V1 29.291.
RP 107.96 LAP 2.78 LOP 201.43 VP 37.033 CAP 14.60 AZP 90.54 TAL 159.65 TAP 80.67 RCA 88.41 APO 155.71 V2 35.103
RC 175.555 GL -13.90 GP 5.50 ZAL 51.31 ZAP 172.87 ETS 48.14 ZAE 127.87 ETE 175.83 ZAC 59.09 ETC 11.12 CLP-175.46
  PLANETOCENTRIC CONIC
                                                                                                 2.19 VHP 9.180 DPA -2.54 RAP 207.22 ECC 1.4506
    C3 27.382 VHL 5.233 OLA -31.22 RAL 223.77 RAD 6568.1 VEL 12.197 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           114.95 12 6 53
114.94 15 32 47
114.95 12 6 53
114.95 12 6 53
114.94 15 32 47
122.98 14 30 3
107.37 19 21 4
                                                                               98.22
                                                                                                                            718.4
                                                                                                                                           22.60
                                                                                                                                                        348.23
                                                                355.67
       76.27
                  11 44 55 1318.39
15 22 27 619.63
                                                   19.40
                                                                                                                                                         296.62
                                                                                                                              19.6
                                                                                                                                            22.61
                                                                                98.23
      103.73
                                                   19.42
                                                                304.06
                                                                               98.22
                                                                                                                             718.4
                                                                                                                                           22.60
                                                                                                                                                         348.23
                 11 44 55
                                                                355.67
       76.27
                                1318.39
                                                  19.40
                                                                                                                                                         296.62
                                                19.42
                                                                                                                             19.5
                                                                                                                                           22.61
      103.73
                   15 22 27
                                   619.63
                                                                304.06
                                                                               98.23
                                                                314.16
                 14 16 17
                                                                                                                             226.4
                                                                                                                                           13.83
                                                                                                                                                         307.67
                                 826.43
                                                   9.55
                                                                               92.60
      110.00
                   17 50 16 5447.63
                                                                                                                           4847.6
                                                                                                                                          32.00
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                                                                              102.69
                                                 29.91
                                                                251.29
      110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5825.6 SGR 468.2 SG3 161.2
RRT -.4498 RRF -.4590 RTF .9527
SGB 5844.4 R23 .0092 R13 -.9528
SGI 5829.4 SG2 417.8 TMA 177.92
                                                                                                                       ST 2733.9 SR 464.8 SS 674.3
CRT -.8994 CRS .8311 CST -.9903
    TDE-2:2108 TRA 3.2983 TC3-3.0582 BAU 1.1196
   RDE .4243 RRA -.0376 RC3 -.0303 FAU .01632
FDE -.6316 FRA 1.2865 FC3 -.5160 8SP 18670
BDE 2.2512 BRA 5.2965 BC3 3.0584 FSP -543
                                                                                                                       LSA 2845.1 MSA 223.0 SSA 15.5
                                                                                                                       EL1 2765.8 EL2 200.9 ALF 171.26
                                                                                                                                  ARRIVAL DATE JAN 19 1968
                                                                        FLIGHT TIME 200.00
  HELIOCENTRIC CONIC
                                                                        DISTANCE 575.345
   RL 152.10 LAL -.00 LOL 280.40 VL 25.607 GAL 8.13 AZL 92.75 MCA 284.23 SMA 121.82 ECC .28379 INC 2.7506 V1 29.291
RP 107.99 LAP 2.67 LOP 204.65 VP 36.992 GAP 15.18 AZP 90.68 TAL 158.23 TAP 82.46 RCA 87.25 APO 156.40 V2 35.091
RC 177.448 GL -12.78 GP 5.35 ZAL 49.04 ZAP 173.53 ETS 53.42 ZAE 127.76 ETE 175.93 ZAC 56.88 ETC 11.22 CLP-176.36
  PLANETOCENTRIC CONIC
                                                                                                                              -3.58 RAP 209.28 ECC 1.4978
   C3 30.247 VHL 5.500 DLA -30.75 RAL 226.48 RAD 6568.2 VEL 12.313 PTH 2.22 VHP 9.517 DPA
   LNCH AZMTH LNCH TIME L-I, TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             716.2
                                                                                            115.07 12 26 14
                                                                                                                                            21.64
                   12 4 18 1316.18
                                                   18.42
                                                                355.01
                                                                             102.42
       77.48
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                                                                                                                                            21.66
                                                                                                                                                          300.10
                   15 24 41
                                  671.56
                                                   18.44
                                                                307.48
                                                                               102.43
                                                                                              115.06
      102.52
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                                                                                                         12 26 14
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                   12 4 18
                                 1316.18
                                                   18.42
                                                                355.01
                                                                               102.42
       77.48
                                                                                              115.06 15 35 53
123.42 14 33 42
107.32 19 39 51
                 15 24 41 671.56
14 19 4 877.49
                                                18.44
                                                                                                                               71.6
                                                                                                                                            21.66
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                                                                307.48
                                                                               102.43
      102.52
                                                                                                                             277.5
                                                                                                                                            11.99
                                                                                                                                                         310.46
                                                    7.65
                                                                316.89
                                                                                96.24
      110.00
                                5446.29
                                                                                                                                                         242.60
                                                                                                                           4846.3
                                                                                                                                            32.02
                  18 9 5
                                                   29.94
                                                                251.20
                                                                              107.31
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5831.8 SGR 467.2 SG3 155.3
RRT -.4622 RRF -.4503 RTF .9543
SGB 5850.5 R23 .0079 R13 -.9543
SGI 5835.8 SG2 414.0 THA 177.87
                                                                                                                       ST 2642.4 SR 462.5 SS 648.7
CRT -.8833 CRS .8112 CST -.9904
    TOE-2.1898 TRA 3.6577 TC3-2.7493 BAU 1.1118
    ROE .4436 RRA -.0525 RC3 -.0232 FAU .01462
                                                                                                                       LSA 2749.9 MSA 233.8 SSA
   FOE -.5955 FRA 1.3393 FC3 -.4184 BSP 18670
BOE 2.2343 BRA 3.6581 BC3 2.7494 FSP -521
                                                                                                                                                             14.9
                                                                                                                       ELI 2674.0 EL2 214.2 ALF 171.15
                                                                                                                                  ARRIVAL DATE JAN 21 1968
                                                                        FLIGHT TIME 202.00
LAUNCH DATE JUL 3 1967
                                                                       DISTANCE 580.427
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.567 GAL 8.95 AZL 92.67 MCA 287.45 8MA 121.59 ECC .29260 INC 2.6669 V1 29.291
RP 108.03 LAP 2.54 LOP 207.87 VP 36.952 GAP 15.80 AZP 90.80 TAL 156.83 TAP 84.28 RCA 86.02 APO 157.17 V2 35.078
RC 179.325 GL -11.70 GP 5.21 ZAL 46.89 ZAP 174.12 ETS 59.95 ZAE 127.64 ETE 176.02 ZAC 54.69 ETC 11.37 CLP-177.27
   PLANETOCENTRIC CONIC
    C3 33.569 VHL 5.794 DLA -30.26 RAL 229.03 RAD 6568.3 VEL 12.448 PTH 2.25 VHP 9.880 DPA -4.59 RAP 211.36 ECC 1.5525
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           115.16 12 46 32
115.15 15 36 48
115.16 12 46 32
115.15 15 36 48
123.76 14 36 52
107.33 19 57 54
                                                                                                                          709.9
                                                                                                                                         20.64
                                                                354.04
                                                                             106.53
                  12 24 42 1309.95
                                                  17.39
       78.87
                                                                                                                                                         304.05
                                                                                                                                            20.65
                                                                                                                             130.2
                   15 24 37
                                   730.23
                                                   17.41
                                                                311.37
                                                                               106.54
      101.13
                                                                                                                                                         346.72
                                                                                                                                           20.64
                                1309.95
                                                                                                                             709.9
                                                                               106.53
       78.87
                  12 24 42
                                                   17.39
                                                                354.04
                                                17.41
                                                                                                                                                         304.05
                                                                                                                                           20.65
                                                                                                                             130.2
                  15 24 37
                                 730.23
                                                                311.37
                                                                               106.54
      101.13
                                                                                                                                                         313.32
                                                                                                                                           10.08
                  14 21 22
                                   929.74
                                                    5.68
                                                                319.65
                                                                                99.80
                                                                                                                             329.7
      110.00
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                                                                                                                                                         242.62
                   18 27 8
                                5446.48
                                                                               111.84
                                                                                                                           4846.5
                                                   29.94
                                                                251.21
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   RET -,4754 RRF -.4628 RTF ..9562
SGB 5653.0 R23 .0068 R13 -.9562
SGI 5838.7 SGZ 408.9 THA 177.82
                                                                                                                       ST 2556.1 SR 458.7 SS 627.0
CRT -.8664 CRS .7914 CST -.9907
LSA 2660.4 MSA 243.6 SSA 14.4
    TDE-2.1704 TRA 4.0340 TC3-2.4568 BAU 1.1026
   RDE .4832 RRA -.0687 RC3 -.0170 FAU .01305
FDE -.5637 FRA 1.3920 FC3 -.3365 BSP 18744
                                                                                                                        EL1 2587.0 EL2 226.3 ALF 171.09
    BDE 2.2193 BRA 4.0346 BC3 2.4569 FSP -504
                                                                                                                                   ARRIVAL DATE JAN 23 1968
LAUNCH DATE JUL 3 1967
                                                                        FLIGHT TIME 204.00
                                                                        DISTANCE 585.391
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 280.40 VL 25.527 GAL 9.82 ATL 92.58 MCA 290.66 SMA 121.37 ECC .30223 INC 2.5802 V1 29.291
RP 108.07 LAP 2.41 LOP 211.08 VP 36.912 GAP 16.46 AZP 90.91 TAL 155.47 TAP 86.12 RCA 84.69 APO 158.05 V2 35.065
RC 181.185 GL -10.67 GP 5.09 ZAL 44.86 ZAP 174.60 ETS 67.91 ZAE 127.51 ETE 176.10 ZAC 52.50 ETC 11.56 CLP-178.19
  PLANETOCENTRIC CONIC
    C3 37.425 VHL 6.118 DLA -29.74 RAL 231.42 RAD 6568.5 VEL 12.601 PTH 2.29 VMP 10.272 DPA -5.57 RAP 213.43 ECC 1.6159
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               1297.84
                                                                            110.56
                                                                                                                                         19.59
                                                                                                                             697.8
                                                                                            115.21 13 8 16
115.20 15 35 2
       80.51 12 46 38
                                                  16.32
                                                                352.62
                                                                                                                                            19.60
                                                                                                                             197.3
        99.49
                  15 21 45
                                   797.27
                                                    16.34
                                                                 315.83
                                                                               110.57
                                                                                                          15 14 42
                                                                                                                                                          312.68
                                                                                                                             265.9
                                                                                                                                            17.47
                 15 0 16
                                                   14.00
                                                                 319.75
                                                                               109.39
                                                                                               116.68
      100.00
                                   865.93
                                                                                                                                          21.75
                                                                                               302.59
                   15 50 49
                                    704.40
                                                  18.70
                                                                 310.06
                                                                               111.69
                                                                                                                             104.4
      100.00
                                                                                                                                             8.10
                                                                                                                                                          316.17
                                                                                                                             362.6
                  14 23 13
                                    982.83
                                                    3.66
                                                                 322.44
                                                                               103.28
                                                                                                                                          31.99
                                5448.32
                                                                                                                            4848.3
                   18 44 20
                                                   29.90
                                                                251.34
                                                                               116.30
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2473.6 SR 453.2 SS 608.4

CRT -.8483 CRS .7712 CST -.9910

LSA 2574.9 MSA 252.4 SSA 13.6

EL1 2503.5 EL2 237.1 ALF 171.09
                                                                   SGT 5832.4 SGR 462.1 SG3 144.4
RRT -.4891 RRF -.4759 RTF .9582
SG8 5850.6 R23 .0057 R13 -.9583
    TDE-2.1499 TRA 4.4332 TC3-2.1772 BAU 1.0894
    RDE .4829 RRA -.0866 RC3 -.0120 FAU .01152
FDE -.5346 FRA 1.4466 FC3 -.2664 BSP 18807
                                                                    SG1 5836.8 8G2 402.7 THA 177.77
    BOE 2.2035 BRA 4.4340 BC3 2.1772 FSP -487
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ARRIVAL DATE JAN 25 1968
                                                                                FLIGHT TIME 206.00
LAUNCH DATE JUL 3 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 590.215
    RL 152.10 LAL -.00 LOL 280.40 VL 25.487 GAL 10.75 AZL 92.49 MCA 293.87 SMA 121.15 ECC .31277 INC 2.4898 V1 29.291
RP 108.11 LAP 2.28 LOP 214.29 VP 36.873 GAP 17.18 AZP 91.01 TAL 154.13 TAP 88.00 RCA 83.25 APO 159.04 V2 35.052
RC 183.028 GL -9.67 GP 4.98 ZAL 42.95 ZAP 174.95 ETS 77.38 ZAE 127.36 ETE 176.17 ZAC 50.32 ETC 11.80 CLP-179.12
   PLANETOCENTRIC CONIC
     C3 41.910 VHL 6.474 OLA -29.21 RAL 233.65 RAO 6568.6 VEL 12.778 PTH 2.32 VHP 10.698 DPA -6.52 RAP 215.51 ECC 1.6897
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    115.23 13 32 33
115.22 15 29 31
118.24 14 57 14
112.36 16 38 46
124.15 14 41 58
107.53 20 31 33
                                                                                                                                                      18.50
                                                                                                                                     675.9
         82.52 13 11 17 1275.93
                                                       15,23
                                                                       350.46 114.49
                                                                                                                                                                         343.25
                     15 14 54
                                      876.34
                                                        15.24
                                                                       321.15
                                                                                       114.50
                                                                                                                                          276.3
                                                                                                                                                          18.52
                                                                                                                                                                         313.94
         97.48
                                     985.76
                                                                                     111.91
                                                                                                                                                                         319.81
        100.00
                   14 40 48
                                                       10.23
                                                                       326.65
                                                                                                                                          385.8
                                                                                                                                                          13.93
       100.00
                    16 28 5
                                       641.74
                                                        20.37
                                                                       306.16
                                                                                       116.87
                                                                                                                                           41.7
                                                                                                                                                          23.22
                                                                                                                                                                         298.52
                   14 24 41 1036.49
                                                                                                                                         436.5
                                                                                                                                                         6.09
31.93
                                                                                                                                                                         319.01
                                                          1.62
                                                                       325.24
                                                                                     106.67
                                                                                                                                                                         243.01
                                                                       251.59
                                                                                                                                       4851.8
       110.00
                    19 0 41
                                     5451.82
                                                        29.83
                                                                                       120.65
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SGT 5825.6 SGR 457.8 SG3 139.3
RRT -.5030 RRF -.4894 RTF .9605
SG8 5843.5 R23 .0046 R13 -.9605
SG1 5830.2 SG2 395.3 THA 177.73
                                                                                                                                    ST 2395.5 SR 446.0 SS 593.0
CRT -.8290 CRS .7508 CST -.9915
    TOE-2.1289 TRA 4.8573 TC3-1.9123 BAU 1.0714
    ROE .5026 RRA -.1060 RC3 -.0082 FAU .01002
    FOE -.5082 FRA 1.5037 FC3 -.2070 BSP 18848
BOE 2.1874 BRA 4.8584 BC3 1.9123 FSP -471
                                                                                                                                   LSA 2494.3 MSA 259.9 SSA 13.3
                                                                                                                                    EL1 2424.2 EL2 246.5 ALF 171.13
                                                                                FLIGHT TIME 208.00
                                                                                                                                                 ARRIVAL DATE JAN 27 1968
   HELIOCENTRIC CONIC
                                                                               DISTANCE 594.877
    RL 152.10 LAL -.00 LOL 280.40 VL 25.449 GAL 11.76 AZL 92.39 MCA 297.08 8MA 120.93 ECC .32434 INC 2.3949 V1 29.291
RP 108.16 LAP 2.13 LOP 217.50 VP 36.833 GAP 17.96 AZP 91.09 TAL 152.84 TAP 89.91 RCA 81.71 APO 160.15 V2 35.039
RC 184.853 GL -8.72 GP 4.87 ZAL 41.17 ZAP 175.13 ETS 88.10 ZAE 127.19 ETE 176.24 ZAC 48.16 ETC 12.10 CLP 179.94
   PLANETOCENTRIC CONIC
         47.137 WHL 6.866 DLA -28.67 RAL 235.73 RAD 6568.8 VEL 12.981 PTH
                                                                                                             2.37 VHP 11.162 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     115.21 14 2 56
115.20 15 16 40
119.06 14 48 50
111.66 17 4 43
124.18 14 43 58
107.72 20 47 5
                                    1231.88
                                                        14.12
                                                                       346.68
                                                                                     116.32
                                                                                                                                          631.9
                                                                                                                                                        17.40
        85.34
                    13 42 24
                                                                                                                                                                          339.51
                   15 0 21
                                                                       328.20
                                                                                       118.33
                                                                                                                                          379.5
                                       979.50
                                                       14.13
                                                                                                                                                                          321.03
                    14 30 56 1074.37
                                                                                       114.79
                                                                                                                                          474.4
                                                          7.34
                                                                       351.64
                                                                                                                                                           11.16
                                                                                                                                                                          324.93
                   16 54 31
                                                                                      121.51
                                                       21.12
                                                                        304.29
                                                                                                                                           12.3
                                                                                                                                                         23.87
                                                                                                                                                                          296.58
       100.00
                                     612.25
                     14 25 48
                                    1090.49
                                                          -.45
                                                                       328.06
                                                                                       109.99
                                                                                                                                          490.5
                                                                                                                                                           4.04
                                                                                                                                                                          321.85
       110.00
                   19 16 8 5456.93
                                                        29.72
                                                                       251.95
                                                                                                                                         4856.9
                                                                                                                                                         31.85
                                                                                                                                                                         243.39
       110.00
                                                                                       124.91
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SCT 5814.3 SCR 452.2 SC3 134.5

RRT -.5168 RRF -.5029 RTF .9629

SC8 5831.8 R23 .0036 R13 -.9629

SC1 5819.0 SC2 386.8 THA 177.69
                                                                                                                                    ST 2320.1 SR 437.2 SS 580.1
CRT -.8081 CRS .7291 CST -.9921
    TOE-2.1029 TRA 5.3130 TC3-1.6591 BAU 1.0455
    RDE .5220 RRA -.1273 RC3 -.0056 FAU .00847
    FOE -.4828 FRA 1.5653 FC3 -.1557 BSP 18095
                                                                                                                                   LSA 2416.5 MSA 266.5 SSA 12.8
    BOE 2.1666 BRA 5.3145 BC3 1.6591 FSP -452
                                                                                                                                    ELI 2347.2 EL2 254.6 ALF 171.24
                                                                               FLIGHT TIME 210.00
                                                                                                                                               ARRIVAL DATE JAN 29 1968
LAUNCH DATE JUL 3 1967
                                                                              DISTANCE 599.343
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 25.411 GAL 12.84 AZL 92.29 MCA 300.28 SMA 120.72 ECC .33709 INC 2.2945 V1 29.291
RP 108.20 LAP 1.98 LOP 220.70 VP 36.795 GAP 18.81 AZP 91.16 TAL 151.60 TAP 91.88 RCA 80.03 APO 161.41 V2 35.025
RC 186.660 GL -7.81 GP 4.78 ZAL 39.51 ZAP 175.11 ETS 99.44 ZAE 126.99 ETE 176.30 ZAC 46.03 ETC 12.45 CLP 178.97
   PLANETOCENTRIC CONIC
    C3 53.249 VHL 7.297 DLA -28.12 RAL 237.65 RAO 6568.9 VEL 13.214 PTH 2.41 VHP 11.670 DPA -8.32 RAP 219.66 ECC 1.8763
    C3 53.249 VHL 7.297 DLA -28.12 RAL 237.65 RAO 6568.9 VEL 13.214 PTH 2.41 VHP 11.670 DPA -8.32 RAP 219.66 ECC 1.8763 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 58 39 1039.96 15.81 333.42 123.37 113.80 15 15 59 440.0 18.69 326.10 100.00 14 24 2 1152.58 4.73 335.98 117.73 119.55 14 43 14 552.6 8.63 329.36 110.00 17 16 44 5882.84 21.55 281.08 125.89 111.23 18 54 47 5282.8 24.25 273.32 110.00 14 26 33 1144.64 -2.52 330.89 113.24 124.10 14 45 38 544.6 1.97 324.68 110.00 19 30 41 5463.54 29.59 252.42 129.05 107.96 21 145 4863.5 31.75 243.88 DISFERBERITAL CORRECTIONS
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                                                  ST 2253.9 SR 427.1 SS 571.2

CRT -.7877 CRS .7096 CST -.9928

LSA 2348.5 MSA 270.7 SSA 12.2

EL1 2279.3 EL2 260.2 ALF 171:40
    TOE-2.0858 TRA 5.7939 TC3-1.4273 BAU 1.0160
                                                                           SGT 5798.7 SGR 445.7 SG3 129.9
                                                                         RRT -.5312 RRF -.5173 RTF .9655
SG8 5815.8 R23 .0025 R13 -.9655
SG1 5803.6 SG2 377.3 THA 177.65
    ROE .5416 RRA -.1497 RC3 -.0037 FAU .00702
FDE -.4621 FRA 1.6287 FC3 -.1142 BSP 18826
    BDE 2.1549 BRA 5.7959 BC3 1.4273 FSP
                                                          -437
                                                                                                                                                ARRIVAL DATE JAN 31 1968
LAUNCH DATE JUL 3 1967
                                                                                FLIGHT TIME 212.00
                                                                               DISTANCE 603.576
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 280.40 VL 25.374 GAL 14.01 AZL 92.19 MCA 303.48 SMA 120.51 ECC .35116 INC 2.1873 V1 29.291
RP 108.24 LAP 1.82 LOP 223.91 VP 36.757 GAP 19.74 AZP 91.21 TAL 150.42 TAP 93.90 RCA 78.19 APO 162.83 V2 35.012
RC 188.449 GL -6.94 GP 4.69 ZAL 37.98 ZAP 174.90 ETS 110.55 ZAE 126.76 ETE 176.36 ZAC 43.93 ETC 12.87 CLP 177.98
   PLANETOCENTRIC CONIC
    C3 60.424 VHL 7.773 DLA -27.56 RAL 239.41 RAD 6569.1 VEL 13.463 PTH 2.46 VHP 12.228 DPA -9.18 RAP 221.72 ECC 1.9944
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     117.64 14 1 15
112.69 15 49 49
        90.00 13 38 41 1354.03
                                                                                   122.94
                                                                                                                                                                         344.94
                                                          6.44
                                                                       351.72
                                                                                                                                          754.0
                                                                                                                                                          10.09
                                                                                                                                          340.2
                                                                                                                                                          20.34
                                                                                                                                                                         322.31
         90.00
                     15 33 28
                                       980.18
                                                       17.41
                                                                       329.76
                                                                                       128.20
                                                                                                        119.81 14 39 0
110.96 19 14 8
123.91 14 46 57
108.25 21 15 33
                                                                                                                                          625.1
                   14 18 35 1225.10
                                                         2.28
                                                                       339.97
                                                                                       120.66
                                                                                                                                                            6.23
                                                                                                                                                                         333.41
       100.00
                                                       21.61
                                                                       260.41
                                                                                       130.07
                                                                                                                                         5272.4
                                                                                                                                                          24.47
                                                                                                                                                                         272.62
       100.00
                    17 36 16
                                     5672.36
                    14 26 58
                                                                                                                                         598.7
                                                                                                                                                           -.09
                                                                                                                                                                         327.51
                                     1196.74
                                                        -4.58
                                                                       333.72
                                                                                       116.40
       110.00
                                                                                                                                                                         244.46
                                                                                                                                        4871.5
                                                                                                                                                          31.62
       110.00
                    19 44 22
                                     5471.50
                                                        29.42
                                                                       252.97
                                                                                       133.07
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2192.1 SR 415.6 SS 565.1

CRT -.7667 CRS .6906 CST -.9936

LSA 2285.3 MSA 273.3 SSA 11.7

ELI 2215.5 EL2 264.0 ALF 171.61
                                                                        SCT 5778.7 SCR 437.9 SC3 125.5
RRT -.5455 RRF -.5318 RTF .9683
SCB 5795.2 R23 .0017 R13 -.9683
SCI 5783.6 SC2 366.7 TMA 177.62
    TDE-2.0689 TRA 6.3095 TC3-1.2114 BAU
                                                            .9786
    RDE .5608 RRA -.1737 RC3 -.0026 FAU .00556
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FOE -.4437 FRA 1.6969 FC3 -.0796 BSP 18848 BDE 2.1435 BRA 6.3119 BC3 1.2115 FSP -423

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LAUNCH DATE JUL 3 1967
                                                                                FLIGHT TIME 214.00
                                                                                                                                                ARRIVAL DATE FEB 2 1968
    HELIOCENTRIC CONIC
                                                                                DISTANCE 607.529
     RL 152.10 LAL -.00 LOL 280.40 VL 25.338 GAL 15.29 AZL 92.07 HCA 306.68 SMA 120.31 ECC .36674 INC 2.0720 V1 29.291
RP 108.28 LAP 1.66 LOP 227.10 VP 36.719 GAP 20.77 AZP 91.24 TAL 149.31 TAP 95.99 RCA 76.19 APO 164.44 V2 34.999
RC 190.221 GL -6.11 GP 4.61 ZAL 36.57 ZAP 174.48 ETS 120.65 ZAE 126.49 ETE 176.42 ZAC 41.87 ETC 13.35 CLP 176.95
    PLANETOCENTRIC CONIC
      C3 58.884 VHL 8.300 DLA -27.00 RAL 241.02 RAD 6569.3 VEL 13.793 PTH 2.52 VHP 12.844 DPA -9.99 RAP 223.76 ECC 2.1337
     LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 26 55 1445.66 3.52 356.87 125.52 118.12 13 51 0 845.7 7.25 350.18
                                                                                                       118.12 13 51 0
                                                                                                      112.11 16 13 58
119.89 14 35 28
110.82 19 31 34
123.61 14 47 55
108.58 21 28 30
          90.00
                       15 58 6
                                        951.54
                                                         18.16
                                                                        327.99
                                                                                        132.48
                                                                                                                                           351.5
                                                                                                                                                                          320.47
                                                                                                                                                           21.00
                    14 13 55 1293.82
         100.00
                                                          -.05
                                                                        343.74
                                                                                       123.55
                                                                                                                                          693.8
                                                                                                                                                            3.93
                                                                                                                                                                          337.22
                    17 53 47 5866.65
14 27 2 1252.63
        100.00
                                                                                   134.0
119.48
                                                         21.95
                                                                        280.04
                                                                                                                                         5266.6
                                                                                                                                                           24.58
                                                                                                                                                                         272.23
        110.00
                                                         -6.62
                                                                        336.56
                                                                                                                                         652.6
                                                                                                                                                           -2.15
                                                                                                                                                                          330.32
        110.00
                     19 57 9
                                      5480.61
                                                         29.22
                                                                                       136.95
                                                                                                                                        4880.5
                                                                        253.61
                                                                                                                                                          31.48
                                                                                                                                                                         245.13
    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SCT 5754.2 SCR 428.9 SC3 121.5
RRT -.5598 RRF -.5464 RTF .9712
SCB 5770.1 R23 .0008 R13 -.9712
SCI 5759.2 SC2 355.1 THA 177.60
                                                                                                                                   ST 2135.5 SR 402.9 SS 562.2

CRT -.7457 CRS .6725 CST -.9944

LSA 2227.9 MSA 273.8 SSA 11.2

EL1 2156.8 EL2 265.8 ALF 171.87
      TOE-2.0551 TRA 6.8632 TC3-1.0116 BAU .9316
     RDE .5798 RRA -.1990 RC3 -.0022 FAU .00405
     FDE -.4279 FRA 1.7705 FC3 -.0509 8SP 18840
8DE 2.1353 BRA 6.8661 BC3 1.0116 FSP -409
 LAUNCH DATE JUL 3 1967
                                                                                FLIGHT TIME 216.00
                                                                                                                                                 ARRIVAL DATE FEB 4 1968
   HELIOCENTRIC CONIC
                                                                                DISTANCE 611.141
    RL 152.10 LAL -.00 LOL 280.40 VL 25.304 GAL 16.69 A7L 91.95 HCA 309.88 SMA 120.12 ECC .38406 INC 1.9469 V1 29.291
RP 100.32 LAP 1.49 LOP 230.30 VP 36.683 GAP 21.91 A7P 91.25 TAL 148.29 TAP 98.17 RCA 73.99 APO 166.25 V2 34.986
RC 191.975 GL -5.32 GP 4.53 ZAL 35.31 ZAP 173.88 ETS 129.37 ZAE 126.17 ETE 176.47 ZAC 39.85 ETC 13.89 CLP 175.89
    PLANETOCENTRIC CONIC
    C3 78.914 VHL 8.883 DLA -26.45 RAL 242.48 RAD 6569.5 VEL 14.151 PTH 2.58 VHP 13.528 DPA -10.77 RAP 225.77 ECC 2.2987
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      118.30 13 43 33
111.75 16 34 5
119.81 14 32 19
110.76 19 47 24
123.21 14 48 29
108.94 21 40 36
                                                                                     128.15
         90.00
                    13 18 7 1526.10
                                                           .93
                                                                         1.36
                                                                                                                                          926.1
                                                                                                                                                           4.70
                                                                                                                                                                         354.72
                    16 18 30
         90.00
                                       934.61
                                                                        326.93
                                                                                       136.47
                                                         18.59
                                                                                                                                           334.6
                                                                                                                                                           21.38
                                                                                                                                                                          319.37
                    14 9 39 1359.68
18 9 40 5864.30
        100.00
                                                         -2.2A
                                                                        347.36
                                                                                       126.37
                                                                                                                                          759.7
                                                                                                                                                           1.70
                                                                                                                                                                          340.84
        100.00
                                                       22.01
                                                                       279.89
                                                                                       137.89
                                                                                                                                         5264.3
                                                                                                                                                           24.63
                                                                                                                                                                         272.08
                    14 26 43 1306.11
20 9 5 5490.63
        110.00
                                                                                    122.47
                                                         -8.62
                                                                        339.40
                                                                                                                                         706.1
                                                                                                                                                          -4.19
                                                                                                                                                                          333.11
        110.00
                                                     29.00
                                                                       254.31
                                                                                       140.66
                                                                                                                                         4890.6
                                                                                                                                                           31.31
                                                                                                                                                                         245.86
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCUMAN
SGT 5727.0 SGR 418.7 SG3 117.6
RRT -.5738 RRF -.5608 RTF .9741
     TOE-2.0409 TRA 7.4646 TC3 -.8254 BAU .8709
                                                                                                                                  ST 2082.6 SR 388.9 SS 562.1
CRT -.7243 CRS .6545 CST -.9952
LSA 2174.8 MSA 272.7 SSA 10.7
    RDE .5982 RRA -.2258 RC3 -.0026 FAU .00243
FDE -.4134 FRA 1.8519 FC3 -.0267 8SP 18705
BDE 2.1268 BRA 7.4680 BC3 .8255 FSP -393
                                                                            568 5742.3 R23 -.0001 R13 -.9741
                                                                                                                                 EL1 2101.8 EL2 265.7 ALF 172.17
                                                                            SG1 5732.0 SG2 342.7 THA 177.59
LAUNCH DATE JUL 3 1967
                                                                               FLIGHT TIME 218.00
                                                                                                                                               ARRIVAL DATE FEB 6 1968
   HELIOCENTRIC CONIC
                                                                              DISTANCE 614.333
    RL 152.10 LAL -.00 LOL 280.40 VL 25.270 GAL 18.23 AZL 91.81 HCA 313.08 SMA 119.94 ECC .40336 INC 1.8096 V1 29.291
RP 108.36 LAP 1.32 LOP 233.49 VP 36.647 GAP 23.17 AZP 91.24 TAL 147.38 TAP 100.46 RCA 71.56 APO 168.32 V2 34.973
RC 193.712 GL -4.56 GP 4.46 ZAL 34.18 ZAP 173.13 ETS 136.65 ZAE 125.80 ETE 176.53 ZAC 37.89 ETC 14.51 CLP 174.77
   PLANETOCENTRIC CONIC
    C3 90.874 VHL 9.533 OLA -25.89 RAL 243.77 RAD 6569.8 VEL 14.568 PTH 2.64 VHP 14.290 OPA -11.51 RAP 227.74 ECC 2.4955
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    118.28 13 37 27

111.53 16 51 35

119.59 14 29 17

110.76 20 1 50

122.70 14 48 39

109.32 21 51 50
                                                                                  130.74
         90.00 13 10 47 1600.05
                                                       -1.46
                                                                                                                                   1000.0 2.33 358.86
                                                                         5.49
         90.00
                     16 36 11
                                      924.23
                                                        18.85
                                                                       326.28
                                                                                      140.21
                                                                                                                                         324.2
                                                                                                                                                                         318.70
                    14 5 33 1423.15
       100.00
                                                        -4.42
                                                                       350.85
                                                                                   129.10
                                                                                                                                         823.2
                                                                                                                                                                      344.32
       100.00
                    18 24 5
                                      5864.40
                                                        22.00
                                                                       279.90
                                                                                      141.51
                                                                                                                                        5264.4
                                                                                                                                                         24.63
                                                                                                                                                                       272.08
                    14 26 0 1359.02
20 20 9 5501.30
       110.00
                                                    -10.58
                                                                                     125.35
                                                                                                                                         759.0
                                                                       342.25
                                                                                                                                                          -6.20
                                                                                                                                                                      335.90
       110 00
                                                        28.76
                                                                       255.05
                                                                                      144.24
                                                                                                                                        4901.3
                                                                                                                                                          31.12
                                                                                                                                                                        246.64
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                           SGT 5693.9 SGR 407.4 SG3 113.9
RRT -.5877 RRF -.5755 RTF .9771
SGB 5708.4 R23 -.0008 R13 -.9771
                                                                                                                                   ST 2035.7 SR 374.0 SS 565.7 CRT -.7048 CRS .6396 CST -.9960
    TOE-2.0388 TRA 8.1081 TC3 -.6582 BAU
                                                            .7997
    RDE .6165 RRA -.2534 RC3 -.0032 FAU .00079
    FOE -.4035 FRA 1.9394 FC3 -.0075 BBP 18709
BOE 2.1300 BRA 8.1121 BC3 .6582 FSP -381
                                                                                                                                  LSA 2128.7 MSA 269.2 SSA 10.2
                                                                           SG1 5698.9 SG2 329.3 THA 177.58
                                                                                                                                  EL1 2053.0 EL2 263.1 ALF 172.50
LAUNCH DATE JUL 3 1967
                                                                               FLIGHT TIME 220.00
                                                                                                                                                ARRIVAL DATE FEB 8 1968
  HELIOCENTRIC CONIC
                                                                               DISTANCE 617.007
    RL 152.10 LAL -.00 LOL 280.40 VL 25.238 GAL 19.93 AZL 91.66 MCA 316.27 SMA 119.76 ECC .42496 INC 1.6571 V1 29.291
RP 108.40 LAP 1.15 LOP 236.68 VP 36.613 GAP 24.59 AZP 91.20 TAL 146.61 TAP 102.87 RCA 68.87 APO 170.66 V2 34.960
RC 195.431 GL -3.84 GP 4.39 ZAL 33.19 ZAP 172.23 ETS 142.66 ZAE 125.36 ETE 176.59 ZAC 36.00 ETC 15.21 CLP 173.59
   PLANETOCENTRIC CONIC
    C3 105.232 VHL 10.258 OLA -25.33 RAL 244.90 RAD 6570.0 VEL 15.052 PTH 2.71 VHP 15.145 OPA -12.20 RAP 229.67 ECC 2.7319
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 4 10 1669.46 -3.69 9.36 133.25 118.09 13 31 59 1069.5 .09 2.73 90.00 16 51 49 917.99 19.00 325.89 143.71 111.40 17 7 7 318.0 21.74 318.29 100.00 14 1 27 1484.51 -6.48 354.25 131.73 119.25 14 26 11 884.5 -2.53 347.69
                                                                                                      118.09 13 31 59
111.40 17 7 7
119.25 14 26 11
110.81 20 14 59
122.08 14 48 20
109.71 22 2 12
                   18 37 13 5866.22
14 24 49 1411.17
       100.00
                                                       21.96
                                                                       260.01
                                                                                   144.93
                                                                                                                                        5266.2
                                                                                                                                                          24.59
                                                                                                                                                                         272.21
       110.00
                                                       -12.48
                                                                       345.09
                                                                                     128.12
                                                                                                                                         811.2
                                                                                                                                                          -8.16
                                                                                                                                                                         338.66
                    20 30 20 5512.32
                                                                                                                                     4912.3
      110.00
                                                      28.51
                                                                       255.81
                                                                                     147.60
                                                                                                                                                         30.93
                                                                                                                                                                       247.44
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5656.6 SGR 394.9 SG3 110.4
RRT -.6013 RRF -.5899 RTF .9800
    TOE-2.0440 TRA 8.8070 TC3 -.5055 BAU .7112
                                                                                                                                 ST 1992.5 SR 358.2 SS 572.6
CRT -.6863 CRS .6263 CST -.9967
LSA 2087.2 MSA 263.8 SSA 9.7
    ROE .6345 RRA -.2818 RC3 -.0041 FAU-.00100
                                                                        SG8 5670.4 R23 -.0015 R13 -.9800
SG1 5661.6 SG2 315.3 THA 177.59
    FOE -.3964 FRA 2.0362 FC3 .0082 B3P 18676
B0E 2.1403 BRA 8.8115 BC3 .5055 FSP -369
                                                                                                                                  ELI 2007.9 EL2 258.5 ALF 172.85
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ARRIVAL DATE SEP 12 1967
                                                                                              FLIGHT TIME 70.00
LAUNCH DATE JUL 4 1967
                                                                                             DISTANCE 175.499
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 25.213 GAL -6.37 A7L 93.45 MCA 75.32 SMA 119.63 ECC .29173 INC 3.4529 V1 29.291 RP 108.72 LAP -3.34 LOP 356.65 VP 36.496 GAP -16.16 AZP 90.88 TAL 195.99 TAP 271.31 RCA 84.73 APO 154.53 V2 34.856 RC 46.178 GL -16.43 GP -5.18 ZAL 121.75 ZAP 5.29 ETS 77.71 ZAE 152.95 ETE 13.85 ZAC 91.12 ETC 13.64 CLP -1.08
   PLANETOCENTRIC CONIC
     C3 28 473 VHL 5.336 DLA -6.72 RAL 153.64 RAD 6568.1 VEL 12.241 PTH 2.20 VHP 10.030 DPA .10 RAP 175.16 ECC 1.4686
LNCH AZHTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      3 41 24 2090.88
13 58 37 5154.85
4 59 32 1838.81
15 23 10 4881.95
6 0 27 1648.10
16 38 45 4645.43
                                                                                                                       113.42
                                                                                                                                                             1490.9
                                                                                                                                          4 16 15
                                                                 -16.39
                                                                                    33.80
                                                                                                     19.36
          90.00
                                                                                                                                         15 24 32
                                                                                                                                                                                    23.46
                                                                                                                                                                 4554.7
                                                                                    230.09
                                                                                                        23.18
                                                                                                                            77.21
                                                                25.48
          90.00
                                                                                                                                                                                    -14.07
                                                                                                                                                                 1238.8
                                                                -17.54
                                                                                      14.73
                                                                                                        18.82
                                                                                                                           114.60
                                                                                                                                          5 30 11
        100.00
                                                                                                                                                                 4282.0
                                                                                                                                                                                    24.52
                                                                                                                                                                                                       201.59
                                                                                                                            76.04 16 44 32
117.91 6 27 55
72.76 17 56 10
                                                                                                        22.85
                                                                26.70
                                                                                    209.71
        100.00
                                                                                                                                                                1048.1
                                                                                                                                                                                    -16.70
                                                                                                                                                                                                       351.70
                                                                                    358.66
                                                                                                        17.23
                                                                                                                           117.91
                                                                -20.59
        110.00
                                                                                                                                                                 4045.4
                                                                                                                                                                                     27.33
                                                                                   190.71
                                                                                                        21.61
                                                                 29.96
        110.00
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 366.2 SR 393.8 SS 254.7

CRT -.8715 CRS -.9928 CST .8991

LSA 577.6 MSA 141.1 SSA ?1.7

EL1 520.3 EL2 135.9 ALF 132.61
                                                                                       SGT 716.2 SGR 424.0 SG3 86.6

RRT -.1077 RRF .1250 RTF -.6618

SG8 832.2 R23 -.0164 R13 6638

SG1 718.4 SG2 420.2 THA 174.45
    TOE .3140 TRA -.4385 TC3 .3913 BAU .1511

RDE -.3645 RRA -.1355 RC3 .0869 FAU .02952

FDE -.2721 FRA -.0455 FC3 -.8976 BBP 1926

BDE .4811 BRA .4590 BC3 .3970 FBP -205
                                                                                                                                                                          ARRIVAL DATE SEP 14 1967
                                                                                              FLIGHT TIME 72.00
LAUNCH DATE JUL 4 1967
                                                                                              DISTANCE 182.264
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 25.462 GAL -6.36 AZL 93.37 MCA 78.49 SMA 121.01 ECC .27836 INC 3.3692 V1 29.291 RP 108.69 LAP -3.30 LOP 359.83 VP 36.678 GAP -15.10 AZP 90.67 TAL 197.09 TAP 275.58 RCA 87.32 APO 154.69 V2 34.865 RC 47.255 GL -16.81 GP -5.49 ZAL 123.37 ZAP 6.39 ETS 58.53 ZAE 151.55 ETE 12.06 ZAC 90.25 ETC 13.67 CLP -3.27
     PLANE TOCENTRIC CONIC

C3 26,444 VHL 5.142 OLA -6.44 RAL 151.88 RAD 6568.1 VEL 12.158 PTH 2.18 VHP 9.432 OPA -.58 RAP 175.92 ECC 1.4352

LNON AZHTH LNCN TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 32 11 2081.49 -16.13 33.23 16.44 113.59 4 6 53 1481.5 -12.81 26.13

90.00 13 53 46 5127.25 25.05 229.19 19.95 76.35 15 19 13 4527.2 22.93 220.17

100.00 4 50 29 1828.96 -17.26 14.13 15.91 114.79 5 20 57 1229.0 -13.77 7.08

100.00 15 18 11 4855.01 26.24 207.84 19.61 75.15 16 39 6 4255.0 23.95 199.79

110.00 5 31 42 1637.24 -20.25 358.01 14.34 118.15 6 19 0 1037.2 -16.32 351.08

110.00 16 53 26 4619.50 29.45 188.88 18.54 71.80 17 50 25 4019.5 26.68 180.79
   PLANETOCENTRIC CONIC
                         16 53 26
                                            4619.50
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORNECTIONS
                                                                                         SCT 739.4 SGR 426.5 SG3 97.4
RRT -.1235 RRF .1450 RTF -.6776
SG8 853.5 R23 -.0210 R13 .6800
                                                                                                                                                           ST 373.8 SR 397.5 SS 263.1

CRT -.8810 CRS -.9942 CST .8913

LSA 588.7 MSA 140.7 SSA 22.9

EL1 529.2 EL2 132.8 ALF 133.00
     TOE .3113 TRA -.4180 TC3 .4487 BAU .1602

MOE -.3545 MRA -.1310 RC3 .0637 FAU .03197

FOE -.2872 FRA -.0834 FC3-1.0468 BBP .2015

BOE .4718 BRA .4323 BC3 .4532 FBP -235
                                                                                          8G1 742.1 8G2 421.7 THA 175.97
     BOE .4718 BRA .4323 BC3 .4532 FSP
                                                                                                                                                                          ARRIVAL DATE SEP 16 1967
                                                                                              FLIGHT TIME 74.00
LAUNCH DATE JUL 4 1967
     RL 152.10 LAL -.00 LOL 281.36 VL 25.689 GAL -6.36 A7L 93.29 MCA 81.67 SMA 122.30 ECC .26630 INC 3.2873 V1 29.291
RP 108.66 LAP -3.25 LOP 3.01 VP 36.846 GAP -14.08 AZP 90.48 TAL 198.22 TAP 279.88 RCA 89.73 APO 154.87 V2 34.875
RC 48.458 GL -17.12 GP -5.84 ZAL 125.01 ZAP 8.04 ETS 45.72 ZAE 150.36 ETE 10.40 ZAC 89.46 ETC 13.71 CLP -5.54
                                                                                              DISTANCE 189.034
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 24.743 VML 4.974 DLA -6.09 RAL 150.14 RAD 6568.0 VEL 12.088 PTH 2.16 VMP 8.866 DPA
      LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                              1476.1
                                                                                                                        113.69 3 57 10
75.51 15 14 28
                        3 22 34 2076.08
13 49 29 5099.81
4 41 1 1823.00
15 13 42 4828.13
5 42 39 1630.04
16 28 34 4593.85
                                                                                                   13.67
                                                                 -15.98
                                                                                   32.90
           90.00
                                                                                                                                                                  4499.8
                                                                                                                                                                                     22.37
                                                                                                                                                                                                        218.35
                                                                  24.60
                                                                                    _26.31
                                                                                                         16.88
                                                                                                                             114.91 5 11 24
74.29 16 34 11
           90.00
                                                                                                                                                                                                          6.73
                                                                                                                                                                 1223.0
                                                                -17,09
                                                                                      13.77
                                                                                                         13.16
                                                                                                                            114.91
          100.00
                                                                                                                                                                 4228.1
                                                                                                                                                                                                        198.01
                                                                                                                                                                                    23.36
                                                                 25.76
                                                                                                         16.53
                                                                                   205.99
          100.00
                                                                                                                            118.31 6 9 49
70.88 17 45 8
                                                                                                                                                                                                        350.67
                                                                                                                                                                 1030.0
                                                                                                         11.61
                                                                                    357.54
                                                                  -20.01
          110.00
                                                                                                                                                                                    26.01
                                                                                                                                                                                                       179.10
                                                                                                                                                                  3993.8
                                                                                    187.09
                                                                                                         15.43
                                                                  28.89
          DO.00
                         16 28 34
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 379.7 SR 400.7 SS 271.3
CRT -.8902 CRS -.9942 CST .8628
LSA 598.4 MSA 140.5 SSA 24.1
                                                                                        SCT 761.6 SGR 428.6 SG3 109.6
RRT -.1426 RRF .1683 RTF -.6932
SG8 873.9 R23 -.0258 R13 .6963
      TOE .3082 TRA -.3849 TC3 .5078 BAU .1690
RDE -.3457 RRA -.1275 RC3 .0577 FAU .03476
      FOE -.3035 FRA -.1274 FC3-1.2163 BSP 2105
BOE .4632 BRA .4035 BC3 .5110 FSP -270
                                                                                                                                                             EL1 536.7 EL2 129.2 ALF 133.27
                                                                                         SG1 765.2 SG2 422.3 THA 173.39
                                                                                                                                                                           APRIVAL DATE SEP 18 1967
                                                                                               FLIGHT TIME 76.00
LAUNCH DATE JUL 4 1967
                                                                                              DISTANCE 195.804
     TELLUCENINIC CONT.

RL 152.10 LAL -.00 LOL 281.36 VL 25.894 GAL -6.37 AZL 93.21 MCA 84.84.3MA 123.50 ECC .25548 INL 3.2068 V1 29.291

RP 108.63 LAP 73.19 LOP 6.19 VP 36.999 GAP -13.12 AZP 90.29 TAL 199.37 TAP 284.21 RCA 91.95 APO 155.06 V2 34.886

RC 49.776 GL -17.34 GP -6.23 ZAL 128.64 ZAP 10.04 ETS 37.37 ZAE 149.38 ETE 8.81 ZAC 88.76 ETC 13.76 CLP -7.89
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 23.317 WAL 4.829 DLA -5.69 RAL 148.43 RAD .567.9 VEL 12.029 PTH 2.15 WHP 8.330 DPA -1.96 RAP 177.21 ECC 1.3837
      LNOI AZMIN LNOI TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ E LAT INJ E LONG
                                                                                                                          113.72 3 47 15
74.70 15 10 19
114.95 5 1 41
73.46 16 29 50
118.39 6 0 32
69.99 17 40 21
                                                                                                                                              3 47 15
                                                                                                                                                               1474.3
                                                                                                                                                                                    -12.60
                                                                                                      11.08
                          3 12 41 2074.33
13 45 47 5072.47
                                                                  -15.94
                                                                                      32.79
            90.00
                                                                                                                                                                   4472.5
                                                                                                                                                                                                         216.56
                                                                                                                                                                                      21.78
                                                                                     224.45
                                                                                                          13.96
                                                                  24.12
            90.00
                         4 51 20 1820.60
15 9 48 4801.43
                                                                                                                                                                                                           6.59
                                                                                                                                                                  1220.6
                                                                                                                                                                                    -13.51
                                                                                       13.63
                                                                                                          10.57
                                                                  -17.02
          100.00
                                                                                                                                                                                                         196.26
                                                                                                                                                                  4201.4
                                                                                                                                                                                     22.75
                                                                                                     13.62
                                                                  25.26
                                                                                     204.16
          100.00
                                                                                                                                                                  1026.2
                                                                                                                                                                                    -15.94
                                                                                                                                                                                                         350.46
                           5 33 25 1624.22
16 24 13 4566.56
                                                                                     357.35
                                                                                                           9.05
                                                                 -19.89
          110,00
                                                                                                                                                                   3968.6
                                                                                                                                                                                       25.32
                                                                                                                                                                                                         177.45
                                                                                                          12.49
                                                                    28.31
                                                                                     165.35
          110.00
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                        HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                         SGT 782.5 SGR 430.4 SG3 123.4 ST 383.6 SR 403.5 SS 279.0 CRT -.8985 CRS -.9926 CST .8730 SG8 893.1 R23 -.0316 R13 .7110 LSA 606.1 MSA 140.8 SSA 25.3 SG1 787.0 SG2 422.1 THA 172.73 ELI 542.5 EL2 125.3 ALF 135.39
                                                                                        SGT 782.5 SGR 430.4 SG3 123.4
MRT -.1645 MRF .1952 MTF -.7072
SGB 893.1 M25 -.0316 M13 .7110
      TOE .3044 TRA -.3567 TC3 .5662 3AU .1771
ROE -.3360 RRA -.1249 RC3 .0468 FAU .03793
FDE -.3204 FRA -.1778 FC3-1.4063 88P .2190
80E .4548 BRA .3796 BC3 .5663 FSP .310
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ARRIVAL DATE SEP 20 1967

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LAUNCH DATE JUL 4 1967
                                                                                     DISTANCE 202.570
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.079 GAL -6.39 AZL 93.13 MCA 88.02 SMA 124.62 ECC .24582 INC 3.1269 VI 29.291
RP 108.59 LAP -3.13 LOP 9.38 VP 37.139 GAP -12.20 AZP 90.11 TAL 200.53 TAP 288.56 RCA 93.98 APO 155.25 V2 34.897
RC 51.201 GL -17.49 GP -6.66 ZAL 128.25 ZAP 12.27 ETS 31.74 ZAE 148.64 ETE 7.27 ZAC 88.15 ETC 13.81 CLP -10.33
   PLANETOCENTRIC CONIC
     C3 22.121 VHL 4.703 OLA -5.23 RAL 146.80 RAD 6567.9 VEL 11.979 PTH 2.13 VMP. 7.822 OPA -2.65 RAP 177.70 ECC 1.3640
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            113.69 3 37 17
73.91 15 6 47
114.94 4 51 56
72.66 16 26 3
118.41 5 51 15
69.15 17 36 6
                    3 2 42 2075.85
13 42 42 5045.35
4 21 34 1821.41
15 6 30 4775.02
5 24 10 1625.44
16 20 24 4543.75
                                                                                         8.68
                                                                                                                                                                -12.64
                                                                                                                                               1475.9
                                                                                                                                                                                      25.80
                                                           -15.98
                                                                             32.88
         90.00
                                                                                                                                                   4445.3
                                                                                                                                                                    21.19
                                                                                                                                                                                      214.79
                                                           23.62
                                                                            222.62
                                                                                               11.26
         90.00
                                                                                                                                                                                        6.63
                                                          -17.04
                                                                             13.67
                                                                                                 8.18
                                                                                                                                                   1221.4
                                                                                                                                                                   -13.54
        100.00
                                                           24.73
                                                                                               10.89
                                                                                                                                                   4175.0
                                                                                                                                                                    22.13
                                                                                                                                                                                      194.55
                                                                            202.36
        100.00
                                                                                                                                                   1025.4
                                                                                                                                                                   -15.92
                                                                                                                                                                                      350.41
                                                          -19.87
                                                                                                 6.66
                                                                            357.31
        110.00
                                                                                                                                                   3943.8
                                                                                                                                                                    24.63
                                                                                                                                                                                      175.46
        110.00
                                                                            183.66
                                                                                                 9.74
                                                            27.72
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                8GT 801.2 8GR 432.0 8G3 159.1
RRT -.1897 RRF .2266 RTF -.7195
                                                                                                                                             ST 365.3 SR 405.9 SS 286.4

CRT -,9058 CR8 -,9894 CST .8617

LSA 611.9 MSA 141.9 SSA 26.4
    TOE .2996 TRA -.3832 TC3 .6222 BAU .1843
ROE -.3311 RRA -.1234 RC5 .0363 FAU .04154
                                                                               SGB 910.2 R23 -.0365 R13 .7243
SG1 806.9 SG2 421.1 THA 171.95
    FOE -.3384 FRA -.2358 FC3-1.6256 BSP 2272
BOE .4465 BRA .3553 BC3 .6233 FSP -356
                                                                                                                                            EL1 546.3 EL2 121.3 ALF 133.36
                                                                                      FLIGHT TIME 80.00
                                                                                                                                                           ARRIVAL DATE SEP 22 1967
LAUNCH DATE JUL 4 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 209.329
    RL 152.10 LAL -.00 LOL 281.36 VL 26.245 GAL -6.42 AZL 93.05 HCA 91.20 8MA 125.64 ECC .23721 INC 3.0474 V1 29.291 RP 108.56 LAP -3.05 LOP 12.56 VP 37.266 GAP -11.31 AZP 89.94 TAL 201.69 TAP 292.89 RCA 95.84 APO 155.45 V2 34.908 RC 52.722 GL -17.56 GP -7.14 ZAL 129.80 ZAP 14.69 ETS 27.78 ZAE 148.15 ETE 5.73 ZAC 87.66 ETC 13.87 CLP -12.87
   PLANETOCENTRIC CONIC
     C3 21.116 WH, 4.595 OLA -4.73 RAL 145.24 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 7.343 OPA -3.35 RAP 178.08 ECC 1.3475 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 52 44 2000.25 -16.10 33.15 6.47 113.61 3 27 24 1480.3 -12.77 26.06
                                                                                          6.47
                                                                                                             113.61 3 27 24

73.15 15 3 54

114.87 4 42 16

71.89 16 22 59

118.37 5 42 7

68.35 17 32 30
                     2 52 44 2000.25
13 40 16 5018.52
                                                                                                                                                                                       213.06
                                                                                                 8.74
                                                                                                                                                    4418.5
                                                                                                                                                                     20.57
                                                           23.10
                                                                             220.85
         90.00
                     4 11 51 1825.03
15 3 50 4748.97
                                                                              13.69
                                                                                                 5.97
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        100.00
                                                          -17.14
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                                                                                                 8.37
                                                                                                                                                                     21.49
                                                           24.19
        100.00
                                                                             200.63
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                      5 15 0 1627.35
16 17 10 4519.42
                                                                             357.42
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        110.00
                                                          -19.93
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                                                                            162.03
                                                                                                 7.19
        110.00
                                                             27.12
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 818.9 SGR 433.9 SG3 157.1

ART -.2210 ARF .2634 RTF -.7319

SG8 926.8 R23 -.0453 R13 .7379

SG1 826." SGZ 419.3 THA 170.96
                                                                                                                                            ST 366.2 SR 407.9 SS 294.3
CRT -.9131 CRS -.9845 CST .8501
LSA 617.1 MSA 143.6 SSA 27.3
    TOE .2953 TRA -.3074 TC3 .6771 BAU .1912

RDE -.3250 RRA -.1231 RC3 .0199 FAU .04566

FDE -.3563 FRA -.3030 FC3-1.8727 BSP 2379

BOE .4391 BRA .3311 BC3 .6774 FSP -411
                                                                                                                                               EL1 549.4 ELZ 116.9 ALF 133.29
                                                                                                                                                           ARRIVAL DATE SEP 24 1967
                                                                                      FLIGHT TIME 82.00
LAUNCH DATE JUL 4 1967
                                                                                     DISTANCE 216.077
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 281.36 VL 26.394 GAL -6.44 AZL 92.97 MCA 94.39 SMA 126.58 ECC .22960 INC 2.9676 VI 29.291
RP 108.52 LAP -2.96 LOP 15.75 VP 37.363 GAP -10.47 AZP 88.77 TAL 202.82 TAP 297.20 RCA 97.52 APO 155.65 V2 34.920
RC 54.330 GL -17.55 GP -7.68 ZAL 131.29 ZAP 17.29 ETS 24.87 ZAE 147.90 ETE 4.15 ZAC 87.30 ETC 13.94 CLP -15.54
    PLANETOCENTRIC CONIC
     C3 20.269 VHL 4.502 OLA -4.20 RAL 143.79 RAD 6567.8 VEL 11.902 PTH 2.11 VHP 6.890 OPA -4.06 RAP 178.33 ECC 1.3336
     LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 42 56 2087.10 -16.28 33.57 4.45 113.49 3 17 43 1487.1 -12.97 26.46
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72.43 15 1 40
114.75 4 32 49
71.15 16 20 30
118.27 5 33 13
67.59 17 29 28
                                                                                                                                                                     19.95
                                                                                                                                                   4392.1
                      13 38 28
                                         4992.06
                                                             22.57
                                                                             219.07
                                                                                                 6.42
          90.00
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                                                                                                                                                                   -13.63
                         4 2 18 1831.05
                                                           -17.32
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                      15 1 47 4723.34
                                                             23.64
                                                                             198.92
                                                                                                 6.04
        100.00
                      5 6 2 1631.54
16 14 32 4495.61
                                                                                                                                                   1031.5
                                                                                                                                                                   -16.13
                                                           -20.06
                                                                             357.67
                                                                                                 2.52
        110.00
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                                                                                                                                                                      23.24
                                                             26.51
                                                                             180.44
                                                                                                 4.85
        110.00
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 851.4 SGR 436.3 SG3 177.3
RRT -.2536 RRF .3053 RTF -.7400
SGB 936.9 R23 -.0561 R13 .7478
                                                                                                                                              ST 383.1 SR 409.3 SS 301.2
CRT -.9178 CRS -.9781 CST .8351
LSA 618.6 MSA 146.8 SSA 28.1
     TOE .2881 TRA -.2848 TC3 .7237 BAU .1961
     ROE -.3195 RRA -.1240 RC3 -.0007 FAU .05033
FOE -.3782 FRA -.3782 FC3-2.1499 BSP 2441
BOE .4302 BRA .3106 BC3 .7237 FSP -472
                                                                                 8G1 841.2 SG2 417.1 THA 169.91
                                                                                                                                               EL1 549.0 EL2 113.4 ALF 132.93
                                                                                                                                                            ARRIVAL DATE SEP 26 1967
                                                                                      FLIGHT TIME 84.00
LAUNCH DATE JUL 4 1967
                                                                                     DISTANCE 222.813
     RL 152.10 LAL -.00 LOL 281.36 VL 26.527 GAL -6.47 AZL 92.89 MCA 97.57 SMA 127.44 ECC .22288 INC 2.8871 V1 29.291
RP 108.48 LAP -2.85 LOP 18.94 VP 37.488 GAP -9.66 AZP 89.62 TAL 203.91 TAP 301.48 RCA 99.04 APO 155.84 V2 34.932
RC 56.016 GL -17.47 GP - 8.28 ZAL 132.70 ZAP 20.06 ETS 22.66 ZAE 147.91 ETE 2.49 ZAC 87.09 ETC 14.00 CLP -18.34
    PLANETOCENTRIC CONIC
     C3 19.551 WHL 4.422 OLA -3.64 RAL 142.45 RAD 6567.8 VEL 11.871 PTH 2.11 WHP 6.464 DPA -4.76 RAP 178.45 ECC 1.3218 LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 33 22 2096.01 -16.53 34.11 2.64 113.33 3 8 18 1496.0 -13.23 26.99
                                                                                                                  113.33 3 8 18
71.74 15 0 5
                                                                                                                                                    4366.0
                                                                                                                                                                      19.32
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                                                                                                  4.31
                      13 37 19 4966.00
                                                            22.02
                                                                             217.36
          90.00
                                                                                                                                4 23 40
                                                                                                                                                    1239.1
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                        3 53 1
                                        1839.11
                                                           -17.54
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                                                                                                                 114.60
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118.14 5 24 39
66.87 17 27 3
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         100.00
                      15 0 21 4696.14
                                                           23.08
                                                                             197.27
                                                                                                  3.92
                                                                                                                                                    1037.7
                                                                                                                                                                    -16.34
                                                                                                                                                                                      351.11
                     4 57 21 1637.69
16 12 30 4472.33
        110.00
                                                            -20.26
                                                                             358.04
                                                                                                   .74
                                                                                                                                                    3672.3
                                                                                                                                                                      22.54
                                                             25.90
                                                                             178.91
                                                                                                 2.71
        110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 839.1 SGR 439.7 SG3 200.2
RRT -.2999 RRT .3526 RTF -.7493
SGB 947.3 R23 -.0694 R13 .7597
SGI 851.8 SGZ 414.5 THA 168.64
                                                                                                                                           ST 377.4 SR 410.3 SS 307.8
CRT -.9210 CRS -.9702 CST .8176
LSA 518.0 MSA 151.1 SSA 28.7
EL1 546.5 EL2 110.4 ALF 132.41
     TOE .2798 TRA - .2645 TC3 .7625 BAU
                                                                 .1994
     ROE -.3144 RRA -.1262 RC3 -.0261 FAU .05560
     FDE -.5967 FRA -.4628 FC3-2.4618 BSP 2483
BDE .4208 BRA .2931 BC3 .7629 FSP -541
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FLIGHT TIME 78.00

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FLIGHT TIME 86.00
LAUNCH DATE JUL 4 1967
                                                                                                                                    ARRIVAL DATE SEP 28 1967
                                                                        DISTANCE 229.532
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.645 GAL -6.50 AZL 92.81 MCA 100.76 SMA 128.21 ECC .21697 INC 2.8053 V1 29.291
RP 108.45 LAP -2.76 LOP 22.13 VP 37.583 GAP -8.89 AZP 89.48 TAL 204.94 TAP 305.70 RCA 100.39 APO 156.03 V2 34.945
RC 57.772 GL -17.32 GP -8.96 ZAL 134.03 ZAP 23.02 ETS 20.93 ZAE 148.19 ETE .69 ZAC 87.04 ETC 14.06 CLP -21.29
   PLANETOCENTRIC CONIC
    C3 18.939 VHL 4.352 DLA -3.06 RAL 141.23 RAD 6567.8 VEL 11.846 PTH 2.10 VMP 6.065 DPA -5.47 RAP 178.36 ECC 1.3117
    LNCH AZERTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZERTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 24 9 2106.64 -18.81 34.76 1.02 113.13 2 59 16 1506.6 -13.54 27.61 90.00 13 36 48 4940.34 21.46 215.66 2.40 71.08 14 59 8 4340.3 18.68 208.11
                                                                                               71.08 14 59 8

F14.40 4 14 53

69.79 16 17 28

117.97 5 16 28

66.19 17 25 15
                    3 44 4 1848.85
                                                                   15.34
                                                  -17.82
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                                                                                                                             1248.8
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                  14 59 34 4673.37
                                                   22.50
                                                                  195.65
                                                                                   2.00
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                                                                                                                                            19.55
                                                                           359.16
                  4 49 3 1645.46
16 11 5 4449.52
                                                                                                                              3849.5
                                                                                                                                          -16.61
21.84
       110.00
                                                   -20.51
                                                                  358.50
                                                                                                                             1045.5
                                                                                                                                                            351.55
       110.00
                                                    25.28
                                                                 177.43
                                                                                   .77
                                                                                                                                                           169.96
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    SGT 841.4 SGR 444.8 SG3 226.0
RRT -.3296 RRF .4056 RTF -.7478
SG8 951.7 R23 -.0860 R13 .7617
SG1 858.0 SG2 411.8 THA 167.09
                                                                                                                        ST 369.4 SR 410.8 SS 314.0

CRT -.9224 CRS -.9609 CST .7969

LSA 615.2 MSA 156.6 SSA 29.1
    TOE .2701 TRA - .2468 TC3 .7923 BAU .2011
    RDE -. 3096 RRA -. 1296 RC3 -. 0569 FAU . 06154
    FOE -.4194 FRA -.5578 FC3-2.8133 BBP 2510
BOE .4109 BRA .2789 BC3 .7944 FBP -619
                                                                                                                         EL1 541.7 EL2 108.2 ALF 131.71
LAUNCH DATE JUL 4 1967
                                                                         FLIGHT TIME 88.00
                                                                                                                                     ARRIVAL DATE SEP 30 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 236.234
   RL 152.10 LAL -.00 LOL 281.36 VL 26.750 GAL -6.52 AZL 92.72 MCA 103.95 3MA 128.91 ECC .21181 INC 2.7216 V1 29.291
RP 108.41 LAP -2.64 LOP 25.32 VP 37.669 GAP -8.15 AZP 89.34 TAL 205.91 TAP 309.87 RCA 101.60 APO 156.21 V2 34.957
RC 59.590 GL -17.10 GP -9.71 ZAL 135.26 ZAP 26.17 ETS 19.52 ZAE 148.75 ETE 358.69 ZAC 87.17 ETC 14.10 CLP -24.42
  PLANETOCENTRIC CONIC
    C3 18.412 WHL 4.291 DLA -2.46 RAL 140.14 RAD 6567.7 VEL 11.823 PTH
                                                                                                   2.09 WHP 5.692 OPA -6.18 RAP 178.11 ECC 1.3030
    LNOW AZHTH LNOW TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.90 2 50 39
70.44 14 58 51
                                                                                                                          1518.7 -13.88
                     2 15 20 2118.60
                                                  -17.13
                                                                   35.50
                                                                            359.60
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        90.00
                   13 56 56
                                  4915.04
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                                                                                               114.18 4 6 32
69.15 16 16 54
117.76 5 8 44
65.54 17 24 4
      100.00
                    3 35 37
                                  1859.98
                                                  -18.13
                                                                  16.02
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                                                                                                                            1260.0
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                  14 59 25
                                  4648.97
                                                    21.92
                                                                  194.07
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      100.00
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      110.00
                    4 41 9
                                 1654.57
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                                                                  359.05
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                   16 10 17 4427.15
                                                    24.66
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      110.00
                                                                 175.99
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
    TOE .2592 TRA -.2324 TC3 .8115 BAU
                                                       .2011
                                                                     SGT 837.4 SGR 452.6 SG3 255.0
                                                                                                                         ST 359.0 SR 410.6 SS 320.0
                                                                                                                        CRT -.9217 CR8 -.9504 CST .7724
LSA 610.3 HSA 163.2 85A 29.3
    RDE -.3049 RRA -.1350 RC3 -.0936 FAU .06823
                                                                    MRT -.3716 MRF .4647 RTF -.7466
    FDE -.4404 FRA -.6636 FC3-3.2001 BBP 2520
BDE .4002 BRA .2668 BC3 .8169 FSP -709
                                                                     868 951.8 R23 -.1069 R13 .7659
                                                                                                                       EL1 535.0 EL2 106.9 ALF 130.83
                                                                      8G1 859.3 8G2 409.4 THA 165.21
LAUNCH DATE JUL 4 1967
                                                                         FLIGHT TIME 90.00
                                                                                                                                    ARRIVAL DATE OCT 2 1967
                                                                         DISTANCE 242.916
    RL 152.10 LAL -.00 LOL 281.36 VL 26.841 GAL -6.54 AZL 92.64 HCA 107.15 SMA 129.53 ECC .20730 INC 2.6356 V1 29.291
RP 108.37 LAP -2.52 LOP 26.52 VP 37.746 GAP -7.43 AZP 89.22 TAL 206.81 TAP 313.95 RCA 102.67 APO 156.38 VZ 34.970
RC 61.464 GL -16.82 GP -10.55 ZAL 136.39 ZAP 29.53 ETS 18.34 ZAE 149.54 ETE 356.41 ZAC 87.51 ETC 14.12 CLP -27.74
   PLANETOCENTRIC CONIC
    C3 17.952 VHL 4.237 DLA -1.84 RAL 139.18 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 5.346 DPA -6.89 RAP 177.64 ECC 1.2954
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 6 56 2131.88 -17.48 36.31 358.36 112.64 2 42 28 1531.9 -14.26 29.11
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                                                    20.32
                                                                 212.43
                                                                                359.17
                                                                                                                              4290.0
                                                                                                                                            17.39
                                                                                                                                                           204.98
        90.00
                                   4890.00
                                                                                357.91
                                                                  16.77
                                                                                                                             1272.3
                                                                                                                                           -15.08
                                                                                                                                                             9.62
      100.00
                    3 27 25 1872.26
                                                  -18.47
                                                                                                                              4024.9
                                                                                358.75
                                                                                                                                             18.22
                                                                                                                                                            185.10
      100.00
                   14 59 53 4624.87
                                                  21.33
                                                                 192.52
                                                                             356.56
                                                                                                                             1064.8
                                                                                                                                            -17.27
                                                                                                                                                           352.66
      110.00
                     4 33 42 1664.78
                                                   -21.12
                                                                 359.67
                                                                                                                             3605.1
                                                                                                                                             20.45
                                                                                                                                                            167.27
      110.00
                   16 10 5
                                  4405.11
                                                    24.03
                                                                 174.56
                                                                                357.50
   DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 828.3 SGR 464.4 SG3 287.9
RRT -.4170 RRF .5291 RTF -.7428
                                                                                                                        ST 348.2 SR 410.5 SS 327.0

CRT -,9194 CRS -.9394 CST .7454

LSA 605.5 MSA 170.8 SSA 29.2
    TOE .2484 TRA -. 2204 TC3 .8213 BAU .1999
    ROE - 3005 RRA - 1419 RC3 - 1376 FAU .07580
FOE - 4628 FRA - 7821 FC3-3.6555 BBP 2544
BOE .3899 BRA .2621 BC3 .8328 FSP -814
                                                                     SG8 949.6 R23 -.1310 R13 .7700
                                                                     SG1 857.7 SG2 407.7 THA 162.86
                                                                                                                         EL1 527.6 EL2 106.5 ALF 129.90
                                                                                                                                     ARRIVAL DATE OCT 4 1967
                                                                         FLIGHT TIME 92.00
LAUNCH DATE JUL 4 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 249.576
   RL 152.10 LAL -.00 LOL 281.36 VL 26.921 GAL -6.56 AZL 92.55 MCA 110..4 SMA 130.07 ECC .20334 INC 2.5465 V1 29.291 RP 108.33 LAP -2.39 LOP 31.71 VP 37.815 GAP -6.75 AZP 89.11 TAL 207.61 TAP 317.95 RCA 103.61 APO 156.52 V2 34.983 RC 63.388 GL -18.48 GP -11.49 ZAL 137.43 ZAP 33.11 ETS 17.32 ZAE 150.60 ETE 353.75 ZAC 88.06 ETC 14.11 CLP -31.27
  PLANETOCENTRIC CONIC
    CS 17.543 WHL 4,188 DLA -1.21 RAL 138.36 RAD 6567.7 VEL 11.787 PTH
                                                                                                    2.08 WHP 5.026 DPA -7.61 RAP 176.95 ECC 1.2887
   LNON AZMTH LNCH TIME L-1 TIME INJLAT INJLONG TNJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 50 50 2146.05 -17.05 37.19 557.30 112.35 2 34 45 1546.1 -14.66 29.96
                                                                                               69.26 15 0 9
113.65 3 51 11
67.96 16 17 40
117.26 4 54 39
64.33 17 25 34
                   13 39 4
                                                   19.73
                                                                 210.85
                                                                                357.83
                                                                                                                              4265.1
                                                                                                                                             16.73
                                                                                                                                                            203.46
        90.00
                                  4865.13
                                                                                356.86
                                                                                                                              1285.5
                                                                                                                                            -15.48
                                                                                                                                                            10.40
      100.00
                     3 19 46 1885.48
                                                  -18.83
                                                                  17.59
                                                                                357.41
                  15 0 59 4600.94
                                                  20.72
                                                                 191.00
                                                                                                                              4000.9
                                                                                                                                            17.55
                                                                                                                                                            163.65
      100.00
                  4 26 43 1675.90
16 10 31 4383.29
                                                   -21.47
                                                                     . 34
                                                                                355.53
                                                                                                                              1075.9
                                                                                                                                           -17.65
19.75
                                                                                                                                                            353.30
      110.00
                                                                  173.21
                                                                                                                             3783.3
                                                                                                                                                            165.97
                                                    23.36
                                                                                356.14
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 333.3 8R 409.5 8S 331.8

CRT -.9123 CRS -.9273 CST .7091

LSA 596.5 MSA 179.5 SSA 29.2

ELI 516.8 ELZ 108.2 ALF 128.60
                                                                    SGT 807.9 SGR 481.0 SG3 323.9
RRT -.4560 RRF .5950 RTF -.7305
    TOE .2345 TRA -.2145 TC3 .8128 BAU .1957
    ROE -. 2950 RRA -. 1505 RC3 -. 1890 FAU .08406
    FOE -.4015 FRA -.9066 FC3-4.1465 88P 2907
80E .3776 8RA .2821 8C3 .8345 FSF -927
                                                                    SG8 940.2 R23 -.1634 R13 .7704
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861 846.9 862 408.3 THA 159.97

LAUNCH DATE JUL 4 1967

ARRIVAL DATE OCT 6 1967

DISTANCE 256.214 HELIOCENTRIC CONIC RL 15E.10 LAL -.00 LOL 281.36 VL 28.980 GAL -6.57 AZL 92.45 MCA 113.54 SMA 130.54 ECC .20001 INC 2.4536 V1 29.291
RP 108.29 LAP -2.25 LOP 34.91 VP 37.876 GAP -6.09 AZP 89.02 TAL 208.33 TAP 321.86 RCA 104.43 APO 156.65 VZ 34.996
RC 65.357 GL -16.08 GP -12.53 ZAL 138.36 ZAP 36.93 ET8 16.39 ZAE 151.90 ETE 350.55 ZAC 88.86 ETC 14.05 CLP -35.03 PLANETOCENTRIC CONIC .57 RAL 137.67 RAD 6567.7 VEL 11.771 PTH 2.08 VHP 4.733 DPA -8.33 RAP 176.01 ECC 1.2826 C5 37.174 WHL 4.144 DLA .57 MAL 137.67 MAD 6567.7 VEL 11.771 PTM 2.08 VMP 4.753 DPA -8.33 MAP 176.01 ECC 1.2826 LNCM AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 1 29 2161.07 -18.24 38.12 356.42 112.05 2 27 30 1561.1 -15.09 30.86 90.00 13 41 6 4840.26 19.12 209.28 356.86 68.71 15 1 47 4240.3 16.06 201.94 100.00 3 12 34 1899.54 -19.22 18.46 355.98 113.35 3 44 13 1299.5 -15.89 11.24 100.00 15 2 43 4577.03 20.11 189.50 356.24 67.40 16 19 0 3977.0 16.87 182.20 110.00 4 20 12 1647.81 -21.84 1.07 354.67 116.97 4 48 20 1087.8 -18.05 355.99 110.00 16 11 34 4361.92 22.74 171.85 354.95 63.77 17 24 15 376.5 19.03 164.68 C3 17.174 WHL 4.144 DLA 99,50 356.24 67.40 16 19 0 1.07 354.67 116.97 4 48 20 71.85 354.95 63.77 17 24 15 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ACT 778.2 SGR 904.0 SG3 3G5.3 RRT .4866 RRT .6609 RTF .7089 bG8 927.1 R23 -.2022 R13 .7697 SG1 830.2 SG2 412.6 THA 156.32 ST 316.6 SR 407.9 SS 335.5 CRT -.8999 CRS -.9145 CST .6629 LSA 585.3 MSA 189.0 SSA 29.0 ELI 504.1 EL2 111.7 ALF 127.06 TOE .2193 TRA -.2140 TC3 .7875 BAU .1496 RDE .2910 RRA -.1009 RC3 -.2491 FAU .09310 FOE .4969 FRA-1.0440 FC3-4.6931 BSF Z449 BOE .3644 BRA .2678 BC3 .8260 FSF 1052 FLIGHT TIME 96.00 ARRIVAL DATE OCT 8 1967 AUNCH DATE JUL 4 1967 HELIOCENTRIC CONIC DISTANCE 262.829 RL 152.10 LAL -.00 LOL 281.36 VL 27.049 GAL -6.57 AZL 92.36 MCA 116.74 SMA 130.95 ECC .19710 INC 2.3559 V1 29.291 RP 108.25 LAP -2.10 LOP 38.11 VP 37.930 GAP -5.46 AZP 88.94 TAL 208.94 TAP 325.68 RCA 105.14 APO 156.76 V2 35.009 RC 67.365 GL -15.62 GP -13.66 ZAL 139.20 ZAP 41.00 ETS 15.50 ZAE 153,41 ETE 346.62 ZAC 89.92 ETC 13.92 CLP -39.04 PERMETOCENTRIC CONIC CS 16.835 WHL 4.105 DLA .09 RAL 137.12 RAD 6567.7 VEL 11.757 PTH 2.08 WHP 4.466 DPA -9.05 RAP 174.80 ECC 1.2770 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ.RT ASC INJ.AZHTH INJ.TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 44 24 2176.91 13 43 46 4915.18 3 5 47 1914.39 15 5 6 4552.93 4 14 7 1700.46 16 15 15 4339.63 90.00 -15.53 395.70 111.71 1576.9 2 20 40 -18.64 39.11 31.62 15 4 3 90.00 18.49 207.70 355.66 66.17 4215.2 15.37 200.42 113.02 3 37 41 66.86 16 20 59 116.66 4 42 26 63.22 17 25 34 100.00 -19.61 19.36 355.27 1314.4 -16.33 12,13 180.75 100.00 19.47 187.99 355.23 3952.9 16.17 110.00 -22.23 1.05 353.90 1100.5 -18.47 354.73 110.00 22.06 170.50 353.93 3739.6 18.31 163.40 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS 86T 741.0 8GR 535.7 8G3 406.6 RRT -.9059 RRF .7247 RTF -.8766 ST 300.1 SR 405.9 SS 339.5 CRT -.8818 CRS -.9019 CST .6077 LSA 574.1 MSA 199.3 SSA 28.6 TOE .2043 TRA -.2180 TC3 .7462 BAU .1827 MOE -.2050 MMA -.1739 MC3 -.3107 FAU ,10295 FOE -.5108 FRA-1.1884 FC3-5.2051 BMP 2405 BOE .3514 BRA .2784 BC5 .8118 FMP 1194 FOE -.5100 FRA-1.1884 FC3-5.2951 88P 8G8 914.3 RE3 -. 2432 R13 .7715 861 811.0 862 422.1 THA 151.57 ELI 491.1 ELZ 117.0 ALF 125.42 LAUNCH UMIE JUL 4 1967 FLIGHT TIME 98.00 ARRIVAL DATE OCT 10 1967 DISTANCE 269.419 RL 152.10 LAL -.00 LOL 281.36 VL 27.086 GAL -6.57 AZL 92.25 MCA 119.94 3MA 131.30 ECC .19460 INC 2.2526 VI 29.291
RP 108.20 LAP -1.95 LOP 41.31 VP 37.977 GAP -4.85 AZP 88.88 TAL 209.45 TAP 329.39 RCA 105.75 APO 156.85 V2 35.023
RC 69.409 GL -15.09 GP -14.95 ZAL 139.94 ZAP 45.32 ETS 14.61 ZAE 155.06 ETE 341.72 ZAC 91.23 ETC 13.70 CLP -43.30 PLANETOCENTRIC CONIC C3 16.510 VHL 4.063 DLA .77 RAL 136.71 RAD 6567.7 VEL 11.743 PTH 2.07 VHP 4.231 DPA -9.78 RAP 173.32 ECC 1.2717 C3 16.510 WH 4.063 DLA .77 RAL 136.71 RAD 6567.7 VEL 11.743 PTH 2.07 VMP 4.231 DPA -9.78 RAP 173.32 ECC 1.2717
LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 47 12 4789.64 17.94 206.11 354.81 67.64 15 7 1 4189.6 14.65 198.89
100.00 2 59 24 1930.04 -20.03 20.36 354.71 112.67 3 31 34 1330.0 -16.78 13.07
100.00 15 8 11 4528.41 18.81 186.47 354.38 66.33 16 23 39 3928.4 15.45 179.29
110.00 4 8 28 1713.85 -22.63 2.67 353.44 116.53 4 37 2 1113.8 -18.91 355.51
110.00 16 15 36 4317.37 21.39 169.14 353.07 62.68 17 27 33 3717.4 17.56 162.11 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY 86T 602.5 8GR 575.9 8G3 451.4 RRT -.4960 RRF .7816 RTF -.6203 8GB 900.6 R23 -.2034 R13 .7761 ST 281.2 SR 402.7 SS 339.6 CRT .8509 CR6 -.8878 CST .5298 LSA 558.2 MSA 210.2 SSA 28.6 TOE .1867 TRA -.2301 TC3 .6795 BAU .1741 ROE -.2799 RRA -.1875 RC3 -.4004 FAU .11316 FOE -.5141 FRA-1.3309 FC3-5.9334 BBP 2316 BOE .3365 BRA .2969 BC3 .7887 FSP -1340 EL1 474.9 ELE 125.3 ALF 125.33 861 785.3 862 440.9 THA 145.25 LAUNCH DATE JUL 4 1967 FLIGHT TIME 100.00 ARRIVAL DATE OCT 12 1967 DISTANCE 275.964 RL 152.10 LAL -.00 LOL 281.36 VL 27.139 GAL -6.56 AZL 92.14 MCA 123.14 SMA 131.59 ECC .19246 INC 2.1422 V1 29.291
RP 108.16 LAP -1.79 LOP 44.52 VP 38.018 GAP -4.27 AZP 88.83 TAL 209.85 TAP 332.99 RCA 106.26 APO 156.91 V2 35.036
RC 71.485 GL -14.50 GP -16.34 ZAL 140.58 ZAP 49.80 ET8 13.67 ZAE 156.77 ETE 335.52 ZAC 92.81 ETC 13.39 CLP -47.83 PLANETOCENTRIC CONIC C3 16.200 WHL 4.025 DLA 1.48 RAL 136.43 RAD 6567.6 VEL 11.730 PTH 2.07 WHP 4.022 DPA -10.52 RAP 171.56 ECC 1.2666 LNCH AZNTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZNTH INJ TIME PO CST TIM INJ ELAT INJ E LONG 90.00 1 31 19 2211.21 -19.49 41.27 354.72 110.96 2 8 10 1611.2 -16.46 33.90 110.96 13 51 20 4763.32 67.12 15 10 45 17.15 204.49 354.12 4163.3 13.90 2 53 21 1946.61 15 11 59 4903.16 4 3 11 1720.05 16 18 39 4294.49 100.00 -20.46 21.40 354.31 112.28 3 25 48 1346.6 -17.26 177.60 3903.2 100.00 15 11 59 18.11 184.92 353.66 65.80 16 27 2 14.69 110.00 -23.06 3.55 353.06 115.96 4 51 59 62.15 17 30 13 1128.1 -19.38 3694.5 16.78 356.35 16 10 30 167.76 110.00 20.67 352.35 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 636.5 SCR 626.2 SC3 497.6 RRT -.4466 RRF .8307 RTF -.5303 ST 262.7 SR 398.3 SS 337.1 CRT -.8038 CRS -.8721 CST .4262 LSA 539.7 MSA 221.9 SSA 28.4 TDE .1684 TRA -.2490 TC3 .5886 BAU .1663 RDE -.2789 RRA -.2032 RC3 -.4929 FAU .12356 FDE -.5072 FRA-1.4600 FC3-6.6042 80P 2240 BDE .3207 BRA .3214 BC3 .7677 FDP -1490 868 894.3 RES -.3011 RES .7944 861 760.7 862 470.3 THA 136.25 EL1 457.3 EL2 136.1 ALF 120.98

FLIGHT TIME 94.00

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ARRIVAL DATE OCT 14 1967
                                                                            FLIGHT TIME 102.00
LAUNCH DATE JUL 4 1967
                                                                            DISTANCE 282.523
  HELIOCENTRIC CONIC
   RL 152:10 LAL -.00 LOL 281:36 VL 27:171 GAL -6.54 AZL 92:02 MCA 126.35 SMA 131:82 ECC .19065 INC 2:0233 V1 29:291
RP 108:12 LAP -1.63 LOP 47:72 VP 38:034 GAP -3.70 AZP 88:80 TAL 210:15 TAP 336:56 RCA 106:69 APO 156:95 V2 35:049
RC 73:590 GL -13:83 GP -17:85 ZAL 141:13 ZAP 54:70 ETS 12:65 ZAE 158:37 ETE 327:66 ZAC 94:64 ETC 12:94 CLP -52:63
   PLANETOCENTRIC CONIC
                                          2.23 RAL 136.28 RAD 6567.6 VEL 11.717 PTH 2.06 WHP 3.844 DPA -11.27 RAP 169.52 ECC 1.2616
    C3 15.894 VHL 3.987 DLA
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  110.53 2 2 22
66.60 15 15 13
                                                                                                                                                 -16.97
                   1 25 12 2230.03
13 56 17 4735.84
                                                                                                                  2 2 22
                                                                                                                                1630.0
                                                                                                                                                                  35.05
                                                    -19.94
                                                                     42.46
                                                                                  354.46
        90.00
                                                                                                                                   4135.8
                                                                                                                                                  13.11
                                                                                                                                                                  195.69
                                                                                   353.56
                                                     16.41
                                                                    202.81
                                                                                                                                1364.3
3874
        90.00
                                                                                                     111.66 3 20 19
65.28 16 31 12
                   2 47 34 1964.31
15 16 36 4476.80
3 58 12 1743.25
16 22 27 4270.62
                                                                                   354.06
353.12
                                                                                                    111.86
                                                                                                                                                 -17.76
                                                                                                                                                                   15.14
                                                                     22.52
                                                    -20.91
       100.00
                                                                                                                                                  13.89
                                                                                                                                                                  176.25
                                                                   183.32
       100.00
                                                     17.36
                                                                                                                                                 -19.87
15.96
                                                                                   352.82
                                                                                                   115.56
                                                                                                                  4 27 15
                                                                                                                                  1143.3
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                                                                      4.51
                                                     -23.51
                                                                                                     115.56 4 27 15
61.62 17 33 38
       110.00
                                                                                   351.78
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                                                                                                                                                                  150.43
                                                                    166.33
                                                      19.90
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 587.4 SGR 688.1 SG3 544.3
RRT -.3423 RRF .8716 RTF -.3910
                                                                                                                              ST 247.5 SR 392.7 SS 333.1
CRT -.7370 CRS -.8555 CST .2969
LSA 520.4 MSA 234.1 SSA 28.2
    TOE .1511 TRA -.2737 TC3 .4740 BAU .1623
   RDE -.2649 RRA -.2204 RC3 -.5969 FAU .13403
FDE -.4911 FRA-1.8011 FC5-7.3007 BBP 2231
BDE .3050 BRA .3515 BC3 .7637 FSP -1649
                                                                        8G8 904.7 R23 -.2548 R13 .8394
                                                                        SG1 749.5 SGE 506.7 THA 122.55
                                                                                                                              EL1 439.4 EL2 149.5 ALF 118.51
                                                                                                                                           ARRIVAL DATE OCT 16 1967
                                                                            FLIGHT TIME 104.00
LAUNCH DATE JUL 4 1967
                                                                            DISTANCE 289.036
  HELIOCENTRIC CONIC
   RL 158.10 LAL -.00 LOL 281.36 VL 27.197 GAL -6.51 AZL 81.89 MCA 129.56 SMA 132.00 ECC .18911 INC 1.8942 V1 29.291
RP 108.08 LAP -1.46 LOP 50.93 VP 38.084 GAP -3.16 AZP 88.79 TAL 210.34 TAP 339.90 RCA 107.04 APO 156.96 VZ 35.062
RC 75.721 GL -13.07 GP -19.48 ZAL 141.59 ZAP 59.72 ETS 11.50 ZAE 159.87 ETE 317.89 ZAC 96.69 ETC 12.34 CLP -57.66
  PLANETOCENTRIC CONIC
    C3 15.588 WHL 3.848 DLA 3.05 RAL 136.27 RAD 6567.6 VEL 11.704 PTH 2.06 WHP 3.697 DPA -12.04 RAP 167.23 ECC 1.2565 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 19 14 2250.36 -20.42 43.76 354.35 110.05 1 56 44 1650.4 -17.50 36.30
                                                                                                       2.06 WHP 3.697 OPA -12.04 RAP 167.23 ECC 1.2565"
                                                                                                  10.05 1 56 44 46 66.08 15 20 37 111.39 3 15 2 64.75 16 36 15 115.11 4 22 48 61.08 17 37 52
                   14 2 10 4706.72
2 41 59 1903.44
15 22 6 4440.60
3 53 28 1759.70
16 27 6 4245.30
                                                                    201.04
                                                                                    353.15
                                                                                                                                   4106.7
                                                                                                                                                   12.25
                                                                                                                                                                   193.98
                                                     15.62
        90.00
                                                     -21.39
                                                                     23.74
                                                                                   353.95
                                                                                                                                   1365.4
                                                                                                                                                  -18.30
                                                                                                                                                                    16.31
       100.00
                                                     16.56
                                                                                   352.70
                                                                                                                                   3648.9
                                                                                                                                                   13.03
                                                                                                                                                                   174.63
                                                                    181.63
       100.00
                                                                                                                                   1159.7
                                                                                                                                                  -20.40
                                                                                                                                                                  358.23
                                                                                   352.74
                                                                       5.54
                                                     -23.99
       110.00
                                                                                                                                   3645.4
                                                                                                                                                   15.08
                                                                                                                                                                  156.00
                                                                    164.83
                                                                                    351.35
                                                     19.00
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       8GT 590.2 $GR 758.8 $G3 587.5
RRT -.1521 RRF .9035 RTF -.1734
                                                                                                                               ST 235.1 SR 384.2 SS 323.3
CRT -.6385 CRS -.8334 CST .1234
LSA 495.5 MSA 247.1 SSA 28.1
    TOE .1331 TRA -.3006 TC5 .3272 BAU .1641
    MOE -.2546 MMA -.2578 MC3 -.7162 FAU .14357
                                                                       9G8 937.3 RE3 -.1021 R13 .8985
8G1 768.0 8G2 537.2 THA 102.47
    FOE -.4545 FRA-1.7073 FC3-7.9733 BSP 2275
BOE .2073 BRA .3001 BC3 .7074 FSP -1792
                                                                                                                               EL1 418.7 EL2 166.0 ALF 115.66
                                                                                                                                          ARRIVAL DATE OCT 18 1967
                                                                            FLIGHT TIME 106.00
LAUNCH DATE JUL 4 1967
   RL 152.10 LAL -.00 LOL 281.36 VL 27.215 GAL -6.48 AZL 91.75 MCA 132.77 SMA 132.13 ECC .18782 INC 1.7524 V1 29.291

RP 108.04 LAP -1.29 LOP 54.14 VP 36.109 GAP -2.63 AZP 68.81 TAL 210.43 TAP 343.20 RCA 107.31 APO 156.95 V2 35.075

RC 77.874 GL -12.21 GP -21.22 ZAL 141.96 ZAP 64.89 ETS 10.19 ZAE 160.40 ETE 306.28 ZAC 98.93 ETC 11.58 CLP -62.92

PLANETOCENTRIC CONIC
                                                                            DISTANCE 295.526
                                          3.89 RAL 136.40 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 3.581 OPA -12.84 RAP 164.71 ECC 1.2515
    C3 15.279 VHL 3.909 DLA
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  109.51 1 51 10
65.55 15 27 3
110.86 3 9 52
64.22 16 42 17
114.61 4 18 30
60.54 17 43 1
                                                                                                                               1672.7
                                                                                                                                                -18.08
                   1 13 17 2272.71
14 9 7 4675.35
2 36 27 2004.47
15 28 39 4418.82
3 48 52 1777.81
16 32 43 4218.24
                                                                                  354.39
                                                                    45.20
        90.00
                                                     -20.94
                                                                                                                                                                  192.15
                                                                                                                                   4075.3
                                                                                                                                                  11.32
                                                                                   352.87
                                                     14.74
                                                                   199.15
                                                                                                                                                                   17.60
                                                                                                                                   1404.5
                                                                                                                                                 -18.88
                                                                                   354.00
                                                     -21.91
                                                                     25.09
       100.00
                                                                                                                                                                  172.89
                                                                                                                                   3818.6
                                                                                                                                                  12.09
                                                                    179.83
                                                                                   352.41
                                                     15.60
       100.00
                                                                                                                                                 -20.98
                                                                                                                                   1177.8
                                                                                                                                                                  359.32
                                                                      6.69
                                                                                   352.82
                                                     -24.51
       110.00
                                                                                                                                                                  156.49
                                                                                                                                   3618.2
                                                                                                                                                   14.12
                                                                    163.25
                                                                                   351.05
                                                      18.18
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 229.2 SR 372.4 SS 309.5
CRT -.5115 CRS -.8040 CST -.0828
                                                                       SGT 548.7 SCR 838.6 SG3 625.8

RRT .1119 RRF .9280 RTF .1099

SG8 1002.2 R23 .0890 R13 .9255

SG1 842.5 SG2 542.8 THA 82.82
     TOE .1168 TRA -.3456 TC3 .1510 BAU .1755
     RDE -. 2419 RRA -. 2550 RC3 -. 8458 FAU .15185
                                                                                                                               LSA 467.1 MSA 260.9 SSA 28.2
    FOE -.3986 FRA-1.7840 FC3-8.6043 88P 2445
80E .2686 8RA .4295 8C3 .8591 FSP -1920
                                                                                                                               EL1 396.2 EL2 185.2 ALF 112.69
                                                                                                                                           ARRIVAL DATE OCT 20 1967
                                                                             FLIGHT TIME 108.00
LAUNCH DATE JUL 4 1967
                                                                            DISTANCE 301.990
   RL 152.10 LAL -.00 LOL 281.36 VL 27.227 GAL -6.43 AZL 91.59 MCA 135.98 SMA 132.22 ECC .18675 INC 1.5949 VI 29.291 RP 108.00 LAP -1.11 LOP 57.35 VP 36.130 GAP -2.13 AZP 88.85 TAL 210.42 TAP 346.41 RCA 107.53 APO 156.91 V2 35.088 RC 80.046 GL -11.23 GP -23.06 ZAL 142.25 ZAP 70.16 ETS 8.68 ZAE 160.31 ETE 293.54 ZAC 101.31 ETC 10.63 CLP -68.35
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 14.963 WHL 3.868 DLA 4.84 RAL 136.66 RAD 6567.6 VEL 11.677 PTH 2.05 WHP 3.498 OPA -13.70 RAP 162.01 ECC 1.2463
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 -18.72
                                                                                                   106.69
                                                                                                                   1 45 30
                                                                                   354.59
                                                                     46.82
                      1 7 13 2297.77
                                                     -21.50
                                                                                                                                                                   190.15
                                                                                                      65.01 15 34 42
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                                                      13.76
                                                                     197.10
                                                                                    352.74
                    14 17 21
                                    4640.92
        90.00
                                                                                                                 3 4 36
                                                                                                                                   1428.1
                                                                                                                                                  -19.51
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                                                                                                    110.25
                                                                     26.61
                      2 30 50 2028.04
                                                     -22.47
       100.00
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                                                                                                                                                                  171.00
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                                                                    177.88
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                    15 34 25
                                    4305.06
                                                      14.69
       100.00
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17 49 15
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                      3 44 17 1798.15
                                                     -25.00
       110.00
                                                                                                                                   3588.5
                                                                                                                                                   13.06
                                                                                                                                                                  154.84
                                                                                                      59.98
                                                                     161.55
                                                                                    350.89
       110.00
                    16 39 26 4188.54
                                                       17.17
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 599.6 SGR 927.2 SG3 657.6

MRT .3637 MRF .9467 RTF .3923

SG8 1104.2 M23 .1564 R13 .9342

SG1 966.6 SG2 530.0 THA 69.76
                                                                                                                               ST 232.1 SR 357.3 SS 293.4
     TOE .1042 TRA -.3688 TC3 -.0538 BAU .1979
                                                                                                                               CRT -.3706 CRS -.7655 CST -.2973
     ROE - .2264 RRA - .2715 RCS - .9880 FAU .15847
FDE - .3260 FRA-1.8268 FCS-9.1688 BSP 2771
BDE .2492 BRA .4742 BCS .9895 FSP -2037
                                                                                                                               LSA 436.8 MSA 275.6 SSA
                                                                                                                                                                      28.3
                                                                                                                               EL1 372.5 EL2 206.8 ALF 109.90
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ARRIVAL DATE OCT 22 1967

LAUNCH DATE JUL 4 1967

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DISTANCE 308.428
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.234 GAL -6.36 AZL 91.42 MCA 139.20 SMA 132.27 ECC .18587 INC 1.4179 VI 29.291
RP 107.96 LAP -.93 LOP 60.56 VP 38:146 GAP -1.64 AZP 88.93 TAL 210.31 TAP 349.51 RCA 107.68 APO 156.85 V2 35.101
RC 82.236 GL -10.08 GP -25.02 ZAL 142.45 ZAP 75.45 ETS 6.94 ZAE 159.25 ETE 280.93 ZAC 103.75 ETC 9.48 CLP -73.90
   PLANETOCENTRIC CONIC
                                            5.91 RAL 137.08 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 3.449 DPA -14.63 RAP 159.18 ECC 1.2409
    C3 14.640 VHL 3.826 DLA
    LNCH AZHTH LNCH TIME L-I TIME
                                                     INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 0 46 2326.53
14 27 8 4602.41
                                                                        48.70
                                                                                                      108.15
                                                                                                                       1 39 33
                                                                                                                                        1726.5
                                                                                                                                                       -19.43
                                                                                       354.98
        90.00
                                                       -22.12
                                                                                                                     15 43 50
                                                                                                           64.45
                                                                                                                                          4002.4
                                                                                       352.75
                                                                                                                                                            9.10
        90.00
                                                        12.64
                                                                       194.83
                                                                                                                      2 59 10
                                                                                                                                          1455.1
                                                                                                                                                                            20.76
                    2 24 55 2055.14
15 45 40 4349.04
                                                                                                         109.52
                                                                                                                                                          -20.23
                                                                        28.36
       100.00
                                                       -23.10
                                                                                       354.61
                                                                                                         63.11 16 58 9
113.34 4 9 55
59.40 17 56 46
       100.00
                                                        13.57
                                                                       175,73
                                                                                       352.28
                                                                                                                                         3749.0
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                                                                                                                                                                          168.91
                                                                                                                                         1221.5
       110.00
                      3 39 34 1821.50
                                                      -25.72
                                                                         9.51
                                                                                       353.49
                                                                                                                                                         -22.34
                                                                                                                                                                             1.99
       110.00
                     16 47 31
                                     4155.44
                                                        16.04
                                                                        159.63
                                                                                       350.88
                                                                                                                                         3555.4
                                                                                                                                                           11.86
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RCT 707.5 8GR 1018.7 8G3 677.9
RRT .5978 RRF .9603 RTF .6069
SG8 1240.3 RZ3 .1918 R13 .9419
8G1 1130.0 8G2 511.3 THA 60.97
                                                                                                                                    ST 243.4 SR 335.5 SS 272.4
CRT -. 2284 CRS -. 7024 CST -. 5160
    TOE .0955 TRA -.4359 TC3 -.2905 BAU .2299
    ROE -.2062 RRA -.2848 RC3-1.1381 FAU .16233
                                                                                                                                    LSA 400.8 MSA 290.7 SSA 28.8
EL1 344.1 EL2 231.0 ALF 107.50
    FDE -.2251 FRA-1.8170 FC3-9.5999 BSP 3213
    BOE .2272 BRA .5207 BC3 1.1746 FSP -2107
                                                                                FLIGHT TIME 112.00
                                                                                                                                                 ARRIVAL DATE OCT 24 1967
                                                                                DISTANCE 314.841
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.255 GAL -6.31 AZL 91.22 MCA 142.42 SMA 132.27 ECC .18516 INC 1.2161 VI 29.291
RP 107.92 LAP -.74 LOP 63.78 VP 38.158 GAP -1.17 AZP 89.04 TAL 210.11 TAP 352.53 RCA 107.78 APO 156.77 VZ 35.113
RC 84.440 GL -8.74 GP -27.08 ZAL 142.56 ZAP 80.67 ETS 4.96 ZAE 157.26 ETE 269.67 ZAC 106.19 ETC 8.13 CLP -79.51
   PLANETOCENTRIC CONIC
   C3 14.309 WHL 3.783 OLA 7.14 RAL 137.67 RAD 6567.6 VEL 11.649 PTH 2.04 VMP 3.434 OPA -15.67 RAP 156.29 ECC 1.2355 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 53 40 2360.40 -22.82 50.94 355.57 107.24 1 33 0 1760.4 -20.25 43.21 90.00 14 38 53 4558.41 11.34 192.25 352.94 63.88 15 54 51 3958.4 7.73 185.43 100.00 2 18 25 2087.03 -23.81 30.48 355.22 108.63 2 53 12 1487.0 -21.04 22.78 100.00 15 56 49 4307.01 12.26 173.29 352.46 62.52 17 8 36 3707.0 8.49 166.54
                                                                                                          62.52 17 8 36
112.49 4 5 17
                                   1849.03
4117.78
                                                                          351.04 58.80 18 5 53
HIO-COURSE EXECUTION ACCURACY
SGT 880.5 SGR 1114 0 ACT
       110.00
                      3 34 28
                                                       -26.45
                                                                         11.32
                                                                                                                                          1249.0
                                                                                                                                                          -23.16
                                                                                                                                                                             3.70
                     16 57 15
                                                         14.72
                                                                        157.51
                                                                                                                                          3517.8
                                                                                                                                                           10.48
                                                                                                                                                                           150.98
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RET .7345 RRF .9705 RTF .7446
SGB 1408.5 RZ3 .2022 R13 .9503
SGI 1319.2 SGZ 493.6 THA 54.81
                                                                                                                                     ST 263.5 SR 307.9 SS 253.2
CRT -.1092 CRS -.6113 CST -.7036
    TOE .0940 TRA -.4835 TC3 -.5537 BAU .2700
    MDE -.1816 MRA -.2951 RC3-1.2982 FAU .16355
    FOE -.1079 FRA-1.7625 FC3-9.8954 BSP 3780
                                                                                                                                     LSA 371.2 MSA 299.6 SSA 29.4
    BOE .2045 BRA .5665 BC3 1.4114 FSP -2152
                                                                                                                                     EL1 312.4 EL2 258.2 ALF 107.47
                                                                                FLIGHT TIME 114.00
                                                                                                                                                 APRIVAL DATE OCT 26 1967
LAUNCH DATE JUL 4 1967
                                                                                DISTANCE 321.229
    RL 152.10 LAL -.00 LOL 281.36 VL 27.232 GAL -6.24 AZL 90.98 MCA 145.64 SMA 132.25 ECC .18460 INC .9823 VI 29.291
RF 107.89 LAP -.55 LOP 67.00 VP 38.167 GAP -.71 AZP 89.19 TAL 209.82 TAP 355.46 RCA 107.83 APO 156.66 VZ 35.125
RC 86.655 GL -7.13 GP -29.29 ZAL 142.56 ZAP 85.73 ETS 2.70 ZAE 154.48 ETE 260.38 ZAC 108.53 ETC 6.56 CLP -85.10
   PLANETOCENTRIC CONIC
    C3 13.973 VHL 3.738 DLA
                                            8.58 RAL 138.43 RAD 6567.5 VEL 11.634 PTH 2.04 VHP 3.455 OPA -16.87 RAP 153.39 ECC 1.2300
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      INJ Azmir.
106.09 1 25 20
63.29 16 8 19
2 46 23
                                                                                     356.42
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                       0 45 27 2401.42
14 53 12 4506.92
                                                                        53.68
                                                                                                                                        1601.4
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        90.00
                                                       -23.62
                                                         9.76
                                                                       189.28
                                                                                       353.34
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         90.00
                    14 53 12
                                                                                                                                          1525.6
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       100.00
                     2 10 57 2125.63
16 10 23 4257.95
                                                       -24.62
                                                                         33.06
                                                                                       356.09
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111.43 4 0 4
58.16 18 17 2
       100.00
                                                       10.71
                                                                       170.48
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                      3 28 42 1882.34
17 9 8 4073.99
                                                                         13.54
                                                                                       355.04
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       110.00
                                                       -27.29
                     17 9 8
                                                                       155.06
                                                                                       351.40
       110.00
                                                       13.16
                                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SCT 1046.8 SGR 1209.4 SG3 682.2
RRT .8170 RRF .9779 RTF .8248
SGB 1599.6 R23 .2051 R13 .9572
SGI 1526.4 SGZ 478.3 THA 50.03
    TOE .1014 TRA -.5298 TC3 -.8431 BAU .3153
                                                                                                                                     ST 291.9 SR 270.5 55 239.2
    RDE -.1496 RRA -.2995 RC3-1.4619 FAU .16126
FOE .0369 FRA-1.6496 FC3-9.9915 BSP 4417
                                                                                                                                     CRT -. 0097 CRS -. 4669 CST -. 8637
                                                                                                                                     LSA 372.2 MSA 275.9 SSA 30.6
EL1 292.0 EL2 270.4 ALF 176.38
    BOE .1809 BRA .6086 BC3 1,6876 FSP -2141
                                                                                FLIGHT TIME 116.00
                                                                                                                                                 ARRIVAL DATE OCT 28 1967
LAUNCH DATE JUL 4 1967
                                                                               DISTANCE 327.594
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 27.224 GAL -6.16 AZL 90.71 MCA 148.86 9MA 132.19 ECC .18418 INC .7062 V1 29.291
RP 107.85 LAP -.37 LOP 70.21 VP 36.172 GAP -.26 AZP 89.40 TAL 209.45 TAP 358.30 RCA 107.84 APO 156.54 V2 35.137
RC 88.880 GL -5.18 GP -31.67 ZAL 142.44 ZAP 90.52 ETS .13 ZAE 151.09 ETE 253.09 ZAC 110.71 ETC 4.78 CLP -90.61
   PLANETOCENTRIC CONIC
    C3 13.640 VHL 3.693 DLA 10.32 RAL 139.41 RAD 6567.5 VEL 11.620 PTH 2.04 VHP 3.514 OPA -18.30 RAP 150.52 ECC 1.2245
    UNCH AZHTH LNCH TIME L-I TIME
90.00 0 35 26 2452.72
90.00 15 11 1 4445.04
100.00 2 1 54 2173.86
100,00 16 27 14 4108.14
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZYMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -24.54 97.15 357.60 104.58 1 16 19 1852.7 -22.30 49.20
                                                                                     357.60
                                                          7.86
                                                                       185.74
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                                                        -25.57
                                                                         36.33
                                                                                       357.29
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                     16 27 14
                                                                                                                     17 37 13
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       100.00
                                     4199.14
                                                         8.80
                                                                        167.15
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                                   1923.92
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                                                                                                                       3 53 50
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                       3 21 47
                                                       -28.30
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57.51 18 30 53
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       110.00
                     17 23 51
                                      4021.84
                                                        11.27
                                                                        152.22
                                                                                       352.02
                                                                                                                                          3421.8
                                                                                                                                                             6.91
   DIFFERENTIAL CORRECTIONS
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           RET 1253:1 SCR 1306.6 SC3 664.8
RRT .8662 RRT .8636 RTF .8721
SC8 1810.4 R23 .2039 R13 .9631
SC1 1748.9 SC2 467.9 THA 46.38
                                                                                                                                     ST 350.7 8R 225.9 SS 242.6
CRT .D864 CRS -.3129 CST -.9584
LSA 408.7 MSA 226.1 SSA 32.7
EL1 331.7 EL2 224.3 ALF 6.24
    TOÉ .1219 TRA -.5700 TC3-1.1523 BAU .3645
    RDE -.1112 RRA -.8967 RC3-1.6353 FAU .15608
FDE .1925 FRA-1.4967 FC3-9.9064 88P 5131
    BQE .1650 BRA .6442 BC3 1.9969 FSP -2100
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FLIGHT TIME 110.00

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ARRIVAL DATE OCT 30 1967
                                                                                   FLIGHT TIME 118.00
LAUNCH DATE JUL 4 1967
                                                                                   DISTANCE 333.934
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.211 GAL -6.06 AZL 90.37 MCA 152.08 SMA 132.10 ECC .18388 INC .3735 VI 29.291
RP 107.82 LAP -.17 LOP 73.44 VP 38.174 GAP .17 AZP 88.67 TAL 208.99 TAP 1.07 RCA 107.81 APO 156.40 VZ 35.149
RC 91.113 GL -2.77 GP -34.29 ZAL 142.16 ZAP 94.94 ETS 357.24 ZAE 147.25 ETE 247.53 ZAC 112.66 ETC 2.77 CLP -95.98
   PLANETOCENTRIC CONIC
    C3 13.322 VML 3.650 DLA 12.46 RAL 140.65 RAD 6567.5 VEL 11.606 PTH 2.03 VMP 3.616 DPA -20.04 RAP 147.69 ECC 1.2193
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 22 34 2519.21 -25.61 61.73 359.24 102.52 1 4 33 1919.2 -23.63 53.62
                                                                                                           102.52 1 4 33
62.17 16 46 35
                     0 22 34 2519.21
15 33 47 4368.30
1 50 19 2236.23
                                                                                                                                               3768.3
                                                                                                                                                                  1.68
                                                                                                                                                                                 174.74
                                                            5.44
                                                                          181.40
                                                                                           355.05
         90.00
                                                                                                              104.02 2 27 35
60.74 17 57 30
108.13 3 45 57
56.86 18 48 30
                                                                           40.64
                                                                                           358.96
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                                                          -26.67
       100.00
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                                       4126.52
                                                            6.41
       100.00
                     16 48 43
                       3 13 0 1977.50
                                                                                                                                               1377.5
                                                                                                                                                                -26.73
                                                                                                                                                                                  11.97
                                                                            20.07
                                                                                           358.04
                                                                                                             108.13
                                                          -29.49
       110.00
                                                                                                                                               3358.0
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                                                            8.92
                                                                          148.78
                                                                                           352.99
       110.00
                     17 42 32
                                      3958.01
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RET .8963 RRF .9678 RTF .9007
SGB 2030.2 R23 .2034 R13 .9672
SGI 1977.0 SGZ 461.7 THA 43.37
                                                                                                                                          ST 385.5 SR 173.3 SS 274.8

CRT .2675 CRS -.2580 CST -.9869

LSA 474.6 MSA 166.2 SSA 36.2

EL1 388.9 EL2 165.5 ALF 8.38
    TOE .1598 TRA -.6033 TC3-1.4768 BAU .4150
    ROE -.0607 RRA -.2886 RC3-1.8026 FAU .14732
    FOE .3722 FRA-1.2917 FC3-9.5732 BSP 5853
BOE .1710 BRA .6667 BC3 2.3303 FSP -1996
                                                                                                                                                       ARRIVAL DATE NOV 1 1967
                                                                                    FLIGHT TIME 120,00
LAUNCH DATE JUL 4 1967
                                                                                   DISTANCE 340-250
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.196 GAL -5.96 AZL 89.96 HCA 155.30 SMA 131.99 ECC .18369 INC .0328 V1 29.291
RP 107.78 LAP .02 LOP 76.66 VP 38.173 GAP .58 AZP 90.03 TAL 208.46 TAP 3.76 RCA 107.75 APO 156.24 V2 35.160
RC 93.352 GL .29 GP -37.27 ZAL 141.63 ZAP 98.88 ETS 353.95 ZAE 143.02 ETE 243.40 ZAC 114.30 ETC .50 CLP-101.18
   PLANETOCENTRIC CONIC
    C3 13.049 WHL 3.612 DLA 15.18 RAL 142.23 RAD 6967.5 VEL 11.595 PTH 2.03 VHP 3.770 DPA -22.18 RAP 144.89 ECC 1.2148 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            0 4 53 2609.37
16 4 5 4269.18
                                                                                                                                              2009.4
                                                                                                                                                               -25.19
                                                                                                                                                                                  59.76
                                                          -26.78
                                                                            66.07
                                                                                              1.51
        90.00
                                                                                                                                                3669.2
                                                                                                                                                                  -1.52
                                                                                                                                                                                  169.21
                                                            2.27
                                                                           175.84
                                                                                           356.68
         90.00
                     1 34 29 2320.40
17 17 10 4033.37
                                                                                                                                                1720.4
                                                                                                                                                                 -26.10
                                                                                                                                                                                   34.25
                                                          -27.92
                                                                            46.58
                                                                                              1.28
       100.00
                                                                                                                                               3433.4
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                                                                           157.94
                                                                                           356.12
                                                            3.28
       100.00
                                     2049.25
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                                                                                                                                                                                  16.82
                                                          -30.90
                                                                            25.18
       110.00
                     3 1 8
                                                                                                                                            3277.3
                                                                                           354.50
                                                                                                                                                                  1.41
                                                                                                                                                                                 138.26
                                                                           144.49
                                       3077.28
                                                            5.89
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 1699.7 SCR 1492.9 SC3 587.4
RRT .9150 RRF .9910 RTF .9189
SCB 2259.2 R23 .2022 R13 .9707
                                                                                                                                           ST 468.4 SR 139.9 SS 339.8
CRT .6692 CRS -.5559 CST -.9781
    TOE .2217 TRA -.6227 TC3-1.8069 BAU .4667
    ROE .0023 RRA -.2702 RC3-1.9729 FAU .13588
FOE .5558 FRA-1.0589 FC3-9.0149 8SP 6626
                                                                                                                                          LSA 582.9 MSA 114.8 SSA 39.6
EL1 478.2 EL2 101.9 ALF 11.85
            .2217 BRA .6788 BC3 2.6753 FSP -1869
                                                                                SG1 2211.5 SG2 461.7 THA 41.03
                                                                                                                                                       ARRIVAL DATE NOV 3 1967
                                                                                    FLIGHT TIME 122.00
LAUNCH DATE JUL 4 1967
                                                                                   DISTANCE 346.542
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.176 GAL -5.85 AZL 89.43 HCA 158.53 SHA 131.85 ECC .18360 INC .5656 V1 29.291
RP 107.75 LAP .21 LOP 79.88 VP 38.169 GAP .99 AZP 90.53 TAL 207.85 TAP 6.38 RCA 107.65 APO 156.06 V2 35.170
RC 95.598 GL 4.27 GP -40.74 ZAL 140.70 ZAP 102.19 ETS 350.21 ZAE 138.39 ETE 240.40 ZAC 115.59 ETC 357.91 CLP-106.19
   PLANETOCENTRIC CONIC
     C3 12.877 VHL 3.586 DLA 18.72 RAL 144.29 RAD 6567.5 VEL 11.587 PTH 2.03 VHP 3.992 DPA -24.87 RAP 142.06 ECC 1.2119
    C3 12.877 VML 3.588 OLA 18.72 RAL 144.29 RAD 6567.5 VEL 11.587 PTH 2.03 VMP 3.992 DPA -22.87 RAP 142.06 ECC 1.2119 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 47 7 4133.15 -2.12 168.25 359.31 61.76 17 56 0 3533.1 -5.68 161.59 100.00 1 10 58 2440.73 -29.20 55.29 4.60 96.72 1 51 39 1840.7 -27.96 46.71 100.00 17 57 6 3907.31 -.99 151.02 358.68 60.12 19 2 13 3307.3 -4.96 144.48 110.00 2 43 54 2149.98 -32.48 32.60 4.00 101.28 3 19 44 1550.0 -30.59 23.90 110.00 18 40 40 3770.83 1.84 138.91 356.92 55.85 19 43 30 3170.8 -2.66 132.70
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 601.0 SR 189.3 S3 441.6

CRT .9736 CRS -.9217 CST -.9718

LSA 763.1 MSA 92.2 S9A 34.3

EL1 628.7 EL2 41.3 ALF 17.12
    TOE .3192 TRA -.6232 TC3-2.1255 BAU .5175
RDE .0869 RRA -.2377 RC3-2.1259 FAU .12142
FDE .7532 FRA -.7945 FC3-8.1632 BSP 7376
BDE .3308 BRA .6670 BC3 3.0062 FSP -1667
                                                                               SGT 1921.1 SGR 1583.6 SG3 529.5
                                                                             RRT .9267 RRF .9935 RTF .9306
SGB 2489.7 R23 .2019 R13 .9731
SG1 2445.4 SG2 467.5 TMA 39.08
                                                                                    FLIGHT TIME 124.00
                                                                                                                                                       ARRIVAL DATE NOV 5 1967
LAUNCH DATE JUL 4 1967
                                                                                   DISTANCE 352.811
    RL 152.10 LAL -.00 LOL 281.36 VL 27.154 GAL -5.72 AZL 88.73 MCA 161.75 SMA 131.70 ECC .18361 INC 1.2708 V1 29.291 RP 107.72 LAP .40 LOP 83.11 VP 36.163 GAP 1.36 AZP 91.21 TAL 207.17 TAP 8.92 RCA 107.52 APO 155.88 V2 35.180 RC 97.843 GL 9.59 GP -44.92 ZAL 139.07 ZAP 104.73 ETS 345.93 ZAE 133.27 ETE 238.28 ZAC 116.43 ETC 354.91 CLP-111.04
    PLANETOCENTRIC CONIC
     C3 12.930 VHL 3.596 DLA 23.45 RAL 147.07 RAD 6567.5 VEL 11.590 PTH 2.03 VHP 4.312 DPA -28.28 RAP 139.05 ECC 1.2128
     LNCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                              -28.28
                                                                                          9.34
                                                                                                             87.22 23 36 14
62.98 19 1 58
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                     22 47 1
                                                          -26.19
                                                                            92.99
                                      2952.76
                                                                          156.34
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                                                                                                                62.98
                                                                                                                                                3321.8
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                     17 56 36
                                       3921.85
                                                            -8.82
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                                      2631.04
                        0 30 44
                                                          -29.89
        100.00
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                                       3718.80
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                       19 30 41
                                       3621.03
                                                           -3.69
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE .4707 TRA -.5967 TC3-2.3994 BAU .5672
ROE .2014 RRA -.1876 RC3-2.2364 FAU .10446
                                                                               SGT 2148.0 SGR 1673.5 SG3 460.3
                                                                                                                                         ST 813.6 SR 339.0 SS 574.7
CRT .9922 CRS -.9920 CST -.9762
                                                                              RRT .9336 RRF .9953 RTF .9366
SGB 2723.0 R23 .2014 R13 .9750
SG1 2680.3 SG2 480.5 THA 37.44
                                                                                                                                          LSA 1046.9 MSA 103.1 SSA 19.9
     FDE .9485 FRA -.5162 FC3-6.9939 BSP 8142
BDE .5120 BRA .6255 BC3 3.2814 FSP -1472
                                                                                                                                           EL1 880.5 EL2 39.1 ALF 22.51
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ARRIVAL DATE NOV 7 1967

LAUNCH DATE JUL 4 1967

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DISTANCE 359.055
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 27.129 GAL -5.59 AZL 87.73 HCA 164.97 SMA 131.52 ECC .18370 INC 2.2655 V1 29.291 RP 107.69 LAP .59 LOP 86.34 VP 36.154 GAP 1.76 AZP 92.19 TAL 206.43 TAP 11.40 RCA 107.36 APO 155.68 V2 35.190 RC 100.092 GL 16.88 GP -50.08 ZAL 136.15 ZAP 106.24 ETS 340.98 ZAE 127.46 ETE 236.76 ZAC 116.75 ETC 351.35 CLP-115.84
   PLANETOCENTRIC CONIC
    C3 13.511 VHL 3.676 DLA 29.90 RAL 151.05 RAD 6567.5 VEL 11.615 PTH 2.04 VHP 4.793 DPA -32.62 RAP 135.59 ECC 1.2224
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  19 16 19 3709.36
21 59 7 3184.26
19 16 19 3709.38
                                                                                                        70.19 20 18 8
70.18 22 52 11
                                                                                                                                                      -25.35
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                                                                                   13.91
                                                      -22.86
                                                                     147.22
        79.98
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                                                                      108.60
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                                                      -22.85
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70.16 22 52 11
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                                     2567.18
       110.00
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                                     3374.45
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       110.00
                    20 59 1
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ST 1150.5 SR 569.5 SS 731.3
CRT .9888 CRS -.9993 CST -.9842
    TDE .7143 TRA -.5271 TC3-2.5517 BAU .6143
                                                                          SGT 2378.4 SGR 1757.5 SG3 380.5
    ROE .3619 RRA -.1102 RC3-2.2461 FAU .08525
FOE 1.1272 FRA -.2370 FC3-5.4624 BSP 8913
BOE .8006 BRA .5385 BC3 3.4007 FSP -1227
                                                                          RRT .9368 RRF .9964 RTF .9445
SGB 2957.3 R23 .1997 R13 .9767
                                                                                                                                   LSA 1472.4 MSA 121.1 SSA 10.6
                                                                                                                                   EL1 1281.4 EL2 76.3 ALF 26.18
                                                                          SG1 2914.4 SG2 501.6 THA 35.92
                                                                               FLIGHT TIME 128.00
                                                                                                                                               ARRIVAL DATE NOV 9 1967
LAUNCH DATE JUL 4 1967
                                                                               DISTANCE 365.271
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.102 GAL -5.44 AZL 86.21 HCA 168.19 SMA 131.32 ECC .18387 INC 3.7889 V1 29.291
RP 107.66 LAP .78 LOP 89.57 VP 38.143 GAP 2.13 AZP 93.71 TAL 205.62 TAP 13.81 RCA 107.18 APO 155.47 V2 35.199
RC 102.344 GL 26.97 GP -56.61 ZAL 131.02 ZAP 106.43 ETS 335.16 ZAE 120.62 ETE 235.44 ZAC 116.43 ETC 346.93 CLP-120.93
   PLANETOCENTRIC CONIC
    C3 13.455 WHL 3.931 DLA 38.67 RAL 157.33 RAD 6567.6 VEL 11.698 PTH 2.06 VMP 5.575 DPA -38.15 RAP 131.13 ECC 1.2543 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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2860.25
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        69.45
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       117.52
                                     2880.25
                                                       -28.21
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 2624.1 SGR 1808.7 SG3 290.8
RRT .9361 RRF .9967 RTF .9493
SG8 3187.0 R23 .1980 R13 .9779
SG1 3142.4 SG2 531.4 THA 33.93
                                                                                                                                   ST 1662.2 SR 867.3 SS 889.9
CRT .9900 CRS-1.0000 CST -.9903
    TDE 1.1304 TRA -.3815 TC3-2.4347 BAU .6535
    RDE .5941 RRA .0173 RC3-2.0193 FAU .06390
                                                                                                                                   LSA 2070.7 MSA 139.4 SSA 5.6
EL1 1871.7 EL2 108.6 ALF 27.42
    FDE 1.2663 FRA .0325 FC3-3.5793 BSP 9645
BDE 1.2770 BRA .3819 BC3 3.1631 FSP -946
                                                                                                                                              ARRIVAL DATE NOV 11 1967
                                                                               FLIGHT TIME 130.00
LAUNCH DATE JUL 4 1967
                                                                               DISTANCE 371.452
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.072 GAL -5.29 A7L 83.57 MCA 171.39 SMA 131.11 ECC .18411 INC 6.4307 V1 29.291
RP 107.63 LAP .96 LOP 92.80 VP 38.129 GAP 2.49 A7P 96.36 TAL 204.74 TAP 16.14 RCA 106.97 APO 155.25 V2 35.208
RC 104.596 GL 40.46 GP -65.03 7AL 122.54 7AP 104.89 ETS 327.76 7AE 112.18 ETE 233.22 7AC 115.32 ETC 340.73 CLP-127.50
   PLANETOCENTRIC CONIC
    C3 21.651 VML 4.653 DLA 49.73 RAL 168.53 RAD 6567.9 VEL 11.960 PTH 2.13 VMP 7.019 OPA -45.10 RAP 124.39 ECC 1.3563
    C3 Z1.651 VHL 4.653 DLA 49.73 RAL 168.53 RAD 6567.9 VEL 11.960 PTH 2.13 VHP 7.019 OPA -45.10 RAP 124.39 ECC 1.3563
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
47.25 17 36 49 4312.64 -31.88 202.47 46.74 49.58 18 48 42 3712.6 -36.85 195.28
132.75 2 1 59 2798.18 -31.87 83.14 46.73 49.57 2 48 37 2198.2 -36.84 75.95
47.25 17 36 49 4312.64 -31.88 202.47 46.74 49.58 18 48 42 3712.6 -36.85 195.28
132.75 2 1 59 2798.18 -31.87 83.14 46.73 49.57 2 48 37 2198.2 -36.84 75.95
47.25 17 36 49 4312.64 -31.88 202.47 46.74 49.58 18 48 42 3712.6 -36.85 195.28
132.75 2 1 59 2798.18 -31.87 83.14 46.73 49.57 2 48 37 2198.2 -36.84 75.95
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RET .9269 RRF .9944 RTF .9549

968 3407.1 R23 .1954 R13 .979U

961 3358.5 862 573.5 THA 30.18
                                                                                                                                   ST 2347.1 SR 1103.0 SS 976.5
     TOE 1.9053 TRA -.0723 TC3-1.8579 BAU .6734
                                                                                                                                   CRT .9902 CRS -.9996 CST -.9937
    ROE .8885 RRA .2350 RC3-1.4004 FAU .04173
FOE 1.3014 FRA .2655 FC3-1.6685 BSP 10403
                                                                                                                                   LSA 2766.5 MSA 160.8 SSA 3.1
EL1 2589.6 EL2 139.8 ALF 25.03
    BOE 2.1023 BRA .2459 BC3 2.3266 FSP -658
                                                                                                                                               ARRIVAL DATE NOV 13 1967
                                                                               FLIGHT TIME 132,00
LAUNCH DATE JUL 4 1967
                                                                              DISTANCE 377.573
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 27.040 GAL -5.11 AZL 77.85 MCA 174.56 SMA 130.89 ECC .18437 INC12.1452 V1 29.291
RP 107.61 LAP 1.14 LOP 96.04 VP 38.114 GAP 2.83 AZP 102.09 TAL 203.78 TAP 18.34 RCA 106.76 APO 155.02 V2 35.216
RC 106.849 GL 55.99 GP -75.93 ZAL 110.71 ZAP 101.24 ETS 314.01 ZAE 100.94 ETE 224.60 ZAC 113.44 ETC 327.49 CLP-143.27
   PLANETOCENTRIC CONIC
     C3 46.723 VHL 6.835 DLA 59.83 RAL 190.31 RAD 6568.7 VEL 12.965 PTH 2.36 VHP 10.349 DPA -53.23 RAP 111.63 ECC 1.7689
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 34.81 18 28 10 4580.62 -26.22 225.43 83.69 34.07 19 44 30 3980.6 -32.75 220.53
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                                                       -26.21
                                                                         19.88
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2882.5 SR 686.2 SS 871.9
     TOE 3,4067 TRA .7820 TC3 -.8481 BAU .6031
                                                                           SGT 3346.7 SGR 1309.6 SG3 -115.1
                                                                           RRT .8992 RRF .9566 RTF .9693
SGB 3593.8 RZ3 .1815 R13 .9825
SGI 3537.4 SGZ 634.0 THA 19.22
                                                                                                                                  CRT .9554 CRS -.9816 CST -.9942
    ROE .7420 RRA .5783 RC3 -.4613 FAU .02033
                                                                                                                                   LSA 3081.4 MSA 212.0 SSA 1.6
    FOE 1.1289 FRA .4699 FC3 -.3767 BSP 10893
                                                                                                                                   EL1 2956.5 EL2 197.5 ALF 12.87
    BOE 3.4866 BRA .9726 BC3 .9655 FSP -382
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FLIGHT TIME 126.00

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FLIGHT TIME 134.00
                                                                                                                                                 ARRIVAL DATE NOV 15 1967
LAUNCH DATE JUL 4 1967
   HELIOCENTRIC CONIC
                                                                                01STANCE 383.467
     RL 152:10 LAL -.00 LOL 281.36 VL 27.006 GAL -4.89 AZL 57.57 MCA 177.54 SMA 130.65 ECC .18440 INC32.4257 V1 29.291
RP 107.59 LAP 1.32 LOP 99.28 VP 38.097 GAP 3.10 AZP 122.40 TAL 202.62 TAP 20.15 RCA 106.56 APO 154.75 V2 35.223
RC 109.101 GL 64.21 GP -77.77 ZAL 98.28 ZAP 95.54 ETS 221.20 ZAE 61.43 ETE 135.96 ZAC 112.03 ETC 232.54 CLP 117.14
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 36.74 20 12 1 4914.78 -6.24 235.54 121.23 31.99 21 33 56 4314.8 -13.00 231.62
     C3 258.766 VHL 16.024 DLA 58.22 RAL 215.10 RAD 6571.5 VEL 19.444 PTH 3.11 VMP 22.619 OPA -57.88 RAP 77.63 ECC 5.2257
                    5 38 18 3267.42
20 12 1 4914.78
5 36 18 3267.42
20 12 1 4914.78
        143.26
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        143.26
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                                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
    TDE 1.1666 TRA 2.1431 TC3 -.0049 BAU .2721
RDE-5.7277 RRA-3.7368 RC3 -.0791 FAU-.00398
FDE .9662 FRA .9271 FC3 .0134 BSP 11624
BOE 5.8453 BRA 4.3077 BC3 .0793 FSP -213
                                                                                                                                    ST 603.8 SR 2184.9 SS 769.4

CRT -.8994 CRS .9896 CST -.9530

LSA 2376.6 MSA 269.4 SSA .8

EL1 2252.3 EL2 256.0 ALF 104.14
                                                                            S6T 1513.8 S6R 3270.5 S63 62.1
RRT -.9175 RRF -.9643 RTF ..9729
S6B 3603.8 R25 -.1085 R13 -.9939
                                                                            SG1 3561.2 SG2 553.1 THA 113.61
                                                                                 FLIGHT TIME 136.00
                                                                                                                                                  ARRIVAL DATE NOV 17 1967
LAUNCH DATE JUL 4 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 390.806
    RL 152.10 LAL -.00 LOL 281.36 VL 26.970 GAL -4.94 AZL 142.28 MCA 181.89 SMA 130.41 ECC .18674 INC52.2800 V1 29.291
RP 107.57 LAP 1.50 LOP 102.51 VP 38.078 GAP 3.77 AZF 37.73 TAL 202.50 TAP 24.39 RCA 106.06 APO 154.76 V2 35.230
RC 111.351 GL -58.43 GP 69.54 ZAL 95.36 ZAP 94.89 ETS 172.33 ZAE 69.00 ETE 255.05 ZAC 86.89 ETC 151.66 CLP 104.11
   PLANETOCENTRIC CONIC
    C3 622.348 VHL 24.947 DLA -51.78 RAL 147.78 RAD 6572.6 VEL 27.270 PTH 3.40 VHP 30.708 DPA 64.27 RAP 327.45 ECC11.2423
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
44.65 4 7 43 2310.74 1.09 65.83 56.90 141.77 4 46 13 1710.7 7.37 59.27
135.35 12 49 32 757.61 1.11 300.53 56.92 141.77 12 58 10 157.6 7.38 295.96
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                       4 7 43
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   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            SCT 998.0 SCR 3422.4 SC3 59.2
RRT -.8614 RRF .9983 RTF -.8336
SC8 3565.0 R23 -.0873 R13 .9958
    TOE 2.4296 TRA 2.0572 TC3 -.0639 BAU 1.7824
                                                                                                                                      ST 603.3 SR 3056.3 SS 1665.9
                                                                                                                                    CRT -.9636 CRS -.9999 CST .9590
LSA 3529.0 MSA 163.1 SSA 1.3
    RD-13.2126 RRA-3.2591 RC3 .2045 FAU-.02624
FDE-2.7195 FRA -.3757 FC3 .0365 BBP 10884
BDE13.4341 BRA 3.8541 BC3 .2142 FBP -184
                                                                            SG1 3530.9 SG2 491.3 THA 104.39
                                                                                                                                      EL1 3111.3 EL2 158.4 ALF 100.80
                                                                                FLIGHT TIME 138.00
                                                                                                                                                 ARRIVAL DATE NOV 19 1967 ....
LAUNCH DATE JUL 4 1967
   MELIOCENTRIC CONIC
                                                                                DISTANCE 396.491
    RL 152.10 LAL -.00 LOL 281.36 VL 26.933 GAL -4.66 AZL 110.77 MCA 184.70 SMA 130.15 ECC .18666 INC20.7721 V1 29.291
RP 107.55 LAP 1.67 LOP 105.75 VP 38.057 GAP 3.98 AZP 69.29 TAL 201.12 TAP 25.82 RCA 105.86 APO 154.45 VZ 35.236
    RC 113,598 GL -63.57 GP 75,96 ZAL 101.91 ZAP 103.30 ETS 82.13 ZAE 94.32 ETE 166.83 ZAC 86.82 ETC 63.60 CLP-161.42
   PLANETOCENTRIC CONIC
     C3 113.026 VHL 10.631 DLA -50.43 RAL 132.22 RAD 6570.1 VEL 15.309 PTH 2.74 VHP 11.931 DPA 76.54 RAP 249.68 ECC 2.8601
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                           MID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                           SGT 3797.3 SGR 826.4 SG3 107.5
RRT .7353 RRF .6436 RTF .9916
SGB 3886.2 R23 -.1494 R13 .9883
SGI 3846.7 SG2 552.9 THA 9.29
                                                                                                                                    ST 2982.1 SR 270.0 SS 1083.0
CRT .6237 CRS -.5800 CST -.9985
    TOE-5.3675 TRA-2.8488 TC3 -.2201 BAU .3327
    ROE - .2079 RRA - .9657 RC3 - .0061 FAU .01263
FDE-1.9142 FRA - .7827 FC3 - .0968 BSP - 11798
                                                                                                                                     LSA 3176.6 MSA 219.0 SSA 1.2
                                                                                                                                     EL1 2986.9 EL2 210.7 ALF 3.25
    80E 5.3716 BRA 3.0080 BC3 .2202 FSP -334
                                                                                                                                                 ARRIVAL DATE NOV 21 1967
                                                                                FLIGHT TIME 140,00
LAUNCH DATE JUL 4 1967
                                                                               DISTANCE 402.517
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 28.895 GAL -4.44 AZU 103.52 MCA 187.85 SMA 129.89 ECC .18722 INC13.5184 VI 29.291
RP 107.53 LAP 1.83 LOP 109.00 VP 38.035 GAP 4.29 AZP 76.60 TAL 199.96 TAP 27.82 RCA 105.57 APO 154.21 V2 35.241
RC 115.842 GL -58.92 GP 82.72 ZAL 106.51 ZAP 112.07 ETS 55.01 ZAE 106.64 ETE 143.82 ZAC 90.76 ETC 37.35 CLP-145.07
   PLANETOCENTRIC CONIC
    C3 54.019 VHL 7.350 DLA -44.90 RAL 133.26 RAD 6569.0 VEL 13.243 PTH 2.42 VHP 7.804 DPA 69.93 RAP 201.75 ECC 1.8890
    LNOH AZMTH LNOH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 55.57 3 40 11 1841.62 19.52 36.19 22.41 131.26 4 10 53 1241.6 24.67 32.00 126.43 11 17 13 5725.66 19.54 267.41 22.42 131.27 12 52 39 5125.7 24.69 261.22 53.57 3 40 II 1841.62 19.52 38.19 22.41 131.28 4 10 53 1241.6 24.67 32.00
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                                                                           MID-COURSE EXECUTION ACCURACY

SGT 3810.0 SGR 1052.7 SG3 182.5

RRT -.8635 RRF -.9556 RTF ..9716

SG8 3952.7 R23 .2001 R13 -.9785

SGI 3918.9 SGZ 516.1 THA 166.34
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2660.3 SR 976.7 SS 1151.1

CRT -.9752 CRS ..9941 CST -.9934

LSA 3050.6 M5A 224.4 SSA 1.9

EL1 2826.6 EL2 203.6 ALF 160.19
     TOE-3.2642 TRA-2.3476 TC3 -.7948 BAU .5955
    ROE 1.2496 MRA .2138 RC3 .2193 FAU .03270
FOE-2.1539 FRA -.9308 FC3 -.5240 BSP 12146
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-579

BOE 3.4952 BRA 2.3573 BC3 .8245 FSP

ARRIVAL DATE NOV 23 1967

LAUNCH DATE JUL 4 1967

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DISTANCE 408.582
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 26.855 GAL -4.22 AZL 100.43 MCA 191.06 SMA 129.62 ECC .18796 INC10.4251 V1 29.291
RP 107.52 LAP 1.99 LOP 112.24 VP 38.011 GAP 4.60 AZP 79.76 TAL 198.81 TAP 29.88 RCA 105.26 APO 153.98 V2 35.246
RC 118.080 GL -53.74 GP 51.73 ZAL 109.27 ZAP 119.83 ETS 48.40 ZAE 114.88 ETE 143.09 ZAC 94.32 ETC 31.36 CLP-143.43
  PLANETOCENTRIC CONIC
    C3 36.127 VML 6.011 OLA -40.50 RAL 135.92 RAO 6568.4 VEL 12.550 PTH 2.27 VMP 6.286 OPA 60.94 RAP 184.97 ECC 1.5946
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      120.26
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                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE-2.5482 TRA-2.0048 TC3-1.3564 BAU .6793
RDE .9926 RRA .2378 RC3 .3718 FAU .04951
FDE-2.3539 FRA -.9940 FC3-1.1865 BSP 12394
BDE 2.7347 BRA 2.0188 BC3 1.4065 FSP -814
                                                                      SGT 3856.8 SGR 1088.1 SG3 253.7
RRT -.8999 RRF -.9803 RTF .9632
                                                                                                                           ST 2543.8 SR 950.5 SS 1235.7

CRT -.9787 CRS .9975 CST -.9908

LSA 2975.3 MSA 221.6 SSA 2.7
                                                                      SGB 4007.4 R23 .2317 R13 -.9705
                                                                      SG1 3980.9 SG2 459.8 THA 165.56
                                                                                                                           EL1 2709.4 EL2 183.2 ALF 159.82
                                                                                                                                       ARRIVAL DATE NOV 25 1967
                                                                          FLIGHT TIME 144.00
LAUNCH DATE JUL 4 1967
                                                                          DISTANCE 414.647
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 26.815 GAL -3.99 AZL 98.71 MCA 194.28 SMA 129.34 ECC .18883 INC 8.7120 V1 29.291
RP 107.50 LAP 2.14 LOP 119.48 VP 37.986 GAP 4.92 AZP 81.55 TAL 197.64 TAP 31.93 RCA 104.92 APO 153.77 V2 35.250
RC 120.312 GL -49.90 GP 43.08 ZAL 110.74 ZAP 126.29 ETS 44.63 ZAE 120.43 ETE 145.96 ZAC 96.89 ETC 28.14 CLP-144.13
  PLANETOCENTRIC CONIC
    C3 28.057 WHL 5.297 DLA -37.29 RAL 138.65 RAD 6568.1 VEL 12.224 PTH 2.20 VHP 5.612 DPA 53.04 RAP 177.75 ECC 1.4617 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      9GT 3960.3 SGR 969.7 SG3 306.3
RRT -.9031 RRF -.9020 RTF ..9585
SGB 4077.3 R23 ..2494 R13 -.9644
                                                                                                                            ST 2504.0 SR 825.0 SS 1279.9
CRT -.9783 CRS .9982 CST -.9891
    TOE-2.2126 TRA-1.7991 TC3-1.8814 BAU .7237
    RDE .7595 RRA .1798 RC3 .4280 FAU .06147
FDE-2.4127 FRA -.9639 FC3-1.8968 BSP 12665
                                                                                                                            LSA 2922.5 MSA 219.1 SSA 3.5
                                                                      $G1 4056.9 $G2 406.6 THA 167.40
                                                                                                                            EL1 2631.4 EL2 162.5 ALF 162.06
    BOE 2.3393 BRA 1.8081 BC3 1.9295 FSP -993
                                                                                                                                      ARRIVAL DATE NOV 27 1967
                                                                          FLIGHT TIME 146.00
LAUNCH DATE JUL 4 1967
                                                                          DISTANCE 420.697
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.773 GAL -3.76 AZL 97.62 MCA 197.52 SMA 129.06 ECC .18980 INC 7.6201 V1 29.291 RP 107.49 LAP 2.29 LOP 118.73 VP 37.960 GAP 5.24 AZP 82.73 TAL 196.45 TAP 33.97 RCA 104.57 APO 153.56 V2 35.253 RC 122.558 GL -46.86 GP 36.34 ZAL 111.32 ZAP 131.58 ETS 41.74 ZAE 124.07 ETE 149.64 ZAC 98.51 ETC 25.74 CLP-145.47
   PLANETOCENTRIC CONIC
    C3 23.567 VHL 4.855 DLA -34.96 RAL 141.27 RAD 6568.0 VEL 12.039 PTH 2.15 VHP 5.296 DPA 46.54 RAP 174.13 ECC 1.3679
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.58 5 22 39 1433.56 22.73 6.27 14.46 117.32 5 46 32 833.6 26.20 358.77 111.42 10 38 41 5718.46 22.74 269.15 14.47 117.31 12 14 0 5118.5 26.21 261.64 68.58 5 22 39 1433.56 22.73 6.27 14.46 117.32 5 46 32 833.6 26.20 358.77
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                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2568.1 SR 735.9 SS 1347.6
CRT -.9794 CRS .9985 CST -.9889
                                                                      SGT 4222.5 SGR 886.6 SG3 358.8
RRT -.9112 RRF -.9807 RTF ..9605
SGB 4314.6 R23 ..2407 R13 -.9645
SGI 4299.6 SG2 358.7 THA 169.09
    TDE-2.0831 TRA-1.7097 TC3-2.4639 BAU .7899
    RDE .6209 RRA .1508 RC3 .4626 FAU .07312
FDE-2.4692 FRA -.9692 FC3-2.6860 BSP 14485
                                                                                                                           LSA 2984.3 MSA 215.3 SSA
                                                                                                                            EL1 2667.6 EL2 143.1 ALF 164.28
    BOE 2.1736 BRA 1.7163 BC3 2.5069 FSP -1306
                                                                                                                                       ARRIVAL DATE NOV 29 1967
                                                                           FLIGHT TIME 148.00
LAUNCH DATE JUL 4 1967
                                                                          DISTANCE 426.750
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.731 GAL -3.51 AZL 96.86 HCA 200.76 SMA 128.78 ECC .19087 INC 6.8597 V1 29.291
RP 107.49 LAP 2.43 LOP 121.98 VP 37.933 GAP 5.55 AZP 83.58 TAL 195.22 TAP 35.97 RCA 104.20 APO 153.36 V2 35.256
RC 124.755 GL -44.44 GP 31.08 ZAL 111.22 ZAP 135.92 ETS 39.30 ZAE 126.41 ETE 153.25 ZAC 99.33 ETC 23.76 CLP-147.00
   PLANETOCENTRIC CONIC
    C3 20.716 WHL 4.552 DLA -33.32 RAL 143.85 RAD 6567.8 VEL 11.920 PTH 2.12 VMP 5.157 DPA 41.24 RAP 172.35 ECC 1.3409
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4153.7 SGR 697.7 SG3 348.8
RRT -.8802 RRF .9558 RTF .9508
SG8 4211.9 R23 .2500 R13 -.9539
SG1 4199.2 SG2 327.6 THA 171.54
                                                                                                                           ST 2483.2 SR 601.5 SS 1266.1
CRT -.9761 CRS .9985 CST -.9864
    TOE-1.8957 TRA-1.5102 TC3-2.7753 BAU .7753
     ROE .4769 RRA .0796 RC3 .3675 FAU .07046
                                                                                                                            LSA 2843.4 MSA 215.1 SSA
    FOE-2.2419 FRA -.7113 FC3-2.9447 BSP 12858
                                                                                                                           ELI 2551.9 ELZ 127.2 ALF 166.66
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FLIGHT TIME 142.00

BOE 1.9548 BRA 1.5123 BC3 2.7995 FSP -1103

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ARRIVAL DATE DEC 1 1967
                                                                                    FLIGHT TIME 150.00
LAUNCH DATE JUL 4 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 432.780
    RL 152.10 LAL -.00 LOL 281.36 VL 26.688 GAL -3.26 AZL 96.30 MCA 204.00 SMA 128.49 ECC .19205 INC 6.2968 V1 29.291
RP 107.48 LAP 2.56 LOP 123.22 VP 37.304 GAP 5.86 AZP 84.24 TAL 193.97 TAP 37.96 RCA 103.82 APO 153.17 V2 35.258
RC 126.964 GL -42.44 GP 26.93 ZAL 110.65 ZAP 139.55 ETS 37.22 ZAE 127.87 ETE 156.52 ZAC 99.56 ETC 22.07 CLP-148.59
   PLANETOCENTRIC CONIC
    C3 18.751 VHL 4.330 DLA -32.17 RAL 146.39 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 5.116 DPA 36.88 RAP 171.38 ECC 1.3080 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.06 6 17 7 1274.09 22.57 353.84 15.02 113.56 6 38 22 674.1 25.56 346.12 105.94 10 25 2 5768.19 22.58 272.92 15.02 113.56 6 38 22 674.1 25.56 346.12 105.94 10 25 2 5768.19 22.58 272.92 15.02 113.56 6 38 22 674.1 25.56 346.12 105.94 10 25 2 5768.19 22.58 272.92 15.02 113.54 12 1 10 5168.2 25.57 265.20 110.00 9 22 15 674.69 15.04 305.83 10.92 121.06 9 33 30 74.7 19.05 299.00 110.00 12 19 5 5415.58 30.54 249.01 MID-COMPSE FRECULTION ACCURACY CORBIT DETERMINATION ACCURACY
     C3 18.751 VHL 4.330 DLA -32.17 RAL 146.39 RAD 6567.8 VEL 11.838 PTH
                                                                                                                   2.10 VHP 5.116 OPA 36.88 RAP 171.58 ECC 1.3086
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                            SGT 4270.6 SGR 601.0 SG3 354.8

MRT -.8613 MRF -.9478 MTF ..9486

SGB 4512.6 R23 ..2491 R13 -.9508

SG1 4302.0 SG2 303.1 THA 173.05
                                                                                                                                           ST 2507.0 SR 530.6 SS 1250.2
CRT -.9762 CRS .9987 CST -.9857
    TDE-1.8276 TRA-1.3992 TC3-3.1846 BAU .8022
     ROE .4005 RRA .0532 RC3 .3129 FAU .07134
    FOE-2.1269 FRA -.5742 FC3-3.2937 BSP 13209
                                                                                                                                           LSA 2843.3 MSA 212.1 55A 6.5
    BOE 1.8709 BRA 1.4002 BC3 3.2000 FSP -1128
                                                                                                                                             ELI 2560.0 EL2 112.7 ALF 168.30
                                                                                     FLIGHT TIME 152.00
                                                                                                                                                          ARRIVAL DATE DEC 3 1967
  HELIOCENTRIC CONIC
                                                                                     DISTANCE 438.795
    RL 152.10 LAL -.00 LOL 281.36 VL 26.644 GAL -3.00 AZL 95.86 MCA 207.24 SMA 128.20 ECC .19334 INC 5.8610 V1 29.291 RP 107.48 LAP 2.68 LOP 128.47 VP 37.874 GAP 6.17 AZP 84.79 TAL 192.69 TAP 39.93 RCA 103.42 APO 152.99 VZ 35.259 RC 129.165 GL -40.77 GP 25.61 ZAL 109.69 ZAP 142.64 ETB 35.45 ZAE 128.76 ETE 159.36 ZAC 99.31 ETC 20.62 CLP-150.16
   PLANETOCENTRIC CONIC
    CS 17.312 VHL 4.161 DLA -31.39 RAL 148.95 RAD 6567.7 VEL 11.777 PTH 2.08 VHP 5.133 DPA 33.24 RAP 171.46 ECC 1.2849
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                    6 39 35 1217.14
10 23 1 5787.89
6 39 35 1217.14
10 23 1 5787.89
9 16 56 705.93
12 44 49 5347.10
                                                                                                            112.45 6 59 52
112.43 11 59 29
112.45 6 59 52
112.43 11 59 29
121.53 9 28 43
103.43 14 13 56
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        75.85
       104.15
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       110.00
                                                            31.73
                                                                            244.03
                                                                                              19.42
                                                                                                                                                  4747.1
                                                                                                                                                                     33.25
                                                                                                                                                                                     235.13
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ST 2547.3 SR 479.2 SS 1233.9

CRT -.9773 CRS .9990 CST -.9652

LSA 2663.2 MSA 208.6 SSA 7.6

EL1 2590.1 EL2 99.8 ALF 169.57
     TOE-1.7918 TRA-1.2953 TC3-3.5724 BAU
                                                                              SGT 4392.2 SGR 526.7 SG3 354.7
RRT -.8352 RRF -.9211 RTF .9469
SG8 4423.7 R23 .2307 R13 -.9484
                                                                .8289
    ROE .3477 RRA .0361 RC3 .2543 FAU .07071
    FOE-2,0135 FRA -.4402 FC3-3.5359 BSP 13631
BOE 1.8252 BRA 1.2958 BC3 3,5815 FSP -1137
                                                                             SG1 4414.3 SG2 288.3 THA 174.26
                                                                                                                                                         ARRIVAL DATE DEC 5 1967
                                                                                    FLIGHT TIME 154.00
LAUNCH DATE JUL 4 1967
                                                                                    DISTANCE 444.794
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.600 GAL -2.72 AZL 95.51 MCA 210.48 SMA 127.91 ECC .19475 INC 5.5116 V1 29.291
RP 107.48 LAP 2.79 LOP 151.72 VP 37.844 GAP 6.48 AZP 85.25 TAL 191.39 TAP 41.87 RCA 103.00 APO 152.83 V2 35.259
RC 131.355 GL -39.33 GP 20.92 ZAL 108.41 ZAP 145.33 ETS 33.95 ZAE 129.27 ETE 161.79 ZAC 98.72 ETC 19.36 CLP-151.70
   PLANETOCENTRIC CONIC
     C3 16.216 VHL 4.027 OLA -30.90 RAL 151.56 RAO 6567.7 VEL 11.730 PTH 2.07 VHP 5.187 OPA 30.13 RAP 171.79 ECC 1.2669
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        17.51 111.67 7 18 16

17.52 111.66 12 1 25

17.51 111.67 7 18 16

17.52 111.66 12 1 25

12.70 121.72 9 30 46

20.81 101.64 14 32 13
                    6 58 41 1174.76
10 24 44 5800.24
6 58 41 1174.76
10 24 44 5800.24
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        102.92
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        110.00
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                                        5304.09
                                                           32.37
                                                                            240.84
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                SCT 4500.8 SCR 469.9 SC3 349.2

RRT - .7991 RRF - .8835 RTF .9451

SCB 4525.2 R23 .2084 R13 - .9462

SCI 4516.4 SG2 281.5 THA 175.21
                                                                                                                                           ST 2593.0 SR 441.2 SS 1214.3
CRT -.9793 CRS .9994 CST -.9850
LSA 2889.8 MSA 204.5 SSA 8.7
     TOE-1.7732 TRA-1.1879 TC3-3.9287 BAU .8528
    RDE .3100 RRA .0248 RC3 .1948 FAU .06885
FDE-1.9003 FRA -.3067 FC3-3.6756 85P 13968
BDE 1.8001 BRA 1.1881 BC3 3.9335 FSP -1121
                                                                                                                                             EL1 2628.8 EL2 88.0 ALF 170.53
                                                                                                                                                          ARRIVAL DATE DEC 7 1967
                                                                                     FLIGHT TIME 156.00
LAUNCH DATE JUL 4 1967
                                                                                    DISTANCE 450.776
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.555 GAL -2.43 AZL 95.22 MCA 213.73 SMA 127.62 ECC .19628 INC 5.2235 V1 29.291
RP 107.48 LAP 2.90 LOP 134.97 VP 37.812 GAP 6.78 AZP 85.65 TAL 190.06 TAP 43.79 RCA 102.57 APO 152.67 V2 35.259
RC 133.557 GL -38.05 GP 18.71 ZAL 106.86 ZAP 147.70 ETS 32.69 ZAE 129.54 ETE 163.85 ZAC 97.84 ETC 18.26 CLP-153.18
   PLANETOCENTRIC CONIC
    CS 15.361 WHL 3.919 DLA -30.64 RAL 154.25 RAD 6567.6 VEL 11.694 PTH 2.06 WHP 5.266 DPA 27.43 RAP 172.44 ECC 1.2528
    LNON AZMTH LNON TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.78 7 14 26 1146.54 22.71 344.26 19.28 111.14 7 33 32 546.5 25.38 336.42
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                    7 14 26 1146.54
10 30 25 5803.92
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111.13 12 7 8
111.14 7 33 32
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       102.22
                    7 14 26 1146.54
10 30 25 5003.92
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                                                            32.72
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                              SGT 4606.1 SGR 429.7 SG3 341.3
RRT -.7547 RRF -.8554 RTF .9434
SG8 4626.1 R23 .1840 R13 -.9442
SG1 4617.5 SG2 281.2 THA 175.96
                                                                                                                                          ST 2648.3 SR 414.6 83 1196.5

CRT -,9822 CRS .9996 CST -,9849

LSA 2928.6 MSA 199.9 SSA 9.8

ELI 2679.4 EL2 77.0 ALF 171.25
     TOE-1.7708 TRA-1.0776 TC3-4.2621 BAU .8757
    ROE .2835 RRA .0182 RC3 .1390 FAU .06642
FOE-1.7960 FRA -.1807 FC3-3.7436 BSF 14298
     BOE 1.7934 BRA 1.0778 BC3 4.2644 FSP -1096
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ARRIVAL DATE DEC 9 1967

EL1 2948.3 EL2 35.1 ALF 172.73

JPL TM 33-99

LAUNCH DATE JUL 4 1967

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DISTANCE 456.742
  HELIOCENTRIC CONTC
   RL 152.10 LAL -.00 LOL 281.36 VL 26.511 GAL -2.14 AZL 94.98 MCA 216.97 SMA 127.33 ECC .19794 INC 4.9806 V1 29.291 RP 107.48 LAP 2.99 LOP 138.22 VP 37.779 GAP 7.09 AZP 86.02 TAL 188.72 TAP 45.69 RCA 102.13 APO 152.53 V2 35.257
   RC 135.709 GL -36.88 GP 16.88 ZAL 105.08 ZAP 149.82 ETS 31.63 ZAE 129.66 ETE 165.58 ZAC 96.74 ETC 17.30 CLP-154.61
  PLANETOCENTRIC CONIC
    C3 14.686 VHL 3.832 OLA -30.56 RAL 157.02 RAD 6567.6 VEL 11.665 PTH 2.05 VMP 5.362 DPA 25.04 RAP 173.34 ECC 1.2417
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  7 27 10 1131.25
10 39 50 5799.11
                                                                                  110.61
                                                                                                7 46 1
                                                                                                                            25.52
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                                                         343.19
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       74.01
                                             22.89
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      101.99
                 10 39 50
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5799.11
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99.88 14 58 58
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      110.00
                 13 31 15
                              5263.17
                                             32.89
                                                         237.76
                                                                       24.44
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                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            8GT 4709.9 8GR 403.0 8G3 332.3
RRT -.7047 RRF -.7794 RTF .9422
8G8 4727.1 R23 .1593 R13 -.9428
                                                                                                           ST 2711.7 SR 396.4 SS 1180.7
CRT -.9856 CRS .9996 CST -.9851
   TOE-1.7810 TRA -.9640 TC3-4.5742 BAU .8963
   ROE .2651 RRA .0152 RC3 .0886 FAU .06373
   FOE-1.7035 FRA -.0652 FC3-3.7568 BSF 14646
BOE 1.8006 BRA .9642 BC3 4.5751 FSP -1070
                                                                                                           LSA 2977.7 MSA 194.6 SSA 10.9
                                                                                                           EL1 2739.7 EL2 66.3 ALF 171.80
                                                             8G1 4718.5 SG2 285.4 THA 176.54
                                                                FLIGHT TIME 160.00
                                                                                                                     ARRIVAL DATE DEC 11 1967
LAUNCH DATE JUL 4 1967
  HELIOCENTRIC CONIC
                                                                DISTANCE 462.690
   RL 152.10 LAL -.00 LOL 281.36 VL 26.465 GAL -1.83 AZL 94.77 MCA 220.22 BMA 127.04 ECC .19973 INC 4.7717 V1 29.291 RP 107.49 LAP 3.08 LOP 141.47 VP 37.746 GAP 7.40 AZP 86.35 TAL 187.35 TAP 47.57 RCA 101.67 APO 152.41 V2 35.255
   RC 137.871 GL -35.79 GP 15.35 ZAL 103.09 ZAP 151.74 ETS 30.76 ZAE 129.68 ETE 167.06 ZAC 95.46 ETC 16.45 CLP-155.98
  PLANETOCENTRIC CONIC
   C3 14.155 WHL 3.762 DLA -30.61 RAL 159.91 RAD 6567.6 VEL 11.642 PTH
                                                                                        2.04 VHP 5.472 OPA
                                                                                                                22.89 RAP 174.43 ECC 1.2330
   LNOH AZHTH LNCH TIME L-I TIME. ÎNJ.LAT. ÎNJ.LONG. ÎNJ.AT ASC. ÎNJ.AZHTH. ÎNJ.TIME. PO CST.TIM. ÎNJ.2 LAT.ÎNJ.2 LONG
      77.65
                  7 37 31 1126.71
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                13 41 50 5250.05
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                                              32.95
  DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                             SGT 4798.2 SGR 386.0 SG3 321.3
RRT -.6496 RRF -.7176 RTF .9405
SGB 4813.7 R23 .1372 R13 -.9410
                                                                                                           ST 2775.5 SR 384.0 SS 1162.7
CRT -.9892 CRS .9991 CST -.9853
   TOE-1.7974 TRA -.8406 TC3-4.8499 BAU .9179
   RDE .2521 RRA .0139 RC3 .0421 FAU .06061
   FDE-1.6140 FRA .0475 FC3-3.7066 88P 14895
                                                                                                           LSA 3027.7 MSA 189.1 SSA 12.0
   BOE 1.8150 BRA .8407 BC3 4.8501 FSP -1030
                                                             $61 4804.8 $62 293.0 THA 177.00
                                                                                                           EL1 2801.4 EL2 55.7 ALF 172.20
                                                                                                                    ARRIVAL DATE DEC 13 1967
LAUNCH DATE JUL 4 1967
                                                                FLIGHT TIME 162.00
                                                               DISTANCE 468.620
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 26.420 GAL -1.50 AZL 94.59 MCA 223.46 SNA 126.75 ECC .20166 INC 4.5891 VI 29.291 RP 107.50 LAP 3.16 LOP 144.73 VP 37.711 GAP 7.71 AZP 86.67 TAL 185.97 TAP 49.43 RCA 101.19 APO 152.31 VZ 35.253
   RC 140.023 GL -34.75 GP 14.05 7AL 100.91 ZAP 153.51 ETS 30.06 ZAE 129.64 ETE 168.30 ZAC 94.03 ETC 15.69 CLP-157.31
  PLANETOCENTRIC CONIC
   C3 13.746 VML 3.708 DLA -30.78 RAL 162.90 RAD 6567.5 VEL 11.625 PTH 2.04 VMP 5.592 DPA 20.93 RAP 175.66 ECC 1.2262
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             1130.39
                                                                      26.27
                                                                                   110.58
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  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                          ST 2849.4 SR 377.3 SS 1149.4
CRT -.9926 CRS .9980 CST -.9857
   TOE-1.8254 TRA -.7148 TC3-5.1095 BAU .9390
                                                             SGT 4895.4 SGR 378.2 SG3 311.3
   ROE .2441 RRA .0147 RC3 .0033 FAU .05771
FOE-1.5577 FRA .1464 FC3-3.6349 BSP 15240
BOE 1.8416 BRA .7149 BC3 5.1095 FSP -1001
                                                             RRT -.5962 RRF -.6576 RTF .9596
9G6 4910.0 RZ3 .1163 R13 -.9402
SG1 4900.7 SG2 302.7 THA 177.34
                                                                                                           LSA 3090.2 MSA 183.1 SSA 13.2
                                                                                                           EL1 2874.0 EL2 45.3 ALF 172.51
LAUNCH DATE JUL 4 1967
                                                                FLIGHT TIME 164.00
                                                                                                                     ARRIVAL DATE DEC 15 1967
                                                                DISTANCE 474.531
  HERIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 26.375 GAL -1.17 AZL 94.43 MCA 226.71 SMA 126.46 ECC .20375 INC 4.4271 V1 29.291 RP 107.51 LAP 3.22 LOP 147.96 VP 37.676 GAP 8.02 AZP 86.96 TAL 184.57 TAP 51.28 RCA 100.69 APO 152.23 V2 35.249 RC 142.165 GL -33.72 GP 12.93 ZAL 98.56 ZAP 155.14 ETS 29.52 ZAE 129.56 ETE 169.37 ZAC 92.48 ETC 15.02 CLP-158.58
  PLANETOCENTRIC CONIC
   C3 13.443 WHL 3.666 DLA -31.02 RAL 166.02 RAD 6567.5 VEL 11.612 PTH 2.03 VHP 5.721 DPA 19.12 RAP 177.02 ECC 1.2212
   LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.77 7 54 9 1139.96 23.70 344.18 29.12 110.63 8 13 9 540.0 26.29 336.24
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      110.00
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      110.00
                 13 59 28
                              5266.95
                                              32.82
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                                                                        31.97
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                                                                                                                             33.87
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                             8GT 4985.5 8GR 376.2 8G3 300.9
RRT -.5505 RRF -.6013 RTF .9392
                                                                                                          ST 2924.6 SR 374.5 SS 1135.8
CRT -.9955 CRS .9961 CST -.9863
LSA 3154.7 MSA 176.8 SSA 14.3
   TOE-1.8590 TRA -.5003 TC3-5.3336 BAU
                                                 .9586
   RDE .2396 RRA .0164 RC3 -.0302 FAU .05474
   FDE-1.4673 FRA .2396 FC3-3.5252 BSP 15551
BDE 1.8743 BRA .5805 BC3 5.3337 FSP -969
                                                             SGB 4999.7 R23 .0985 R13 -.9395
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FLIGHT TIME 158.00

\$G1 4989.8 \$G2 313.8 THA 177.61

ARRIVAL DATE DEC 17 1967

LAUNCH DATE JUL 4 1967

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DISTANCE 480.422
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.329 GAL -.82 AZL 94.28 HCA 229.95 SMA 126.17 ECC .20599 INC 4.2816 V1 29.291 RP 107.52 LAP 3.28 LOP 151.23 VP 37.640 GAP 8.34 AZP 87.24 TAL 183.15 TAP 53.10 RCA 100.18 APO 152.16 V2 35.245 RC 144.295 GL -32.70 GP 11.97 ZAL 96.07 ZAP 156.66 ETS 29.12 ZAE 129.46 ETE 170.28 ZAC 90.83 ETC 14.42 CLP-159.81
   PLANETOCENTRIC CONIC
    C3 13.240 VHL 3.639 DLA -31.32 RAL 169.26 RAD 6567.5 VEL 11.603 PTH 2.03 VHP 5.858 DPA 17.43 RAP 178.49 ECC 1.2179 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                110.75 8 21 5
110.74 13 18 19
                     6 1 51 1153.11
11 42 47 5731.71
6 1 51 1153.11
11 42 47 5731.71
10 36 39 650.17
                                                                                                                                 8 21 5
                                                                                                                                                        553.1
                                                                                                 32.22
                                                            23.99
                                                                              345.29
         76.03
                                                                                                                                                      5131.7
                                                              24.01
                                                                              270.78
                                                                                                 32.23
        103.97
                                                                                                                  110.75
                                                                                                                                 8 21 5
                                                                                                                                                        553.1
                                                                                                                                                                          26.60
                                                                                                                                                                                          337.34
                                                             23.99
                                                                              345.29
                                                                                                 32.22
                                                                                                                  110.75 8 21 5
110.74 13 18 19
120.67 10 47 29
100.72 15 35 13
         76.03
                                                                                                                                                                          26.61
                                                                                                                                                      5131.7
                                                             24.01
                                                                              270.78
                                                                                                 32.23
       103.97
                                                                                                                                                         50.2
                                                                                                                                                                          19.85
                                                                                                                                                                                          297.55
                                                             15.90
                                                                              304.45
                                                                                                 28.08
       110.00
                                                                                                                                                      4682.6
                                                                                                                                                                          33.79
                                      5282.64
                                                                              239.23
                                                                                                 34.99
       110.00
                      14 7 10
                                                              32.65
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  RRT -.5097 RRF -.5517 RTF .9592
SGB 5088.1 R23 .0825 R13 -.9394
SGI 5077.7 SGZ 325.4 THA 177.81
                                                                                                                                                ST 2999.2 SR 374.8 SS 1121.5
CRT -.9976 CRS ..9934 CST -.9869
    TDE-1.8969 TRA -.4388 TC3-5.5256 BAU
                                                                  .9761
    ROE .2379 RRA .0188 RC3 -.0574 FAU .05191
FDE-1.4019 FRA .3245 FC3-3.3943 88P 15857
BDE 1.9118 BRA .4392 BC3 5.5259 FSP -939
                                                                                                                                                LSA 3219.3 MSA 170.4 SSA 15.4
                                                                                                                                                EL1 3022.4 EL2 25.6 ALF 172.89
                                                                                                                                                               ARRIVAL DATE DEC 19 1967
                                                                                        FLIGHT TIME 168.00
LAUNCH DATE JUL 4 1967
                                                                                       DISTANCE 486.294
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 26.284 GAL -.45 AZL 94.15 MCA 233.19 SMA 125.88 ECC .20841 INC 4.1494 VI 29.291
RP 107.53 LAP 3.32 LOP 154.48 VP 37.604 GAP 8.66 AZP 87.51 TAL 181.72 TAP 54.92 RCA 99.65 APO 152.12 VZ 35.240
RC 146.414 GL -31.65 GP 11.14 ZAL 93.44 ZAP 156.08 ETS 28.87 ZAE 129.35 ETE 171.06 ZAC 89.08 ETC 13.89 CLP-161.00
   PLANETOCENTRIC CONIC
                                                                                                                                                          15.63 RAP 180.04 ECC 1.2161
    C3 13.132 VHL 3.624 DLA -31.64 RAL 172.62 RAD 6567.5 VEL 11.596 PTH
                                                                                                                       2.03 VHP 6.002 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      8 9 52 1168.26
12 1 35 5713.02
                                                                                                                                   8 29 21
                                                                                                                                                        568.3
                                                                                                                                                                                       338.59
                                                                                                                 110.94
                                                              24.28
                                                                              346.55
                                                                                                 35.56
         75.25
                                                                                                                   110.93 15 36 48
110.94 8 29 21
110.95 15 36 48
120.30 11 6 57
                                                                                                                                                       5113.0
                                                                                                                                                                          26.91
                                                                                                                                                                                           261.52
                                                              24.29
                                                                              269.49
                                                                                                  35.56
        104.75
                                                                                                                                                        568.3
                                                                                                                                                                          26.90
                                                                                                                                                                                           338.59
                     8 9 52 1168.26
12 1 35 5713.02
                                                              24.28
                                                                              346.55
                                                                                                  35.56
         75.25
                                                                                                  35.56
31.66
                                                                                                                                                       5113.0
                                                                                                                                                                          26.91
                                                                                                                                                                                           261.52
                                                              24.29
                                                                               269.49
        104.75
                                                                                                                                                                          20.54
                                                                                                                                                                                           296.27
                                                              16.64
                                                                               303.22
                      10 56 8
                                           628.68
       110.00
                                      5300.59
                                                                                                                                 15 42 50
                                                                                                                                                       4700.6
                                                                                                                                                                          33.66
                                                                                                                                                                                           231.56
                     14 14 29
                                                                              240.57
                                                                                                 36.25
                                                               32.42
                                                                                                                   101.49
       110.00
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERNINATION ACCURACY
                                                                                                                                               ST 3066.3 $R 377.1 $S 1103.6

CRT -.998 CRS .9898 CST -.9874

LSA 3276.4 MSA 164.6 $SA 16.4
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5147.9 SGR 363.4 SG3 280.1
RRT -.4741 RRF -.5063 RTF .9386
     TOE-1.9358 TRA -.2849 TC3-5.6653 BAU .9947
     RDE .2384 RRA .0210 RC3 -.0801 FAU .04892
                                                                                   SG8 5162.1 R23 .0697 R13 -.9389
SG1 5151.1 SG2 337.4 THA 177.97
    FOE-1.3376 FRA .,4081 FC3-3.2254 BSP 16079
BOE 1.9498 BRA .2856 BC3 5.6659 FSP -904
                                                                                                                                                  EL1 3089.3 EL2 18.5 ALF 173.00
                                                                                                                                                              ARRIVAL DATE DEC 21 1967
                                                                                       FLIGHT TIME 170.00
LAUNCH DATE JUL 4 1967
                                                                                      DISTANCE 492.143
    RL 152.10 LAL -.00 LOL 281.36 VL 26.238 GAL -.08 AZL 94.03 MCA 236.44 SMA 125.60 ECC .21102 INC 4.0279 VI 29.291
RP 107.55 LAP 3.36 LOP 157.73 VP 37.567 GAP 8.98 AZP 87.77 TAL 180.28 TAP 56.72 RCA 99.10 APO 152.10 V2 35.234
RC 148.521 GL -30.59 GP 10.42 ZAL 90.69 ZAP 159.42 ETS 28.75 ZAE 129.23 ETE 171.74 ZAC 87.27 ETC 13.41 CLP-162.15
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 13.119 VML 3.622 DLA -31.98 RAL 176.10 RAD 6567.5 VEL 11.598 PTH 2.03 VMP 6.153 OPA 14.31 RAP 181.66 ECC 1.2159
    C3 13.119 VHL 3.622 DLA -31.98 RAL 176.10 RAD 6567.5 VEL 11.598 PTH 2.03 VHP 6.153 PTA 14.51 RAP 181.66 ECC 1.275  
LHCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 105.52 12 20 41 5696.34 24.54 268.33 39.13 111.18 13 55 38 5096.3 27.19 260.35  
74.48 6 18 28 1184.50 24.53 347.89 39.12 111.19 8 38 12 584.5 27.18 339.92  
105.52 12 20 41 5696.34 24.54 268.33 39.13 111.18 13 55 38 5096.3 27.19 260.35  
105.52 12 20 41 5696.34 24.54 268.33 39.13 111.18 13 55 38 5096.3 27.19 260.35  
110.00 11 16 41 606.95 17.38 301.98 35.47 119.91 11 26 48 6.9 21.23 294.96  
110.00 14 21 39 5321.89 32.12 242.16 41.72 102.38 15 50 21 4721.9 33.49 233.20
                     11 16 41
14 21 39
                                       5321.89
                                                                              242.16
                                                              32.12
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5240.3 SGR 391.4 SG3 271.5
RRT - .4507 RRF - .4773 RTF .9404
SG8 5254.9 R23 .0578 R13 - .9405
SG1 5243.3 SG2 349.2 THA 178.06
                                                                                                                                                ST 3141.3 SR 382.9 SS 1092.3

CRT -.9989 CRS .9857 CST -.9882

LSA 3344.0 MSA 158.2 SSA 17.4
     TOE-1.9836 TRA -.1329 TC3-5.7836 BAU 1.0145
     ROE .2419 RRA .0240 RC3 -.0948 FAU .04651
FDE-1.2874 FRA .4748 FC3-3.0691 BSP 16542
BOE 1.9983 BRA .1351 BC3 5.7844 FSP -892
                                                                                                                                                  ELI 3164.5 EL2 17.8 ALF 173.06
                                                                                                                                                               ARRIVAL DATE DEC $3 1967
                                                                                        FLIGHT TIME 172.00
LAUNCH DATE JUL 4 1967
                                                                                        DISTANCE 497.970
   HELIOCENTRIC CONTC
     RL 152.10 LAL -.00 LOL 281.36 VL 26.192 GAL .32 ATL 93.92 MCA 239.68 SMA 125.32 ECC .21381 INC 3.9153 VI 29.291
RP 107.57 LAP 3.38 LOP 160.98 VP 37.529 GAP 9.31 ATP 88.02 TAL 178.83 TAP 58.51 RCA 98.52 APO 152.11 V2 35.228
RC 150.615 GL -29.49 GP 9.78 TAL 87.83 TAP 160.69 ETS 28.77 TAE 129.12 ETE 172.32 TAC 85.38 ETC 12.98 CLP-163.26
    PLANETOCENTRIC CONIC
     C3 13.202 VML 3.633 DLA -32.30 RAL 179.67 RAD 6567.5 VEL 11.601 PTH 2.03 VMP 6.311 DPA 12.86 RAP 183.34 ECC 1.2173 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.77 8 27 56 1200.78 24.73 349.22 42.89 111.48 8 47 57 600.8 27.42 341.25
                                                                                                                   111.46 14 14 26
                                                                                                                                                                          27.43
                                                                                                                                                                                           259.41
                                                                                                                                                        5082.8
                                                                                                  42.89
                       12 39 43
                                          5682.81
                                                              24.74
                                                                               267.36
        106.23
                                                                                                                                                         600.8
                                                                                                                                                                           27.42
                                                                                                                                                                                           341.25
                                                                                                                   111.48
                                                                                                                                   8 47 57
                         8 27 56 1200.78
                                                              24.73
                                                                               349.22
                                                                                                  42.89
          73.77
                                                                                                                   111.46 14 14 26
119.51 13 15 49
103.56 15 58 0
                                                                                                                                                                           27.43
                                                                                                                                                                                           259.41
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                                                              24.74
                                                                               267.36
                                                                                                  42.89
                        12 39 43
                                         5682.81
         106.23
                                                                                                                                                       5274.1
                                                                                                                                                                          21.88
                                                                                                                                                                                           271.59
                                                                               278.67
                                                                                                  39.49
                        11 37 55 5674,06
                                                              18.09
         110.00
                                                                                                                                                                         33.27
                                                                                                                                                                                           235.01
                                                                                                                                                       4745.6
                                         5345.56
                                                              31.76
                                                                               243.92
                                                                                                  45.39
                       14 28 54
         110.00
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 3188.5 SR 388.1 SS 1065.4
CRT -.9980 CRS .9800 CST -.9884
LSA 3380.5 MSA 155.2 SSA 18.3
                                                                                   SCT 5296.8 SCR 398.7 SC3 259.9
RRT - .4245 RRF - .4464 RTF .9386
SCB 5311.8 R23 .0511 R13 - .9387
      TOE-2.0204 TRA .0456 TC3-5.8219 BAU 1.0277
     EL1 3211.9 EL2 24.6 ALF 173.07
                                                                                    SG1 5299.5 SG2 360.8 THA 178.16
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FLIGHT TIME 166.00

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LAUNCH DATE JUL 4 1967
                                                                           FLIGHT TIME 174.00
                                                                                                                                        ARRIVAL DATE DEC 25 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 503.772
     RL 152.10 LAL -.00 LOL 281.36 VL 26.147 GAL .73 AZL 93.81 MCA 242.92 SMA 125.04 ECC .21682 INC 3.8099 V1 29.291
RP 107.59 LAP 3.39 LOP 164.22 VP 37.491 GAP 9.65 AZP 88.26 TAL 177.37 TAP 60.28 RCA 97.92 APO 152.15 V2 35.221
RC 152.696 GL -28.35 GP 9.21 ZAL 84.93 ZAP 161.89 ETS 28.93 ZAE 129.00 ETE 172.83 ZAC 83.44 ETC 12.60 CLP-164.34
    PLANETOCENTRIC CONIC
     C3 13.386 VHL 3.659 DLA -32.60 RAL 183.32 RAD 6567.5 VEL 11.609 PTH
                                                                                                      2.03 WHP 6.475 OPA 11.45 RAP 185.08 ECC 1.2203
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    8 38 21 1216.70
12 58 27 5672.89
         73.14
                                                     24.87
                                                                   350,50
                                                                                  46.85
                                                                                                               8 58 38
                                                                                                 111.79
                                                                                                                                  616.7
                                                                                                                                                 27.60
                                                                                                                                                               342.53
                                                                                                   111.77
                                                                                                              14 33 0
        106.86
                                                      24.88
                                                                   266.68
                                                                                   46.85
                                                                                                                                 5072.9
                                                                                                                                                 27.61
                                                                                                                                                               258.71
                      8 38 21 1216.70
12 58 27 5672.89
                                                                                                  111.79
         73.14
                                                     24.87
                                                                   350.50
                                                                                   46.85
                                                                                                               8 5A 3A
                                                                                                                                  616.7
                                                                                                                                                 27.60
                                                                                                                                                               342.53
                                                                                                 111.77 14 33 0
119.14 13 37 2
104.38 16 6 3
                    12 56 27
        106.86
                                                     24.88
                                                                   266.68
                                                                                   46.85
                                                                                                                                 5072.9
                                                                                                                                                 27.61
                                                                                                                                                               258.71
       110.00
                    11 59 27
                                    5855.06
                                                      18.72
                                                                   277.56
                                                                                   43.70
                                                                                                                                 5255.1
                                                                                                                                                 22.46
                                                                                                                                                               270.42
                                  5370.57
                    14 36 33
       110.00
                                                                   245.75
                                                      31.35
                                                                                   49.25
                                                                                                                                 4770.6
                                                                                                                                                 33.01
                                                                                                                                                               236.92
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 5365.8 SGR 407.5 SG3 250.8
RRT -.4099 RRF -.4265 RTF ..9392
SGB 5381.2 R23 ..0435 R13 -.9393
SGI 5368.4 SG2 371.5 THA 178.21
    TDE-2.0625 TRA .2269 TC3-5.8271 BAU 1.0430 RDE .2526 RRA .0265 RC3 -.1156 FAU .04073
                                                                                                                            ST 3234.9 SR 395.9 SS 1043.9
CRT -.9960 CRS .9740 CST -.9889
LSA 3418.7 MSA 151.8 SSA 19.1
    FOE-1.1699 FRA .6257 FC3-2.6344 8SP 16832
    BOE 2.0779 BRA .2285 BC3 5.8283 FSP -809
                                                                                                                            EL1 3258.8 EL2 35.0 ALF 173.05
LAUNCH DATE JUL 4 1967
                                                                           FLIGHT TIME 176.00
                                                                                                                                        ARRIVAL DATE DEC 27 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 509.549
    RL 152.10 LAL -.00 LOL 281.36 VL 26.102 GAL 1.16 AZL 93.71 MCA 246.16 SMA 124.76 ECC .22006 INC 3.7105 V1 29.291
RP 107.62 LAP 3.39 LOP 167.47 VP 37.452 GAP 9.99 AZP 88.50 TAL 175.89 TAP 62.05 RCA 97.30 APO 152.21 V2 35.214
RC 154.762 GL -27.17 GP 8.71 ZAL 81.95 ZAP 163.04 ETS 29.24 ZAE 128.90 ETE 173.27 ZAC 81.45 ETC 12.26 CLP-165.40
   PLANETOCENTRIC CONIC
    C3 13.677 VHL 3.698 DLA -32.85 RAL 187.04 RAD 6567.5 VEL 11.622 PTH
                                                                                                                                  10.09 RAP 186.86 ECC 1.2251
                                                                                                      2.04 VHP 6.648 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.61 8 49 48 1231.87 24.93 351.69 50.97 112.11 9 10 20 631.9 27.71 343.74
       107.39
                   13 16 41
                                   5667.08
                                                     24.94
                                                                   266.26
                                                                                    50.98
                                                                                                   112.10
                                                                                                              14 51 8
                                                                                                                                 5067.1
                                                                                                                                                 27.72
                                                                                                                                                               25A.31
                   8 49 48 1231.87
13 16 41 5667.08
12 20 44 5839.41
        72.61
                                                     24.93
                                                                   351.69
                                                                                    50.97
                                                                                                   112.11
                                                                                                               9 10 20
                                                                                                                                  631.9
                                                                                                                                                 27.71
                                                                                                                                                                343.74
       107.39
                                                     24.94
                                                                   266.26
                                                                                                  112.10 14 51 8
118.82 13 58 3
105.37 16 14 51
                                                                                   50.98
                                                                                                                                 5067.1
                                                                                                                                                 27.72
                                                                                                                                                               258.31
       110.00
                                                     19.24
                                                                   276.64
                                                                                   48.05
                                                                                                                                 5239.4
                                                                                                                                                 22.93
                                                                                                                                                               269.45
                                                                   247.57
       110.00
                   14 44 55
                                   5395.58
                                                     30.91
                                                                                   53.27
                                                                                                                                4795.6
                                                                                                                                                 32.71
                                                                                                                                                               238.81
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    TOE-2.0972 TRA .4202 TC3-5.7745 BAU 1.0561
ROE .2604 RRA .0270 RC3 -.1164 FAU .03813
                                                                       SGT 5422.2 SGR 415.9 SG3 241.1
RRT -.3983 RRF -.4097 RTF .9394
SGB 5438.1 R23 .0366 R13 -.9395
SGI 5424.7 SG2 381.3 THA 178.24
                                                                                                                            ST 3260.0 SR 403.8 SS 1014.4
CRT -.9931 CRS .9668 CST -.9892
    FDE-1.1123 FRA .6920 FC3-2.4133 BSP 16996
BDE Z.1134 BRA .4211 BC3 5.7757 FSP -777
                                                                                                                            LSA 3434.7 MSA 150.2 SSA 19.7
                                                                                                                            EL1 3284.6 EL2 47.1 ALF 172.99
                                                                                                                                       ARRIVAL DATE DEC 29 1967
LAUNCH DATE JUL 4 1967
                                                                           FLIGHT TIME 178.00
   HELTOCK /RIC CONTC
                                                                          DISTANCE 515.298
    RL 152.10 LAL -.00 LOL 281.36 VL 26.057 GAL 1.60 AZL 93.62 MCA 249.39 SMA 124.48 ECC .22355 INC 3.6161 VI 29.291
RP 107.64 LAP 3.38 LOP 170.71 VP 37.413 GAP 10.35 AZP 88.73 TAL 174.42 TAP 63.81 RCA 96.65 APO 152.31 VZ 35.205
RC 156.813 GL -25.96 GP 8.27 ZAL 78.94 ZAP 164.14 ETS 29.71 ZAE 128.80 ETE 173.66 ZAC 79.42 ETC 11.97 CLP-166.42
   PLANETOCENTRIC CONIC
    C3 14.082 VHL 3.753 DLA -33.04 RAL 190.80 RAD 6567.6 VEL 11.639 PTH 2.04 VHP 6.828 DPA 8.77 RAP 188.69 ECC 1.2318
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.21 9 2 15 1246.14 24.91 352.78 55.24 112.45 9 25 1 646.1 27.75 344.84
                                                                                                 112.44 15 8 39
112.45 9 23 1
                                                                                                                                                 27.74
       107.79
                   13 34 13 5665.61
                                                     24.92
                                                                   266.14
                                                                                   55.24
                                                                                                                                5065.6
                                                                                                                                                               258.20
        72.21
                    9 2 15
                                  1246.14
                                                                   352.78
                                                                                   55.24
                                                                                                                                                 27.73
                                                                                                                                                               344.84
                                                    24.91
                                                                                                                                 646.1
                                                                                                 112.44 15 8 39
118.59 14 18 18
106.28 16 24 48
                                                                                                                                                               258.20
       107.79
                   13 34 13 5665.61
                                                    24.92
                                                                  266.14
                                                                                   55.24
                                                                                                                                5065.6
                                                                                                                                                 27.74
       110.00
                   12 41 9
                                  5828,77
                                                     19.59
                                                                   276.01
                                                                                   52.50
                                                                                                                                5228.8
                                                                                                                                                 23.25
                                                                                                                                                               268.79
                    14 54 29 5419.01
                                                                                   57,45
       110.00
                                                                   249.26
                                                                                                                                4819.0
                                                                                                                                               32.41
                                                                                                                                                               240.57
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                     SCT 5484.1 SCR 424.7 SG3 232.2

RRT -.3928 RRF -.4005 RTF .9406

SCB 5500.5 R23 .0316 R13 -.9407

SG1 5486.7 SG2 390.4 THA 178.25
                                                                                                                           ST 3277.9 SR 412.9 SS 987.2
CRT -.9893 CRS .9594 CST -.9896
    TDE-2.1337 TRA .6201 TC3-5.6822 BAU 1.0700
    RDE .2703 RRA .0270 RC3 -.1168 FAU .03576
   FOE-1.0619 FRA .7512 FC3-2.1985 BSP 17249
BDE 2.1507 BRA .6206 BC3 5.6834 FSP -755
                                                                                                                           LSA 3444.8 MSA 149.4 SSA 20.1
                                                                                                                            EL1 3303.2 EL2 59.8 ALF 172.89
LAUNCH DATE JUL 4 1967
                                                                           FLIGHT TIME 180.00
                                                                                                                                       ARRIVAL DATE DEC 31 1967
  HELIOCENTRIC CONIC
                                                                          DISTANCE 521.016
   RL 152.10 LAL -.00 LOL 281.36 VL 26.012 GAL 2.07 AZL 93.53 MCA 252.63 SMA 124.21 ECC .22729 INC 3.5255 V1 29.291
RP 107.67 LAP 3.36 LOP 173.96 VP 37.374 GAP 10.71 AZP 88.95 TAL 172.93 TAP 65.56 RCA 95.98 APO 152.44 V2 35.197
RC 158.850 GL -24.72 GP 7.87 ZAL 75.92 ZAP 165.20 ETS 30.35 ZAE 128.70 ETE 173.99 ZAC 77.36 ETC 11.71 CLP-167.42
   PLANETOCENTRIC CONIC
    C3 14.611 VML 3.822 OLA -33.17 RAL 194.57 RAD 6567.6 VEL 11.662 PTH 2.05 VMP 7.017 OPA 7.49 RAP 190.55 ECC 1.2405
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               59.62
                                                                                               112.79 9 36 38
112.77 15 25 23
                                                                                                                                              27.65
                                                                                                                                                           345.83
       71.95
                     9 15 39
                                  1259.36
                                                    24.78
                                                                  353.74
                                                                                                                                  659.4
      108.05
                   13 50 54
                                   5666.70
                                                     24.80
                                                                  266.32
                                                                                   59.62
                                                                                                                                 5068.7
                                                                                                                                                 27.66
                                                                                                                                                               258.41
        71.95
                    9 15 39
                                  1259.36
                                                     24.78
                                                                  353.74
                                                                                   59.62
                                                                                                  112.79
                                                                                                               9 36 38
                                                                                                                                  659.4
                                                                                                                                                 27.65
                                                                                                                                                               345.83
                                                                                                 112.79 9 36 38
112.77 15 25 23
118.51 14 37 8
107.05 16 36 20
      108.05
                  13 50 54
                                   5668.70
                                                     24.80
                                                                  266.32
                                                                                   59.62
                                                                                                                                 5066.7
                                                                                                                                                 27.66
                                                                                                                                                               258.41
                  13 0 3
15 5 41
                                                                                                                                5224.9
      110.00
                                   5624.93
                                                     19.71
                                                                  275.78
                                                                                   56.99
                                                                                                                                                 23.36
                                                                                                                                                               268.55
      110.00
                                   5439.17
                                                     30.06
                                                                  250.69
                                                                                   61.78
                                                                                                                               4839.2
                                                                                                                                                 32.12
                                                                                                                                                               242.07
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 3277.3 SR 422.1 SS 955.9
CRT -.9846 CRS .9510 CST -.9898
LSA 3436.5 MSA 150.7 SSA 20.2
    TOE-2.1643 TRA .8320 TC3-5.5416 BAU 1.0827
                                                                       SGT 5540.0 SGR 433.0 SG3 223.5
   RDE .2814 RRA .0259 RC3 -.1122 FAU .03344
FDE-1.0106 FRA .8092 FC3-1.9816 BSP 17466
BDE 2.1825 BRA .8324 BC3 5.5427 FSP -730
                                                                     RRT -.3902 RRF -.3945 RTF .9415
SGB 5556.9 R23 .0274 R13 -.9416
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SG1 5542.6 SG2 398.5 THA 178.24

EL1 3303.6 EL2 73.2 ALF 172.77

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ARRIVAL DATE JAN 2 1968
                                                                           FLIGHT TIME 182.00
LAUNCH DATE JUL 4 1967
                                                                           DISTANCE 526.702
   RL 152.10 LAL -.00 LOL 281.36 VL 25.967 GAL 2.56 AZL 93.44 MCA 255.87 SMA 123.94 ECC .23133 INC 3.4382 VI 29.291
RP 107.70 LAP 3.33 LOP 177.20 VP 37.334 GAP 11.09 AZP 89.16 TAL 171.44 TAP 67.31 RCA 95.27 APO 152.61 V2 35.187
RC 160.871 GL -23.46 GP 7.51 ZAL 72.90 ZAP 166.21 ETS 31.19 ZAE 128.61 ETE 174.29 ZAC 75.26 ETC 11.49 CLP-168.40
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                     6.23 RAP 192.45 ECC 1.2514
    C3 15.275 VHL 3.908 DLA -33.23 RAL 198.33 RAD 6567.6 VEL 11.690 PTH 2.06 VMP 7.215 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.12 9 51 9
113.11 15 41 11
113.12 9 51 9
113.11 15 41 11
113.12 15 41 11
118.61 14 53 55
107.63 16 49 51
                                                                               64.08
                                                                                                                                  671.4
                   9 29 57 1271.40
14 6 35 5676.53
9 29 57 1271.40
                                                     24.56
                                                                   354.57
        71.84
                                                                                                                                  5076.5
                                                                                    64.08
                                                     24.57
                                                                   266.82
       104.16
                                                                                                                                   671.4
                                                                                                                                                  27.47
                                                     24.56
                                                                   354.57
                                                                                    64.08
        71.84
                                                                                                                                                  27.48
                                                                                                                                  5076.5
                                                     24.57
                                                                   266.82
                                                                                    64,08
                   14 6 35 5676.53
      108.16
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                                                                                                                                  5229.5
                                                                                                                                                  23.23
                                                                                    61.47
                                                      19.56
                                                                   276.05
                   13 16 46
                                   5829.48
      110.00
                                                                                                                                 4854.5
                                                                                                                                                  31.89
                                                     29.77
                                                                                    66.25
                                                                   251.78
                   15 18 57
                                   5454.50
      110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 3259.1 SR 431.1 SS 922.4
CRT -.9791 CRS .9417 CST -.9900
                                                                       SGT 5590.1 SGR 440.6 SG3 215.0
RRT -.3905 RRF .3920 RTF .9426
SGB 5607.4 R23 .0239 R13 .9426
   TOE-2.1890 TRA 1.0558 TC3-5.3561 BAU 1.0940
ROE .2939 RRA .0237 RC3 -.1051 FAU .03121
FOE .9600 FRA .8652 FC3-1.7690 BSP 17654
                                                                                                                            LSA 3410.9 MSA 153.8 SSA 20.1
                                                                                                                            EL1 3286.3 EL2 87.0 ALF 172.62
    BOE 2.2086 BRA 1.0561 BC3 5.3571 FSP -705
                                                                        5G1 5592.8 SG2 405.4 THA 178.23
                                                                                                                                         ARRIVAL DATE JAN 4 1968
                                                                            FLIGHT TIME 184.00
LAUNCH DATE JUL 4 1967
                                                                            DISTANCE 532.352
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 25.923 GAL 3.07 A7L 93.35 MCA 259.10 SMA 123.67 ECC .23567 INC 3.3534 VI 29.291
RP 107.73 LAP 3.29 LOP 180.44 VP 37.294 GAP 11.47 A7P 89.37 TAL 169.95 TAP 69.05 RCA 94.53 APO 152.82 V2 35.178
RC 162.878 GL -22.18 GP 7.19 TAL 69.92 TAP 167.18 ETS 32.26 TAE 128.53 ETE 174.55 TAC 73.13 ETC 11.30 CLP-169.36
   PLANETOCENTRIC CONIC
                                                                                                                                      5.00 RAP 194.38 ECC 1.2648
    C3 16.089 VHL 4.011 OLA -33.21 RAL 202.05 RAD 6567.6 VEL 11.725 PTH
                                                                                                       2.07 VHP 7.424 DPA
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.43 10 6 24
113.42 15 55 58
113.42 15 55 58
113.42 15 55 58
118.90 15 8 19
107.98 17 5 30
                  9 45 2 1282.37
14 21 9 5689.05
9 45 2 1282.37
14 21 9 5689.05
                                                                                                                                                  27.18
                                                                                                                                   682.4
                                                      24.23
                                                                   355.26
                                                                                    68.59
       71.89
                                                                                                                                                   27.19
                                                                                                                                  5089.1
                                                                                                                                                                 259.80
                                                                                    66.60
                                                      24.24
                                                                    267.63
       10A.11
                                                                                                                                                   27.18
                                                                                                                                   682.4
                                                                    355.26
                                                                                    68.59
                                                      24.23
        71.89
                                                                                                                                  5089.1
                                                                                                                                                   27.19
                                                                                                                                                                 259.80
                                                                                    68.60
                                                      24.24
                                                                    267.63
       10A.11
                                                                                                                                  5243.3
                                                                                                                                                   22.81
                  13 30 55 5843.29
15 34 26 5464.16
                                                                                    65.89
                                                      19.11
                                                                    276.87
       110.00
                                                                                                                                                   31.74
                                                                                                                                  4864.2
                                                                      MID COURSE EXECUTION ACCURACY
                                                                                    70.86
                                                      29.57
                                                                   252.46
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5630.7 SGR 447.3 SG3 206.6
RRT .3926 RRF .3916 RTF .9432
SG8 5648.4 R23 .0211 R13 .9433
SG1 5633.4 SG2 411.2 THA 178.20
                                                                                                                            ST 3220.9 SR 439.3 SS 885.9
CRT -.9725 CRS .9310 CST .9900
LSA 3365.5 MSA 159.1 SSA 19.8
    TOE-2.2048 TRA 1.2950 TC3 5.1241 BAU 1.1024
    RDE .3075 RRA .0201 RC3 .0966 FAU .02896
FDE -.9084 FRA .9215 FC3-1.5581 BSP 17766
                                                                                                                             EL1 3249.1 EL2 101.4 ALF 172.44
    BOE 2.2262 BRA 1.2951 BC3 5.1251 FSP -678
                                                                                                                                        ARRIVAL DATE JAN 6 1968
                                                                            FLIGHT TIME 186.00
LAUNCH DATE JUL 4 1967
                                                                          DISTANCE 537.962
    RL 152.10 LAL -.00 LOL 281.36 VL 25.879 GAL 3.60 AZL 93.27 MCA 262.33 SMA 123.41 ECC .24036 INC 3.2704 V1 29.291
RP 107.76 LAP 3.24 LOP 183.67 VP 37.253 GAP 11.88 AZP 89.56 TAL 168.46 TAP 70.79 RCA 93.75 APO 153.07 V2 35.167
RC 164.869 GL -20.89 GP 6.90 ZAL 66.98 ZAP 168.12 ETS 33.58 ZAE 128.45 ETE 174.78 ZAC 70.98 ETC 11.15 CLP-170.31
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 17.069 VHL 4.131 DLA -33.11 RAL 205.69 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 7.643 DPA
                                                                                                                                    3.80 RAP 196.33 ECC 1.2809
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                113.73 10 22 23
113.72 16 9 33
113.72 16 9 33
113.72 16 9 33
113.72 16 9 33
119.36 15 20 15
108.14 17 23 8
                                                                                                                                 692.0 26.79 348.01
                                                      23.79
                                                                   355.79
                                                                                  73.14
                  10 0 51 1292.04
14 34 27 5706.47
        72.08
                                                                                                                                  5106.5
                                                                                                                                                  26.80
                                                                                                                                                                260.98
                                                      23.80
                                                                    268.77
                                                                                    73.14
        107.92
                    14 34 27
                                 1292.04
                                                                                                                                                                348.01
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                                                                                    73.14
                   10 0 51
                                                      23.79
                                                                    355.79
        72.08
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                                                      23.60
                                                                    268.77
                                                                                    73.14
                                   5706.47
                     14 34 27
        107.92
                                                                                                                                  5266.2
                                                                                                                                                  22.12
                                                                                                                                                                271.11
                   13 42 28
                                                                    278.21
                                                                                    70.22
                                                      16.35
                                   5866.20
       110.00
                                                                                                                                                   31.66
                    15 51 59 5468.34
                                                                                                                                  4868.3
                                                                    252.75
                                                                                    75.57
                                                      29.48
        110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 3171.6 SR 447.1 SS 850.0

CRT -.9651 CRS .9196 CST -.9900

LSA 3309.6 MSA 165.6 SSA 19.3
                                                                      SGT 5671.9 SGR 453.4 SG3 198.8
RRT .3975 RRF .3944 RTF .9443
SG8 5690.0 R23 .0186 R13 .9443
SG1 5674.7 SG2 415.8 THA 178.17
     TOE-2.2175 TRA 1.5430 TC3-4.8691 BAU 1.1113
     RDE .3223 RRA .0154 RC3 -.0864 FAU .02690
FDE -.8598 FRA .9738 FC3-1.3641 BSP 17948
                                                                                                                             EL1 3200.8 EL2 116.0 ALF 172.24
     BOE 2.2408 BRA 1.5431 BC3 4.8699 FSP -655
                                                                                                                                         ARRIVAL DATE JAN 8 1968
                                                                            FLIGHT TIME 188.00
 LAUNCH DATE JUL 4 1967
                                                                            DISTANCE 543.528
    RL 152.10 LAL -.00 LOL 281.36 VL 25.835 GAL 4.16 AZL 93.19 MCA 265.56 SMA 123.15 ECC .24541 INC 3.1888 VI 29.291
RP 107.79 LAP 3.18 LOP 186.91 VP 37.213 GAP 12.30 AZP 89.75 TAL 166.97 TAP 72.53 RCA 92.93 APO 153.38 V2 35.156
RC 186.846 GL -19.61 GP 6.64 ZAL 64.10 ZAP 169.02 ETS 35.21 ZAE 128.37 ETE 174.98 ZAC 68.81 ETC 11.04 CLP-171.24
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 18.235 VHL 4.270 DLA -32.94 RAL 209.25 RAD 6567.7 VEL 11.816 PTH 2.09 VHP 7.875 DPA
                                                                                                                                      2.62 RAP 198.31 ECC 1.3001
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.43 10 17 15 1300.54 23.25 356.19 77.68 114.01 10 38 56 700.5 26.29 348.46
                                                                                                 114.01
114.00
                                                      23.27
                                                                    270.22
                                                                                     77.69
                     14 46 26 5728.65
        107.57
                                                                                                                                    700.5
                                                                                                                                                   26.29
                                                                                                                                                                 348.46
                                                                                     77.68
                                                                                                    114.01
                                                                                                               10 36 56
                                                                    356.19
                                   1300,54
                                                      23.25
                     10 17 15
         72.43
                                                                                                                                                   26.31
                                                                                                                                                                 262.48
                                                                                     77.69
                                                                                                    114.00 16 21 54
                                                                                                                                   5128.6
                                                                    270.22
                                                      23.27
        107.57
                     14 46 26
                                   5728.65
                                                                                                   119.95 14 1 52
108.13 17 42 17
                                                                                                                                      9.0
                                                                                                                                                   21.16
                                                                                                                                                                 295.08
                                                                                     74.46
                                                      17.31
                                                                    302.10
        110.00
                    13 51 42
                                      609.02
                                                                                                                                   4868.2
                                                                                                                                                                 244.22
                                                                    252.74
                                                                                     80.36
                                  5468.17
                    16 11 9
                                                       29.49
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 3108.9 SR 453.8 SS 814.2
CRT -.9567 CRS .9071 CST -.9900
LSA 3241.0 MSA 173.7 SSA 18.7
                                                                       SCT 5708.0 SCR 458.6 SC3 191.2
RRT -.4041 RRF .3992 RTF .9455
SC8 5726.4 R23 .0165 R13 .9455
     TDE-2.2237 TRA 1.8048 TC3-4.5880 BAU 1.1186
     ROE .3382 RRA .0094 RC3 -.0755 FAU .02491
     FOE -.8128 FRA 1.0252 FC3-1.1828 BSP 18105
BDE 2.2493 BRA 1.8049 BC3 4.5886 FSP -634
                                                                                                                            EL1 3139.2 EL2 130.8 ALF 172.04
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SG1 5711.0 SG2 419.2 THA 178.13

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ARRIVAL CATE JAN 10 1968
 LAUNCH DATE JUL 4 1967
                                                                                                  FLIGHT TIME 190.00
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 549.046
      RL 152.10 LAL -.00 LOL 281.36 VL 25.791 GAL 4.75 AZL 93.11 HCA 268.79 SMA 122.90 ECC .25087 INC 3.1079 V1 29.291 RP 107.83 LAP 3.11 LOP 190.14 VP 37.172 GAP 12.74 AZP 89.93 TAL 165.48 TAP 74.27 RCA 92.07 APO 153.73 V2 35.145 RC 168.808 GL -18.34 GP 6.40 ZAL 61.30 ZAP 169.89 ETS 37.21 ZAE 128.29 ETE 175.15 ZAC 66.62 ETC 10.96 CLP-172.16
     PLANETOCENTRIC CONIC
      C3 19.609 VHL 4.428 CLA -32.69 RAL 212.70 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 8.120 CPA
                                                                                                                                                                           1.47 RAP 200.30 ECC 1.3227
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          72.93 10 34 13 1307.69
107.07 14 56 57 5755.73
                                                                                                        82.20
                                                                   22.62
                                                                                       356.43
                                                                                                                            114.26 10 56 1
                                                                                                                                                                        707.7
                                                                                                                                                                                       25.70
                           14 56 57
                                              5755.73
                                                                                       271.99
                                                                                                                                               16 32 53
          107.07
                                                                      22.63
                                                                                                            82.21
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          107.07
                          14 56 57
                                             5755.73
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                                                                                       271.99
                                                                                                            82.21
                                                                                                                         114.25 16 32 53
120.60 14 9 49
108.02 18 2 23
                                                                                                                                                                       5155.7
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                         13 59 3
          110.00
                                                                     16.03
                                                                                       304.23
                                                                                                            78.58
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          110.00
                          16 31 18
                                                                     29.55
                                                                                       252.53
                                                                                                            85.19
                                                                                                                                                                                             31.73
                                                                                                                                                                                                               243.99
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
ST 3035.4 SR 459.2 SS 779.0
CRT -.9472 CRS .8933 CST -.9899
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                            SGT 5738.9 SGR 462.7 SG3 183.9
RRT -.4122 RRF -.4057 RTF .9466
      TOE-2.2240 TRA 2.0804 TC3-4.2883 BAU 1.1243
      ROE .3549 RRA .0020 RC3 -.0645 FAU .02300
FOE -.7674 FRA 1.0760 FC3-1.0154 BSP 18259
BDE 2.2521 BRA 2.0804 BC3 4.2888 FSP -613
                                                                                            SG8 5757.5 R23 .0146 R13 -.9466
SG1 5742.1 SG2 421.4 THA 178.09
                                                                                                                                                                LSA 3161.9 MSA 182.9 SSA 18.1
                                                                                                                                                                  EL1 3066.5 EL2 145.7 ALF 171.83
                                                                                                  FEIGHT TIME 192.00
                                                                                                                                                                                 ARRIVAL DATE JAN 12 1968
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 554.510
     RL 152.10 LAL -.00 LOL 281.36 VL 25.748 GAL 5.37 AZL 93.03 MCA 272.01 SMA 122.64 ECC .25678 INC 3.0273 VI 29.291
RP 107.86 LAP 3.03 LOP 193.37 VP 37.131 GAP 13.20 AZP 90.11 TAL 164.00 TAP 76.01 RCA 91.15 APO 154.14 V2 35.134
RC 170.755 GL -17.09 GP 6.19 ZAL 58.59 ZAP 170.72 ETS 39.66 ZAE 128.21 ETE 175.31 ZAC 64.43 ETC 10.92 CLP-173.07
    PLANETOCENTRIC CONIC
     C3 21.219 VHL 4.606 DLA -32.39 RAL 216.02 RAD 6567.9 VEL 11.941 PTH 2.13 VHP 8.380 DPA .34 RAP 202.32 ECC 1.3492 LNC MATCH LOCK TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ MATCH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            114.49 11 13 34
                                             1313.41
          73.58
                          10 51 41
                                                                     21.89
                                                                                       356.51
                                                                                                           86.69
                                                                                                                                                                        713.4
                                                                                                                                                                                             25.01
                                                                                                                                                                                                               348.90
                                                                                                                                114.47
                          15 5 58
                                             5787.70
                                                                     21.91
                                                                                       274.08
                                                                                                            86.70
                                                                                                                                                                        5187.7
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                          10 51 41
                                              1313.41
                                                                                       356.51
                                                                                                            86.69
86.70
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114.47 16 42 25
                                                                     21.89
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                        15 5 58
                                             5787.70
                                                                                       274.08
                                                                                                                                                                       5187.7
                                                                     21.91
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                                                                                                                               121.28 14 16 23
107.85 18 22 55
                          14 4 55
         110.00
                                                688.43
                                                                     14.56
                                                                                       306.60
                                                                                                            82.61
                                                                                                                                                                         88.4
                                                                                                                                                                                             18.59
                                                                                                                                                                                                               299.81
                        16 51 54
                                             5460.68
                                                                                       252.21
                                                                                                            90.02
                                                                    29.65
                                                                                                                                                                        4860.7
                                                                                                                                                                                             31.80
                                                                                                                                                                                                               243.67
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            SCT 5761.7 SCR 465.8 SC3 176.9
RRT -.4209 RRF -.4127 RTF .9476
SCB 5780.5 R23 .0129 R13 -.9477
SCI 5765.0 SC2 422.2 THA 178.04
     TOE-2.2148 TRA 2.3745 TC3-3.9696 BAU 1.1262
                                                                                                                                                                 ST 2949.9 SR 463.0 SS 743.9
CRT -.9361 CRS .8773 CST -.9897
     ROE .3722 RRA -.0071 RC3 -.0542 FAU .02107
FOE -.7220 FRA 1.1280 FC3 -.8597 BSP 18303
                                                                                                                                                                  LSA 3071.2 MSA 193.6 SSA 17.4
      BOE 2.2459 BRA 2.3745 BC3 3.9699 FSP -589
                                                                                                                                                                 ELI 2981.7 EL2 161.1 ALF 171.62
LAUNCH DATE JUL 4 1967
                                                                                                 FLIGHT TIME 194.00
                                                                                                                                                                               ARRIVAL DATE JAN 14 1968
                                                                                                 DISTANCE 559.912
    HELIOCENTRIC CONIC
     RL 152:10 LAL -.00 LOL 281.36 VL 25.706 GAL 6.02 AZL 92.95 MCA 275.23 SMA 122.40 ECC .26318 INC 2.9463 V1 29.291 RP 107.90 LAP 2.93 LOP 196.60 VP 37.090 GAP 13.69 AZP 90.27 TAL 162.53 TAP 77.76 RCA 90.18 APO 154.61 V2 35.122
                                                      5.99 TAL 55.99 TAP 171.51 ETS 42.65 TAE 128.13 ETE 175.45 TAC 62.22 ETC 10.92 CLP-173.97
     RC 172.686 GL -15.87 GP
    PLANETOCENTRIC CONIC
     C3 23.097 VHL 4.806 DLA -32.03 RAL 219.19 RAD 6567.9 VEL 12.020 PTH 2.15 VHP 8.657 DPA
                                                                                                                                                                          -.77 RAP 204.36 FCC 1.3801
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       11 9 39 1317.47
15 13 20 5824.72
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114.67 16 50 25
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          74.37
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         105.63
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114.67 16 50 25
121.93 14 21 53
107.68 18 43 26
                        11 9 39
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17 12 30
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                                               734.25
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         110.00
                                             5455.93
                                                                    29.74
                                                                                       251.88
                                                                                                            94.63
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                                                                                                                                                                                                              243.32
   DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                           SGT 5783.1 SGR 467.9 SG3 170.3

RRT -.4314 RRF -.4218 RTF .9490

SGB 5802.0 R23 .0114 R13 -.9490

SGI 5786.6 SG2 421.9 THA 177.99
     TDE-2.2044 TRA 2.6805 TC3-3.6530 BAU 1.1281
                                                                                                                                                                 ST 2863.0 SR 465.4 SS 712.1
CRT -.9240 CRS .8608 CST -.9897
LSA 2979.7 MSA 204.3 SSA 16.8
     ROE .3903 RRA -.0176 RC3 -.0441 FAU .01931
FDE -.6809 FRA 1.1780 FC3 -.7237 BSP 18434
BDE 2.2387 BRA 2.6806 BC3 3.6532 FSP -570
                                                                                                                                                                 EL1 2895.2 EL2 176.0 ALF 171.43
LAUNCH DATE JUL 4 1967
                                                                                                 FLIGHT TIME 196.00
                                                                                                                                                                                ARRIVAL DATE JAN 16 1968
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 565.244
    RL 152.10 LAL -.00 LOL 281.36 VL 25.664 GAL 6.71 A7L 92.86 MCA 278.45 SMA 122.15 ECC .27011 INC 2.8646 V1 29.291
RP 107.94 LAP 2.83 LOP 199.82 VP 37.050 GAP 14.21 A7P 90.42 TAL 161.07 TAP 79.52 RCA 89.16 APO 155.15 V2 35.110
RC 174.603 GL -14.68 GP 5.81 ZAL 53.49 ZAP 172.25 ETS 46.33 ZAE 128.04 ETE 175.57 ZAC 60.01 ETC 10.95 CLP-174.87
   PLANETOCENTRIC CONIC
     C3 25.281 VML 5.028 DLA -31.62 RAL 222.22 RAD 6568.0 VEL 12.110 PTH 2.17 VMP 8.953 DPA -1.85 RAP 206.41 ECC 1.4161
    C5 25.281 WHC 5.028 ULA -51.02 RAL EZELZE RAU 5705.05 VEL JEITU FIN THE LITTURE TO THE LITTURE IN JEAT IN JEONG IN JET ASC IN JET AND THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JE LAT IN JEONG TO THE LITTURE PO CST TIM IN JE LAT IN JE LAT
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   DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                         SCT 5798.8 SGR 469.0 SG3 164.0
RRT -.4426 RRF -.4319 RTF .9504
SGB 5817.7 R23 .0101 R13 -.9505
SG1 5802.5 SG2 420.3 THA 177.94
     TOE-2.1897 TRA 3.0033 TC3-3.3351 BAU 1.1273
                                                                                                                                                                ST 2773.1 SR 466.1 SS 682.6
CRT -.9105 CRS .8429 CST -.9897
    TOE -.6419 FRA 1.2284 FC3 -.6023 BSP 18539
BOE 2.2276 BRA 3.0035 BC3 3.3353 FSP -551
                                                                                                                                                               LSA 2885.6 MSA 215.4 SSA 16.1
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EL1 2805.5 EL2 190.5 ALF 171.26

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ARRIVAL DATE JAN 18 1968
                                                                      FLIGHT TIME 198.00
LAUNCH DATE JUL 4 1967
                                                                     DISTANCE 570.498
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 25.622 GAL 7.45 A7L 92.78 HCA 281.67 SMA 121.91 ECC .27765 INC 2.7816 V1 29.291 RP 107.97 LAP 2.72 LOP 203.04 VP 37.009 GAP 14.76 AZP 90.56 TAL 159.62 TAP 81.29 RCA 88.06 APO 155.76 V2 35.097 RC 176.504 GL -13.52 GP 5.65 ZAL 51.10 ZAP 172.94 ETS 50.85 ZAE 127.95 ETE 175.68 ZAC 57.80 ETC 11.03 CLP-175.77
   PLANETOCENTRIC CONIC
    C3 27.817 VHL 5.274 DLA -31.17 RAL 225.09 RAD 6568.1 VEL 12.214 PTH 2.19 VHP 9.270 DPA -2.91 RAP 208.47 ECC 1.4578
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      110.00
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                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 5810.0 SGR 468.9 SG3 158.0
RRT -.4545 RRF -.4428 RTF .9521
SGB 5828.9 R23 .0088 R13 -.9521
SGI 5813.9 SG2 417.4 THA 177.89
                                                                                                                    ST 2682.5 SR 465.1 SS 655.8
CRT -.8955 CRS .8238 CST -.9897
LSA 2791.1 MSA 226.5 SSA 15.5
    TOE-2.1713 TRA 3.3444 TC3-3.0221 BAU 1.1239
   ROE .4279 RRA -.0431 RC3 -.0269 FAU .01593
FDE -.6055 FRA 1.2795 FC3 -.4959 BSP 18635
                                                                                                                     EL1 2714.8 EL2 204.6 ALF 171.12
    BOE 2.2130 BRA 3.3447 BC3 3.0222 FSP
                                                                                                                                ARRIVAL DATE JAN 20 1968
                                                                       FLIGHT TIME 200.00
LAUNCH DATE JUL 4 1967
                                                                      DISTANCE 575.660
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 25.581 GAL 8.23 AZL 92.70 MCA 284.89 SMA 121.68 ECC .28585 INC 2.6967 V1 29.291
RP 108.01 LAP 2.61 LOP 206.26 VP 36.968 GAP 15.34 AZP 90.69 TAL 158.19 TAP 83.08 RCA 86.89 APO 156.46 V2 35.084
RC 178.389 GL -12.40 GP 5.50 ZAL 48.83 ZAP 173.57 ETS 56.41 ZAE 127.84 ETE 175.78 ZAC 55.59 ETC 11.15 CLP-176.67
  PLANETOCENTRIC CONIC
    C3 30.759 VHL 5.546 DLA -30.69 RAL 227.79 RAD 6568.2 VEL 12.334 PTH 2.22 VHP 9.611 DPA -3.94 RAP 210.54 ECC 1.5062 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
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107.34 19 42 15
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                                5446.94
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                   18 11 28
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2590.4 SR 462.3 SS 631.1
CRT -.8785 CRS .8026 CST -.9898
                                                                   $6T 5813.0 SCR 467.6 $63 152.4

RRT -.4666 RRF -.4539 RTF .9537

$6B 5833.8 R23 .0075 R13 -.9537
    TOE-2.1461 TRA 3.7083 TC3-2.7126 BAU 1.1155
    ROE .4470 RRA -.0584 RC3 -.0203 FAU .01426
                                                                                                                     LSA 2695.4 MSA 237.5 SSA 14.9
    FOE - 15699 FRA 1.3331 FC3 - 4014 BSP 18627
BDE 2.1922 BRA 3.7088 BC3 2.7127 FSP -511
                                                                                                                     EL1 2622.2 EL2 218.2 ALF 171.03
                                                                   SG1 5819.1 SG2 413.3 THA 177.84
                                                                                                                               ARRIVAL DATE JAN 22 1968
                                                                      FLIGHT TIME 202.00
TAUNCH DATE JUL 4 1967
                                                                      DISTANCE 580.717
   HELLOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 281.36 VL 25.540 CAL 9.05 AZL 92.61 HCA 288.10 SMA 121.44 ECC .29480 INC 2.6093 VI 29.291 RP 108.05 LAP 2.48 LOP 209.47 VP 36.928 CAP 15.97 AZP 90.81 TAL 156.79 TAP 84.89 RCA 85.64 APO 157.25 V2 35.071
    RC 180.257 GL -11.33 GP 5.37 ZAL 46.68 ZAP 174.11 ETS 63.20 ZAE 127.73 ETE 175.87 ZAC 53.39 ETC 11.31 CLP-177.58
   PLANETOCENTRIC CONIC
    C3 34.173 VHL 5.846 DLA -30.18 RAL 230.34 RAD 6568.3 VEL 12.472 PTH 2.26 VHP 9.978 DPA -4.94 RAP 212.62 ECC 1.5624
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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115.16 15 36 27
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107.34 20 0 25
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       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2504.4 SR 457.9 SS 610.5
CRT -.8605 CRS .7818 CST -.9901
LSA 2606.4 MSA 247.5 SSA 14.3
                                                                   SCT 5816.6 SCR 465.3 SC3 146.9
RRT -.4796 RRF -.4662 RTF .9557
SCB 5835.2 R23 .0063 R13 -.9557
    TDE-2.1231 TRA 4.0895 TC3-2.4200 BAU 1.1056
    RDE .4664 RRA -.0751 RC3 -.0145 FAU .01272
FDE -.5388 FRA 1.3866 FC3 -.3222 BSP 18703
BDE 2.1737 BRA 4.0902 BC3 2.4200 FSP -494
                                                                                                                     EL1 2535.5 EL2 230.4 ALF 170.98
                                                                   SG1 5820.9 SG2 408.0 THA 177.79
                                                                                                                                ARRIVAL DATE JAN 24 1968
                                                                       FLIGHT TIME 204.00
LAUNCH DATE JUL 4 1967
                                                                       DISTANCE 585.652
    RL 152.10 LAL -.00 LOL 281,36 VL 25.500 GAL 9.94 AZL 92.52 HCA 291.31 SMA 121.22 ECC .30459 INC 2.5187 V1 29.291
RP 108.09 LAP 2.35 LOP 212.69 VP 36.888 GAP 15.64 AZP 90.92 TAL 155.42 TAP 86.73 RCA 84.30 APO 158.14 V2 35.058
RC 182.108 GL -10.30 GP 5.24 ZAL 44.66 ZAP 174.55 ETS 71.36 ZAE 127.60 ETE 175.95 ZAC 51.20 ETC 11.52 CLP-178.49
   PLANETOCENTRIC CONIC
    C3 38.138 VHL 6.176 DLA -29.65 RAL 232.72 RAD 6568.5 VEL 12.630 PTH 2.29 VHP 10.376 DPA -5.91 RAP 214.70 ECC 1.6277
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2422.6 SR 451.8 SS 593.0
                                                                   SGT 5813.4 SGR 461.9 SG3 141.8
     TOE-2.0987 TRA 4.4937 TC3-2.1407 BAU 1.0915
                                                                                                                     CRT -.8413 CRS .7604 CST -.9905
LSA 2521.6 MSA 256.4 SSA 13.7
ELI 2452.5 EL2 241.3 ALF 171.00
    ROE .4859 RRA -.0934 RC3 -.0100 FAU .01121
FDE -.5103 FRA 1.4421 FC3 -.2545 BSP 18750
BDE 2.1542 BRA 4.4947 BC3 2.1407 FSP -478
                                                                   RRT -.4929 RRF -.4790 RTF .9579
                                                                   SGB 5831.7 R23 .0052 R13 -.9579
                                                                   SG1 5817.9 SG2 401.5 THA 177.75
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ARRIVAL DATE JAN 26 1968
                                                                           FLIGHT TIME 206.00
  LAUNCH DATE JUL 4 1967
                                                                          DISTANCE 590.443
     HELIOCENTRIC CONIC
      RL 152.10 LAL -.00 LOL 281.36 VL 25.460 GAL 10.89 A7L 92.42 MCA 294.52 SMA 121.00 ECC .31531 INC 2.4241 V1 29.291
RP 108.13 LAP 2.21 LOP 215.90 VP 36.848 GAP 17.37 A7P 91.01 TAL 154.08 TAP 88.60 RCA 82.85 APO 159.15 V2 35.045
RC 183.942 GL -9.31 GP 5.13 ZAL 42.76 ZAP 174.84 ETS 80.86 ZAE 127.45 ETE 176.02 ZAC 49.02 ETC 11.79 CLP-179.41
     PLANETOCENTRIC CONIC
       C3 42.753 VHL 6.539 DLA -29.11 RAL 234.94 RAD 6568.6 VEL 12.811 PTH 2.33 VHP (0.808 DPA -6.85 RAP 216.79 ECC 1.7036
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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107.54 20 34 10
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                                     634.14
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                                    1046.24
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         110.00
                     14 24 31
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         110.00
                     19 3 18 5452.11
                                                     29.82
                                                                   251.61
                                                                                 122.32
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                     SGT 5805.7 SGR 457.3 SG3 136.9
RRT .5065 RRF .4923 RTF .9602
SGB 5823.6 R23 .0042 R13 .9603
SGI 5810.3 SG2 393.9 THA 177.71
                                                                                                                          ST 2345.5 SR 444.2 SS 578.6

CRT -.8209 CRS .7388 CST .9911

LSA 2442.1 MSA 264.0 SSA 13.2

EL1 2374.0 EL2 250.6 ALF 171.06
       TOE-2.0737 TRA 4.9233 TC3-1.8768 BAU 1.0727
      RDE .5054 RRA -.1132 RC3 -.0065 FAU .00973
FOE -.4843 FRA 1.5002 FC3 -.1971 BSP 18799
       BOE 2.1344 BRA 4.9246 BC3 1.8768 FSP -462
                                                                                                                                     ARRIVAL DATE JAN 28 1968
  LAUNCH DATE JUL 4 1967
                                                                           FLIGHT TIME 208.00
                                                                          DISTANCE 595.066
     HELIOCENTRIC CONIC
      RL 152.10 LAL -.00 LOL 281.36 VL 25.422 GAL 11.91 AZL 92.32 MCA 297.73 SMA 120.78 ECC .32708 INC 2.3246 V1 29.291
RP 108.18 LAP 2.06 LOP 219.10 VP 36.809 GAP 18.16 AZP 91.08 TAL 152.79 TAP 90.51 RCA 81.27 APO 160.28 V2 35.032
RC 185.758 GL -8.36 GP 5.02 ZAL 40.98 ZAP 174.97 ETS 91.37 ZAE 127.27 ETE 176.09 ZAC 46.86 ETC 12.11 CLP 179.64
     PLANETOCENTRIC CONIC
       C3 48.138 VHL 6.938 OLA -28.55 RAL 237.01 RAD 6568.8 VEL 13.019 PTH 2.38 VHP 11.279 OPA -7.77 RAP 218.87 ECC 1.7922
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                115.19 14 10 41
115.18 15 11 27
                                                                               119.91
                                                                                                                                615.0
                                                                                                                                             17.19
                                                                                                                                                            338.18
          86.17 13 50 26 1214.98
                                                     13.91
                                                                   345.34
                                                                                                                                                            322.95
                                                                                                                                406.9
                                                                                                                                               17.21
          93.83
                     14 54 40
                                    1006.92
                                                      13.93
                                                                   330.11
                                                                                  119.92
                                                                                                 119.18 14 47 3
111.53 17 9 2
124.17 14 43 52
107.73 20 49 42
                                                                                                                                490.2
                                                                                                                                              10.65
                                                                                                                                                            325.83
         100.00
                    14 28 53 1090.18
                                                       6.81
                                                                   332.52
                                                                                 116.21
                                                                                                                                                            296.22
                                                                                                                                  7.0
                                                                                                                                              23.99
         100.00
                     16 58 55
                                     606.96
                                                     21.25
                                                                   303.95
                                                                                 123.23
                                                                                                                                500.7
         110.00
                                                                                                                                                3.65
                                                                                                                                                            322.39
                     14 25 32 1100.71
                                                       - .84
                                                                   328.59
                                                                                 111.49
                                                                                                                              4857.2
                                                                                                                                               31.85
         110.00
                     19 18 45
                                    5457.23
                                                     29.72
                                                                   251.97
                                                                                 126.57
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2272.3 SR 434.8 SS 566.9
CRT .7987 CRS .7163 CST .9917
LSA 2366.6 MSA 270.4 SSA 12.7
                                                                      SGT 5794.4 SGR 451.4 SG3 132.3
RRT .5200 RRF .5056 RTF .9628
SGB 5811.9 R23 .0032 R13 -.9628
       TOE 2.0447 TRA 5.3858 TC3-1.6249 BAU 1.0457
      RDE .5245 RRA .1348 RC3 .0042 FAU .00821
FDE .4597 FRA 1.5626 FC3 .1477 BSP 18750
                                                         444
                                                                                                                          FL1 2299.0 FL2 258.6 ALF 171.20
                                                                       SG1 5799.2 SG2 385.2 THA 177.67
       BDE 2.1109 BRA 5.3875 BC3 1.6249 FSP
                                                                                                                                     ARRIVAL DATE JAN 30 1968
                                                                           FLIGHT TIME 210.00
   LAUNCH DATE JUL 4 1967
      HELIOCENTRIC CONIC
                                                                          DISTANCE 599.487
       RL 152.10 LAL -.00 LOL 281.36 VL 25.384 GAL 13.01 A7L 92.22 HCA 300.93 SMA 120.57 ECC .34006 INC 2.2192 V1 29.291 RP 108.22 LAP 1.90 LOP 222.31 VP 36.770 GAP 19.02 A7P 91.14 TAL 151.55 TAP 92.48 RCA 79.57 APO 161.57 V2 35.019
                           7.46 GP 4.92 TAL 39.33 TAP 174.90 ETS 102.27 TAE 127.07 ETE 176.15 TAC 44.73 ETC 12.49 CLP 178.68
      PLANETOCENTRIC CONIC
       C3 54.440 VHL 7.378 DLA -27.99 RAL 238.91 RAD 6569.0 VEL 13.259 PTH 2.42 VMP 11.795 QPA -8.64 RAP 220.95 ECC 1.8959
       LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 52 38 1263.39 9.26 346.56 121.89 116.88 14 13 42 663.4 12.80 339.66 90.00 15 7 40 1019.69 16.36 332.18 125.30 113.44 15 24 40 419.7 19.39 324.82
                                                                                                113.44 15 24 40
119.62 14 41 43
111.12 18 58 43
124.07 14 45 27
107.97 21 4 21
                                                                                                                                                            330.21
                                                                                                                                567.6
                                                                                                                                               8.13
                     14 22 15 1167.61
                                                       4.22
                                                                   336.81
                                                                                 119.16
                                                                                                                                              24.33
                                                                                                                                                            273.04
                                                     21.66
                                                                   280.82
                                                                                 127.60
                                                                                                                              5278.7
          100.00
                      17 20 44
                                    5878.74
                                                                                                                                                            325.24
                     14 26 12 1155.24
                                                                                                                               555.2
                                                                                                                                               1.57
                                                      -2.92
                                                                   331.44
                                                                                114.73
                                                                   252.44
                                                                                                                              4863.9
                                                                                                                                              31.75
                                                     29.58
                                                                                 130.71
                      19 33 17
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                       SGT 5776.9 SGR 444.4 SG3 127.9
RRT .5339 RRF .5195 RTF .9655
SGB 5793.9 R23 .0022 R13 -.9655
                                                                                                                         ST 2207.1 SR 424.3 SS 558.8
CRT .7770 CRS .6957 CST .9925
LSA 2299.6 MSA 274.5 SSA 12.2
       TOE-2.0227 TRA 5.8723 TC3-1.3945 BAU 1.0149
       RDE .5437 RRA .1575 RC3 .0026 FAU .00677 FDE .4392 FRA 1.6274 FC3 .1076 BSP 18770
                                                                                                                          EL1 2231.9 EL2 264.1 ALF 171.38
                                                                       SG1 5781.8 SGZ 375.4 THA 177.64
       BOE 2.0945 BRA 5.8744 BC3 1.3945 FSP -430
                                                                           FLIGHT TIME 212.00
                                                                                                                                     ARRIVAL DATE FEB 1 1968
- LAUNCH DATE JUL 4 1967
                                                                           DISTANCE 603.667
     HELIOCENTRIC CONIC
       RL 152.10 LAL -.00 LOL 281.36 VL 25.347 GAL 14.21 AZL 92.11 MCA 304.13 SMA 120.36 ECC .35439 INC 2.1065 V1 29.291
RP 108.26 LAP 1.74 LOP 225.51 VP 36.732 GAP 19.97 AZP 91.18 TAL 150.37 TAP 94.50 RCA 77.71 APO 163.02 V2 35.005
RC 189.337 GL -6.60 GP 4.83 ZAL 37.81 ZAP 174.64 ETS 112.76 ZAE 126.84 ETE 176.22 ZAC 42.64 ETC 12.94 CLP 177.68
      PLANETOCENTRIC CONIC
                                                                                                                                   9.49 RAP 223.01 ECC 2.0178
       C3 61.845 VHL 7.864 DLA -27.43 RAL 240.66 RAD 6569.2 VEL 13.535 PTH 2.47 VHP 12.363 DPA
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                117.77 13 57 58
                                                                                                                                775.1
                                                                                                                                                            346.15
                      13 35 2
                                    1375.13
                                                      5.77
                                                                   352.91
                                                                                 124.29
           90.00
                                                                                                                                370.4
                                                                                                                                               20.57
                                                                                                                                                            321.68
                                                                                                 112.49
                                                                                                            15 55 24
                      15 39 13
                                      970.36
                                                      17.67
                                                                   329.16
                                                                                  129.98
           90.00
                                                                                                 119.84 14 37 37
                                                                                                                                639.7
                                                                                                                                                5.75
                                                                                                                                                            334.22
                      14 16 57
                                    1239.70
                                                       1.79
                                                                   340.77
                                                                                  122.10
          100.00
                                                                                                                                              24.53
                                                                                                                                                            272.40
                                                                                                 110.88 19 17 49
                                                                                                                               5269.1
                     17 40 O
                                                      21.89
                                                                   280.20
                                                                                  131.76
                                    5869.07
                                                                                                                                                            328.07
                     14 26 31 1209.64
19 46 55 5471.90
                                    1209.64
                                                                                                 123.86 14 46 41
108.27 21 18 7
                                                      -4.99
                                                                    334.29
                                                                                  117.89
                                                                                                                               609.6
                                                                                                                                                - . 51
          110.00
                                                                                                                                              31.62
                                                                                                                                                            244.49
                                                      29.41
                                                                                                                              4871.9
                                                                   253.00
                                                                                  134.73
          110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                       ST 2147.1 SR 412.4 SS 553.8

CRT .7548 CRS .6758 CST -.9934

LSA 2238.3 MSA 276.7 SSA 11.6

EL1 2169.9 EL2 267.7 ALF 171.62
                                                                       SGT 5755.8 SGR 436.2 SG3 123.7
RRT .5478 RRF .5337 RTF .9684
SGB 5772.3 R23 .0013 R13 -.9684
       TDE-2.0017 TRA 6.3949 TC3-1.1803 BAU .9759
       RDE .5627 RRA -.1817 RC3 -.0019 FAU .00531
       FOE -.4211 FRA 1.6970 FC3 -.0743 BSP 18783
                                                                       SGI 5760.7 SG2 364.7 THA 177.61
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BOE 2.0793 BRA 6.3975 BC3 1.1803 FSP -416

ARRIVAL CATE FEB 3 1968

LAUNCH DATE JUL 4 1967

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HELIOCENTRIC CONIC
                                                                           DISTANCE 607.556
   RL 152.10 LAL -.00 LOL 281.36 VL 25.311 GAL 15.51 AZL 91.99 MCA 307.33 SMA 120.16 ECC .37029 INC 1.9850 VI 29.291
RP 108.30 LAP 1.58 LOP 228.70 VP 36.694 GAP 21.02 AZP 91.20 TAL 149.27 TAP 96.60 RCA 75.67 APO 164.66 VZ 34.992
RC 191.100 GL -5.77 GP 4.75 ZAL 36.42 ZAP 174.19 ETS 122.26 ZAE 126.57 ETE 176.28 ZAC 40.58 ETC 13.45 CLP 176.66
   PLANETOCENTRIC CONIC
    C3 70.587 VHL 8.402 DLA -26.87 RAL 242.25 RAD 6569.4 VEL 13.854 PTH 2.53 VMP 12.991 DPA -10.29 RAP 225.05 ECC 2.1617
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               118.18 13 48 30

111.97 16 18 37

119.89 14 34 10

110.75 19 35 1

123.54 14 47 34

108.60 21 30 59
                                                                               126.91
        90.00 13 24 6
                                  1464.03
                                                     2.93
                                                                   357.90
                                                                                                                                864.0
                                                                                                                                                 6.67
                                                                                                                                                              351.22
                  16 2 52
                                   944.73
                                                     18.33
                                                                   327.57
                                                                                  134.21
                                                                                                                                  344.7
                                                                                                                                                 21.15
                                                                                                                                                               320.03
        90.00
       100.00
                   14 12 22
                                   1308.12
                                                      -.53
                                                                   344.53
                                                                                  124.99
                                                                                                                                  708.1
                                                                                                                                                  3.45
                                                                                                                                                               338.00
       100.00 17 57 17 5863.90
                                                                                                                                                               272.05
                                                    22.02
                                                                   279.86
                                                                                  135.75
                                                                                                                                5263.9
                                                                                                                                                 24.64
                 14 26 30
19 59 38
                                                     -7.03
                                                                   337.15
                                                                                  120.97
                                                                                                                                 663.7
                                                                                                                                                 -2.58
                                                                                                                                                               330.90
       110.00
                                   1263.73
                                                                   253.64
                                                                                138.60
                                                                                                                                4881.1
                                                                                                                                                 31.47
                                                                                                                                                               245.16
                                   5481.06
                                                     29.21
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     SCT 5730.5 SGR 426.9 SC3 119.7

RRT -.5615 RRF -.5479 RTF .9713

SCB 5746.4 R23 .0005 R13 -.9713

SCI 5735.5 SG2 352.9 THA 177.60
                                                                                                                           ST 2092.4 SR 399.2 SS 551.8
CRT -.7327 CRS .6569 CST -.9942
    TOE-1.9837 TRA 6.9566 TC3 -.9823 BAU .9270
    ROE .5813 RRA -.2071 RC3 -.0017 FAU .00381
                                                                                                                           LSA 2182.9 MSA 277.0 SSA 11.1
EL1 2113.1 EL2 269.1 ALF 171.91
    FOE -.4056 FRA 1.7725 FC3 -.0467 BSP 18774
    BOE 2.0671 BRA 6.9597 BC3 .9823 FSP -403
                                                                           FLIGHT TIME 216.00
                                                                                                                                        ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUL 4 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 611.091
   RL 152.10 LAL -.00 LOL 281.36 VL 25.276 GAL 16.94 A7L 91.85 MCA 310.53 SMA 119.97 ECC .38796 INC 1.8529 V1 29.291
RP 108.34 LAP 1.41 LOP 231.90 VP 36.658 GAP 22.17 AZP 91.20 TAL 148.26 TAP 98.79 RCA 73.43 APO 166.52 V2 34.979
RC 192.846 GL -4.98 GP 4.68 ZAL 35.17 ZAP 173.57 ETS 130.45 ZAE 126.24 ETE 176.34 ZAC 38.57 ETC 14.04 CLP 175.59
  PLANETOCENTRIC CONIC
                                                                                                      2.59 VHP 13.688 OPA -11.05 RAP 227.06 ECC 2.3325
    C3 80.964 VHL 8.998 DLA -26.31 RAL 243.69 RAD 6569.6 VEL 14.224 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               118.31 13 41 26
111.64 16 38 12
119.78 14 31 3
110.70 19 50 39
123.11 14 48 4
108.96 21 43 0
       90.00 13 15 43 1543.07
                                                                                                                                  943.1
                                                                    2.31
                                                                               129.55
                                                                                                                                                  4.16
                                                                                                                                                               355.67
                                                       . 30
                   16 22 42
                                    929.37
                                                     18.72
                                                                   326.61
                                                                                  138.16
                                                                                                                                  329.4
                                                                                                                                                  21.50
                                                                                                                                                                319.03
                 14 8 9 1373.72
18 12 57 5662.00
14 26 7 1317.35
20 11 29 5491.13
                                                                   348.13
                                                     -2.76
                                                                                  127.81
                                                                                                                                  773.7
                                                                                                                                                  1.23
                                                                                                                                                               341.61
                                                                                                                                                 24.6A
                                                   22.06
                                                                   279.74
                                                                                  139.54
                                                                                                                                 5262.0
                                                                                                                                                               271.92
       100.00
                                                     -9.04
                                                                   340.00
                                                                               123.95
                                                                                                                                  717.3
                                                                                                                                                 -4.62
                                                                                                                                                               333.70
       110.00
       110.00
                                                     28.99
                                                                   254.34
                                                                                 142.31
                                                                                                                                 4691.1
                                                                                                                                                 31.30
                                                                                                                                                               245.90
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 5702.3 SGR 416.3 SG3 115.9
RRT -.5750 RRF -.5620 RTF .9743
                                                                                                                           ST 2041.7 SR 384.9 SS 552.8

CRT -.7102 CRS .6384 CST -.9951

LSA 2132.2 MSA 275.4 SSA 10.6
    TDE-1.9656 TRA 7.5663 TC3 -.7983 BAU .8641
    RDE .5994 RRA -.2339 RC3 -.0023 FAU .00219
    FOE -.3915 FRA 1.8554 FC3 -.0234 BSP 18650
BOE 2.0551 BRA 7.5699 BC3 .7983 FSP -387
                                                                      568 5717.4 R23 -.0003 R13 -.9743
                                                                  SG1 5707.3 SG2 340.3 THA 177.59
                                                                                                                          EL1 2060.2 EL2 268.5 ALF 172.24
                                                                           FLIGHT TIME 218.00
                                                                                                                                       ARRIVAL DATE FEB 7 1968
LAUNCH DATE JUL 4 1967
  HELIOCENTRIC CONIC
                                                                          OISTANCE 614.189
   RL 152.10 LAL -.00 LOL 281.36 VL 25.243 GAL 18.51 AZL 91.71 HCA 313.72 SMA 119.79 ECC .40767 INC 1.7076 V1 29.291
RP 108.38 LAP 1.23 LOP 235.09 VP 36.622 GAP 23.47 AZP 91.18 TAL 147.37 TAP 101.09 RCA 70.95 APO 168.62 VZ 34.966
RC 194.574 GL -4.23 GP 4.60 ZAL 34.06 ZAP 172.80 ETS 137.33 ZAE 125.86 ETE 176.40 ZAC 36.62 ETC 14.71 CLP 174.46
   PLANETOCENTRIC CONIC
   C3 93.355 VHL 9.662 DLA -25.74 RAL 244.96 RAD 6569.8 VEL 14.653 PTH 2.65 VHP 14.466 DPA -11.78 RAP 229.04 ECC 2.5364 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              118.25 13 35 31
111.44 16 55 19
119.53 14 28 1
110.71 20 4 53
122.57 14 48 9
109.34 21 54 8
                                                                              132.14
                                                                                                                                                              359.75
                                                                                                                             1016.1
                                                   -1.98
                                                                    6.38
                                                                                                                                                  1.61
        90.00 13 8 35 1616.11
                 16 39 59 920.00
14 4 4 1436.94
                                                                                                                                                 21.70
                                                                                                                                                               318.42
        90.00
                                    920.00
                                                    18.95
                                                                   326.02
                                                                                 141.86
                                                                                                                                 320.0
                                                                               130.53
                                                                                                                                                               345.08
                                                    -4.89
                                                                  351.61
                                                                                                                                 836.9
                                                                                                                                                  -.92
       100.00
                  18 27 11
14 25 18
                                                                                  143.14
                                                                                                                                5262.4
                                                                                                                                                 24.67
                                                                                                                                                              271.95
                                  5862.45
                                                   22.05
                                                                  279.77
       100.00
                                                                                                                                 770.3
                                                                               126.82
                                                                                                                                                 -6.62
                                                                                                                                                               336.49
       110.00
                                  1370.31
                                                   -11.00
                                                                   342.86
                                                                                                                                4901.8
                                                                                                                                                 31.11
                                                                                                                                                               246.68
                                                                   255.09
                                                                                  145.84
                  20 22 26
                                   5501.84
                                                   28.75
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1996.7 SR 369.7 SS 557.3

CRT -.6897 CRS .6229 CST -.9959

LSA 2088.1 MSA 271.5 SSA 10.1
                                                                       SGT 5668.3 SGR 404.5 SG3 112.4
    TOE-1.9593 TRA 8.2198 TC3 -.6329 BAU .7899
   RDE .6173 RRA -.2613 RC3 -.0030 FAU .00053
FDE -.3816 FRA 1.9450 FC3 -.0049 BSP 18643
BDE 2.0543 BRA 8.2239 BC3 .6329 FSP -376
                                                                      RRT -.5884 RRF -.5762 RTF .9774
SG8 5682.7 R23 -.0010 R13 -.9774
                                                                                                                            EL1 2013.2 EL2 265.5 ALF 172.59
                                                                       SG1 5673.3 SG2 326.8 THA 177.59
                                                                           FLIGHT TIME 220.00
                                                                                                                                        ARRIVAL DATE FEB 9 1968
LAUNCH DATE JUL 4 1967
                                                                           DISTANCE 616.747
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 281.36 VL 25.211 GAL 20.25 ATL 91.55 MCA 316.91 SMA 119.62 ECC .42975 INC 1.5461 V1 29.291
RP 108.42 LAP 1.06 LOP 238.28 VP 36.588 GAP 24.92 AZP 91.13 TAL 146.61 TAP 103.52 RCA 68.21 APO 171.02 V2 34.953
RC 196.285 GL -3.52 GP 4.54 ZAL 33.10 ZAP 171.89 ETS 143.06 ZAE 125.41 ETE 176.47 ZAC 34.75 ETC 15.45 CLP 173.27
  PLANETOCENTRIC CONIC
    C3 108.253 VHL 10.404 DLA -25.18 RAL 246.07 RAD 6570.1 VEL 15.152 PTH
                                                                                                      2.72 WHP 15.340 OPA -12.46 RAP 230.96 ECC 2.7816
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               118.03 13 30 11
111.32 17 10 31
119.15 14 24 56
110.76 20 17 51
121.94 14 47 45
109.73 22 4 23
                 13 2 6
16 55 16
                                                     -4.19
                                                                   10.22
                                                                                134.65
                                                                                                                                1084.8
                                                                                                                                                  - .40
                                                                                                                                                                  3.59
        90.00
                                   1684.81
                                                                                                                                  314.5
                                                                                                                                                 21.82
                                                                                                                                                               318.06
                                                                   325.67
                                                                                  145.33
                                   914.47
                                                    19.09
        90.00
                 13 59 58
18 40 6
14 24 3
                                                                                                                                  898.0
                                                                                                                                                               348.43
                                                                   355.00
                                                                                  133.15
                                                                                                                                                 -2.98
                                   1498.01
                                                     -6.92
       100.00
                                                                                                                                              24.63
                                                                                                                                                               272.09
                                                   22.00
                                                                   279.90
                                                                                  146.52
                                                                                                                                 5264.5
                                  5864.54
       100.00
                                                   -12.89
                                                                   345.71
                                                                                  129.58
                                                                                                                                 822.4
                                                                                                                                                 -8.58
                                                                                                                                                               339.26
                                   1422.43
       110.00
                  20 32 30 5512.88
                                                                                                                                4912.9
                                                                                                                                                 30.92
                                                                                                                                                               247.48
                                                                   255.85
                                                                                 149.17
       110.00
                                                    28.50
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                    SGT 5630.2 SGR 391.6 SG3 109.0 ST 1955.4 SR 353.6 SS 565.2 RRT -.6013 RRF -.5900 RTF .9803 CRT -.6704 CRS .6091 CST -.9967 SGB 5643.8 R23 -.0016 R13 -.9803 LSA 2048.8 MSA 265.6 SSA 9.6 SG1 5635.2 SG2 312.6 THA 177.60 EL1 1970.0 EL2 260.4 ALF 172.96
    TOE-1.9604 TRA 8.9295 TC3 -.4823 BAU .6980
    ROE .6349 RRA -.2894 RC3 -.0041 FAU-.00128
FDE -.5746 FRA 2.0442 FC3 .0102 BSP 18609
BDE 2.0606 BRA 6.9342 BC3 .4823 FSP -364
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FLIGHT TIME 214.00

ARRIVAL DATE SEP 13 1967

LAUNCH DATE JUL 5 1967

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DISTANCE 176.474
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 25.360 GAL -6.74 AZL 93.42 MCA 75.95 SMA 120.43 ECC .28631 INC 3.4244 VI 29.291 RP 108.71 LAP -3.32 LOP 358.24 VP 36.602 GAP -15.70 AZP 90.83 TAL 197.47 TAP 273.42 RCA 85.95 APO 154.92 V2 34.860 RC 46.700 GL -16.41 GP -5.51 ZAL 124.00 ZAP 5.92 ETS 68.09 ZAE 152.25 ETE 12.59 ZAC 90.71 ETC 13.65 CLP -2.15
  PLANETOCENTRIC CONIC
   C3 28.365 VHL 5.326 DLA -6.19 RAL 152.37 RAD 6568.1 VEL 12.237 PTH 2.20 VMP 9.780 DPA -.41 RAP 175.49 ECC 1.4668 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 113.13 4 3 26

76.65 15 19 15

114.31 5 17 37

75.48 16 39 1

117.61 6 15 55

72.20 17 50 5
                                                                                18.09
                                                                                                                                  1506.7
                                                                                                                                                -13.54
                     3 28 19 2106.66
                                                    -16.81
                                                                    34.76
                                                                                                                                                   23.12
                                                                                                                                                                  220.82
                                                                                                                                   4537.0
                                                     25.21
                                                                    228.87
                                                                                    21.62
        90.00
                    13 53 36
                                   5136.97
                                                                                                                                   1253.7
                                                                                                                                                                    8.53
                                                                                     17.57
                     4 46 43 1853.74
                                                   -17.96
                                                                     15.64
       100.00
                                                                                                                                   4265.1
                                                                                                                                                                  200.46
                                                                                                                                                   24.16
       100.00
                   15 17 55
                                    4865.12
                                                     26.42
                                                                    208.54
                                                                                     21.28
                                                                                                                                                                  352.45
                                                                                                                                   1061.2
                                                                                                                                                   -17.14
                   5 48 14 1661.15
16 32 54 4630.48
                                                   -21.01
                                                                    359.45
                                                                                     15.99
       110.00
                                                                                                                                                  26.96
                                                                                                                                   4030.5
                                                                                                                                                                 181.52
                                                                    189.65
                                                                                    20.21
       110.00
                                                     29.68
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 709.1 SGR 423.7 SG3 89.6
RRT -.1160 RRF .1357 RTF -.6595
SGB 826.1 R23 -.0181 R13 .6619
SG1 711.7 SG2 419.3 TMA 173.92
                                                                                                                              ST 358.3 SR 394.5 SS 243.6

CRT -.8755 CRS -.9939 CST .8855

LSA 568.8 MSA 139.0 SSA 22.3
   TDE .3077 TRA -.4201 TC3 .4055 BAU .1555
RDE -.3644 RRA -.1356 RC3 .0613 FAU .03055
   FDE -.2655 FRA -.0785 FC3 -.9323 BSP 1909
BDE .4770 BRA .4415 BC3 .4101 FSP -214
                                                                                                                               EL1 516.3 EL2 132.3 ALF 131.85
                                                                                                                                           ARRIVAL DATE SEP 15 1967
                                                                             FLIGHT TIME 72.00
LAUNCH DATE JUL 5 1967
                                                                            OISTANCE 183.247
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 25.600 GAL -6.72 AZL 93.34 MCA 79.13 SMA 121.79 ECC .27349 INC 3.3382 V1 29.291
RP 108.68 LAP -3.28 LOP 1.42 VP 36.779 GAP -14.65 AZP 90.63 TAL 198.62 TAP 277.74 RCA 88.48 APO 155.10 V2 34.870
RC 47.841 GL -16.73 GP -5.85 ZAL 125.63 ZAP 7.32 ETS 52.35 ZAE 150.97 ETE 10.88 ZAC 89.90 ETC 13.69 CLP -4.40
  PLANETOCENTRIC CONIC
                                                                                                                                      -1.10 RAP 176.20 ECC 1.4354
    C3 26.457 VHL 5.144 DLA -5.86 RAL 150.62 RAD 6568.1 VEL 12.159 PTH
                                                                                                        2.18 VHP 9.193 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   1499.9
                                                                                                                                                                    27.22
                                  2099.95
                                                     -16.63
                                                                     34.35
                                                                                  15.26
                                                                                                  113.25
                                                                                                                  3 53 47
        90.00
                      3 18 47
                                                                                                                                                   22.56
                                                                                                                                    4509.0
                                                                                                                                                                   218.96
                                                                    226.94
                                                                                     18.47
                                                                                                     75,79 15 14 23
                   13 49 14 5109.03
                                                     24.75
        90.00
                  4 37 21 1846.49
15 13 21 4837.72
5 39 14 1652.72
16 27 57 4604.25
                                                                                                                                                    -14.31
                                                                      15.20
                                                                                                                  5 8 7
                                                                                                                                    1246.5
                                                    -17.75
                                                                                      14.75
                                                                                                     114.45
       100.00
                                                                                                     74.59 16 33 59
                                                                                                                                    4237.7
                                                                                                                                                   23.57
                                                                    206.64
                                                                                     18.13
                                                     25.94
       100.00
                                                                                                                                   1052.7
                                                                                                                                                   -16.86
                                                                                                                 6 6 47
                                                    -20.74
                                                                    356,94
                                                                                     13.19
                                                                                                     117.80
       110.00
                                                                                                     71.25 17 44 41
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                                                                                                                                   4004.3
                                                                    187.82
                                                                                    17.02
                                                    29.12
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 364.7 SR 398.2 SS 251.3
CRT -.8849 CRS -.9938 CST ..8761
LSA 578.7 MSA 138.8 SSA 23.6
EL1 524.4 EL2 129.0 ALF 132.16
                                                                        SCT 731.7 SCR 426.4 SC3 100.8
RRT -.1336 RRF .1575 RTF -.6761
SCB 846.9 R23 -.0228 R13 .6791
    TOE .3049 TRA -.3934 TC3 .4622 BAU .1647 ROE -.3553 RRA -.1319 RC3 .0566 FAU .03317
    FOE -.2801 FRA -.1205 FC3-1.0852 BSP 2003
    BOE .4682 BRA .4149 BC3 .4656 FSP -246
                                                                         SG1 735.0 SG2 420.7 THA 173.37
                                                                                                                                          ARRIVAL DATE SEP 17 1967
                                                                             FLIGHT TIME 74.00
LAUNCH DATE JUL 5 1967
                                                                            DISTANCE 190.021
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 25.818 GAL -6.71 AZL 93.25 MCA 82.30 SMA 123.05 ECC .26199 INC 3.2538 V1 29.291
RP 108.64 LAP -3.22 LOP 4.60 VP 36.941 GAP -13.65 AZP 90.44 TAL 199.79 TAP 282.09 RCA 90.82 APO 155.29 V2 34.881
RC 49.103 GL -16.97 GP -6.23 ZAL 127.27 ZAP 9.15 ETS 41.96 ZAE 149.90 ETE 9.26 ZAC 89.17 ETC 13.73 CLP -6.72
   PLANETOCENTRIC CONIC
     C3 24.859 VHL 4.986 DLA -5.46 RAL 148.90 RAD 6568.0 VEL 12.093 PTH 2.16 VHP 8.636 DPA -1.79 RAP 176.82 ECC 1.4091
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                -13.26
                                                                                   12.60
                                                                                                  113.31 3 43 53
74.95 15 10 5
                                                                                                                                1497.0
                                                                     34.17
         90.00
                      3 8 56 2097.02
                                                    -16.55
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                                                                    225.04
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         90.00
                                                     24.27
                     13 45 24
                                   5081.18
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                                                                                                    114.52
                                                                                                                 4 58 25
                                                                                                                                   1242.9
                                                                                                                                                  -14.20
                     4 27 42 1842.94
15 9 20 4810.49
                                                    -17.65
                                                                     14.98
                                                                                     12.09
       100,00
                                                                                                      73.74 16 29 30
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                    15 9 20
                                                    25.43
       100.00
                                                                                                                                                 -16.69
                   5 30 2 1647.78
16 23 29 4578.41
                                                                                      10.57
                                                                                                    117.91 5 57 30
70.33 17 39 47
                                                                                                                                   1047.8
                                                                                                                                                                   351.68
                                                                     358.64
                                                     -20.58
       110.00
                                                                                                                                                   25.59
                                                                                                                                   3978.4
                                                                                                                                                                   178.09
                                                                                      14.01
                                                                    146.03
                                                     28.54
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 752.8 SGR 428.7 SG3 113.5
RRT -,1536 RRF .1826 RTF -,6908
SGB 866.3 R23 -,0284 R13 .6945
                                                                                                                               ST 369.0 SR 401.5 S5 258.3

CRT -.8934 CR3 -.9919 CST .8652

LSA 586.6 MSA 139.2 SSA 24.8

EL1 530.7 EL2 125.4 ALF 132.30
     TOE .3011 TRA -.3673 TC3 .5183 BAU .1730
    ROE -.3472 RRA -.1291 RC3 .0491 FAU .03613
FOE -.2951 FRA -.1665 FC3-1.2583 BSP 2085
BOE .4596 BRA .3893 BC3 .5207 FSP -282
                                                                         SG1 757.0 SG2 421.3 THA 172.74
                                                                             FLIGHT TIME 76.00
                                                                                                                                           ARRIVAL DATE SEP 19 1967
LAUNCH DATE JUL 5 1967
                                                                             DISTANCE 196.794
    PLI 152.10 LAL -.00 LOL 282.31 VL 28.014 GAL -6.72 AZL 93.17 MCA 85.48 SMA 124.23 ECC .25170 INC 3.1705 V1 29.291 RP 108.61 LAP -3.16 LOP 7.78 VP 37.088 GAP -12.70 AZP 90.25 TAL 200.98 TAP 286.46 RCA 92.96 APO 155.49 VZ 34.891 RC 50.476 GL -17.14 GP -6.65 ZAL 128.88 ZAP 11.28 ETS 35.05 ZAE 149.05 ETE 7.70 ZAC 88.53 ETC 13.79 CLP -9.13
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 23.520 VHL 4.850 DLA -5.02 RAL 147.25 RAD 6568.0 VEL 12.037 PTH 2.15 VHP 8.110 DPA -2.48 RAP 177.35 ECC 1.3871
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 58 56 2097.50 -16.57 34.20 10.13 113.30 3 33 54 1497.5 -13.27 27.07
                                                                                                 113.30 3 33 54
74.14 15 6 24
                      2 58 56 2097.50
                                  5053.55
1842.72
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                                                      23.77
                                                                     223.17
                                                                                      12.70
                                                                                                                                    4453.6
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         90,00
                     13 42 11
                                                                                                                                                                      7.88
                                                                                                                 4 48 38
                                                                                                                                    1242.7
                                                                                                                                                    -14.19
                                                                      14.97
                                                                                       9.63
                                                                                                     114.53
                      4 17 55
                                                     -17.65
       100.00
                    15 5 55 4783.57
5 20 45 1646.01
16 19 33 4553.04
                                                                                                                 16 25 37
                                                                                                                                    4183.6
                                                                                                                                                    22.33
                                                                                                                                                                    195.10
                                                                     202.95
                                                                                      12.34
                                                                                                       72.91
                                                      24.91
       100.00
                                                                                                       117.95 5 48 11
69.46 17 35 26
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                                                                                                                                                    -16.63
                                                                                       8.13
                                                                                                     117.95
                                                                     358.54
       110.00
                                                     -20.53
                                                                                                                                                                    176.45
                                                                                      11.16
                                                                                                                                    3953.0
                                                                                                                                                    24.89
                                                                     184.29
       110.00
                                                      27.94
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 371.2 SR 404.3 SS 265.1

CRT -.9010 CRS -.9883 CST .8527

LSA 592.6 MSA 140.1 SSA 25.9
     TOE .2965 TRA -.3416 TC3 .5732 BAU .1806
RDE -.3400 RRA -.1275 RC3 .0364 FAU .03951
                                                                         SGT 772.0 SGR 430.8 SG3 128.0
                                                                        RRT -.1770 RRF .2118 RTF -.7041
SG8 884.0 R23 -.0349 R13 .7088
SG1 777.3 SG2 421.1 THA 172.00
     FDE -.3110 FRA -.2239 FC3-1.4543 BSP 2168
BDE .4512 BRA .3646 BC3 .5744 FSP -324
                                                                                                                                EL1 535.2 EL2 121.6 ALF 132.29
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FLIGHT TIME 70.00

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LAUNCH DATE JUL 5 1967
                                                                                   FLIGHT TIME 78.00
                                                                                                                                                    ARRIVAL DATE SEP 21 1967
    HELIOCENTRIC CONIC
                                                                                  OISTANCE 203.561
     RL 152.10 LAL -.00 LOL 282.31 VL 26.191 GAL -6.73 AZL 93.09 MCA 88.66 SMA 125.31 ECC .24253 INC 3.0879 V1 29.291
RP 108.58 LAP -3.09 LOP 10.97 VP 37.223 GAP -11.79 AZP 90.07 TAL 202.17 TAP 290.83 RCA 94.92 APO 155.70 V2 34.903
RC 51.950 GL -17.22 GP -7.12 ZAL 130.45 ZAP 13.62 ETS 30.26 ZAE 148.44 ETE 6.15 ZAC 88.00 ETC 13.85 CLP -11.64
    PLANETOCENTRIC CONIC
     C3 22.398 VHL 4.733 DLA -4.52 RAL 145.67 RAD 6567.9 VEL 11.991 PTH 2.14 VHP 7.613 DPA -3.18 RAP 177.77 ECC 1.3686
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 48 56 2100.99
13 39 35 5026.25
                                                                                       7.85
                                                                                                                                         1501.0
          90.00
                                                         -16.66
                                                                          34.42
                                                                                                        113.23
                                                                                                                          3 23 57
          90.00
                                                          23.25
                                                                         221.34
                                                                                           10.11
                                                                                                             73.37
                                                                                                                        15 3 21
                                                                                                                                             4426.2
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        100.00
                        4 8 9
                                      1845.44
                                                         -17.72
                                                                           15.13
                                                                                           7.36
                                                                                                            114.47
                                                                                                                         4 38 54
                                                                                                                                           1245.4
                                                                                                            72.12 16 22 20
117.93 5 38 58
68.63 17 31 38
        100,00
                      15 3 3
                                      4757.03
                                                          24.36
                                                                         201.17
                                                                                             9.73
                                                                                                                                             4157.0
                                                                                                                                                              21.69
                                                                                                                                                                              193.39
        110.00
                       5 11 31 1647.04
                                                         -20.56
                                                                          358.60
                                                                                             5.88
                                                                                                                                                            -16.66
                                                                                                                                                                              351.64
                      16 16 10
                                                                                                                                                              24.19
        110.00
                                      4528.19
                                                          27.34
                                                                         182.61
                                                                                             8.55
                                                                                                                                             3928.2
    DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SCT 788.5 SCR 432.9 SC3 144.4
RRT -. 2035 RRF .2454 RTF -. 7151
SCB 899.5 R25 -. 0430 R15 .7211
                                                                                                                                      ST 371.1 SR 406.6 SS 271.5
CRT -.9074 CRS -.9828 CST .8381
LSA 596.5 MSA 142.0 SSA 27.0
     TOE .2909 TRA -.3173 TC3 .6243 BAU .1871
     ROE -.3337 RRA -.1267 RC3 .0241 FAU .04334
     FOE -.3274 FRA -.2870 FC3-1.6752 BSP 2238
BOE .4427 BRA .3416 BC3 .6248 FSP -372
                                                                              SG1 795.3 SGZ 420.2 THA 171.13
                                                                                                                                        EL1 537.7 EL2 117.9 ALF 132.12
                                                                                  FLIGHT TIME 80.00
                                                                                                                                                     ARRIVAL DATE SEP 23 1967
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 210.320
    RL 152.10 LAL -.00 LOL 282.31 VL 26.350 GAL -6.75 AZL 93.01 MCA 91.84 SMA 126.31 ECC .23441 INC 3.0055 V1 29.291
RP 108.54 LAP -3.00 LOP 14.16 VP 37.346 GAP -10.92 AZP 89.90 TAL 203.34 TAP 295.18 RCA 96.70 APO 155.91 V2 34.914
RC 53.515 GL -17.23 GP -7.64 ZAL 131.96 ZAP 16.14 ETS 26.81 ZAE 148.09 ETE 4.58 ZAC 87.59 ETC 13.91 CLP -14.26
   PLANETOCENTRIC CONIC
     C3 21.454 WHL 4.632 DLA -4.00 RAL 144.18 RAD 6567.9 VEL 11.951 PTH
                                                                                                                2.13 VHP 7.143 OPA
                                                                                                                                                -3.89 RAP 178.06 ECC 1.3531
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        5,77
                       2 39 2 2107.07
                                                         -16.82
                                                                          34.79
                                                                                                         113.12
         90.00
                                                                                                                           3 14 9
                                                                                                                                             1507.1
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         90.00
                      13 37 37 4999.34
                                                         22.72
                                                                         219.55
                                                                                            7.71
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        100.00
                       3 56 30
                                      1850.71
                                                        -17.87
                                                                           15.45
                                                                                                          114.37
                                                                                             5.28
                                                                                                                                             1250.7
                                                                                                                                                              -14.43
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                                                                                                          71.37 16 19 41
117.85 5 29 58
67.85 17 28 26
        100.00
                    15 0 50 4730.93
                                                                         199.43
                                                                                             7.33
                                                        23.61
                                                                                                                                             4130.9
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        110.00
                       5 2 27
                                      1650.51
                                                        -20.67
                                                                         358.81
                                                                                             3.63
                                                                                                                                             1050.5
                                                                                                                                                             -16.78
                                                                                                                                                                              351.84
       110.00
                     16 13 23 4503.90
                                                                         180.99
                                                                                             6.13
                                                                                                                                             3903.9
                                                                                                                                                             23.46
   DIFFERENTIAL CORRECTIONS
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TDE .2844 TRA -.2944 TC3 .6711 BAU .1925
RDE -.3279 RRA -.1273 RC3 .0059 FAU .04770
                                                                            SGT 802.2 SGR 435.3 SG3 163.0
RRT -.2338 RRF .2843 RTF -.7243
SG8 912.7 R23 -.0528 R13 .7320
                                                                                                                                     ST 368.9 SR 408.4 SS 277.7
CRT -.9127 CRS -.9756 CST .8216
LSA 598.5 MSA 145.0 SSA 27.9
     FOE -.3447 FRA -.3567 FC3-1.9247 Bap 2302
BOE .4340 BRA .3208 BC3 .6711 FSP -427
                                                                              $61 811.0 $62 418.6 THA 170.11
                                                                                                                                        ELI 538.3 EL2 114.4 ALF 131.82
LAUNCH DATE JUL 5 1967
                                                                                 FLIGHT TIME 82.00
                                                                                                                                                   ARRIVAL DATE SEP 25 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 217.066
    RL 152.10 LAL -.00 LOL 282.31 VL 26.492 GAL -6.77 AZL 92.92 MCA 95.03 SMA 127.21 ECC .22724 INC 2.9228 VI 29.291 RP 108.50 LAP -2.91 LOP 17.34 VP 37.457 GAP -10.09 AZP 89.74 TAL 204.47 TAP 299.50 RCA 98.31 APO 156.12 VZ 34.926 RC 55.163 GL -17.17 GP -8.22 ZAL 133.40 ZAP 18.84 ETS 24.22 ZAE 147.98 ETE 2.95 ZAC 87.33 ETC 13.97 CLP -17.01
   PLANETOCENTRIC CONIC
     C5 20.657 VHL 4.545 OLA -3.44 RAL 142.60 RAO 6567.8 VEL 11.918 PTH 2.12 VHP 6.701 OPA -4.59 RAP 178.21 ECC 1.3400
     ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         112.96 3 4 37
71.92 14 59 11
114.22 4 20 4
70.65 16 17 40
117.75 5 21 16
67.11 17 25 51
                    2 29 22 2115.35
13 36 18 4972.87
3 49 6 1858.14
14 59 15 4705.32
                                                                                       3.88
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                                                       -17.04
                                                                         35.29
                                                                                                                                                                              28.13
                                                                         217.81
                                                        22.17
                                                                                            5.52
                                                                                                                                            4372.9
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                                                       -18.08
                                                                          15.91
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                                                       23.24
                                                                         197.74
                                                                                            5.13
                                                                                                                                            4105.3
                                                                                                                                                            20.39
                    4 53 40 1656.04
16 11 11 4480.18
       110.00
                                                        -20.85
                                                                         359.14
                                                                                            1.98
                                                                                                                                            1056.0
                                                                                                                                                          -16.97
22.78
       110.00
                                                         26.11
                                                                         179.42
                                                                                            3.91
                                                                                                                                            3880.2
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 811.8 SGR 438.5 SG3 184.1
RRT -.2677 RRF .3286 RTF -.7311
SGB 922.7 R23 -.0649 R13 .7412
                                                                                                                                      ST 364.2 SR 409.7 SS 283.6
    TOE .2766 TRA -. 2734 TC3 .7115 BAU .1965
    ROE -.3226 RRA -.1292 RC3 -.0167 FAU .05264
FOE -.3623 FRA -.4399 FC3-2.2061 BSP 2353
BOE .4249 BRA .3024 BC3 .7117 FSP -490
                                                                                                                                      CRT -.9165 CRS -.9664 CST .8022
LSA 598.2 MSA 149.0 SSA 28.5
                                                                                                                                      EL1 536.8 EL2 111.2 ALF 131.34
                                                                            SG1 823.3 SG2 416.6 THA 168.89
LAUNCH DATE JUL 5 1967
                                                                                  FLIGHT TIME 84.00
                                                                                                                                                   ARRIVAL DATE SEP 27 1967
                                                                                 DISTANCE 223.798
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 26.618 GAL -6.79 ATL 92.84 MCA 98.22 SMA 128.04 ECC .22093 INC 2.8391 V1 29.291
RP 108.46 LAP -2.81 LOP 20.54 VP 37.558 GAP -9.29 AZP 89.59 TAL 205.56 TAP 303.78 RCA 99.75 APO 156.32 V2 34.938
RC 56.885 GL -17.03 GP -8.87 ZAL 134.76 ZAP 21.72 ETS 22.22 ZAE 148.14 ETE 1.19 ZAC 87.21 ETC 14.03 CLP -19.91
   PLANETOCENTRIC CONIC
    C3 19.979 VHL 4.470 DLA -2.86 RAL 141.54 RAD 6567.8 VEL 11.890 PTH 2.11 VHP 6.286 DPA -5.30 RAP 178.21 ECC 1.3288
   CS 19.979 VML 4.470 DLA -2.86 RAL 141.54 RAD 6567.8 VEL 11.890 PM 2.11 VMP 6.286 DPA -5.50 RAP 178.21 ECC 1.3288 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 20 1 2125.46 -17.51 35.92 2.20 112.76 2 55 26 1525.5 -14.08 28.73 90.00 13 35 36 4946.85 21.61 216.10 3.54 71.24 14 58 3 4346.9 18.85 208.52 100.00 3 40 1 1867.36 -18.34 16.47 1.74 114.03 4 11 9 1267.4 -14.94 9.33 100.00 14 58 17 4680.18 22.66 196.09 3.14 69.97 16 16 17 4080.2 19.73 188.52 110.00 4 45 12 1663.31 -21.07 359.58 .33 117.56 5 12 56 1063.3 -17.22 352.57 110.00 16 9 35 4457.00 25.49 177.91 1.90 66.41 17 23 52 3857.0 22.07 170.42
   DIFFERENTIAL CORRECTIONS
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           SGT 818.9 SGR 443.3 SG3 208.2
RRT -.3080 RRF .3798 RTF -.7371
SG8 931.2 R23 -.0782 R13 .7503
                                                                                                                                     ST 359.1 SR 410.6 SS 290.7

CRT -.9197 CRS -.9558 CST .7820

LSA 597.9 MSA 154.2 SSA 29.0
    TOE .2692 TRA -.2553 TC3 .7470 BAU .1999
    ROE - 3178 RRA - .1326 RC3 - .0445 FAU .05829
FOE - .3820 FRA - .5329 FC3-2.5258 83P 2428
80E .4165 BRA .2859 8C3 .7483 FSP - 566
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SG1 834.1 SG2 414.1 THA 167.37

EL1 534.6 EL2 108.3 ALF 130.85

ARRIVAL DATE SEP 29 1967

EL1 502.0 EL2 109.7 ALF 126.62

LAUNCH DATE JUL 5 1967

DISTANCE 230.512 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 26.730 GAL -6.81 AZL 92.75 MCA 101.40 SMA 128.78 ECC .21541 INC 2.7541 V1 29.291
RP 108.43 LAP -2.70 LOP 23.73 VP 37.649 GAP -8.53 AZP 89.45 TAL 206.58 TAP 307.99 RCA 101.04 APO 156.52 V2 34.951
RC 58.673 GL -16.83 GP -9.59 ZAL 136.02 ZAP 24.79 ETS 20.61 ZAE 148.56 ETE 359.27 ZAC 87.28 ETC 14.08 CLP -22.97 PLANETOCENTRIC CONIC 2.10 VHP 5.898 OPA -6.01 RAP 178.02 ECC 1.3193 C3 19.399 VHL 4.404 DLA -2.26 RAL 140.41 RAD 6567.8 VEL 11.865 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -14.41 2 11 2 2137.05 13 35 32 4921.26 29.42 -17.61 36.63 .72 1537.1 90.00 4321.3 18.20 206.92 21.04 214.44 1.75 90.00 3 31 20 1878.05 14 57 56 4655.49 -18.63 17.13 .26 1.35 358.88 .26 1278.1 -15.26 9.96 100.00 4055.5 19.07 186.99 1.35 22.08 194.49 100.00 1072.0 -17.51 353.07 4 37 9 1671.99 16 8 36 4434.32 -21.35 .10 110.00 3834.3 21.37 169.03 .09 24.86 176.45 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 818.0 SGR 450.1 SG3 235.0 RRT -.3479 RRF .4356 RTF -.7373 ST 350.0 SR 410.8 SS 296.1 CRT -.9197 CRS -.9436 CST .7555 TOE .2589 TRA -.2379 TC3 .7697 BAU .2006 ROE -.3130 RRA -.1375 RC3 -.0776 FAU .06458 FOE -.3997 FRA -.6348 FC3-2.8823 BSP 2444 BOE .4062 BRA .2748 BC3 .7736 FSP -648 SG8 933.6 R23 -.0972 R13 .7554 SG1 837.8 SG2 411.9 THA 165.62 LSA 593.5 MSA 160.7 SSA 29.3 EL1 529.0 EL2 106.7 ALF 130.04 ARRIVAL DATE OCT 1 1967 FLIGHT TIME 88.00 LAUNCH DATE JUL 5 1967 DISTANCE 237.207 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 26.828 GAL -6.83 AZL 92.67 MCA 104.60 SMA 129.44 ECC .21059 INC 2.6670 V1 29.291
RP 108.39 LAP -2.58 LOP 26.92 VP 37.731 GAP -7.79 AZP 89.33 TAL 207.53 TAP 312.13 RCA 102.18 APO 156.70 V2 34.964
RC 60.521 GL -16.57 GP -10.40 ZAL 137.19 ZAP 28.07 ETS 19.29 ZAE 149.25 ETE 357.09 ZAC 87.54 ETC 14.11 CLP -26.22 PLANETOCENTRIC CONIC 2.10 WHP 5.537 OPA -6.73 RAP 177.64 ECC 1.3110 C3 18.895 WHL 4.347 DLA -1.65 RAL 139.41 RAD 6567.8 VEL 11.844 PTH LNCH AZMTH LNCH TIME LT TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 2 29 2149.86 -17.95 37.43 359.42 112.28 2 36 19 1549.9 -14.77 30.19 69.99 14 57 42 13 36 6 4896.03 3 23 4 1889.95 205.35 212.82 .16 4296.0 17.55 90.00 20.46 113.55 3 54 34 66.70 16 15 23 117.12 4 57 35 65.12 17 21 45 10.67 358.97 1289.9 -15.61 -18.96 17.86 100.00 359.75 357.61 14 50 12 4631.10 4031.2 185.49 21.48 192.93 18.40 100.00 4 29 33 1681.82 -21.65 . 70 1081.8 -17.84 353.64 110.00 175.02 3612.1 20.67 167.69 358.48 110.00 16 8 12 4412.06 24.23 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 338.6 SR 410.4 SS 301.4 CRT -.9170 CRS -.9301 CST .7238 LSA 587.1 MSA 168.4 SSA 29.4 SGT 809.9 SGR 459.9 SG3 265.1 RRT -. 3889 RRF . 4964 RTF -. 7331 TDE .2473 TRA -.2262 TC3 .7808 BAU .1994 RDE -.3083 RRA -.1439 RC3 -.1169 FAU .07163 FOE -.4170 FRA -.7477 FC3-3.2818 BSP 2440 BOE .3952 BRA .2681 BC3 .7895 FSP -740 SGB 931.4 RZ3 -.1212 RI3 .7585 SG1 836.1 SG2 410.5 THA 163.45 EL1 521.3 EL2 106.3 ALF 129.04 ARRIVAL DATE OCT 3 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 5 1967 DISTANCE 243.882 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 26.914 GAL -6.84 ATL 92.58 MCA 107.79 SMA 130.02 ECC .20641 INC 2.5773 VI 29.291
RP 108.35 LAP -2.45 LOP 30.12 VP 37.804 GAP -7.09 ATP 89.21 TAL 208.39 TAP 316.18 RCA 103.19 APO 156.86 V2 34.977
RC 62.420 GL -16.24 GP -11.30 TAL 138.26 TAP 31.56 ETS 18.16 TAE 150.20 ETE 354.57 TAC 88.01 ETC 14.10 CLP -29.66 PLANETOCENTRIC CONIC C3 18.452 VML 4.296 DLA -1.02 RAL 138.54 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 5.203 OPA -7.45 RAP 177.04 ECC 1.3037 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 23 2163.69 -18.30 38.28 358.30 111.99 2 30 27 1563.7 -15.16 31.02 90.00 13 37 16 4871.04 19.87 211.22 358.76 69.40 14 58 27 4271.0 16.89 203.82 100.00 3 15 15 1902.84 -19.31 18.66 357.86 113.28 3 46 58 1302.8 -15.99 11.44 68.11 16 15 53 116.86 4 50 37 64.52 17 21 36 4007.1 184.02 17.73 4607.13 20.88 191.40 358.34 1092.6 -18.21 354.27 4 22 24 1692.63 16 8 25 4390.11 -21.99 1.36 356.52 19.97 3790.1 23.59 173.64 357.05 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 327.2 SR 409.6 SS 307.8 CRT -.9125 CRS -.9161 CST .6891 LSA 581.0 MSA 177.0 SSA 29.3 EL1 513.4 EL2 106.9 ALF 128.02 SCT 796.9 SCR 474.6 SC3 299.1 RRT -.4316 RRF .5620 RTF -.7256 SCB 927.6 R23 -.1486 R13 .7619 SCI 832.0 SC2 410.1 THA 160.73 TOE .2360 TRA -.2172 TC3 .7826 BAU .1972 ROE -.3038 RRA -.1523 RC3 -.1637 FAU .07958 FOE -.4354 FRA -.8737 FC3-3.7536 8SP 2457 BOE .3847 BRA .2653 BC3 .7995 FSP -851 BOE .3847 BRA .2653 BC3 .7995 FSP ARRIVAL DATE OCT 5 1967 LAUNCH DATE JUL 5 1967 FLIGHT TIME 92.00 DISTANCE 250.534 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 25.988 GAL -6.85 AZL 92.48 MCA 110.99 SMA 130.54 ECC .20279 INC 2.4843 V1 29.291 RP 108.31 LAP -2.32 LOP 35.31 VP 37.869 GAP -6.42 AZP 89.11 TAL 209.16 TAP 320.15 RCA 104.06 APO 157.01 V2 34.990 RC 64.367 GL -15.86 GP -12.30 ZAL 139.23 ZAP 35.28 ETS 17.14 ZAE 151.39 ETE 351.58 ZAC 88.71 ETC 14.06 CLP -33.33 PLANETOCENTRIC CONIC C3 18.054 WHL 4.249 OLA -.38 RAL 137.81 RAD 6567.7 VEL 11.808 PTH 2.09 WHP 4.895 DPA -8.17 RAP 176.20 ECC 1.2971 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.66 -15.57 2 23 2 1578.4 1 46 44 2178.37 13 39 4 4846.18 357.36 39.20 90.00 -18.67 14 59 51 68.84 4246.2 16.22 90.00 19.27 209.65 357.53 1316.6 12.26 112.97 3 39 50 -16.39 3 7 54 1916.56 -19.67 19.51 356.93 100.00 67.55 16 16 59 17.05 100.00 15 0 36 4563.22 20.27 189.69 357.11 3983.2 116.57 4 44 8 63.94 17 22 3 -1A.59 19.26 1704.22 1104.2 354.95 116.57 110.00 4 15 44 -22.34 2.06 355.61 3768.3 110.00 16 9 15 4366.32 22.95 172.27 355.81 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 312.1 SR 408.2 SS 311.8 CRT -.9018 CRS -.9007 CST .6417 LSA 570.6 MSA 186.7 SSA 29.2 SGT 772.2 SGR 494.6 SG3 336.0 RRT -.4649 RRF .6276 RTF -.7074 SGB 917.0 R23 -.1846 R13 .7617 TOE .2218 TRA -.2149 TC3 .7652 BAU .1920 RDE -.2987 RRA -.1624 RC3 -.2181 FAU .08818 FDE -.4486 FRA-1.0068 FC3-4.2283 BSP 2409 BDE .3721 BRA .2694 BC3 .7956 FSP -967

FLIGHT TIME 86.00

SG1 818.7 SG2 413.0 THA 157.36

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FLIGHT TIME 94.00
                                                                                                                                 ARRIVAL DATE OCT 7 1967
LAUNCH DATE JUL 5 1967
                                                                       DISTANCE 257.163
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 27.052 GAL -6.85 AZL 92.39 MCA 114.18 SMA 130.98 ECC .19966 INC 2.3871 V1 29.291
RP 108.27 LAP -2.18 LOP 36.51 VP 37.926 GAP -5.77 AZP 89.02 TAL 209.83 TAP 324.01 RCA 104.83 APO 157.13 V2 35.003
    RC 66.356 GL -15.43 GP -13.41 7AL 140.10 7AP 39.25 ETS 16.20 TAE 152.80 ETE 347.95 TAC 89.66 ETC 13.95 CLP -37.24
   PLANETOCENTRIC CONTC
                                         .27 RAL 137.21 RAD 6567.7 VEL 11.793 PTH 2.09 VMP 4.616 DPA -8.89 RAP 175.10 ECC 1.2911
    C3 17.690 VHL 4.206 DLA
                                               INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                               40.17
208.08
                                                                                           111.35
                                                                                                                         1593.6
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                   1 39 31 2193.82
13 41 31 4821.24
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                                                 -19.06
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       90.00
                                                                                               68.29 15 1 52
        90.00
                                                  18.64
                                                                              356.47
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67,00 16 18 43
116.26 4 38 7
63.39 17 23 8
                                                                20.42
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      100.00
                    3 0 59 1931.04
                                                 -20.05
                                                                                                                                        -16.81
      100.00
                 15 2 44 4559.26
                                                  19.64
                                                                188.39
                                                                              356.04
                                                                                                                          3959.3
                                                                                                                                         16.35
                                                                                                                                                        181.13
                                1716.53
      110.00
                    4 9 31
                                                 -22.72
                                                                 2.84
                                                                              354.86
                                                                                                                          1116.5
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                                                                                                                          3746.5
                                                                                                                                         18.54
      110.00
                  16 10 42
                                 4346.53
                                                  22.29
                                                               170.92
                                                                             354.73
                                                                                                                                                        163.80
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 738.4 SGR 521.6 SG3 376.0
RRT -.4857 RRF .6917 RTF -.6774
SG8 904.1 R23 -.2260 R13 .7615
                                                                                                                     ST 295.6 SR 405.9 SS 314.6

CRT -.8844 CRS -.8843 CST .5813

LSA 557.9 MSA 197.3 SSA 29.0
                                                      .1851
    TOE .2064 TRA -.2185 TC3 .7305 BAU
    ROE -.2933 RRA -.1744 RC3 -.2814 FAU .09750
   FOE -.4573 FRA-1.1468 FC3-4.7716 BSP 2343
BDE .3586 BRA .2795 BC3 .7828 FSP -1094
                                                                    SG1 800.2 SG2 420.7 THA 153.07
                                                                                                                      EL1 488.8 EL2 114.6 ALF 124.98
LAUNCH DATE JUL 5 1967
                                                                       FLIGHT TIME 96.00
                                                                                                                                 ARRIVAL DATE OCT 9 1967
                                                                       DISTANCE 263.767-
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.106 GAL -6.85 AZL 92.28 MCA 117.59 SMA 131.36 ECC .19697 INC 2.2848 VI 29.291
RP 108.22 LAP -2.03 LOP 39.71 VP 37.977 GAP -5.14 AZP 88.95 TAL 210.39 TAP 327.78 RCA 105.48 APO 157.23 V2 35.016
RC 68.382 GL -14.93 GP -14.63 ZAL 140.88 ZAP 43.46 ETS 15.28 ZAE 154.38 ETE 343.46 ZAC 90.87 ETC 13.77 CLP -41.40
  PLANETOCENTRIC CONIC
    C3 17.350 WHL 4.165 OLA
                                          .94 RAL 136.74 RAO 6567.7 VEL 11.779 PTH
                                                                                                 2.08 WHP 4.364 OPA
                                                                                                                             -9.61 RAP 173.73 ECC 1.2855
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                41.19
                                                                            355.97
                                                                                                                                        -16.43
       90.00
                    1 32 42 2210.05
                                                 -19.46
                                                                                           110.99
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15 4 33
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       90.00
                  13 44 37
                                 4796.01
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      100.00
                    2 54 29
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114.92 4 32 33
                 15 5 31 4535.02
4 3 43 1729.53
16 12 46 4324.53
                                                               186.88
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      100.00
                                                 14.00
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                                                                                                                                                        179.6A
                                                 -23.10
                                                                                             115.92
                                                                                                                          1129.5
      110.00
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                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 697.5 SCR 557.8 SC3 419.4
RRT -.4895 RRF .7521 RTF -.6321
SCB 895.1 R23 -.2656 R13 .7660
SC1 780.0 SC2 434.9 THA 147.37
                                                                                                                      ST 279.8 SR 403.0 SS 317.5

CRT -.8592 CRS -.8680 CST .5086

LSA 545.1 MSA 208.6 SSA 28.8

EL1 475.4 EL2 121.4 ALF 123.26
    TOE .1913 TRA -.2269 TC5 .6789 BAU .1777
    ROE -. 2874 RRA -. 1885 RC3 -. 3552 FAU . 10754
   FOE -.4630 FRA-1.2941 FC3-5.3661 BSP 2295
BOE .3453 BRA .2950 BC3 .7662 FSP -1236
                                                                                                                                ARRIVAL DATE OCT 11 1967
LAUNCH DATE JUL 5 1967
                                                                       FLIGHT TIME 98.00
                                                                       DISTANCE 270.346
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.150 GAL -6.83 AZL 92.18 HCA 120.59 SMA 131.67 ECC .19467 INC 2.1764 V1 29.291
RP 108.18 LAP -1.87 LOP 42.92 VP 38.021 GAP -4.54 AZP 88.89 TAL 210.85 TAP 331.44 RCA 106.04 APO 157.30 V2 35.029
RC 70.443 GL -14.37 GP -15.97 ZAL 141.55 ZAP 47.93 ETS 14.32 ZAE 156.05 ETE 337.81 ZAC 92.33 ETC 13.49 CLP -45.82
   PLANETOCENTRIC CONIC
    C3 17.025 VHL 4.126 DLA 1.63 RAL 136.41 RAD 6567.7 VEL 11.765 PTH 2.08 VHP 4.142 OPA -10.34 RAP 172.08 ECC 1.2802
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                           355.51
                                                                                           110.60 2 3 22
67.25 15 7 55
111.91 3 21 3
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                    1 26 15 2227.12
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                  13 48 25 4770.20
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                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 648.0 SGR 602.7 SG3 465.8
RRT -.4565 RRF .8048 RTF -.5559
SGB 885.0 R23 -.2939 R13 .7786
SG1 756.4 SG2 459.4 THA 139.51
                                                                                                                     ST 262.7 SR 398.7 SS 316.8

CRT -.8181 CRS -.8492 CST .4082

LSA 528.0 MSA 220.7 SSA 28.6

EL1 459.1 EL2 131.2 ALF 121.15
    TDE .1741 TRA - .2436 TC3 .6021 BAU .1696
    ROE -.2804 RRA -.2040 RC3 -.4392 FAU .11779
   FDE -.4572 FRA-1.4369 FC3-5.9896 BSP 2217
BOE .3301 BRA .3178 BC3 .7452 FSP -1382
                                                                                                                                 ARRIVAL DATE OCT 13 1967
LAUNCH DATE JUL 5 1967
                                                                       FLIGHT TIME 100.00
                                                                       DISTANCE 276.900
  HELIOCENTRIG CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.187 GAL -6.82 AZL 92.06 HCA 123.79 SMA 131.93 ECC .19271 INC 2.0604 V1 29.291 RP 108.14 LAP -1.71 LOP 46.12 VP 38.059 GAP -3.97 AZP 88.85 TAL 211.20 TAP 334.99 RCA 106.50 APO 157.35 V2 35.042 RC 72.534 GL -13.74 GP -17.42 ZAL 142.14 ZAP 52.63 ETS 13.30 ZAE 157.69 ETE 330.68 ZAC 94.05 ETC 13.09 CLP -50.50
  PLANETOCENTRIC CONIC
   C3 16.708 WHL 4.088 DLA 2.35 RAL 136.21 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 3.949 DPA -11.08 RAP 170.16 ECC 1.2750 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 20 6 2245.19 -20.30 43.43 355.19 110.18 1 57 31 1645.2 -17.37 35.98
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66.74 15 12 3
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      110.00
                  16 18 58
                                 4278.85
                                                  20.17
                                                               166.82
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 597.1 SCR 657.6 SC3 508.6
RRT -.3725 RRF .8494 RTF -.4345
SCB 888.3 R23 -.2767 R13 .8131
                                                                                                                     5T 247.0 SR 392.8 55 313.4
    TOE .1566 TRA -.2675 TC3 .5006 BAU .1636
                                                                                                                    CRT -.7567 CRS -.8277 CST .2766
LSA 508.1 MSA 233.5 SSA 28.4
    ROE -.2721 RRA -.2209 RC3 -.5345 FAU .12803
    FDE -.4395 FRA-1.5716 FC3-6.6339 B3P 2168
BDE .3140 BRA .3469 BC3 .7324 F3P -1529
                                                                  SG1 738.7 SG2 493.3 THA 127.72
                                                                                                                   EL1 441.2 EL2 143.8 ALF 118.78
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FLIGHT TIME 102.00
                                                                                                                                      ARRIVAL DATE OCT 15 1967
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 283.428
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.215 GAL -6.79 AZL 91.94 MCA 127.00 SMA 132.13 ECC .19104 INC 1.9354 V1 29.291
RP 108.10 LAP -1.55 LOP 49.33 VP 38.091 GAP -3.41 AZP 88.83 TAL 211.44 TAP 338.44 RCA 106.89 APO 157.38 V2 35.056
RC 74.652 GL -13.03 GP -18.99 ZAL 142.63 ZAP 57.56 ETS 12.18 ZAE 159.12 ETE 321.75 ZAC 96.01 ETC 12.55 CLP -55.44
   PLANETOCENTRIC CONIC
                                         3.11 RAL 136.14 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 3.787 DPA -11.84 RAP 167.98 ECC 1.2698
    C3 16.393 VHL 4.049 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 14 9 2264.54 -20.75 44.67 355.03 109.71 1 51 53 1664.5 -17.87 37.18
                                                                                               109.71
                     1 14 9 2264.54
                                                                                                  66.23 15 16 59
                                                                                                                                4115.4
                                                                                                                                               12.51
                                                                                                                                                              194.49
                                                                  201.57
                                                                                 353.75
        90.00
                   13 58 24 4715.42
                                                    15.86
                                                                                                                               1397.5
                                                                                                                                                              17.17
                 2 36 56 1997.48
15 18 17 4457.71
3 48 31 1773.45
                                                                                 354.63
                                                                                                 111.04
                                                                                                              3 10 14
                                                                                                                                               -18.6A
      100.00
                                                   -21.74
                                                                   24.64
                                                                                                64.92 16 32 35
114.73 4 18 4
                                                                                                                                3857.7
                                                                                                                                               13.30
                                                                  182.16
                                                                                 353.29
      100.00
                                                   16.82
                                                                                                                               1173.4
                                                                                                                                              -20.84
                                                                                                                                                              359.06
      110.00
                                                   -24.36
                                                                    6.42
                                                                                 353.42
                                                                                                  61.27 17 34 6
                  16 23 12 4254.52
                                                                                                                                               15.40
                                                                                                                                                              158.52
      110.00
                                                                                                                               3654.5
                                                    19.38
                                                                  165.37
                                                                                351.93
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 235.8 SR 385.5 SS 308.8

CRT -.6730 CRS -.8045 CST .1192

LSA 487.6 MSA 247.1 SSA 28.3

EL1 423.1 EL2 159.0 ALF 116.38
                                                                     SGT 556.4 SGR 723.8 SG3 553.0

RRT -.2219 RRF .8859 RTF -.2525

SG8 912.9 R23 -.1640 R13 .8725

SG1 745.8 SG2 526.5 THA 109.92
    TOE .1405 TRA -.2973 TC3 .3755 BAU .1632
    ROE -.2626 RRA -.2392 RC3 -.6428 FAU .13806
    FOE -.4122 FRA-1.6949 FC3-7.2912 BSP 2206
    BOE .2978 BRA .3616 BC3 .7445 FSP -1682
                                                                                                                                      ARRIVAL DATE OCT 17 1967
                                                                          FLIGHT TIME 104.00
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 289.930
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.236 GAL -6.75 AZL 91.80 MCA 130.21 SMA 132.28 ECC .18964 INC 1.7991 VI 29.291
RP 108.06 LAP -1.37 LOP 52.54 VP 38.119 GAP -2.88 AZP 88.84 TAL 211.57 TAP 341.78 RCA 107.20 APO 157.37 V2 35.069
RC 76.795 GL -12.23 GP -20.66 ZAL 143.04 ZAP 62.66 ETS 10.90 ZAE 160.09 ETE 310.94 ZAC 98.17 ETC 11.85 CLP -60.60
  PLANETOCENTRIC CONIC
    C3 16.076 VHL 4.010 DLA 3.93 RAL 136.21 RAD 6567.6 VEL 11.724 PTH 2.07 VHP 3.657 DPA -12.61 RAP 165.56 ECC 1.2646 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               109.20
                                                                                                              1 46 23
                                                                                                                               1665.5
                                                                                                                                              -18.41
                                                                                                                                                               38.48
        90.00
                     1 8 18 2285.54
                                                   -21.23
                                                                  46.03
                                                                                355.00
                                                                                                                                                              192.74
                                                                                                                                4085.5
                                                                                                                                               11.62
        90.00
                   14 4 46 4685.52
                                                    15.03
                                                                  199.76
                                                                                 353.42
                                                                                                  65.71
                                                                                                              15 22 52
                                                                                                   110.53 3 5 6
64.40 16 38 5
                                                                                                                                                               18.39
      100.00
                    2 31 29 2017.24
                                                   -22.22
                                                                   25.91
                                                                                 354.62
                                                                                                  110.53
                                                                                                                                1417.2
                                                                                                                                               -19.22
                                                                                                                                                              173.48
      100.00
                   15 24 16 4429.06
                                                   15.98
                                                                  180.44
                                                                                 352.96
                                                                                                                                3629.1
                                                                                                                                               12.41
                                                                                                 114.25 4 13 47
60.74 17 38 46
                    3 43 57 1790.44
                                                   -24.86
                                                                    7.50
                                                                                 353.43
                                                                                                                                1190.4
                                                                                                                                              -21.36
                                                                                                                                                                  .09
      110,00
       110.00
                   16 28 18 4228.62
                                                   18.52
                                                                   163.85
                                                                                 351.56
                                                                                                                                3628.6
                                                                                                                                               14.48
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                      SGT 541.1 SGR 797.4 SG3 592.4
RRT .0133 RRF .9139 RTF .0059
SG8 963.6 R23 .0166 R13 .9138
SG1 797.4 SG2 541.0 THA 89.04
                                                                                                                           ST 229.0 SR 374.7 SS 298.8
CRT -.5576 CRS -.7720 CST -.0800
    TOE .1245 TRA -.3350 TC3 .2191 BAU .1702
    RDE -.2502 RRA -.2570 RC3 -.7611 FAU .14682
    FOE -.3626 FRA-1.7870 FC3-7.9063 BSP 2322
BOE .2795 BRA .4222 BC3 .7920 FSP -1813
                                                                                                                           LSA 461.4 MSA 261.5 SSA 28.3
                                                                                                                           EL1 401.7 EL2 177.3 ALF 113.70
                                                                                                                                      ARRIVAL DATE OCT 19 1967
                                                                          FLIGHT TIME 106.00
LAUNCH DATE JUL 5 1967
  HELIOCENTRIC CONIC
                                                                          DISTANCE 296.406
    RL 152.10 LAL -.00 LOL 282.31 VL 27.251 GAL -6.71 AZL 91.65 MCA 133.42 SMA 132.39 ECC .18846 INC 1.6492 V1 29.291
RP 108.02 LAP -1.20 LOP 55.75 VP 38.141 GAP -2.36 AZP 88.87 TAL 211.60 TAP 345.03 RCA 107.44 APO 157.34 V2 35.082
RC 78.958 GL -11.32 GP -22.44 ZAL 143.36 ZAP 67.88 ETS 9.45 ZAE 160.36 ETE 298.66 ZAC 100.48 ETC 10.97 CLP -65.96
   PLANETOCENTRIC CONIC
                                        4.82 RAL 136.41 RAD 6567.6 VEL 11.711 PTH 2.06 VHP 3.558 DPA -13.42 RAP 162.95 ECC 1.2593
    C3 15.754 VHL 3.969 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             355.14
                                                                                                                                          -19.00
                                                                                              108.61 1 40 54
65.19 15 29 49
                                                   -21.74
                                                                  47.54
                                                                                                                            1708.8
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                     1 2 25 2308.78
        90.00
        90.00
                   14 12 16 4653.10
                                                                  197.82
                                                                                 353.22
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                                                    14.11
                                                                                                 109.95 3 0 1
63.87 16 44 59
                                                   -22.73
                                                                   27.33
                                                                                 354.76
                                                                                                                               1439.1
                                                                                                                                              -19.81
                                                                                                                                                              19.76
       100.00
                    2 26 1 2039.10
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                                                                                                                                               11.43
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                   15 31 21
                                                   15.06
                                                                  178.60
                                                                                 352.76
      100.00
                                   4398.01
                                                                                                 113.70 4 9 37
60.20 17 44 24
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                                                                                                                               1209.2
                                                                                                                                              -21.96
                     3 39 28 1809.25
                                                   -25.38
                                                                    8.72
                                                                                 353.60
      110.00
                                                                                                                                                              155,51
                                                                                                                                3600.6
                                                                                                                                               13.49
                  16 34 24
                                                   17.58
                                                                  162.22
                                                                                 351.36
      110.00
                                  4200.62
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 571.6 SGR 878.4 SG3 625.7

RRT .2866 RRF .9353 RTF .2932

SGB 1048.0 R23 .1348 R13 .9259

SGI 902.3 SG2 533.1 THA 73.55
                                                                                                                         ST 229.7 SR 360.1 SS 285.6
CRT -.4213 CRS -.7281 CST -.2980
    TOE .1111 TRA -. 3782 TC3 .0342 BAU .1876
    FOE -.2349 RRA -.2739 RC3 -.8900 FAU .15400
FOE -.2938 FRA-1.8443 FC3-8.4625 BSP 2571
BOE .2599 BRA .4670 BC3 .8906 FSP -1926
                                                                                                                           LSA 431.8 MSA 276.9 SSA 28.4
                                                                                                                           EL1 378.3 EL2 198.3 ALF 111.09
                                                                                                                                       ARRIVAL DATE OCT 21 1967
                                                                          FLIGHT TIME 108.00
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 302.857
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.260 GAL -6.66 A7L 91.48 MCA 136.64 SMA 132.45 ECC .18748 INC 1.4824 V1 29.291
RP 107.98 LAP -1.02 LOP 58.96 VP 38.159 GAP -1.86 A7P 88.92 TAL 211.54 TAP 348.18 RCA 107.62 APO 157.29 V2 35.094
RC 81.159 GL -10.27 GP -24.31 ZAL 143.59 ZAP 73.16 ETS 7.79 ZAE 159.73 ETE 285.96 ZAC 102.89 ETC 9.91 CLP -71.47
  PLANETOCENTRIC CONIC
                                         5.81 RAL 136.76 RAD 6567.6 VEL 11.697 PTH
                                                                                                     2.06 WHP 3.493 DPA -14.28 RAP 160.19 ECC 1.2539
    C3 15.425 VHL 3.927 OLA
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 56 18 2335.04 -22.30 49.26 355.44 107.92 1 35 13 1735.0 -19.64 41.59 90.00 14 21 7 4617.30 13.08 195.70 353.17 64.66 15 38 5 4017.3 9.56 188.79
                                                                                                               2 54 48
                                                                                                                                1463.8
                                                                                                                                                               21.31
                     2 20 24 2063.81
                                                   -23.30
                                                                    28.95
                                                                                 355.07
                                                                                                 109.28
                                                                                                                                               -20.45
      100.00
                                                                                                   63.33 16 52 27
                                                                                                                                3763.8
                                                                                                                                               10.33
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                                 4363.76
                                                                  176.59
                                                                                 352.70
      100.00
                   15 39 43
                                                   14.02
                                                                                                 113.06 4 5 27
59.65 17 51 10
                                                                                                                                1230.5
                                                                                                                                               -22.61
                                                                                                                                                               2.55
                     3 34 56
                                  1830.53
                                                   -25.96
                                                                    10.10
                                                                                 353.94
      110.00
                                4169.80
                                                                                                                              3569.8
                                                                                                                                             12.38
                   16 41 40
                                                                                                                                                             153.81
      110.00
                                                   16.53
                                                                  160.45
                                                                                 351.28
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ST 239.1 SR 341.9 SS 272.0

CRT -.2841 CRS -.6719 CST -.5029

LSA 401.8 MSA 292.8 SSA 28.6

EL1 353.3 EL2 221.8 ALF 108.94
                                                                     SGT 655.7 SGR 966.8 SG3 651.6
RRT .5210 RRF .9516 RTF .5334
SGB 1168.2 R23 .1825 R13 .9350
    TOE .1022 TRA -.4249 TC3 -.1775 BAU .2155
    RDE -. 2168 RRA -. 2896 RC3-1.0298 FAU .15928
    FOE -.2110 FRA-1.8652 FC3-8.9394 BSP 2971
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SG1 1047.9 SG2 516.4 THA 63.69

BOE .2397 BRA .5143 BC3 1.0450 FSP -2025

BOE .1709 BRA .6818 BC3 2.0801 FSP -2015

ARRIVAL DATE OCT 31 1967

JPL TM 33-99

LAUNCH DATE JUL 5 1967

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HELIOCENTRIC CONIC
                                                                           DISTANCE 334.735
   RL 152.10 LAL -.00 LOL 282.31 VL 27.229 GAL -6.25 A7L 90.17 HCA 152.74 SMA 132.23 ECC .18488 INC .1727 V1 29.291
RP 107.80 LAP -.08 LOP 75.05 VP 38.192 GAP .40 A7P 89.85 TAL 209.84 TAP 2.57 RCA 107.78 APO 156.68 V2 35.154
RC 92.232 GL -1.27 GP -35.62 TAL 143.12 ZAP 97.21 ETS 355.51 TAE 145.19 ETE 244.81 ZAC 113.74 ETC 1.58 CLP -98.88
  PLANETOCENTRIC CONIC
    C3 13.750 VHL 3.708 OLA 13.87 RAL 141.19 RAD 6567.5 VEL 11.625 PTH 2.04 VHP 3.705 OPA -20.86 RAP 146.12 ECC 1.2263
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                -24.62
                                                                   65.61
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                     0 8 35 2574.57
                                                    -26.37
        90.00
                                                                                     .82
                                                                                                                                  3726.7
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                                                                                                                                                                 172.42
                   15 44 14
                                  4326.70
                                                       4.12
                                                                   179.06
                                                                                  356.15
        90.00
                     1 37 15 2288.61
                                                                    44.32
                                                                                      .57
                                                                                                                                  1688.6
                                                                                                                                                 -25.52
                                                                                                                                                                  36.07
                                                    -27.48
       100.00
                                                                                  355.60
                                                                                                                                  3487.9
                                                                                                                                                   1.15
                                                                                                                                                                154.41
                                    4087.89
                                                       5.12
                                                                   160.95
       100.00
                   16 58 15
                  3 1 56 2023.65
17 50 4 3925.61
                                                                                                                                  1423.7
                                                                                                                                                 -27.88
                                                                                                                                                                  15.07
                                                                    23.34
                                                                                359.71
                                                    -30.42
      110.00
                                                                                                                                 3325.6
                                                                                                                                                  3.26
                                                                                                                                                                 140.74
                                                      7.71
                                                                   147.05
                                                                                  354.00
      110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 1582.7 SGR 1412.8 SG3 596.5

RRT .9058 RRF .9883 RTF .9104

SGB 2121.6 R23 .2052 R13 .9675

SG1 2071.7 SG2 457.2 THA 41.42
                                                                                                                             ST 430.4 SR 153.2 S9 314.0
CRT .4412 CRS -.3468 CST -.9839
    TOE .1955 TRA -.6375 TC3-1,5864 BAU .4407
   RCE -.0317 RRA -.2922 RC3-1.7977 FAU .14089
FOE .4935 FRA-1.2244 FC3-8.8713 83P 6156
BOE .1981 BRA .7013 BC3 2.3976 FSP -1890
                                                                                                                             LSA 534.8 MSA 141.2 SSA 37.0
                                                                                                                             EL1 436.2 EL2 135.6 ALF 9.89
                                                                            FLIGHT TIME 120.00
                                                                                                                                          ARRIVAL DATE NOV 2 1967
LAUNCH DATE JUL 5 1967
                                                                            DISTANCE 341.038
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.210 GAL -6.14 A7L 89.73 MCA 155.96 SMA 132.10 ECC .18472 INC .2732 V1 29.291
RP 107.77 LAP .11 LOP 78.27 VP 38.189 GAP .81 A7P 90.25 TAL 209.25 TAP 5.22 RCA 107.70 APO 156.50 V2 35.165
RC 94.474 GL 2.02 GP -38.66 ZAL 142.42 ZAP 100.85 ETS 352.05 ZAE 140.90 ETE 241.27 ZAC 115.19 ETC 359.23 CLP-103.95
  PLANETOCENTRIC CONIC
   C3 13.500 VHL 3.674 OLA 16.78 RAL 142.92 RAD 6567.5 VEL 11.614 PTH 2.04 VHP 3.884 DPA -23.13 RAP 143.41 ECC 1.2222 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       2.04 VHP 3.884 DPA -23.13 RAP 143.41 ECC 1.2222
                                                                                                    97.28 24 29 9
61.69 17 28 22
                                                                                                                                  2075.4
                  23 44 34 2675.41
                                                    -27.44
                                                                    72.79
                                                                                     3.39
                                                                                                                                                 -26.15
                                                                                                                                                                   64.36
        90.00
                                                                                                                                  3617.9
                                                                                                                                                                  166.35
                                  4217.86
                                                                    172.98
                                                                                   358.09
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        90.00
                   16 18 4
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                                                                                     3.20
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                     1 19 23 2362.32
                                                                     51.04
       100.00
                                                                                                     60.15 18 36 19
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                                   3986.18
                                                                    155.35
      100.00
                  17 29 53
                                                      1.69
                   2 48 42 2102.89
18 17 3 3636.36
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56.07 19 21 2
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                                                                                                                                                 -29.65
      110.00
                                                    -31.60
                                                                    29.10
                                                                                    2.48
                                                                                                                                  3238.4
                                                                                                                                                   -.07
                                                                                   355.60
      110.00
                                                      4.41
                                                                    142.44
  DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                      SGT 1803.1 SGR 1496.6 SG3 548.1
RRT .9204 RRF .9913 RTF .9245
SGB 2343.2 R23 .2055 R13 .9703
SG1 2297.8 SG2 459.2 TMA 39.25
                                                                                                                              ST 531.4 SR 150.1 SS 391.4
CRT .8621 CRS -.7598 CST -.9739
    TDE .2716 TRA -.6513 TC3-1.8986 BAU .4907
    RDE .0384 RRA -.2678 RC3-1.9465 FAU .12838
                                                                                                                             LSA 668.0 MSA 102.3 SSA 37.8
    FOE .6725 FRA -.9777 FC3-8.2328 BSP 6883
    BOE .2743 BRA .7042 BC3 2.7191 FSP -1739
                                                                                                                              EL1 547.3 EL2 73.9 ALF 13.95
                                                                                                                                         ARRIVAL DATE NOV 4 1967
LAUNCH DATE JUE - 5 1967
                                                                           FLIGHT TIME 122.00
                                                                          DISTANCE 347.317
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27,189 GAL -6.02 AZL 89.15 MCA 159.19 SMA 131.94 ECC .18465 INC .8511 VI 29.291
RP 107.73 LAP .30 LOP 81.50 VP 38.183 GAP 1.21 AZP 90.80 TAL 208.60 TAP 7.79 RCA 107.58 APO 156.31 V2 35.175
RC 96.719 GL 6.31 GP -42.25 ZAL 141.24 ZAP 103.82 ETS 348.12 ZAE 136.23 ETE 238.72 ZAC 116.25 ETC 356.57 CLP-108.83
  PLANETOCENTRIC CONIC
    C3 13.387 VML 3.659 DLA 20.59 RAL 145.17 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 4.136 DPA -25.97 RAP 140.64 ECC 1.2203
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 91.88 24 0 8
61.99 18 15 18
93.70 1 33 51
60.25 19 19 27
                                                                                                                                                -27.70
        90.00 23 13 3 2825.45
                                                                                 7.01
                                                                                                                                 2225.4
                                                                                                                                                                  75.06
                                                    -28.26
                                                                   83.6A
                                                                                                                                                   -8.05
                                                                                                                                                                 157.68
                   17 7 33
                                    4064.16
                                                     -4.33
                                                                   164.39
                                                                                     1.27
                                                                                                                                  3464.2
        90.00
                                                                                                                                                 -28.85
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                                                    -29.68
                                                                                                                                  1919.5
                     0 51 52 2519.49
                                                                    61.10
                                                                                      6.93
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                                                     -3.09
                                                                   147.62
                                                                                      .58
                                                                                                                                  3245.3
       100.00
                   18 15 22
                                   3845.35
                                                                                                                                                -31.73
                                                                                                     98.42 3 5 51
55.82 19 56 49
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                   2 28 55 2215.85
                                                                    37.59
                                                                                      6.49
                                                                                                                                  1615.9
                                                    -33.25
                                                                                                                                                                 130.13
                                                      -.04
                                                                   136.35
                                                                                  358.68
                                                                                                                                  3121.8
                                                                                                                                                   -4.52
                   18 54 48
                                   3721.75
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 689.0 SR 237.7 SS 496.5

CRT .9920 CRS -.9653 CST -.9736

LSA 876.4 MSA 94.5 SSA 28.3

ELI 728.3 EL2 28.4 ALF 18.92
   TOE .3874 TRA -.6439 TC3-2.1909 BAU .5404
ROE .1293 RRA -.2305 RC3-2.0780 FAU .11361
FDE .8511 FRA -.7143 FC3-7.3473 BSP 7632
BDE .4084 BRA .6839 BC3 3.0196 FSP -1562
                                                                        SGT 2024.5 SGR 1581.7 SG3 489.6
                                                                       RRT .9294 RRF .9936 RTF .9340
5G8 2569.1 R23 .2054 R13 .9726
                                                                       SG1 2526.1 SG2 467.9 THA 37.49
                                                                                                                                         ARRIVAL DATE NOV 6 1967
                                                                            FLIGHT TIME 124.00
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 353.572
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.164 GAL -5.89 ATL 88.37 MCA 162.41 SMA 131.77 ECC .18467 INC 1.6303 V1 29.291
RP 107.70 LAP .49 LOP 84.73 VP 36.174 GAP 1.60 AZP 91.55 TAL 207.88 TAP 10.29 RCA 107.43 APO 156.10 V2 35.185
RC 98.967 GL 12.05 GP -46.58 ZAL 139.20 ZAP 105.96 ETS 343.64 ZAE 131.06 ETE 236.91 ZAC 116.87 ETC 353.49 CLP-113.58
  PLANETOCENTRIC CONIC
    C3 13.573 VHL 3.684 OLA 25.67 RAL 148.24 RAD 6567.5 VEL 11.617 PTH 2.04 VHP 4.499 OPA -29.56 RAP 137.64 ECC 1.2234
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 9 45 3094.68 -27.29 103.27 11.85 82.15 23 1 19 2494.7 -28.10 94.70 90.00 18 35 21 3800.96 -12.47 149.34 7.13 64.37 19 38 42 3201.0 -15.82 142.26 100.00 0 0 32 2750.19 -29.47 78.21 12.14 84.72 0 46 22 2150.2 -29.88 69.43
                     0 0 32
                                  2750.19
                                                    -29.47
                                                                     78.21
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       100.00
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                                   3620.68
                                                    -10.52
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56.36 20 52 2
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       110.00
                     1 55 23 2390.83
                                                    -34,18
                                                                     51.15
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       110.00
                  19 52 49 3552.81
                                                     -6.47
                                                                    127.50
                                                                                     3.67
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TDE .5661 TRA -.6053 TC3-2.4205 BAU .5878
RDE .2537 RRA -.1726 RC3-2.1529 FAII .00641
                                                                     SGT 2246.6 SGR 1661.6 SG3 420.2
RRT .9343 RRF .9953 RTF .9406
SGB 2794.3 R23 .2053 R13 .9743
SG1 2752.1 SG2 483.4 THA 35.93
                                                                                                                            ST 936.1 SR 407.3 SS 629.8
CRT .9912 CRS -.9961 CST -.9796
           .2537 RRA -.1726 RC3-2.1529 FAU .09641
                                                                                                                            LSA 1194.5 MSA 108.2 SSA 16.1
ELI 1019.6 EL2 49.6 ALF 23.39
    FOE 1.0279 FRA -.4380 FC3-6.1494 BSP 8363
BDE .6204 BRA .6295 BC3 3.2394 FSP -1346
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FLIGHT TIME 118.00

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FLIGHT TIME 126.00
                                                                                                                                           ARRIVAL DATE NOV 8 1967
LAUNCH DATE JUL 5 1967
                                                                             DISTANCE 359.802
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 282.31 VL 27.137 GAL -5.75 AZL 87.25 HCA 165.63 SMA 131.57 ECC .18478 INC 2.7464 V1 29.291 RP 107.67 LAP .68 LOP 87.96 VP 38.164 GAP 1.97 AZP 92.66 TAL 207.09 TAP 12.72 RCA 107.26 APO 155.88 V2 35.195 RC 101.218 GL 19.89 GP -51.96 ZAL 135.66 ZAP 107.01 ETS 338.46 ZAE 125.14 ETE 235.57 ZAC 116.95 ETC 349.80 CLP-118.35
   PLANETOCENTRIC CONIC
     C3 14.461 VHL 3.803 DLA 32.57 RAL 152.71 RAD 6567.6 VEL 11.655 PTH 2.05 VHP 5.050 DPA -34.13 RAP 134.09 ECC 1.2380
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  17.41
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18 30 52 3876.06
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                    0 33 6 2741.49
21 50 47 3230.01
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                                                     -18.09
                                                                     109.72
                                                                                     14.11
                                                                        MID-COURSE EXECUTION ACCURACY

8GT 2476.0 8GR 1731.3 8G3 341.8

RRT - .9360 RRF .9963 RTF .9458

SGB 3021.2 R23 .2040 R13 .9759

8G1 2978.5 8G2 506.7 THA 34.34
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1314.2 SR 646.0 SS 778.6

CRT .9894 CRS -.9997 CST -.9867

LSA 1653.8 MSA 125.2 SSA 8.8

EL1 1462.0 EL2 84.4 ALF 26.03
    TOE .8517 TRA -.5181 TC3-2.5036 BAU .6323
RDE .4265 RRA -.0846 RC3-2.1044 FAU .07733
    FOE 1.1808 FRA -.1674 FC3-4.6292 BSP 9132
BOE .9525 BRA .5250 BC3 3.2705 FSP -1108
                                                                             FLIGHT TIME 128.00
                                                                                                                                            ARRIVAL DATE NOV 10 1967
LAUNCH DATE JUL 5 1967
  HELIOCENTRIC CONIC
                                                                             DISTANCE 366.002
   RL 152.10 LAL -.00 LOL 282.31 VL 27.107 GAL -5.00 AZL 85.51 MCA 168.84 8MA 131.36 ECC .18495 INC 4.4900 V1 29.291
RP 107.65 LAP .87 LOP 91.19 VP 38.151 GAP 2.34 AZP 94.41 TAL 206.24 TAP 15.08 RCA 107.07 APO 155.66 V2 35.204
RC 103.470 GL 30.62 GP -58.79 ZAL 129.63 ZAP 106.66 ETS 332.33 ZAE 118.12 ETE 234.19 ZAC 116.38-ETC 345.12 CLP-123.60
  PLANETOCENTRIC CONIC
    C3 17.199 WHL 4.147 DLA 41.77 RAL 159.91 RAD 6567.7 VEL 11.772 PTH 2.08 WHP 5.962 DPA -39.91 RAP 129.31 ECC 1.2830 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ 2 LONG
    LNOW AZHTH LNCH TIME L-I TIME INJ LAT
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   DIFFERENTIAL CORRECTIONS
                                                                        SGT 2723.2 SGR 1794.4 SG3 255.4
RRT .9328 RRF .9960 RTF .9503
SGB 3239.4 R23 .2026 R13 .9770
SG1 3194.3 SG2 538.9 THA 32.02
                                                                                                                                ST 1872.3 SR 928.8 SS 917.5
    TOE 1.3478 TRA -.3371 TC3-2.2744 BAU
                                                          .6655
                                                                                                                                CRT .9905 CRS -.9999 CST -.9917
    RDE .6710 RRA .0615 RC3-1.7904 FAU .05641
                                                                                                                               LSA 2278.1 MSA 142.9 SSA 4.8
    FDE 1.2877 FRA .0905 FC3-2.8397 BBP 9800
                                                                                                                                ELI 2086.9 EL2 114.8 ALF 26.25
    BOE 1.5056 BRA .3426 BC3 2.8946 FSP -835
                                                                                                                                           ARRIVAL-DATE NOV 12 1967
                                                                             FLIGHT TIME 130.00
LAUNCH DATE JUL 5 1967
                                                                            DISTANCE 372.163
   RL 152.10 LAL -.00 LOL 282.31 VL 27.075 GAL -5.43 AZL 82.38 NCA 172.04 SMA 131.14 ECC .18518 INC 7.6183 VI 29.291
RP 107.62 LAP 1.05 LOP 94.42 VP 38.136 GAP 2.69 AZP 97.55 TAL 205.32 TAP 17.36 RCA 106.85 APO 155.42 VZ 35.212
RC 105.723 GL 44.52 GP -67.60 ZAL 120.21 ZAP 104.52 ETS 324.16 ZAE 109.34 ETE 231.25 ZAC 115.05 ETC 338.12 CLP-131.14
   PLANETOCENTRIC CONIC
    C3 25.978 VHL 5.097 DLA 52.75 RAL 173.05 RAD 6568.1 VEL 12.139 PTH 2.18 VHP 7.702 DPA -47.06 RAP 121.72 ECC 1.4275
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ. 2 LONG 43.44 17 39 5 4384.52 -31.32 209.38 55.50 45.12 18 52 9 3784.5 -36.78 202.72 136.56 2 27 56 2815.41 -31.31 84.33 55.48 45.11 3 14 51 2215.4 -36.76 77.68
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                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2567.2 SR 1061.6 SS 963.9
CRT .9885 CRS -.9990 CST -.9942
                                                                        SCT 3031.7 SCR 1639.4 SC3 168.9
RRT .9167 RRF .9910 RTF .9569
SCB 3446.5 RZ3 .1991 R13 .9763
SCI 3396.6 SCZ 584.5 THA 27.24
    TOE 2.2631 TRA .0597 TC3-1.5792 BAU .6665
    ROE .9312 RRA .3111 RC3-1.1003 FAU .03509
FOE 1.2788 FRA .3121 FC3-1.1695 BSP 10358
BOE 2.4657 BRA .3168 BC3 1.9247 FSP -557
                                                                                                                               LSA 2935.6 MSA 167.6 SSA
                                                                                                                                                                        2.7
                                                                                                                               EL1 2774.1 EL2 148.4 ALF 22.30
                                                                                                                                           APRIVAL DATE NOV 14 1967
                                                                             FLIGHT TIME 132.00
LAUNCH DATE JUL 5 1967
                                                                             DISTANCE 378.248
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 27.041 GAL -5.25 A7L 75.15 MCA 175.19 3MA 130.90 ECC .18540 INC14.8521 V1 29.291
RP 107.60 LAP 1.23 LOP 97.66 VP 38.119 GAP 3.01 AZP 104.80 TAL 204.31 TAP 19.49 RCA 106.63 APO 155.17 V2 35.220
RC 107.975 GL 59.33 GP -78.66 ZAL 107.95 ZAP 100.27 ETS 305.08 ZAE 97.29 ETE 217.11 ZAC 113.13 ETC 319.33 CLP-155.12
   PLANETOCENTRIC CONIC
    C3 64.406 WHL 8.025 DLA 60.98 RAL 197.44 RAD 6569.2 VEL 13.629 PTH 2.49 WHP 11.975 DPA -54.96 RAP 106.40 ECC 2.0600
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
33,44 18 49 18 4665.90 -21.98 229.62 94.51 31.55 20 7 2 4065.9 -28.73 225.28
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                      4 32 22
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   DIFFERENTIAL CORRECTIONS
                                                                         SGT 3497.3 SGR 921.0 SG3 97.1 ST 2882.9 SR 288.5 SS 815.3 RRT .7060 RRF .8379 RTF .9775 CRT .6581 CRS -.7330 CST -.9945 SG8 3616.5 R23 .1739 R13 .9841 LSA 3001.0 MSA 230.4 SSA 1.3 SG1 3559.4 SG2 640.2 THA 10.90 EL1 2889.2 EL2 216.7 ALF 3.79
                                                                        967 3497.3 SCR 921.0 SG3 97.1
RRT .7068 RRF .8379 RTF .9775
SG8 3616.5 R23 .1739 R13 .9841
    TOE 3.9639 TRA 1.2442 TC3 -.5613 BAU .5366
    RDE .2030 RRA .5645 RC3 -.2309 FAU .01514
FOE 1.0555 FRA .5210 FC3 -.2035 89P 10777
     BOE 3.9691 BRA 1.3662 BC3 .6255 FSP -316
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ARRIVAL DATE NOV 16 1967

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LAUNCH DATE JUL 5 1967
    RL 152.10 LAL -.00 LOL 282.31 VL 27.006 GAL -4.98 AZL 45.12 MCA 178.00 SHA 130.65 ECC .18517 INC44.8780 V1 29.291 RP 107.58 LAP 1.41 LOP 100.89 VP 38.100 GAP 3.24 AZP 134.86 TAL 202.99 TAP 20.99 RCA 106.46 APO 154.85 V2 35.227 RC 110.226 GL 61.07 GP -70.49 ZAL 96.21 ZAP 94.35 ETS 199.51 ZAE 73.23 ETE 115.48 ZAC 112.76 ETC 209.83 CLP 103.11
                                                                                 DISTANCE 363.964
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 470.451 VHL 21.690 DLA 53.61 RAL 215.38 RAD 6572.3 VEL 24.326 PTH 3.32 VHP 29.967 DPA -54.91 RAP 64.19 ECC 8.7424
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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SGT 582-0 are 3150
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   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 396.3 SR 2090.3 SS 905.6
CRT .7526 CRS .9960 CST .6904
LSA 2296.1 MSA 273.3 SSA .9
    TOE-1.4303 TRA .8942 TC3 -.0279 BAU 1.1187

RDE-7.2483 RRA-6.2758 RC3 -.1757 FAU-.01729

FOE 1.1603 FRA 1.2610 FC3 .0318 BSP 10203

BOE 7.3880 BRA 6.3392 BC3 .1779 FSP -174
                                                                             SGT 562.0 SGR 3472.2 SG3 56.5
RRT -.1523 RRF -.9951 RTF .2476
                                                                             SG8 3517.3 R23 -.0933 R13 -.9955
                                                                                                                                        EL1 2111.8 EL2 258.3 ALF 81.76
                                                                             SG1 3473.2 SG2 555.3 THA 91.45
                                                                                                                                                    ARRIVAL DATE NOV 18 1967
                                                                                  FLIGHT TIME 136.00
LAUNCH DATE JUL 5 1967
                                                                                 DISTANCE 391.348
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 26.968 GAL -5.04 AZL 130.95 MCA 182.41 SMA 130.40 ECC .18764 INC40.9459 V1 29.291
RP 107.58 LAP 1.58 LOP 104.13 VP 38.080 GAP 3.92 AZP 49.08 TAL 202.87 TAP 25.28 RCA 105.93 APO 154.86 V2 35.233
RC 112.475 GL -62.14 GP 75.77 ZAL 98.83 ZAP 96.46 ETS 163.36 ZAE 76.47 ETE 246.02 ZAC 86.17 ETC 142.31 CLP 117.25
   PLANETOCENTRIC CONIC
                                                                                                                                               69.96 RAP 314.41 ECC 7.9264
     C3 396.559 VHL 19.914 DLA -53.44 RAL 141.61 RAD 6572.1 VEL 22.757 PTH
                                                                                                                3.27 WHP 24.085 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                      12 23 11
                                        706.54
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                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 187.2 SR 3128.8 SS 1392.4

CRT -.5350 CRS -.9995 CST .5088

LSA 3425.9 MSA 163.3 SSA 1.1
                                                                              SGT 594.7 SGR 3628.3 SG3 64.1
     TOE .2482 TRA 1.1937 TC3 -.0319 BAU .9020
                                                                             RRT -.6209 RRF .9961 RTF -.5519
SGB 3676.8 R23 -.0980 R13 .9949
     RD-10.7120 RRA-3.7168 RC3 .1671 FAU-.01255
     FOE-2.3020 FRA -.6549 FC3 .0274 BSP 10437
B0E10.7149 BRA 3.9036 BC3 .1701 FSP -186
                                                                                                                                        EL1 3130.4 EL2 158.0 ALF 91.84
                                                                              SG1 3647.4 SG2 463.7 THA 95.91
                                                                                                                                                    ARRIVAL DATE NOV 20 1967
                                                                                  FLIGHT TIME 138.00
 LAUNCH DATE JUL 5 1967
                                                                                 DISTANCE 397.161
     RL 152.10 LAL -.00 LOL 282.31 VL 26.930 GAL -4.78 AZL 109.08 MCA 185.36 SMA 130.13 ECC .18776 INC19.0795 V1 29.291 RP 107.54 LAP 1.75 LOP 107.37 VP 38.038 GAP 4.16 AZP 71.00 TAL 201.56 TAP 26.92 RCA 105.70 APO 154.56 V2 35.239 RC 114.720 GL -62.72 GP 73.52 ZAL 103.14 ZAP 105.11 ETS 74.11 ZAE 96.74 ETE 158.97 ZAC 87.58 ETG. 54.67 CLP-156.71
    PLANETOCENTRIC CONIC
     C3 97.425 VHL 9.870 DLA -49.53 RAL 132.37 RAD 6569.9 VEL 14.791 PTH 2.67 VHP 10.972 DPA 76.15 RAP 237.25 ECC 2.6034
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          137.96 3 45 10
137.96 13 7 57
137.96 3 45 10
137.96 13 7 57
                                                                                                                                                           20.12
                                                                                        29.84
                     3 11 17 2032.89
11 31 7 5809.80
                                                                                                                                         1432.9
                                                                                                                          3 45 10
                                                                          51.08
          47.50
                                                          14.25
                                                                                                                                             5209.8
                                                                                                                                                                              264.74
                                                                                                                                                              20.13
                                                                         270.02
                                                                                           29.85
                                                           14.27
         132.50
                     11 31 7 5809.80
3 11 17 2032.89
11 31 7 5809.80
3 11 17 2032.89
11 31 7 5809.80
                                                                                                                                                                              45.81
                                                                                                                                             1432.9
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                                                                                           29.84
                                                                          51.06
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         47.50
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        132.50
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          47.50
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137.96 13 7 57
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                                                                         270.02
                                                                                           29.85
                                                          14.27
         132.50
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                             RIG-TOURSE ERECUTION ACCOUNTS.

RET 1.1806 RRF .0222 RTF .9867

SGB 3691.4 R23 -.1624 R13 .9861

SGI 3652.4 SGE 549.7 THA 1.53
                                                                                                                                        ST 2911.1 SR 322.0 SS 1064.7
CRT -.7465 CRS .7927 CST -.9974
     TDE-4.8369 TRA-2.8652 TC3 -.3124 BAU. .4077
     RDE .4969 RRA -.5337 RC3 .0201 FAU .01606
FDE-1.8981 FRA -.8099 FC3 -.1429 BSP 11831
BDE 4.8624 BRA 2.9144 BC3 .3130 FSP -364
                                                                                                                                        LSA 3108.4 MSA 223.6 SSA
                                                                                                                                                                                   1.3
                                                                                                                                        EL1 2921.1 EL2 213.6 ALF 175.25
                                                                                                                                                     ARRIVAL DATE NOV 22 1967
                                                                                   FLIGHT TIME 140.00
 LAUNCH DATE JUL 5 1967
                                                                                  DISTANCE 403.189
     RL 152.10 LAL -.00 LOL 282.31 VL 26.890 GAL -4.56 AZL 103.00 MCA 188.52 SMA 129.86 ECC .18834 INC13.0021 V1 29.291
RP 107.52 LAP 1.91 LOP 110.62 VP 38.034 GAP 4.47 AZP 77.14 TAL 200.39 TAP 28.91 RCA 105.40 APO 154.31 V2 35.244
RC 116.961 GL -57.61 GP 60.83 ZAL 107.41 ZAP 113.69 ETS 54.63 ZAE 107.95 ETE 143.86 ZAC 91.35 ETC 35.93 CLP-145.53
    PLANETOCENTRIC CONIC
     C3 51.003 VHL 7.142 DLA -44.12 RAL 133.91 RAD 6566.9 VEL 13.129 PTH 2.40 VHP 7.583 DPA 68.48 RAP 197.98 ECC 1.8394
     C3 51.003 VHL 7.142 DLA -44.12 RAL 133.91 RAD 6568.9 VEL 13.129 PTH 2.40 VMP 7.583 OPA 68.48 RAP 197.98 ECC 1.8394
LNCH XENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
54.64 3 42 55 1816.63 19.87 36.23 22.01 130.24 4 13 12 1216.6 24.90 29.92
125.36 11 11 47 5722.16 19.88 267.41 22.03 130.23 12 47 9 5122.2 24.92 261.10
54.64 3 42 55 1816.63 19.87 36.23 22.01 130.24 4 13 12 1216.6 24.90 29.92
125.36 11 11 47 5722.16 19.88 267.41 22.03 130.23 12 47 9 5122.2 24.92 261.10
54.64 3 42 55 1816.63 19.87 36.23 22.01 130.24 4 13 12 1216.6 24.90 29.92
125.36 11 11 47 5722.16 19.88 267.41 22.03 130.23 12 47 9 5122.2 24.92 261.10
125.36 11 11 47 5722.16 19.88 267.41 22.03 130.23 12 47 9 5122.2 24.92 261.10
DIFFERENTIAL CORRECTIONS
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2620.7 SR 939.3 SS 1138.4
CRT -.9740 CRS .9942 CST -.9927
LSA 2999.3 MSA 224.7 SSA 2.1
      TDE-3.1168 TRA-2.3378 TC3 -.8751 BAU .6176
                                                                               SCT 3626.3 SCR 1021.6 SC3 188.2
                                                                              RRT -.6628 RRF -.9773 RTF .9695
SGB 3960.3 R23 .2096 R13 -.9763
SGI 3928.3 SGZ 503.0 THA 166.81
     ROE 1.1674 RRA .2103 RC3 .2335 FAU .03496
FOE-2.1294 FRA -.9415 FC3 -.5934 BSP 12217
                                                                                                                                        EL1 2776.7 EL2 200.9 ALF 160.65
      BOE 3.3262 BRA 2.3473 BC3 .9057 FSP
                                                             - 600
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FLIGHT TIME 134.00

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LAUNCH DATE JUL 5 1967
                                                                                               FLIGHT TIME 142.00
                                                                                                                                                                            ARRIVAL DATE NOV 24 1967
    HELIOCENTRIC CONIC
                                                                                               DISTANCE 409.246
      RL 152.10 LAL -.00 LOL 282.31 VL 26.849 GAL -4.33 AZL 100.21 HCA 191.73 SNA 129.58 ECC .18908 INC10.2148 V1 29.291 RP 107.51 LAP - 2.07 LOP 113.86 VP 38.009 GAP 4.78 AZP 79.99 TAL 199.21 TAP 30.94 RCA 105.08 APO 154.08 VZ 35.248 RC 119.197 GL -53.03 GP 50.42 ZAL 109.96 ZAP 121.19 ETS 48.76 ZAE 115.55 ETE 143.91 ZAC 94.59 ETC 30.62 CLP-144.38
    PLANETOCENTRIC CONIC
      C3 35.317 VHL 5.943 DLA -39.96 RAL 136.57 RAD 6568.4 VEL 12.517 PTH 2.27 VMP 6.254 DPA 59.68 RAP 183.88 ECC 1.5812
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         4 18 30 1655.80
10 57 25 5698.04
4 18 30 1655.80
10 57 25 5698.04
4 18 30 1655.80
                                                                                                    17.67
           60.53
                                                                  21.91
                                                                                      23.84
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                                                                                                                                             4 46 6
                                                                                                                                                                1055.8
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                                                                                                                             124.29 12 32 23
                                                                    21.92
                                                                                     266.96
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124.29 12 32 23
           60.53
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         119.47
                                                                                     266.96
                                                                                                          17.88
                                                                    21.92
                                                                                                                                                                   5098.0
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                                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                          SCT 3881.7 SGR 1026.3 SC3 252.6
RRT -.8934 RRF -.9781 RTF ..9616
SGB 4015.1 R23 .2389 R13 -.9683
SG1 3990.0 SG2 448.6 THA 166.54
                                                                                                                                                           ST 2519.1 SR 894.2 SS 1209.1

CRT -.9768 CRS .9972 CST -.9901

LSA 2925.4 MSA 222.2 SSA 2.9

EL1 2667.0 EL2 180.9 ALF 160.78
      TOE-2.4896 TRA-2.0218 TC3-1.4176 BAU .6909
     ROE .9235 RRA .2176 RC3 .3625 FAU .05029
FOE-2.2882 FRA -.9636 FC3-1.2327 83P 12404
BOE 2.6554 8RA 2.0334 BC3 1.4633 FSP -611
                                                                                               FLIGHT TIME 144.00
                                                                                                                                                                            ARRIVAL DATE NOV 26 1967
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 415.301
     RL 152.10 LAL -.00 LOL 282.31 VL 26.807 GAL -4.10 A7L 98.61 MCA 194.96 SMA 129.29 ECC .18994 INC 8.6144 V1 29.29 RP 107.50 LAP 2.22 LOP 117.11 VP 37.983 GAP 5.10 A7P 81.67 TAL 198.02 TAP 32.97 RCA 104.73 APO 153.85 V2 35.252 RC 121.426 GL -49.35 GP 42.21 ZAL 111.30 ZAP 127.42 ETS 45.16 ZAE 120.70 ETE 146.81 ZAC 96.88 ETC 27.54 CLP-145.14
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 27.863 VHL 5.279 OLA -36.92 RAL 139.26 RAD 6568.1 VEL 12.216 PTH 2.20 VHP 5.645 DPA 52.07 RAP 177.56 ECC 1.4586
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
65.25 4 52 21 1529.56 22.50 13.81 15.79 120.08 5 17 51 929.6 26.32 6.50
114.75 10 45 3 5705.17 22.51 267.95 15.80 120.07 12 20 8 5105.2 26.33 260.65
65.25 4 52 21 1529.56 22.50 13.81 15.79 120.08 5 17 51 929.6 26.32 6.50
65.25 4 52 21 1529.56 22.50 13.81 15.79 120.08 5 17 51 929.6 26.32 6.50
114.75 10 45 3 5705.17 22.51 267.95 15.80 120.07 12 20 8 5105.2 26.33 260.65
                           4 52 21 1529.56
10 45 3 5705.17
                                                                                                                            120.08 5 17 51
120.07 12 20 8
                                                                   22.50
                                                                                      13.81
                                                                                                        15.79
                                                                                                                                                                     929.6
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                        10 45 3
                                                                   22.51
                                                                                     267.95
                                                                                                         15.80
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                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                        SGT 3986.9 SGR 914.0 SG3 299.3
RRT -.8957 RRF -.9791 RTF ..9569
SG8 4090.4 R23 .2548 R13 -.9623
SG1 4070.9 SG2 398.1 TMA 168.28
                                                                                                                                                            ST 2483.7 SR 778.4 SS 1244.5
CRT -.9763 CRS .9979 CST -.9883
     TOE-2.1825 TRA-1.8255 TC3-1.9274 BAU .7336
     RDE .7144 RRA .1645 RC3 .4065 FAU .06102
     FOE-2.3231 FRA -.9423 FC3-1.8961 BSP 12694
BOE 2.2964 BRA 1.8329 BC3 1.9698 FSP -971
                                                                                                                                                            LSA 2876.6 MSA 220.1 SSA 3.7
                                                                                                                                                             EL1 2597.8 EL2 161.0 ALF 162.92
                                                                                              FLIGHT TIME 146.00
                                                                                                                                                                           ARRIVAL DATE NOV 28 1967
LAUNCH DATE JUL 5 1967
                                                                                              DISTANCE 421.344
     RL 152.10 LAL -.00 LOL 282.31 VL 26.764 GAL -3.66 AZL 97.57 MCA 198.19 SMA 129.00 ECC .19092 INC 7.5720 V1 29.291
RP 107.49 LAP 2.36 LOP 120.35 VP 37.955 GAP 5.41 AZP 82.80 TAL 196.80 TAP 34.99 RCA 104.38 APO 153.63 VZ 35.255
RC 123.648 GL -46.43 GP 35.79 ZAL 111.80 ZAP 132.54 ETS 42.34 ZAE 124.10 ETE 150.36 ZAC 98.27 ETC 25.20 CLP-146.45
    PLANETOCENTRIC CONIC
     C3 23.587 VHL 4.857 OLA -34.75 RAL 141.87 RAD 6568.0 VEL 12.040 PTH 2.15 VHP 5.356 OPA 45.80 RAP 174.39 ECC 1.3882
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                         117.11 5 47 21
117.10 12 10 4
117.11 5 47 21
117.10 12 10 4
                           5 23 35 1426.24
10 34 36 5726.20
                                                                                                     14.99
                                                                                                                                             5 47 21
                                                                                                                                                                   826.2
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          69.01
                                                                  22.58
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        110.99
                        10 34 36
                                                                   22.50
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                          5 23 35 1426.24
10 34 36 5726.20
                                                                   22.58
          69.01
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                        10 34 36
                                                                   22.59
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        110.99
                           3 23 35 1426.24
                                                                   22.58
                                                                                                                                            5 47 21
                                                                                       5.61
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                                                                                                                            117.11
                                                                                                                                                                   826.2
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          69.01
                                                                                                                            117.11 5 47 21
                                         5726.20
                        10 34 36
                                                                                    269.67
                                                                                                                                                                  5126.2
        110.99
                                                                  22.59
                                                                                                         15.00
                                                                                                                                                                                       26.03
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         SCT 4185.2 SCR 816.8 SC3 338.8
RRT -.8977 RRF -.9758 RTF ..9568
SC8 4264.1 R23 .2511 R13 -.9606
SC1 4249.4 SC2 354.4 THA 169.99
                                                                                                                                                            ST 2517.3 SR 686.6 SS 1282.7
CRT -.9766 CRS .9982 CST -.9877
LSA 2899.4 MSA 217.1 SSA 4.7
     TOE-2.0392 TRA-1.7128 TC3-2.4544 BAU .7851
     ROE .5800 RRA .1290 RC3 .4178 FAU .08978
FDE-2.3254 FRA -.8990 FC3-2.5612 BSP 13862
     BOE 2.1201 BRA 1.7176 BC3 2.4897 FSP -1180
                                                                                                                                                             EL1 2605.4 EL2 142.6 ALF 165.04
LAUNCH DATE JUL 5 1967
                                                                                              FLIGHT TIME 148.00
                                                                                                                                                                           ARRIVAL DATE NOV 30 1967
                                                                                             DISTANCE 427.364
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 26.721 GAL -3.61 A7L 96.84 MCA 201.43 SMA 128.71 ECC .19198 INC 6.8355 V1 29.291
RP 107.48 LAP 2.49 LOP 123.60 VP 37.927 GAP 5.72 AZP 83.63 TAL 195.54 TAP 36.97 RCA 104.00 APO 153.42 V2 35.257
RC 125.861 GL -44.08 GP 30.74 ZAL 111.65 ZAP 136.75 ETS 39.97 ZAE 126.30 ETE 153.82 ZAC 98.91 ETC 23.26 CLP-147.93
   PLANETOCENTRIC CONIC
    C3 20.820 VHL 4.563 DLA -33.16 RAL 144.43 RAD 6567.8 VEL 11.925 PTH 2.12 VHP 5.229 DPA 40.67 RAP 172.84 ECC 1.3426 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.97 5 51 48 1341.05 22.52 358.94 15.05 115.02 6 14 9 741.0 25.69 351.32 108.03 10 26 52 5750.94 22.53 271.57 15.05 115.01 12 2 43 5150.9 25.71 263.94 71.97 5 51 48 1341.05 22.52 358.94 15.05 115.02 6 14 9 741.0 25.69 351.32 108.03 10 26 52 5750.94 22.53 271.57 15.05 115.01 12 2 43 5150.9 25.71 263.94 108.03 10 26 52 5750.94 22.53 271.57 15.05 115.01 12 2 43 5150.9 25.71 263.94 110.00 9 34 53 819.53 16.65 309.70 11.66 120.14 9.46 13 10 5 20.43 204.72
                                                                                                                           115.01 12 2 45
120.14 9 46 13
                                                                                                                                                                                                        295.72
        110.00
                          9 35 53
                                              619.53
                                                                  16.95
                                                                                    302.70
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                                                                                                                            109.99 13 13 58
                        11 41 58 5520.46
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        110.00
                                                                  20.33
                                                                                    256.37
                                                                                                        17.71
                                                                                                                                                                                       30.78
                                                                                                                                                                                                        248.03
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         #ID-COUNSE EXECUTION ACCURACY

SGT 4173.2 SGR 663.5 SG3 335.8

RRT -.8698 RRF -.9599 RTF ..9489

SGB 4225.6 R23 .2625 R13 -.9518

SG1 4213.2 SG2 324.2 THA 172.08
                                                                                                                                                           ST 2462.2 SR 575.8 SS 1224.4

CRT -.9740 CRS ..9983 CST -.9855

LSA 2801.1 MSA 216.1 SSA 5.7

EL1 2525.4 EL2 127.1 ALF 167.13
     TOE-1.8808 TRA-1.5375 TC3-2.7978 BAU
                                                                       .7846
    RDE .4578 RRA .0729 RC3 .3426 FAU .06873
FDE-2.1433 FRA -.6872 FC3-2.8579 89P 12868
80E 1.9357 BRA 1.5393 BC3 2.8187 FSP -1059
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ARRIVAL DATE DEC 2 1967

LAUNCH DATE JUL 5 1967

DISTANCE 433.404 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 26.676 GAL -3.35 AZL 96.28 MCA 204.67 SMA 128.42 ECC .19316 INC 6.2845 VI 29.291
RP 107.48 LAP 2.62 LOP 126.85 VP 37.897 GAP 6.02 AZP 84.29 TAL 194.27 TAP 38.93 RCA 103.61 APO 153.23 V2 35.258
RC 128.066 GL -42.13 GP 26.74 ZAL 111.04 ZAP 140.28 ETS 37.94 ZAE 127.69 ETE 156.94 ZAC 99.00 ETC 21.61 CLP-149.46 PLANETOCENTRIC CONIC C3 18.884 VML 4.346 DLA -32.07 RAL 146.98 RAD 6567.8 VEL 11.843 PTM 2.10 VMP 5.193 DPA 36.42 RAP 172.22 ECC 1.3108 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.52 6 38 12 22.45 15.69 671.2 6 17 1 1271.16 10 21 59 5774.46 6 17 1 1271.16 353.56 74.28 11 58 13 5174.5 25.45 265.63 22.47 273.34 15.70 113.51 105.72 353.56 15.69 113.52 6 38 12 671.2 25.44 345.85 22.45 74.28 113.51 11 58 13 121.20 9 29 55 105.95 13 49 49 15.70 5174.5 25.45 265.63 22.47 273.34 10 21 59 5774.46 105.72 83.2 18.77 299.50 14.74 306.31 11.48 110.00 9 18 32 663.19 5410.43 4810.4 32.52 239.93 30.64 18.97 248.64 110.00 12 19 39 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2489.4 SR 512.8 SS 1211.0 CRT -.9744 CRS ..9986 CST -.9848 LSA 2807.3 MSA 213.1 SSA 6.7 SGT 4294.0 SGR 576.5 SG3 341.5 RRT -.8498 RRF -.9403 RTF .9468 TDE-1.8181 TRA-1.4276 TC3-3.2049 BAU .8125 RDE .3885 RRA .0494 RC3 .2912 FAU .06950 FOE-2.0365 FRA -.5560 FC3-3.1861 BSP 13286 BOE 1.8592 BRA 1.4284 BC3 3.2181 FSP -1088 SGB 4332.5 R23 .2499 R13 -.9488 SG1 4322.0 SG2 301.9 THA 173.46 EL1 2539.2 ELZ 113.1 ALF 168.63 ARRIVAL DATE DEC 4 1967 FLIGHT TIME 152.00 LAUNCH DATE JUL 5 1967 HELIOCENTRIC CONIC DISTANCE 439.400 RL 152.10 LAL -.00 LOL 282.31 VL 26.632 GAL -3.08 A7L 95.85 MCA 207.91 SMA 128.12 ECC .19446 INC 5.8546 V1 29.291
RP 107.48 LAP 2.74 LOP 130.10 VP 37.866 GAP 6.33 A7P 84.82 TAL 192.97 TAP 40.88 RCA 103.21 APO 153.04 V2 35.259
RC 130.261 GL -40.49 GP 23.52 ZAL 110.05 ZAP 143.30 ETS 36.21 ZAE 128.55 ETE 159.66 ZAC 98.65 ETC 20.19 CLP-150.98 PLANETOCENTRIC CONIC 2.08 WHP 5.213 OPA 32.84 RAP 172.21 ECC 1.2872 C3 17.453 WHL 4.178 DLA -31.35 RAL 149.55 RAD 6567.7 VEL 11.783 PTH 2.08 WHP 5.215 DPA 32.84 RAP 172.21 ECC 1.2872 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 16.79 25.30 6 39 1 1216.01 10 20 31 5792.79 22.45 349.38 112.45 6 59 17 616.0 75.99 16.79 16.79 16.79 11 57 4 274.73 112.44 5192.8 104.01 22.46 10 20 31 5700 T 341.61 112.45 6 59 17 616.0 349.36 75.99 22.45 11 57 4 274.73 112.44 5192.8 25.31 266.97 104.01 22.46 301.13 9 26 16 111.1 110.00 9 14 25 13.75 307.86 12.13 121.61 9 26 16 103.37 14 13 23 121.61 33.27 110.00 243.93 12 44 17 5345.72 31.76 201.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4409.9 SGR 508.6 SG3 540.9 RRT -.8215 RRF -.9112 RTF ..9449 SGB 4439.1 R23 .2308 R13 -.9464 SG1 4429.7 SG2 288.7 THA 174.56 ST 2527.8 SR 466.3 SS 1194.8 CRT -.9757 CRS .9989 CST -.9843 TDE-1.7827 TRA-1.3204 TC3-3.5855 BAU .8384 RDE .3398 RRA .0336 RC3 .2352 FAU .06873 FDE-1.9277 FRA -.4241 FC3-3.4095 BSP 13666 BDE 1.8147 BRA 1.3208 BC3 3.5932 FSP -1092 LSA 2826.8 MSA 209.5 SSA 7.8 EL1 2568.5 EL2 100.5 ALF 169.78 ARRIVAL DATE DEC 5 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 5 1967 DISTANCE 445.397 RL 152.10 LAL -.00 LOL 282.31 VL 26.586 GAL -2.80 AZL 95.51 HCA 211.16 SHA 127.83 ECC .19587 INC 5.5076 V1 29.291
RP 107.48 LAP 2.85 LOP 133.35 VP 37.834 GAP 6.64 AZP 85.28 TAL 191.64 TAP 42:80 RCA 102.79 APO 152.86 V2 35.259
RC 132.447 GL -39.07 GP 20.90 ZAL 108.74 ZAP 145.93 ETS 34.74 ZAE 129.06 ETE 161.99 ZAC 97.97 ETC 18.96 CLP-152.47 PLANETOCENTRIC CONIC C3 16.355 VHL 4.044 OLA -30.88 RAL 152.18 RAD 6567.7 VEL 11.736 PTH 2.07 VMP 5.267 OPA 29.78 RAP 172.62 ECC 1.2692 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.70 25.27 1175.47 18.26 7 17 13 575.5 6 57 37 22.52 346.35 77.13 7 17 13 5203.4 25.28 22.54 275.56 18.27 111.69 102.87 10 22 54 5803.42 575.5 25.27 338.55 6 57 37 1175.47 7 17 13 346.35 18.26 111.70 77.13 22.52 11 59 37 25.28 5203.4 22.54 275.56 18.27 111.69 10 22 54 5803.42 102.87 301.76 17.47 9 29 1 14 31 7 122.0 13.42 121.76 110.00 9 16 59 722.01 13.36 308.47 231.89 4704.9 33.63 240.90 21.58 101.67 110.00 13 2 42 5304.69 32.36 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2573.7 SR #432.5 SS 1177.2 CRT -.9780 CRS ..9993 CST -.9841 LSA 2855.6 MSA 205.4 SSA 8.9 SCT 4516.8 SGR 457.6 SG3 335.9 MRT - 7839 MRF - .8713 RTF .9430 SGB 4539.9 R23 .2080 R13 - .9441 SG1 4531.0 SG2 283.2 THA 175.44 TOE-1.7654 TRA-1.2106 TC3-3.9394 BAU .8622 ROE .3051 RRA .0235 RC3 .1791 FAU .06694 FOE-1.8220 FRA -.2943 FC3-3.5432 BSP 14006 BDE 1.7915 BRA 1.2108 BC3 3.9434 FSP -1078 EL1 2608.3 EL2 89.0 ALF 170.66 ARRIVAL DATE DEC 8 1967 FLIGHT TIME 156.00 LAUNCH DATE JUL 5 1967 **DISTANCE 451.369** HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 282.31 VL 26.541 GAL -2.51 AZL 95.22 MCA 214.40 SMA 127.53 ECC .19740 INC 5.2202 V1 29.291
RP 107.48 LAP 2.95 LOP 136.60 VP 37.801 GAP 6.94 AZP 85.69 TAL 190.30 TAP 44.70 RCA 102.36 APO 152.70 V2 35.258
RC 134.624 GL -37.80 GP 18.75 ZAL 107.17 ZAP 148.25 ETS 33.51 ZAE 129.34 ETE 163.97 ZAC 97.02 ETC 17.89 CLP-153.90 PLANETOCENTRIC CONIC C3 15.493 VHL 3.936 DLA -30.65 RAL 154.89 RAD 6567.6 VEL 11.699 PTH 2.06 VHP 5.346 DPA 27.10 RAP 173.33 ECC 1.2550 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 102.24 10 29 10 5805.49 22.66 275.78 20.06 111.19 12 5 55 5205.5 25.35 267.94 111.19 12 5 55 111.20 7 32 6 25.34 336.58 22.67 344.42 20.06 548.8 77.76 7 12 57 1148.84 10 29 10 5805.49 111.19 12 5 55 121.77 9 35 58 100.61 14 45 22 5205.5 267.94 25.35 102.24 22.68 275.78 20.06 301.79 17.45 110.00 9 23 55 722.42 13.35 308.49 15.18 122.4 33.60 229.96 13 17 22 5279.90 239.02 23.26 4679.9 32.69 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2629.2 SR 408.9 SS 1161.4

CRT -.9812 CRS ..9996 CST -.9841

LSA 2896.3 MSA 200.6 SSA 10.0

EL1 2659.7 EL2 78.0 ALF 171.32 SGT 4621.4 SGR 421.8 SG3 328.7 RRT -.7390 RRF -.8217 RTF .9415 SGB 4640.6 R23 .1831 R13 -.9422 TDE-1.7638 TRA-1.0986 TC3-4.2720 BAU .8853 RDE .2808 RRA .0178 RC3 .1266 FAU .06462 FDE-1.7253 FRA -.1732 FC3-3.6108 BSP 14347

FLIGHT TIME 150.00

SG1 4631.9 SG2 283.5 THA 176.13

BOE 1.7860 BRA 1.0987 8C3 4.2739 FSP -1057

ARRIVAL DATE DEC 10 1967

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LAUNCH DATE JUL 5 1967

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DISTANCE 457.325
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 26.495 GAL -2.20 AZL 94.98 MCA 217.64 SMA 127.23 ECC .19906 INC 4.9767 VI 29.291
RP 107.48 LAP 3.04 LOP 139.85 VP 37.768 GAP 7.25 AZP 86.06 TAL 188.93 TAP 46.58 RCA 101.91 APO 152.56 VZ 35.256
RC 136.791 GL -36.64 GP 16.96 ZAL 105.36 ZAP 150.34 ETS 32.48 ZAE 129.48 ETE 165.64 ZAC 95.86 ETC 16.94 CLP-155.29
     PLANETOCENTRIC CONIC
      C3 14.810 VHL 3.848 DLA -30.59 RAL 157,70 RAD 6567.6 VEL 11.670 PTH 2.05 VHP 5.442 DPA 24.73 RAP 174.27 ECC 1.2437
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T7,92 7 25 19 1135.00 22.87 343.46 22.15 110.88 7 44 14 535.0 25.50 335.60 10.20 10.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11.20 11
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    DIFFERENTIAL CORRECTIONS
                                                                                                 SCT 4712.6 SGR 397.4 SC3 319.2
RRT -.6669 RRF -.7637 RTF .9397
SG8 4729.3 R23 .1593 R13 -.9402
SG1 4720.5 SG2 288.3 THA 176.67
                                                                                                                                                                          ST 2686.9 SR 392.2 SS 1143.5

CRT -.9848 CRS ..9995 CST -.9841

LSA 2939.8 MSA 195.3 SSA 11.2

EL1 2714.5 EL2 67.3 ALF 171.82
      TOE-1.7708 TRA -.9789 TC3-4.5736 BAU .9057
      RDE .2634 RRA .0147 RC3 .0774 FAU .06179
FDE-1.6326 FRA -.0559 FC3-3.6118 BSP 14604
BDE 1.7902 BRA '.9790 BC3 4.5743 FSP -1022
                                                                                                                                                                                            APRIVAL DATE DEC 12 1967
                                                                                                        FLIGHT TIME 160.00
    HELIOCENTRIC CONIC
                                                                                                        DISTANCE 463.263
     RL 152.10 LAL -.00 LOL 282.31 VL 26.449 GAL -1.89 AZL 94.77 MCA 220.89 SMA 126.94 ECC .20086 INC 4.7666 V1 29.291
RP 107.49 LAP 3.12 LOP 143.10 VP 37.733 GAP 7.55 AZP 86.39 TAL 187.55 TAP 48.44 RCA 101.44 APO 152.43 V2 35.254
RC 138.949 GL -35.56 GP 15.45 ZAL 103.34 ZAP 152.23 ETS 31.64 ZAE 129.52 ETE 167.07 ZAC 94.53 ETC 16.11 CLP-156.63
    PLANETOCENTRIC CONIC
      C3 14.271 VHL 3.778 DLA -30.66 RAL 160.61 RAD 6567.6 VEL 11.647 PTH 2.04 VHP 5.551 DPA 22.59 RAP 175.40 ECC 1.2349 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
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                                                                                                SGT 4809.6 SGR 383.8 SG3 310.0
RRT -.6350 RRF -.7037 RTF .9366
SG8 4824.9 R23 .1364 R13 -.9390
SG1 4815.8 SG2 296.1 THA 177.09
                                                                                                                                                                          ST 2755.8 SR 382.2 SS 1130.4
CRT -.9887 CRS ..9990 CST -.9845
      TDE-1.7908 TRA -.8562 TC3-4.8588 BAU .9270
     ROE .2519 RRA .0142 RC3 .0548 FAU .05902
FOE-1.5530 FRA .0494 FC3-3.5802 BSP 14931
BOE 1.8085 BRA .8563 BC3 4.8590 FSP -994
                                                                                                                                                                           LSA 2997.1 MSA 189.4 SSA 12.3
                                                                                                                                                                           EL1 2781.6 EL2 56.7 ALF 172.19
                                                                                                                                                                                           ARRIVAL DATE DEC 14 1967
                                                                                                        FLIGHT TIME 162.00
LAUNCH DATE JUL 5 1967
                                                                                                       DISTANCE 469.183
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 26.403 GAL -1.56 AZL 94.58 MCA 224.13 SMA 126.64 ECC .20280 INC 4.5824 VI 29.291
RP 107.50 LAP 3.19 LOP 146.35 VP 37.698 GAP 7.86 AZP 86.71 TAL 186.15 TAP 50.28 RCA 100.96 APO 152.32 V2 35.251
      RC 141.095 GL -34.51 GP 14.16 ZAL 101.13 ZAP 153.96 ETS 30.97 ZAE 129.49 ETE 168.28 ZAC 93.05 ETC 15.37 CLP-157.92
    PLANETOCENTRIC CONIC
      C3 13.853 VML 3.722 DLA -30.84 RAL 163.65 RAD 6567.5 VEL 11.629 PTH 2.04 VMP 5.670 OPA 20.63 RAP 176.67 ECC 1.2280
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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    DIFFERENTIAL CORRECTIONS
                                                                                                 SCT 4904.2 SGR 377.9 SG3 300.6
RRT -.5854 RRF -.6452 RTF .9379
SG8 4918.7 R23 .1160 R13 -.9382
SG1 4909.2 SG2 306.0 THA 177.41
                                                                                                                                                                           ST 2829.9 SR 377.0 SS 1118.6

CRT -.9923 CRS .9978 CST -.9850

LSA 3060.7 MSA 183.2 SSA 13.4
      TDE-1.8192 TRA -.7272 TC3-5.1169 BAU .9477
      RDE .2448 RRA .0152 RC3 -.0021 FAU .05620
FDE-1.4816 FRA .1464 FC3-3.5119 89P 15261
                                                                                                                                                                           EL1 2854.5 EL2 46.2 ALF 172.47
      BOE 1.8356 BRA .7274 BC3 5.1169 FSP = -966
                                                                                                                                                                                            ARRIVAL DATE DEC 16 1967
                                                                                                        FLIGHT TIME 164.00
LAUNCH DATE JUL 5 1967
                                                                                                       DISTANCE 475.084
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 26.357 GAL -1.22 ATL 94.42 HCA 227.38 SMA 126.35 ECC .20490 INC 4.4185 V1 29.291
RP 107.51 LAP 3.23 LOP 149.60 VP 37.682 GAP 8.17 AZP 87.00 TAL 184.73 TAP 52.11 RCA 100.46 APO 152.24 V2 35.247
RC 143.232 GL -33.48 GP 13.06 ZAL 98.76 ZAP 155.56 ETS 30.45 ZAE 129.44 ETE 169.32 ZAC 91.47 ETC 14.72 CLP-159.16
     PLANETOCENTRIC CONIC
                                                                                                                                            2.04 WHP 5.798 OPA 18.82 RAP 178.06 ECC 1.2229
      C3 13.544 VHL 3.660 DLA -31.10 RAL 166.80 RAD 6567.5 VEL 11.616 PTH
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.56 7 51 56 1145.87 25.71 344.63 30.04 110.73 8 11 4 545.9 26.32 336.70 103.42 11 25 10 5748.82 23.73 271.96 30.04 110.71 13 0 59 5148.8 26.33 264.02
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    DIFFERENTIAL CORRECTIONS
                                                                                                SGT 4993.1 SGR 377.1 SG3 290.9
RRT -.5404 RRF -.5910 RTF .9373
SGB 5007.3 R23 .0980 R13 -.9376
SG1 4997.3 SG2 317.0 THA 177.65
                                                                                                                                                                          ST 2904.5 SR 375.1 SS 1105.6
CRT -.9954 CRS .9959 CST -.9856
LSA 3125.4 MSA 176.8 SSA 14.5
EL1 2928.4 EL2 35.8 ALF 172.67
      TOE-1.8526 TRA -.5902 TC3-5.3421 BAU
                                                                              .9673
      ROE .2409 RRA .0170 RC3 -.0336 FAU .05336
      FDE-1.4146 FRA .2374 FC3-3.4107 BSP 15562
BDE 1.8682 BRA .5905 BC3 5.3422 FSP -936
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FLIGHT TIME 158.00

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LAUNCH DATE JUL 5 1967
                                                                                       FLIGHT TIME 166.00
                                                                                                                                                           ARRIVAL DATE DEC 18 1967
     HELIOCENTRIC CONIC
                                                                                       DISTANCE 480.965
       RL 152.10 LAL -.00 LOL 282.31 VL 26.310 GAL -.86 AZL 94.27 MCA 230.62 SMA 126.05 ECC .20716 INC 4.2709 V1 29.291
RP 107.53 LAP 3.30 LOP 152.85 VP 37.625 GAP 8.49 AZP 87.29 TAL 183.30 TAP 53.92 RCA 99.94 APO 152.17 V2 35.243
RC 145.356 GL -32.45 GP 12.11 ZAL 96.23 ZAP 157.05 ETS 30.09 ZAE 129.36 ETE 170.21 ZAC 89.78 ETC 14.13 CLP-160.36
      PLANETOCENTRIC CONIC
       C3 13.335 VHL 3.652 DLA -31.40 RAL 170.09 RAD 6567.5 VEL 11.607 PTH
                                                                                                                     2.03 VHP 5.935 OPA 17.12 RAP 179.54 ECC 1.2195
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
           75.82
                          7 59 44
                                          1159.27
                                                              24.02
                                                                              345.77
                                                                                                33.18
                                                                                                                110.86
                                                                                                                                8 19 3
                                                                                                                                                     559.3
                                                                                                                                                                                   -337.82
                                                                                                                                                                      26.64
          104.18
                        11 43 36 5728.66
                                                                                                                 110.85 13 19 4
                                                              24.03
                                                                              270.56
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110.85 13 19 4
           75.82
                          7 59 44
                                          1159.27
                                                              24.02
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                                                                                                33.18
                                                                                                                                                     559.3
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                        11 43 36
                                        5728.66
          104.18
                                                              24.03
                                                                              270.56
                                                                                                33.19
                                                                                                                                                   5128.7
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                                                                                                                 120.61 10 48 20
101.01 15 33 6
                        10 37 34
          110.00
                                            646.62
                                                              16.02
                                                                              304.25
                                                                                                29.08
                                                                                                                                                     46.6
                                                                                                                                                                      19.96
                                                                                                                                                                                      297.34
                                       5289.31
                                                                              239.73
          110.00
                       14 4 57
                                                                                                35.95
                                                                                                                                                   4689.3
                                                              32.57
                                                                                                                                                                      33.74
                                                                                                                                                                                      230.69
     DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                  RIG-COUNSE EXECUTION ACCORDER

807-5015 RRF - .5436 RTF ..9369

SGB 5091.3 R23 .0830 R13 -.9371

SGI 5080.6 SGZ 328.7 THA 177.84
       TOE-1.8905 TRA -.4444 TC3-5.5298 BAU .9859
                                                                                                                                              ST 2978.8 SR 376.2 SS 1092.7

CRT -.9975 CRS .9931 CST -.9862

LSA 3190.5 MSA 170.6 SSA 15.6
       ROE .2397 RRA .0191 RC3 -.0597 FAU .03053
FOE-1.3528 FRA .3234 FC3-3.2803 89P 15866
BOE 1.9096 BRA .4448 BC3 5.5301 FSP -908
                                                                                                                                              EL1 3002.3 EL2 26.1 ALF 172.82
 LAUNCH DATE JUL 5 1967
                                                                                       FLIGHT TIME 168.00
                                                                                                                                                           ARRIVAL DATE DEC 20 1967
    HELIOCENTRIC CONIC
                                                                                       DISTANCE 486.827
      RL 152:10 LAL -.00 LOL 282:31 VL 26:264 GAL -.49 AZL 94:14 MCA 233:86 SMA 125:76 ECC .20959 INC 4:1365 VI 29:291
RP 107:54 LAP 3:34 LOP 156:10 VP 37:588 GAP 8:80 AZP 87:56 TAL 181:85 TAP 35:72 RCA 99:40 APO 152:12 V2 35:237
RC 147:469 GL -31:40 GP 11:29 ZAL 93:56 ZAP 158:45 ETS 29:86 ZAE 129:27 ETE 170:97 ZAC 88:00 ETC 13:61 CLP-161:52
     PLANETOCENTRIC CONIC
       C3 13.224 VHL 3.636 OLA -31.74 RAL 173.49 RAD 6567.5 VEL 11.602 PTH
      C5 13.224 WHL 3.636 DLA -31.74 RAL 173.49 RAD 6567.5 VEL 11.602 PTH 2.03 VMP 6.078 OPA 15.52 RAP 181.11 ECC 1.2176 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.03 8 7 93 1174.51 24.51 347.04 36.56 111.06 8 27 27 574.5 26.95 339.08 104.97 12 2 37 5709.78 24.32 269.25 36.56 111.05 13 37 47 5109.8 26.96 261.29 75.03 8 7 93 1174.51 24.31 347.04 36.56 111.06 8 27 27 574.5 26.95 339.08 104.97 12 2 37 5709.78 24.32 269.25 36.56 111.05 13 37 47 5109.8 26.96 261.29 110.00 10 57 30 624.29 16.79 302.97 32.71 120.22 11 7 54 24.3 20.68 296.01 110.00 14 12 11 5308.00 32.32 241.13 39.24 101.80 15 40 39 4708.0 33.60 232.13
                                                                                                                     2.03 WHP 6.078 OPA
                                                                                                                                                     15.52 RAP 181.11 ECC 1.2176
     DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                 967 5150.2 SCR 385.8 SG3 271.1
RRT -.4882 RRF -.5029 RTF .9366
SG8 5164.6 R23 .0706 R13 -.9368
BGI 5153.4 SG2 340.7 THA 177.98
       TOE-1.9290 TRA -.2885 TC3-5.8694 BAU 1.0024
                                                                                                                                              ST 3046.0 SR 379.4 SS 1076.4
CRT -.9987 CRS .9893 CST -.9868
      ROE .2407 RRA .0213 RC3 -.0611 FAU .04762
F0E-1.2924 FRA .4043 FC3-3.1175 83F 16121
80E 1.9439 BRA .2892 BC3 5.6700 FSP -878
                                                                                                                                              LSA 3248.6 MSA 164.6 SSA 16.7
                                                                                                                                              EL1 3069.5 EL2 18.9 ALF 172.91
FLAUNCH DATE JUL - 5 1967
                                                                                      FLIGHT TIME 170.00
                                                                                                                                                          ARRIVAL DATE DEC 22 1967
     HELIOCENTRIC CONIC
                                                                                      DISTANCE 492.666
      RL 152.10 LAL -.00 LOL 282.31 VL 26.218 GAL -.11 AZL 94.01 MCA 237.11 SMA 125.48 ECC .21221 INC 4.0127 V1 29.291
RP 107.56 LAP 3.37 LOP 159.35 VP 37.550 GAP 9.13 AZP 87.82 TAL 180.40 TAP 57.50 RCA 98.85 APO 152.10 V2 35.231
RC 149.570 GL -30.32 GP 10.57 ZAL 90.78 ZAP 159.77 ETS 29.78 ZAE 129.17 ETE 171.63 ZAC 86.16 ETC 13.14 CLP-162.65
     PLANETOCENTRIC CONIC
      C3 13.209 VML 3.634 OLA -32.08 RAL-177.01 RAD 6567.5 VEL 11.602 PTH 2.03 VMP 6.228 DPA 13.99 RAP 182.75 ECC 1.2174
      LNCH AZMTH LNCH TIME L-J TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              8 16 42 1190.55
12 21 51 5693.26
8 16 42 1190.55
12 21 51 5693.26
                                                                                            40.17
          74.26
                                                             24.56
                                                                             348.37
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         105.74
                                                              24.57
                                                                             268.11
                                                                                                40.17
                                                                                                                                                   5093.3
                                                                                                                                                                      27.24
          74.26
                                                              24.56
                                                                             348.37
                                                                                                40.17
                                                                                                                                                    590.5
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111.30 13 56 45
119.81 11 28 30
102.72 15 48 6
         105.74
                                                             24.57
                                                                             260.11
                                                                                                40.17
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                                                                                                                                                                     27.24
         110.00
                        11 18 28
                                         601.79
                                                              17.56
                                                                             301.66
                                                                                                36.58
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                                                                                                                                                                     21.39
                       14 19 16 5330.01
         110.00
                                                             32.00
                                                                             242.77
                                                                                                42.75
                                                                                                                                                   4730.0
                                                                                                                                                                      33.42
    DIFFERENTIAL CORRECTIONS
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                 SCT 5247.0 SCR 394.0 SC3 263.7
RRT -.4477 RRF -.4740 RTF .9587
SCB 5261.7 R23 .0580 R13 -.9388
SCI 5249.9 SCZ 352.1 THA 178.07
                                                                                                                                             ST 3120.5 SR 385.7 SS 1066.3
CRT -.9989 CRS .9852 CST -.9877
      TOE-1.9772 TRA -.1303 TC3-5.7970 BAU 1.0238
      RDE .2445 RRA .0240 RC3 -.0937 FAU .04545 FDE-1.2451 FRA .4718 FC3-2.9791 BBP 16454
                                                                                                                                              LSA 3316.3 MSA 158.0 SSA 17.7
      BOE 1.9923 BRA .1325 BC3 5.7978 FSP -858
                                                                                                                                              EL1 3144.2 EL2 18.1 ALF 172.96
 LAUNCH DATE JUL 5 1967
                                                                                      FLIGHT TIME 172.00
                                                                                                                                                           ARRIVAL DATE DEC 24 1967
    HELIOCENTRIC CONIC
                                                                                      DISTANCE 498.483
     RL 152.10 LAL -.00 LOL 282.31 VL 26.172 GAL .29 A7L 93.90 MCA 240.35 SMA 125.19 ECC .21503 INC 3.8978 V1 29.291
RP 107.58 LAP 3.39 LOP 162.60 VP 37.512 GAP 9.46 A7P 88.07 TAL 178.93 TAP 59.28 RCA 98.27 APO 152.11 V2 35.225
RC 151.657 GL -29.21 GP 9.93 ZAL 87.90 ZAP 161.02 ETS 29.85 ZAE 129.07 ETE 172.20 ZAC 84.25 ETC 12.73 CLP-163.74
    PLANETOCENTRIC CONIC
      C3 13.293 WHL 3.646 DLA -32.40 RAL 180.63 RAD 6567.5 VEL 11.605 PTH 2.03 WHP 6.386 DPA 12.52 RAP 184.45 ECC 1.2188
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.55 8 26 22 1206.77 24.76 349.69 43.98 111.60 8 46 29 606.8 27.47 341.75 106.45 12 41 4 5679.78 24.78 267.17 43.99 111.58 14 15 43 5079.8 27.48 259.20
                                                                                                              INJ marri.
111.60 8 40 41
441.58 14 15 43
44 29
                                                             24.78
                                                                             267.17
                                                                                               43.99
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                                                                                                                75.55
                         # 26 22 1206.77
                                                             24.76
                                                                             349.69
                                                                                               43.96
                                                                                                                                                     606.8
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         106.45
                       12 41 4
                                        5679.78
                                                             24.78
                                                                             267.17
                                                                                               43.99
                                                                                                                                                   5079.8
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         110.00
                       11 40 6
                                        5868.19
                                                             18.28
                                                                             278.33
                                                                                                40.66
                                                                                                                                                   5268.2
                                                                                                                                                                      22.06
                                                                                                                                                                                     271.23
                        14 26 20
         110.00
                                         5354.40
                                                             31.62
                                                                             244.57
                                                                                                46.46
                                                                                                                                                   4754.4
                                                                                                                                                                      33.16
    DIFFERENTIAL CORRECTIONS
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
     TOE-2.0083 TRA .0505 TC3-5.8161 BAU 1.0338
ROE .2484 RRA .0250 RC3 -.1076 FAU .04218
                                                                                                                                            ST 3158.8 SR 390.7 SS 1035.6

CRT -.9979 CRS .9792 CST -.9878

LSA 3343.4 MSA 154.9 SSA 18.6

EL1 3182.8 EL2 24.9 ALF 172.96
                                                                                 SGT 5287.4 SGR 401.0 SG3 251.8
RRT -.4222 RRF -.4429 RTF .9367
SGB 5302.5 R23 .0502 R13 -.9368
     FOE-1.1775 FRA .9518 FC3-2.7470 BSP 16527
BOE 2.0236 BRA .0564 BC3 5.8171 FSP -811
                                                                                  $61 5290.1 $62 363.3 THA 178.16
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ARRIVAL DATE DEC 26 1967
                                                                                        FLIGHT TIME 174.00
LAUNCH DATE JUL 5 1967
                                                                                       DISTANCE 504.275
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 26.126 GAL .71 ATL 93.79 MCA 243.59 SNA 124.91 ECC .21807 INC 3.7901 V1 29.291
RP 107.60 LAP 3.39 LOP 165.85 VP 37.473 GAP 9.79 ATP 88.31 TAL 177.45 TAP 61.04 RCA 97.67 APO 152.14 V2 35.217
RC 153.730 GL -28.06 GP 9.37 TAL 84.95 TAP 162.20 ETS 30.06 TAE 128.98 ETE 172.70 TAC 82.29 ETC 12.36 CLP-164.80
   PLANETOCENTRIC CONIC
    C3 13.480 VHL 3.671 DLA -32.70 RAL 184.33 RAD 6567.5 VEL 11.613 PTH 2.03 VMP 6.551 DPA 11.11 RAP 186.21 ECC 1.2218
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             47.99
                                                                                                                                  8 57 27
                                                                                                                111.91
                                                             24.90
                                                                              350.96
                         8 37 4 1222.44
          72.92
                                                                                                                   111.89 14 34 25
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                                                                                                  48.00
                                                                              266.49
                                                               24.91
                       12 59 54
                                          5670.18
                                                                                                                                                        622.4
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                                                                                                                                  8 57 27
                                                                               350.96
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          72.92
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                                         1222.44
                                                              24.90
                                                                                                                   111.69 14 34 25
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                                                              24.91
                       12 59 54
                                          5670.18
        107.08
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104.76 16 3 47
                                                                                                                                                       5248.6
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                                                                              277.18
                                                                                                  44.93
                       12 2 3
        110.00
                                          5848.54
                                                              14.93
                                                                                                                                                                          32.90
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                                                                               246.44
                                                                                                  50.35
                       14 34 7 5380.02
        110.00
                                                               31.19
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 3206.1 SR 398.9 SS 1015.7
CRT - 9960 CRS .9731 CST - .9884
                                                                                   SGT 5358.8 SGR 410.1 SG3 243.2
RRT -.4094 RRF -.4249 RTF .9374
     TOE-2.0511 TRA .2333 TC3-5.8232 BAU 1.0496
     RDE .2554 RRA .0262 RC3 -.1132 FAU .03971
                                                                                   SG8 5374.5 R23 .0430 R13 -.9375
SG1 5361.4 SG2 373.9 THA 178.20
                                                                                                                                                 LSA 3383.2 MSA 151.5 SSA 19.4
    FOE-1.1280 FRA .6184 FC3-2.5501 BSP 16797
BDE 2.0669 BRA .2348 BC3 5.8243 FSP -786
                                                                                                                                                  EL1 3230.6 EL2 35.5 ALF 172.94
                                                                                                                                                                ARRIVAL DATE DEC 28 1967
                                                                                        FI I CHT TIME 176.00
LAUNCH DATE JUL 5 1967
                                                                                        DISTANCE 510.041
    RL 152.10 LAL -.00 LOL 282.31 VL 26.080 GAL 1.14 A7L 93.69 MCA 246.82 SMA 124.63 ECC .22133 INC 3.6883 VI 29.291
RP 107.63 LAF 3.39 LOP 169.09 VP 37,434 GAP 10.13 AZP 88.55 TAL 175.97 TAP 62.79 RCA 97.04 APO 152.21 V2 35.210
RC 155.789 GL -26.87 GP 8.87 ZAL 81.94 ZAP 163.33 ETS 30.42 ZAE 128.88 ETE 173.14 ZAC 80.28 ETC 12.03 CLP-165.83
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                                            9.75 RAP 188.01 ECC 1.2267
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.41 8 48 47 1237.43 24.96 352.13 52.17 112.24 9 9 25 637.4 27.75 344.18 107.59 13 18 14 5664.67 24.97 266.09 52.17 112.22 14 52 39 5064.7 27.76 258.14
     C3 13.776 VHL 3.712 OLA -32.95 RAL 188.10 RAD 6567.5 VEL 11.626 PTH
                                                                                                                         2.04 VHP 6.723 OPA
                                                                                                                                                         637.4
                                                                                                                     112.24
                                                                                                                                   9 9 25
                        8 48 47 1237.43
13 18 14 5664.67
                                                                               352.13
                                                                                                   52.17
                                                               24.96
         72.41
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118.67 14 0 52
105.76 16 12 38
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                                                                                                                                                                           27.76
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                                                                                                   52.17
                                                               24.97
                                                                               266.09
        107.59
                                                                                                                                                        5232.7
                                                                                                                                                                           23.13
                                                                               276.24
                                                                                                   49.34
                       12 23 39
                                       5832.67
                                                               19.46
        110.00
                                                                                                                                                                            32.59
                                                                                                                                                       4805.5
                                                                                                   54.41
                                                               30.73
                                                                               248.28
                        14 42 33
                                         5405.47
         110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 3234.4 SR 407.4 SS 989.7
CRT -.9930 CRS .9659 CST -.9887
                                                                                   SGT 5419.9 SGR 418.8 SG3 234.3
RRT -.4001 RRF -.4108 RTF .9379
SGB 5436.0 R23 .0368 R13 -.9380
SGI 5422.5 SG2 383.6 THA 178.22
     TOE-2.0879 TRA .4282 TC3-5.7732 BAU 1.0635
     ROE .2637 RRA .0265 RC3 -.1190 FAU .03723
FOE-1.0758 FRA .6836 FC3-2.3398 85P 17006
80E 2.1045 BRA .4290 BC3 5.7743 FSP -758
                                                                                                                                                  LSA 3403.5 MSA 150.0 SSA 19.9
EL1 3259.6 EL2 47.7 ALF 172.87
                                                                                                                                                                ARRIVAL DATE DEC 30 1967
                                                                                         FLIGHT TIME 178.00
LAUNCH DATE JUL 5 1967
                                                                                       DISTANCE 515.778
     RL 152.10 LAL -.00 LOL 282.31 VL 26.034 GAL 1.60 A7L 93.59 MCA 250.06 SMA 124.35 ECC .22485 INC 3.5914 VI 29.291
RP 107.65 LAP 3.38 LOP 172.33 VP 37.394 GAP 10.49 A7P 88.77 TAL 174.47 TAP 64.54 RCA 96.39 APO 152.31 V2 35.201
RC 157.834 GL -25.64 GP 8.43 7AL 78.90 ZAP 164.42 ETS 30.95 ZAE 128.80 ETE 173.52 ZAC 78.23 ETC 11.75 CLP-166.84
    PLANETOCENTRIC CONIC
      CS 14.189 VHL 3.767 DLA -33.13 RAL 191.90 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 6.904 DPA 8.42 RAP 189.85 ECC 1.2335 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       27.76
                                                                                                                   112.57 9 22 24
112.56 15 10 13
112.57 9 22 24
                                                                                                56.48
                        9 1 33 1251.36
13 35 50 5663.71
                                                               24.93
                                                                               353.19
          72.03
                                                                                                                                                        5063.7
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                                                                                266.00
                                                                                                   56.49
                        13 35 50
                                          5663.71
                                                                24.94
         107.97
                                                                                                                                                                           27.76
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                                                                                                   56.48
                                                                                                                     112.57
                         9 1 33 1251.36
                                                               24.93
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           72.03
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118.45 14 21 19
106.67 16 22 44
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                                                                                                   56.49
                        13 35 50
                                          5663.71
                                                                24.94
         107.97
                                                                                                                                                                                            268.37
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                                                                                                   53.84
                       12 44 17 5822.07
14 52 15 5429.05
                                                                                275.61
                                                                19.80
         110.00
                                                                                                                                                                                            241.32
                                                                                                                                                        4829.0
                                                                                249.97
                                                                                                   58.64
                                                                30.28
         110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5480.7 SGR 427.4 SG3 225.9
RRT -.3955 RRF -.4020 RTF ..9390
SG8 5497.4 R23 .0314 R13 -.9390
SGI 5483.4 SG2 392.4 THA 178.22
                                                                                                                                                  ST 3249.0 SR 416.5 55 962.2
CRT -,9891 CRS .9582 CST -,9891
      TOE-2.1223 TRA .6317 TC3-5.6785 BAU 1.0774
      ROE .2736 RRA .0260 RC3 -.1127 FAU .03494
FOE-1.0260 FRA .7436 FC3-2.1317 89P 17239
                                                                                                                                                  LSA 3410.7 MSA 149.6 SSA 20.3
                                                                                                                                                   EL1 3275.1 EL2 60.7 ALF 172.77
      BOE 2.1399 BRA .6323 BC3 5.6796 FSP -734
                                                                                                                                                                 ARRIVAL DATE JAN 1 1968
                                                                                          FLIGHT TIME 180.00
 LAUNCH DATE JUL 5 1967
      RL 152:10 LAL -.00 LOL 282.31 VL 25.989 GAL 2.07 A7L 93.50 MCA 253.30 SMA 124.07 ECC .22863 INC 3.4984 VI 29.291
RP 107.68 LAP 3.35 LOP 175.58 VP 37.394 GAP 10.85 A7P 88.99 TAL 172.98 TAP 66.27 RCA 95.71 APO 152.44 V2 35.192
RC 159.863 GL -24.39 GP 8.03 ZAL 75.85 ZAP 165.45 ETS 31.67 ZAE 128.71 ETE 173.85 ZAC 76.15 ETC 11.50 CLP-167.83
                                                                                         DISTANCE 521.485
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                                             7.13 RAP 191.72 ECC 1.2424
      C3 14.729 VHL 3.838 DLA -33.25 RAL 195.71 RAD 6567.6 VEL 11.667 PTH 2.05 VHP 7.093 DPA
      C3 14.729 VHL 3.838 DLA -33.25 RAL 195.71 RAD 6567.6 VEL 11.667 PTH 2.05 VHP 7.093 DPA 7.13 RAP 191.72 ECC 1.2424

LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 11.71 PM 9 15 15 1264.28 24.79 354.13 60.91 112.90 9 36 20 664.3 27.67 346.22 71.79 9 15 15 1264.28 24.79 354.13 60.91 112.89 15 27 0 5067.4 27.68 258.32 108.21 13 52 33 5667.36 24.80 266.22 60.92 112.89 15 27 0 5067.4 27.67 346.22 108.21 13 52 33 5667.36 24.80 266.22 60.92 112.89 15 27 0 5067.4 27.68 258.32 100.00 13 3 13 5818.79 19.91 275.42 58.36 118.38 14 40 12 5218.8 23.54 256.16 10.00 15 3 46 5448.89 29.89 251.38 63.01 107.42 16 34 35 4848.9 31.98 242.79
                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 3246.4 SR 425.7 SS 931.8
CRT -. 9844 CRS .. 9496 CST -. 9893
       TOE-2.1515 TRA .8468 TC3-5.5535 BAU 1.0898

ROE .2850 RRA .0268 RC3 -.1077 FAU .03268

FOE -.9766 FRA .8011 FC3-1.9209 BSP 17455

ROE 2.703 RRA .478 RC1 8 EARS FCB .711
                                                                                     SGT 5535.5 SGR 435.6 SG3 217.6
                                                                                   MRT -.3936 MRF -.3971 RTF .9400
SGB 5532.6 RE3 .0273 R13 -.9401
SGI 5538.2 SGZ 400.3 THA 178.22
                                                                                                                                                   LSA 3400.7 MSA 151.1 SSA 20.4
                                                                                                                                                    EL1 3273.3 EL2 74.3 ALF 172.64
       BOE 2.1703 BRA .8472 BC3 5.5345 FSP -711
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ARRIVAL DATE JAN 3 1968

LAUNCH DATE JUL 5 1967

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DISTANCE 527.159
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 25.944 GAL 2.57 AZL 93.41 MCA 256.53 SMA 123.80 ECC .23271 INC 3.4086 V1 29.291 RP 107.71 LAP 3.31 LOP 178.82 VP 37.313 GAP 11.23 AZP 89.21 TAL 171.48 TAP 68.01 RCA 94.99 APO 152.61 V2 35.183 RC 161.876 GL -23.12 GP 7.67 ZAL 72.80 ZAP 166.45 ETS 32.59 ZAE 128.64 ETE 174.14 ZAC 74.04 ETC 11.29 CLP-168.79
   PLANETOCENTRIC CONIC
     C3 15.408 VHL 3.925 DLA -33.30 RAL 199.51 RAD 6567.6 VEL 11.696 PTH 2.06 VHP 7.291 DPA
                                                                                                                                                                         5.87 RAP 193.63 ECC 1.2536
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     65.42
                        9 29 53 1276.00
14 8 13 5675.83
                                                                                     354.92
                                                                                                                          113.23
                                                                                                                                              9 51 9
                                                                                                                                                                      676.0
                                                                                                                                                                                         27.48
         71.71
                                                                   24.55
                                                                                                                             113.22 15 42 49
                                                                                                                                                                                          27.49
                                                                                                                                                                     5075.8
         108.29
                                                                    24.56
                                                                                     266.77
                                                                                                           65.42
                                                                                                                                                                      676.0
                        9 29 53 1276.00
14 8 13 5675.83
                                                                                                                                              9 51 9
                                                                                                                                                                                          27.48
          71.71
                                                                    24.55
                                                                                     354.92
                                                                                                          65.42
                                                                                                                             113.23
                                                                                                                             113.23 9 51 9
113.22 15 42 49
118.50 14 56 50
107.95 16 48 33
                                                                                                                                                                                                         258.89
                                                                                                                                                                     5075.8
                                                                                                                                                                                          27.49
        108.29
                                                                    24.56
                                                                                     266.77
                                                                                                           65.42
                        13 19 46 5824.51
15 17 30 5463.36
                                                                                                                                                                    5224.5
                                                                                                                                                                                          23.37
                                                                                                                                                                                                           26A . 52
                        13 19 46
                                                                    19.72
                                                                                     275.76
                                                                                                           62.89
        110,00
                                                                                                                                                                                          31.75
                                                                                                                                                                    4863.4
                                                                    29.59
                                                                                     252.40
                                                                                                          67.54
         110.00
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                          SGT 5583.9 SGR 443.1 SG3 209.5
RRT -.3944 RRF -.3948 RTF .9411
SG8 5601.4 R23 .0236 R13 -.9411
SG1 5586.6 SG2 406.9 THA 178.20
                                                                                                                                                             ST 3224.7 SR 434.5 SS 898.3
CRT -.9787 CRS .9399 CST -.9895
     TOE-2.1736 TRA 1.0742 TC3-5.3431 BAU 1.1008
     ROE .2975 ARA .0219 RC3 -.1003 FAU .03050
FOE -.9268 FRA .8573 FC3-1.7138 BSP 17639
BOE 2.1938 BRA 1.0744 BC3 5.3440 FSP -687
                                                                                                                                                               LSA 3371.9 MSA 154.6 SSA 20.2
                                                                                                                                                             EL1 3252.6 EL2 88.4 ALF 172.48
                                                                                                FLIGHT TIME 184.00
                                                                                                                                                                              ARRIVAL DATE JAN 5 1968
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 532.797
    RL 152.10 LAL -.00 LOL 202.31 VL 25.899 GAL 3.08 ATL 93.32 MCA 259.76 SMA 123.53 ECC .23710 INC 3.3212 V1 29.291
RP 107.74 LAP 3.27 LOP 102.05 VP 37.273 GAP 11.62 AZP 89.41 TAL 169.97 TAP 69.74 RCA 94.24 APO 152.82 V2 35.172
RC 103.875 GL -21.83 GP 7.35 ZAL 69.79 ZAP 167.40 ETS 33.75 ZAE 128.56 ETE 174.40 ZAC 71.89 ETC 11.11 CLP-169.74
   PLANETOCENTRIC CONIC
    C3 16.240 VHL 4.030 DLA -33.26 RAL 203.26 RAD 6567.7 VEL 11.731 PTH 2.07 VHP 7.500 DPA 4.64 RAP 195.56 ECC 1.2673 LNCH ATMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMITH INJ TIME POCST TIM INJ 2 LAT INJ 2 LONG 71.78 9 45 16 1286.61 24.21 355.57 69.97 113.54 10 6 43 686.6 27.18 347.75 108.22 14 22 45 5689.07 24.22 267.62 69.98 113.52 15 57 34 5089.1 27.19 259.79 110.02 14 22 45 5689.07 24.22 267.62 69.98 113.52 15 57 34 5089.1 27.19 259.79 110.00 13 33 35 5840.02 19.22 276.68 67.34 118.83 15 10 55 5240.0 22.91 269.49 110.00 15 33 37 5471.70 29.41 252.99 72.20 108.26 17 4 49 4871.7 31.62 244.48 DIFFERENTIAL CORRECTIONS
     C3 16.240 VHL 4.030 OLA -33.26 RAL 203.26 RAD 6567.7 VEL 11.731 PTH
                                                                                                                                   2.07 WHP 7.500 OPA
                                                                                                                                                                          4.64 RAP 195.56 ECC 1.2673
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SCT 5623.3 SCR 449.6 SC3 201.6
RRT -.3966 RRF -.3948 RTF .9419
SCB 5641.2 R23 .0208 R13 -.9419
SCI 5626.1 SCZ 412.5 THA 178.17
                                                                                                                                                              ST 3183.2 SR 442.6 SS 862.4
CRT -.9719 CRS .9288 CST -.9895
     TOE-2.1868 TRA 1.3164 TC3-5.1073 BAU 1.1091
     ROE .3112 RRA .0179 RC3 -.0916 FAU .02831
FOE -.8764 FRA .9131 FC3-1.5091 89F 17751
                                                                                                                                                              LSA 3323.6 MSA 160.2 SSA 19.9
                                                                                                                                                              EL1 3212.1 EL2 103.1 ALF 172.30
     BOE 2.2046 BRA 1.3144 BC3 5.1062 FSP -661
                                                                                                                                                                             ARRIVAL DATE JAN 7 1968
                                                                                                FLIGHT TIME 186.00
LAUNCH DATE JUL 5 1967
                                                                                               DISTANCE 538.394
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 25.855 GAL 3.62 ATL 93.24 MCA 262.99 SMA 123.27 ECC .24183 INC 3.2356 V1 29.291
RP 107.78 LAP 3.21 LOP 185.29 VP 37.232 GAP 12.02 AZP 89.60 TAL 168.47 TAP 71.46 RCA 93.46 APO 153.08 V2 35.162
     RC 165,860 GL -20.53 GP 7.06 TAL 66,83 TAP 168.32 ETS 35.19 TAE 128.49 ETE 174.63 TAC 69.73 ETC 10.98 CLP-170.67
   PLANETOCENTRIC CONIC
     C3 17.243 VHL 4.152 DLA -33.15 RAL 206.94 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 7.721 DPA
                                                                                                                                                                        3.43 RAP 197.53 ECC 1.2838
    C3 17.243 WHL 4.152 OLA -33.15 RAL 208.94 RAD 6567.7 VEL 11.774 PTM 2.08 VMP 7.721 DPA 3.43 RAP 197.53 ECC 1.2838 LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ 2T ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.01 10 1 23 1295.95 23.77 268.81 74.56 113.81 16 11 7 5107.3 26.78 261.03 72.01 10 1 23 1295.95 23.77 268.81 74.56 113.81 16 11 7 5107.3 26.78 261.03 107.99 14 36 0 5707.25 23.77 268.81 74.56 113.83 10 22 59 695.9 26.77 348.30 107.99 14 36 0 5707.25 23.77 268.81 74.56 113.81 16 11 7 5107.3 26.78 261.03 110.00 13 44 41 5864.90 18.39 278.14 71.68 119.33 15 22 26 5264.9 22.16 271.03 110.00 15 51 52 5474.34 29.36 253.17 76.97 108.35 17 23 6 4874.3 31.58 244.67
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                          SGT 5663.5 SGR 455.5 SG3 194.0
RRT -.4020 RRF -.3979 RTF .9431
SGB 5681.6 R23 .0182 R13 -.9431
                                                                                                                                                              ST 3130.8 SR 450.0 SS 827.2
CRT -.9643 CRS .9169 CST -.9895
LSA 3265.0 MSA 167.2 SSA 19.4
     TDE-2.1966 TRA 1.5661 TC3-4.8480 BAU 1.1178
    ROE .3261 RRA .0128 RC3 -.0814 FAU .02630
FOE -.8290 FRA .9656 FC3-1.3205 BSP 17925
                                                                                                                                                               EL1 3160.8 ELZ 118.0 ALF 172.10
                                                                                           SG1 5666.5 SG2 416.9 THA 178.14
     BOE 2.2207 BRA 1.5682 BC3 4.8487 FSP -640
                                                                                                                                                                              ARRIVAL DATE JAN 9 1968
                                                                                                FLIGHT TIME 188.00
LAUNCH DATE JUL 5 1967
                                                                                               DISTANCE 543.947
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 25.810 GAL 4.19 AZL 93.15 MCA 266.22 SMA 123.01 ECC .24695 INC 3.1513 V1 29.291 RP 107.81 LAP 3.14 LOP 188.52 VP 37.191 GAP 12.44 AZP 89.79 TAL 166.97 TAP 73.19 RCA 92.63 APO 153.39 V2 35.151 RC 167.829 GL -19.24 GP 8.80 ZAL 63.94 ZAP 169.20 ETS 36.95 ZAE 128.42 ETE 174.82 ZAC 67.55 ETC 10.87 CLP-171.59
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT 'INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.39 10 18 6 1304.04 23.20 356.43 79.13 114.10 10 39 50 704.0 26.25 348.70 107.61 14 47 52 5730.31 23.21 270.32 79.14 114.08 16 23 22 5130.3 26.26 262.59 110.00 13 53 27 609.70 17.29 302.13 75.92 119.96 14 3 37 9.7 21.14 295.12
     C3 18.437 VML 4.294 OLA -32.96 RAL 210.52 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 7.954 DPA
                                                                                                                                                                         2.25 RAP 199.51 ECC 1.3034
                                                                                                                             114.08 16 23 22
119.96 14 3 37
108.29 17 42 53
                        16 11 41 5472.65
                                                                                                                                             17 42 53
                                                                                                                                                                    4872.6
                                                                                                                                                                                          31.61
        110.00
                                                                    29.39
                                                                                      253.06
                                                                                                           81.41
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 5698.1 SGR 460.5 SG3 186.8
RRT -,4089 RRF -,4029 RTF .,9443
SG8 5718.7 R23 .0161 R13 -,9443
SG1 5701.2 SG2 420.0 THA 178.10
                                                                                                                                                            ST 3065.3 SR 456.4 SS 792.0
CRT -.9556 CRS .9038 CST -.9894
LSA 3193.8 MSA 175.6 SSA 18.8
EL1 3096.2 EL2 133.1 ALF 171.89
     TOE-2.1999 TRA 1.8332 TC3-4.5625 BAU 1.1247
     ROE .3420 RRA 1.0172 FC3-1.1356 BSP 18083
FDE -.7831 FRA 1.0172 FC3-1.1436 BSP 18083
BDE 2.2263 BRA 1.8333 BC3 4.5630 FSP -620
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FLIGHT TIME 182.00

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ARRIVAL CATE JAN 11 1968
                                                                                  FLIGHT TIME 190.00
LAUNCH DATE JUL 5 1967
                                                                                  DISTANCE 549.450
   HELIOCENTRIC CONIC
    RL 152.10 LAL ..00 LOL 282.31 VL 25.767 GAL 4.79 AZL 93.07 HCA 269.45 SMA 122.75 ECC .25248 INC 3.0676 V1 29.291
RP 107.84 LAP 3.07 LOP 191.75 VP 37.150 GAP 12.89 AZP 89.97 TAL 165.47 TAP 74.92 RCA 91.76 APO 153.74 V2 35.139
RC 169.783 GL -17.97 GP 6.56 ZAL 61.12 ZAP 170.05 ETS 39.09 ZAE 128.35 ETE 175.00 ZAC 65.36 ETC 10.81 CLP-172.50
   PLANETOCENTRIC CONIC
                                                                                                                                                1.10 RAP 201.52 ECC 1.3266
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T2.92 10 35 24 1310.67 22.54 356.62 83.69 114.34 10 57 14 710.7 25.63 346.95 107.08 14 58 13 5758.43 22.55 272.16 83.69 114.33 16 34 11 5158.4 25.64 264.49 107.08 14 58 13 5758.43 22.55 272.16 83.69 114.34 10 57 14 710.7 25.63 348.95 107.08 14 58 13 5758.43 22.55 272.16 83.69 114.35 16 34 11 5158.4 25.64 264.49 110.00 14 58 13 5758.43 22.55 272.16 83.69 114.35 16 34 11 5158.4 25.64 264.49 110.00 14 58 13 5758.43 22.55 272.16 83.69 114.35 16 34 11 5158.4 25.64 264.49
    C3 19.845 VHL 4.455 DLA -32.70 RAL 213.99 RAD 6567.8 VEL 11.884 PTH 2.11 VHP 8.201 DPA
                                                                                                          120.64 14 11 11
108.13 18 3 33
                                                                                                                                                                              297.47
                                                                                           80.05
                                                                                                                                              48.8
                                                                                                                                                              19.89
                                                                         304.37
                                                          15.95
       110.00
                     14 0 23
                                        648.78
                                                                                                                                             4868.3
                                                                                                                                                                              244.23
                                                                         252.75
                                                                                           86.69
                                                                                                                                                               31.68
       110.00
                    16 32 25 5468.31
                                                          29.49
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5727.6 SGR 464.4 SG3 179.8
RRT -,4169 RRF -,4093 RTF .9456
                                                                                                                                       ST 2988.6 SR 461.3 SS 757.2
CRT -.9456 CRS .8892 CST -.9893
LSA 3111.8 MSA 185.3 SSA 18.1
    TDE-2.1964 TRA 2.1126 TC3-4.2591 BAU 1.1301
    RDE .3587 RRA -.0016 RC3 -.0598 FAU .02249
                                                                             SCB 5746.4 R23 .0142 R13 -.9456
SGI 5730.9 SG2 421.9 THA 178.05
    FDE -.7383 FRA 1.0680 FC3 -.9809 BSP 18223
BOE 2.2255 BRA 2.1126 BC3 4.2595 FSP -599
                                                                                                                                        EL1 3020.4 EL2 148.5 ALF 171.67
                                                                                                                                                    ARRIVAL DATE JAN 13 1968
                                                                                  FLIGHT TIME 192,00
                                                                                  DISTANCE 554.898
   RL 152.10 LAL -.00 LOL 282.31 VL 25.723 GAL 5.42 A7L 92.98 MCA 272.67 SMA 122.50 ECC .25846 INC 2.9841 VI 29.291
RP 107.88 LAP 2.98 LOP 194.98 VP 37.108 GAP 13.35 A7P 90.14 TAL 163.98 TAP 76.65 RCA 90.84 APO 154.16 V2 35.128
RC 171.722 GL -16.71 GP 6.34 ZAL 58.40 ZAP 170.86 ETS 41.71 ZAE 128.27 ETE 175.16 ZAC 63.15 ETC 10.78 CLP-173.40
   PLANETOCENTRIC CONIC
    C3 21.495 WHL 4.636 DLA -32.38 RAL 217.32 RAD 6567.9 VEL 11.953 PTH 2.13 VHP 8.463 DPA -.03 RAP 203.55 ECC 1.3538 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIMP PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           114.55 11 15 5
114.54 16 43 34
                                                                         356.66
                                                                                          88.20
                                                                                                                                              715.9
                                                                                                                                                                              349.05
                    10 53 9 1315.93
15 7 3 5791.40
                                                         21.80
        73.61
                                                                                                                                                                               266.71
                                                                         274.32
                                                                                                                                                               24.93
                                                                                           88.20
                                                          21.81
       106.39
                     10 53 9 1315.93
15 7 3 5791.40
14 5 53 692.52
                                                                                           88.20
                                                                                                            114.55
                                                                                                                        11 15 5
                                                                                                                                               715.9
                                                                                                                                                               24.92
                                                                                                                                                                               349.05
                                                         21.80
                                                                         356.66
        73.61
                                                                                                            114.54 16 43 34
                                                                                                                                                                               266.71
                                                                         274.32
                                                                                           88.20
                                                                                                                                                               24.93
       106.39
                                                         21.61
                                                                                                           121.34 14 17 26
107.93 18 24 32
                                                                                                                                                                               300.05
                                                                                                                                               92.5
                                                                                                                                                               18.46
       110.00
                                                          14.41
                                                                         306.83
                                                                                           84.08
                                                                                                                                            4862.8
                                                                                                                                                              31.76
                                                                                                                                                                              243.82
                                                                         252.36
                                                                                           91.56
       110.00
                      16 53 29
                                      5462.81
                                                          29.60
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5749.2 SGR 467.2 SG3 175.1
RRT -.4256 RRF -.4164 RTF ..9466
SGB 5768.2 R23 .0125 R13 -.9466
SG1 5752.7 SG2 422.5 THA 178.01
                                                                                                                                        ST 2901.0 SR 464.6 SS 722.9
CRT -,9340 CRS .8723 CST -.9891
    TOE-2.1839 TRA 2.4107 TC3-3.9369 BAU 1.1314
    ROE .3799 RRA -.0112 RC3 -.0498 FAU .02056
FOE -.6938 FRA 1.1205 FC3 -.8290 BSP 18263
BDE 2.2160 BRA 2.4107 BC3 3.9372 FSP -576
                                                                                                                                       LSA 3019.2 MSA 196.3 SSA 17.4
                                                                                                                                        EL1 2933.4 EL2 164.1 ALF 171.47
                                                                                                                                                    ARRIVAL DATE JAN 15 1968
                                                                                  FLIGHT TIME 194.00
LAUNCH DATE JUL 5 1967
    RL 152.10 LAL -.00 LOL 282.31 VL 25.680 GAL 6.08 AZL 92.90 HCA 275.89 SMA 122.25 ECC .26494 INC 2.9002 V1 29.291 RP 107.92 LAP 2.88 LOP 198.21 VP 37.067 GAP 13.84 AZP 90.30 TAL 162.50 TAP 78.59 RCA 89.86 APO 154.64 V2 35.116 RC 173.647 GL -15.48 GP 6.15 ZAL 55.79 ZAP 171.62 ETS 44.91 ZAE 128.20 ETE 175.29 ZAC 60.94 ETC 10.79 CLP-174.30
                                                                                 DISTANCE 560.283
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.421 VHL 4.839 DLA -32.00 RAL 220.51 RAO 6568.0 VEL 12.033 PTH 2.15 VHP 8.742 DPA -1.14 RAP 205.59 ECC 1.3854
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          114.74 11 33 24
114.75 16 51 22
                                                                                                                                                           24.13
                                                                                                                                             719.5
                                                                                                                                                                            348.98
                                                                                         92.65
         74.44 11 11 25 1319.46
105.56 15 14 12 5829.51
                                                         20.97
                                                                        356.52
                                                                                                                                                              24.14
                                                                                                                                             5229.5
                                                                                                                                                                              269.27
                                                                         276.82
                                                                                           92.66
                                                          20.98
       105.56
                                                                                                           114.74 11 33 24
114.73 16 51 22
                                                                                                                                                              24.13
                                                                                                                                                                              348.98
                                                                                                                                              719.5
                                                                                           92.65
                     11 11 25 1319.46
                                                          20.97
                                                                         356.52
         74.44
                                                                                                                                             5229.5
                                                                                                                                                                              269.27
                     15 14 12 5829.51
14 10 20 739.70
17 14 28 5457.27
                                                                                           92.66
                                                          20.98
                                                                         276.82
       105.56
                                                                                                           122.00 14 22 39
107.73 18 45 25
                                                                                                                                              139.7
                                                                                                                                                                              302.78
                                                          12.73
                                                                         309.45
                                                                                           88.01
       110.00
                    14 10 20
                                                                                                                                             4857.3
                                                                                                                                                                              243.41
                                                          29.72
                                                                         251.97
                                                                                           96.41
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 2812.4 SR 466.5 SS 692.0
CRT -.9213 CRS .8548 CST -.9890
                                                                             SCT 5769.3 SCR 469.1 SC3 166.8
RRT -.4360 RRF -.4255 RTF .9481
SCB 5788.3 R23 .0110 R13 -.9481
     TOE-2.1701 TRA 2.7203 TC3-3.6179 BAU 1.1329
    RDE .3940 RRA -.0221 RC3 -.0401 FAU .01885
FDE -.6534 FRA 1.1708 FC3 -.6969 BSP 18390
                                                                                                                                        LSA 2926.3 MSA 207.5 SSA 16.7
                                                                                                                                        EL1 2845.2 EL2 179.3 ALF 171.28
                                                                              SG1 5772.9 SG2 421.9 THA 177.96
    BOE 2.2056 BRA 2.7204 BC3 3.6182 FSP -557
                                                                                                                                                    ARRIVAL DATE JAN 17 1968
                                                                                  FLIGHT TIME 196,00
LAUNCH DATE JUL 5 1967
                                                                                 DISTANCE 565.597
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 282.31 VL 25.638 GAL 6.79 AZL 92.82 MCA 279.11 SMA 122.00 ECC .27197 INC 2.8154 VI 29.291 RP 107.96 LAP 2.78 LOP 201.43 VP 37.026 GAP 14.36 AZP 90.45 TAL 161.03 TAP 80.15 RCA 88.82 APO 155.19 V2 35.103 RC 175.555 GL -14.29 GP 5.97 ZAL 53.28 ZAP 172.34 ETS 48.81 ZAE 128.12 ETE 175.42 ZAC 58.72 ETC 10.84 CLP-175.19
   PLANETOCENTRIC CONIC
    C3 25.662 VML 5.066 DLA -31.57 RAL 223.54 RAD 6568.0 VEL 12.126 PTH 2.17 VMP 9.041 DPA -2.22 RAP 207.65 ECC 1.4223
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.42 11 30 11 1320.98 20.07 356.19 97.04 114.89 11 52 12 721.0 23.26 348.71
                                                                                                                        16 57 29
                                                          20.09
                                                                         279.67
       104.58
                     15 19 36
                                       5872.89
                                                                                                                        11 52 12
                                                                                                                                                                               348.71
                                                                                                                                               721.0
                                                                                                                                                               23,26
                                                                                           97.04
                                                                                                            114.89
                                                          20.07
                                                                         356.19
         75.42
                     11 30 11
                                       1320.96
                                                                                                                       16 57 29
14 27 6
                                                                                                                                                                               272.19
                                                                                                                                             5272.9
                                                                                                                                                               23.27
                                                                                           97.04
                                                                                                            114.86
                     15 19 36
                                       5872.89
                                                          20.09
                                                                         279.67
       104.58
                                                                                                                                                                               305.60
                                                                                                            122.60
                      14 13 57
                                        789.36
                                                           10.92
                                                                          312.16
                                                                                           91.83
       110.00
                                                                                                                         19 5 54
                                                                                                           107.55
                                                                                                                                             4852.5
                                                                                                                                                               31.92
                                                                                                                                                                              243.06
                     17 35 1
                                    5452.48
                                                                         251.64
                                                                                         101.20
                                                          29.82
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5784.3 SGR 469.9 SG3 160.7
RRT -.4471 RRF -.4554 RTF .9497
SG8 5803.3 R23 .0096 R13 -.9497
SG1 5788.1 SG2 420.0 THA 177.91
                                                                                                                                       ST 2721.1 SR 466.7 S5 663.4

CRT -.9070 CRS .8359 CST -.9890

LSA 2831.0 MSA 218.9 SSA 16.1
     TOE-2.1515 TRA 3.0471 TC3-3.2992 BAU 1.1319
     RDE .4125 RRA -.0346 RC3 -.0313 FAU .01716
     FOE -. 6153 FRA 1.2215 FC3 -. 5797 BSP 18497
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BOE 2.1907 BRA 3.0473 BC3 3.2993 FSP -539

EL1 2754.0 EL2 194.2 ALF 171.11

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LAUNCH DATE JUL 5 1967
                                                                                FLIGHT TIME 198.00
                                                                                                                                                ARRIVAL DATE JAN 19 1968
    HELIOCENTRIC CONIC
                                                                                DISTANCE 570.830
     RL 152.10 LAL -.00 LOL 282.31 VL 25.596 GAL 7.53 AZL 92.73 MCA 282.33 SMA 121.76 ECC .27962 INC 2.7291 V1 29.291
RP 107.99 LAP 2.67 LOP 204.65 VP 36.985 GAP 14.91 AZP 90.58 TAL 159.58 TAP 81.91 RCA 87.72 APO 155.81 V2 35.091
RC 177.448 GL -13.14 GP 5.80 ZAL 50.89 ZAP 173.00 ETS 53.58 ZAE 128.03 ETE 175.53 ZAC 56.51 ETC 10.93 CLP-176.08
    PLANETOCENTRIC CONIC
     C3 28.265 VHL 5.316 DLA -31.11 RAL 226.41 RAD 6568.1 VEL 12.233 PTH 2.20 VHP 9.361 DPA -3.27 RAP 209.72 ECC 1.4652
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    101.34
                                                                                                                                                      22.32
                                                                                                                                                                    348.23
         76.56
                                                                                                      115.02 12 11 34
115.01 15 33 41
                      11 49 34 1320.01
                                                         19.11
                                                                       355.64
                                                                                                                                          720.0
        103.44
                      15 23 7
                                     633.80
                                                         19.13
                                                                        304.98
                                                                                       101.35
                                                                                                        115.01
                                                                                                                                           33.8
                                                                                                                                                                        297.56
                                                                                                                                                          22.34
                                                                                                        115.02 12 11 34
115.01 15 33 41
123.11 14 30 56
107.42 19 25 45
                      11 49 34 1320.01
         76.56
                                                         19.11
                                                                        355.64
                                                                                       101.34
                                                                                                                                          720.0
                                                                                                                                                          22.32
                                                                                                                                                                        348.23
        103.44
                      15 23 7
                                       633.80
                                                         19.13
                                                                        304.96
                                                                                      101.35
                                                                                                                                           33.8
                                                                                                                                                          22.34
                                                                                                                                                                        297.56
                     14 16 55
        110.00
                                       840.88
                                                          9.02
                                                                        314.93
                                                                                        95.57
                                                                                                                                         240.9
                                                                                                                                                          13.31
                                                                                                                                                                        308.47
                      17 54 56
        110.00
                                     5448.97
                                                         29.89
                                                                       251.39
                                                                                       105.93
                                                                                                                                        4849.0
                                                                                                                                                          31.98
                                                                                                                                                                        242.80
    DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 5794.1 SGR 469.5 SG3 154.9
RRT -.4588 RRF -.4462 RTF .9514
SGB 5813.1 R23 .0084 R13 -.9514
SGI 5798.1 SGZ 416.9 THA 177.86
     TDE-2.1293 TRA 3.3924 TC3-2.9848 BAU 1.1279
                                                                                                                                    ST 2629.8 SR 465.2 SS 637.6
     RDE .4313 RRA -.0486 RC3 -.0237 FAU .01555
FDE -.5795 FRA 1.2733 Ft3 -.4764 BSP 18585
                                                                                                                                   CRT -.8911 CRS .8157 CST -.9891
LSA 2736.0 MSA 230.3 SSA 15.4
                                                                                                                                    EL1 2662.5 EL2 208.5 ALF 170.99
     BOE 2.1725 BRA 3.3928 BC3 2.9849 FSP -522
 LAUNCH DATE JUL 5 1967
                                                                                FLIGHT TIME 200,00
                                                                                                                                                ARRIVAL DATE JAN 21 1968
   HELIOCENTRIC CONIC
                                                                                DISTANCE 575.969
     RL 152.10 LAL -.00 LOL 282.31 VL 25.554 GAL 8.32 ATL 92.64 MCA 285.54 SMA 121.53 ECC .28794 INC 2.6407 V1 29.291
RP 108.03 LAP 2.54 LOP 207.87 VP 36.944 GAP 15.51 AZP 90.71 TAL 158.15 TAP 83.69 RCA 86.53 APO 156.52 V2 35.078
RC 179.325 GL -12.02 GP 5.65 ZAL 48.62 ZAP 173.59 ETS 59.39 ZAE 127.93 ETE 175.63 ZAC .54.30 ETC 11.07 CLP-176.98
    PLANETOCENTRIC CONIC
     C3 31.286 VHL 5.593 OLA -30.61 RAL 229.11 RAD 6568.2 VEL 12.356 PTH
                                                                                                            2.23 VHP 9.706 OPA
                                                                                                                                            -4.29 RAP 211.80 ECC 1.5149
     LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       115.12 12 31 42
115.11 15 35 58
         77.87
                     12 9 47 1315.66
                                                        18.10
                                                                       354.82
                                                                                      105.56
                                                                                                                                         715.7
                                                                                                                                                        21.33
        102.13
                     15 24 29
                                      689.05
                                                         18.11
                                                                        306.63
                                                                                       105.57
                                                                                                                                           89.1
                                                                                                                                                          21.34
                                                                                                                                                                         301.28
                                                                                                       115.12 12 31 42
115.11 15 35 58
123.54 14 34 16
107.35 19 44 51
                                    1315.66
         77.87
                     12 9 47
                                                         18.10
                                                                        354.82
                                                                                       105.56
                                                                                                                                          715.7
                                                                                                                                                                         347.46
                                     669.05
                                                                                                                                                          21.33
        102.13
                     15 24 29
                                                                       308.63
                                                                                                                                                                       301.28
                                                        18.11
                                                                                       105.57
                                                                                                                                           89.1
                                                                                                                                                          21.34
        110.00
                     14 19 22
                                       893.69
                                                         7.04
                                                                       317.75
                                                                                                                                                          11.40
                                                                                        99.22
                                                                                                                                          293.7
                                                                                                                                                                        311.37
       110.00
                     18 14 4 5447.06
                                                                       251.25
                                                                                      110.58
                                                                                                                                        4847.1
                                                                                                                                                          32.00
                                                                                                                                                                         242.66
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 5798.0 SGR 467.9 SG3 149.5
RRT -.4707 RRF -.4571 RTF .9532
SG8 5816.8 R23 .0070 R13 -.9532
SG1 5802.2 SG2 412.6 THA 177.81
                                                                                                                                   ST 2537.9 SR 461.8 SS 614.0
CRT -.8731 CRS .7933 CST -.9892
     TOE-2.1006 TRA 3.7607 TC3-2.6746 BAU 1.1187
     ROE .4502 RRA -.0644 HC3 -.0175 FAU .01391
     FDE -.5447 FRA 1.3275 FC3 -.3850 BSP 18569
                                                                                                                                   LSA 2640.6 MSA 241.6 SSA 14.8
     BOE 2.1483 BRA 3.7613 BC3 2.6747 FSP -501
                                                                                                                                    EL1 2570.0 EL2 222.3 ALF 170.91
LAUNCH DATE JUL 5 1967
                                                                                FLIGHT TIME 202.00
                                                                                                                                               ARRIVAL DATE JAN 23 1968
   HELIOCENTRIC CONIC
                                                                              DISTANCE 581.000
    RL 152.10 LAL -.00 LOL 282.31 VL 25.513 GAL 9.16 AZL 92.55 MCA 288.75 SMA 121.30 ECC .29703 INC 2.5496 V1 29.291 RP 108.07 LAP 2.41 LOP 211.08 VP 36.903 GAP 16.14 AZP 90.82 TAL 156.74 TAP 85.50 RCA 85.27 APO 157.32 V2 35.065
     RC 181.185 GL -10.95 GP
                                            5.51 7AL 46.48 7AP 174.09 ETS 66.41 7AE 127.81 ETE 175.72 7AC 52.09 ETC 11.26 CLP-177.88
    PLANETOCENTRIC CONIC
     C3 34.795 VHL 5.899 DLA -30.09 RAL 231.65 RAD 6568.4 VEL 12.497 PTH 2.26 VHP 10.078 DPA -5.29 RAP 213.88 ECC 1.5726
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     12 31 10 1306.65
         79.38
                                                                                                      115.18 12 52 57
115.17 15 35 52
                                                       17.04
                                                                       353.62
                                                                                     109.70
                                                                                                                                         706.6
                                                                                                                                                       20.29
                                                                                                                                                                       346.32
                     15 23 20
                                       751.64
                                                                       312.79
                                                                                      109.70
                                                        17.05
                                                                                                                                         151.6
                                                                                                                                                                        305.49
                                                                                                                                                         20.30
                                                                                                      115.18 12 52 57
115.17 15 35 52
123.86 14 37 9
107.34 20 3 6
         79.38
                     12 31 10
                                    1306.65
                                                        17.04
                                                                      353.62
                                                                                      109.70
                                                                                                                                         706.6
                                                                                                                                                         20.29
                                                                                                                                                                        346.32
       100.62
                     15 23 20
                                     751.64
                                                       17.05
                                                                       312.79
                                                                                      109.70
                                                                                                                                         151.6
                                                                                                                                                         20.30
                                                                                                                                                                       305.49
       110.00
                     14 21 22
                                                          5.01
                                                                       320.58
                                       947.42
                                                                                      102.78
                                                                                                                                        347.4
                                                                                                                                                          9.42
                                                                                                                                                                       314.27
                                    5446.90
                      18 32 19
       110.00
                                                        29.93
                                                                       251.24
                                                                                      115.15
                                                                                                                                       4846.9
                                                                                                                                                         32.01
                                                                                                                                                                       242.65
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                           SGT 5798.7 SGR 465.3 SG3 144.3
RRT -.4834 RRF -.4692 RTF ..9553
SGB 5817.4 R23 .0059 R13 -.9553
SGI 5803.1 SG2 407.0 THA 177.77
    TOE-2.0739 TRA 4.1466 TC3-2.3825 BAU 1.1083
                                                                                                                                  ST 2452.6 SR 456.8 SS 594.5

CRT -.8541 CRS .7712 CST -.9895

LSA 2552.2 MSA 251.7 SSA 14.2
    RDE .4695 RRA -.0815 RC3 -.0121 FAU .01239
FDE -.5143 FRA 1.3817 FC3 -.3084 BSP 18646
    BOE 2.1264 BRA 4.1474 BC3 2.3825 FSP -485
                                                                                                                                   ELI 2483.7 EL2 234.7 ALF 170.88
LAUNCH DATE JUL 5 1967
                                                                               FLIGHT TIME 204.00
                                                                                                                                               ARRIVAL DATE JAN 25 1968
   HELIOCENTRIC CONIC
                                                                               DISTANCE 565.905
    RL 152.10 LAL -.00 LOL 282.31 VL 25.473 GAL 10.06 AZL 92.46 MCA 291.96 SMA 121.07 ECC .30698 INC 2.4550 V1 29.291
RP 108.11 LAP 2.28 LOP 214.29 VP 36.863 GAP 16.82 AZP 90.92 TAL 155.37 TAP 87.33 RCA 83.90 APO 158.23 V2 35.052
RC 183.028 GL -9.92 GP 5.39 ZAL 44.46 ZAP 174.48 ETS 74.70 ZAE 127.68 ETE 175.80 ZAC 49.90 ETC 11.49 CLP-178.79
   PLANETOCENTRIC CONIC
    C3 38.874 VML 6.235 DLA -29.55 RAL 234.02 RAD 6568.5 VEL 12.659 PTM 2.30 VMP 10.480 DPA -6.25 RAP 215.98 ECC 1.6398
    C3 38.874 WHL 6.235 DLA -29.55 RAL 234.02 RAD 6568.5 VEL 12.659 PTH 2.30 WHP 10.480 DPA -6.25 RAP 215.98 ECC 1.6398 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.19 12 54 30 1290.41 15.95 351.88 113.73 115.21 13 16 0 690.4 19.21 344.63 99.81 15 18 58 823.90 15.96 317.62 113.74 115.20 15 32 42 223.9 19.23 310.38 100.00 14 49 51 917.08 12.41 322.72 111.93 117.41 15 5 8 317.1 15.99 315.76 100.00 16 6 18 672.46 19.56 308.08 115.43 113.07 16 17 30 72.5 22.51 300.53 110.00 14 22 58 1001.78 2.94 323.43 106.26 124.07 14 39 40 401.8 7.39 317.17 110.00 18 49 39 5448.57 29.90 251.36 119.62 107.40 20 20 28 4848.6 31.98 242.77
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         SGT 5794.3 SGR 461.5 SG3 139.3

RRT -.4964 RRF -.4818 RTF .9576

SGB 5812.7 R23 .0048 R13 -.9576

SGI 5798.9 SG2 400.3 THA 177.72
                                                                                                                                 ST 2371.5 SR 450.2 SS 578.0

CRT -.8336 CRS .7487 CST -.9900

LSA 2468.4 MSA 260.6 SSA 13.7

EL1 2401.3 EL2 245.6 ALF 170.91
    TDE-2.0456 TRA 4.5556 TC3-2.1040 BAU 1.0935
    RDE .4887 RRA -.1002 RC3 -.0080 FAU .01091
FDE -.4863 FRA 1.4380 FC3 -.2430 BSP 18712
BDE 2.1032 BRA 4.5567 BC3 2.1040 FSP -470
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ARRIVAL DATE JAN 27 1968
                                                                         FLIGHT TIME 206.00
LAUNCH DATE JUL 5 1967
                                                                         DISTANCE 590.663
   RL 152.10 LAL -.00 LOL 282.31 VL 25.433 GAL 11.03 AZL 92.36 MCA 295.17 SMA 120.85 ECC .31788 INC 2.3561 VI 29.291 RP 108.16 LAP 2.13 LOP 217.50 VP 36.823 GAP 17.56 AZP 91.00 TAL 154.03 TAP 89.20 RCA 82.43 APO 159.26 V2 35.039 RC 184.853 GL -8.94 GP 5.27 ZAL 42.56 ZAP 174.72 ETS 84.16 ZAE 127.53 ETE 175.88 ZAC 47.72 ETC 11.78 CLP-179.71
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                   2.34 VMP 10.919 DPA -7.19 RAP 218.07 ECC 1.7180
    C3 43.625 VHL 6.605 DLA -28.99 RAL 236.24 RAD 6568.7 VEL 12.845 PTH
    ENCH AZETH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          18.11
                                                                                               115.20 13 42 38
                                                                                                                            660.7
                                                                               117.67
                   13 21 36 1260.67
                                                    14.83
                                                                 349.14
       83.50
                                                                                                115.19 15 24 40
118.61 14 52 22
112.00 16 48 53
124.17 14 41 50
107.53 20 36 55
                                                                                                                               311.8
                                                                                                                                              18.12
                                                                                                                                                            316.37
                                                                                117.68
                                                    14.65
                                                                 323.57
                   15 9 28
                                   911.82
        96.50
                                                                                                                               421.5
                                                                                                                                              12.82
                                                                                                                                                            321.89
                                                                               114.68
                   14 35 20 1021.53
                                                     9.07
                                                                 328.67
      100.00
                                                                                                                                 26.2
                                                                                                                                              23.57
                                                                                                                                                            297.50
                                                                                120.39
                   16 38 26
                                                    20.77
                                                                  305.17
                                   626.19
      100.00
                                                                                                                                                            320.07
                                                                                                                                                5.33
      110.00
                    14 24 13 1056.50
                                                      .85
                                                                 326.29
                                                                               109.66
                                                                                                                                              31.93
                                                                                                                                                            243.03
                                                                                                                              4852.0
                                   5452.02
                                                    29.82
                                                                 251.60
                                                                               123.00
                   19 6 3
      110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5784.8 SGR 456.5 SG3 134.6
RRT -.5095 RRF -.4948 RTF ..9601
SGB 5802.8 R23 .0039 R13 -.9601
SGI 5789.5 SG2 392.5 THA 177.69
                                                                                                                          ST 2294.9 SR 442.1 SS 564.6
CRT -.8117 CRS .7259 CST -.9907
LSA 2389.3 MSA 268.2 SSA 13.1
    TDE-2.0154 TRA 4.9907 TC3-1.8402 BAU 1.0732
    RDE .5079 RRA -.1204 RC3 -.0049 FAU .00945
    FOE -. 4608 FRA 1.4970 FC3 -. 1874 BSP 18747
                                                                                                                          EL1 2323.2 EL2 255.0 ALF 171.00
    BOE 2.0784 BRA 4.9922 BC3 1.8402 FSP
                                                       -454
                                                                                                                                      ARRIVAL DATE JAN 29 1968
                                                                          FLIGHT TIME 208.00
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 595.246
   RL 152.10 LAL -.00 LOL 282.31 VL 25.395 GAL 12.07 AZL 92.25 MCA 298.38 SMA 120.63 ECC .32986 INC 2.2520 VI 29.291

RP 108.20 LAP 1.98 LOP 220.70 VP 36.784 GAP 18.36 AZP 91.07 TAL 152.74 TAP 91.11 RCA 80.84 APO 160.42 V2 35.025

RC 186.660 GL -8.00 GP 5.17 ZAL 40.79 ZAP 174.79 ETS 94.42 ZAE 127.36 ETE 175.95 ZAC 45.56 ETC 12.13 CLP 179.35
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 49.173 VHL 7.012 DLA -28.43 RAL 238.29 RAD 6568.8 VEL 13.059 PTH 2.38 VHP 11.397 OPA -8.09 RAP 220.16 ECC 1.8093 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               115.16 14 21 16
115.15 15 3 24
119.29 14 45 8
111.39 17 13 28
124.16 14 43 40
107.72 20 52 26
                                                                              121.50
                                                                                                                                                            336.14
                                                                                                                                588.4
                                                                                                                                              16.98
                                                    13.70
                                                                  343.29
        67.35 14 1 27
                                   1188.44
                                                                                                                                                             325.58
                                                                                                                                444.1
                   14 46 D
                                   1044.10
                                                    13.72
                                                                  332.73
                                                                                121.51
        92.64
                   14 26 41 1106.53
17 3 27 601.24
14 25 8 1111.39
                                                                                                                                                             326.76
                                                                                                                                506.5
                                                                                                                                               10.12
                                                      6.27
                                                                  333.43
                                                                                117.62
       100.00
                                                                                                                                                             295.84
                                                                                                                                  1.2
                                                                                                                                              24.11
                                                    21.40
                                                                  305.59
                                                                                124.97
       100.00
                                                                                                                                                             322.95
                                 1111.39
                                                                                                                                511.4
                                                                                                                                                3.24
                                                    -1.25
                                                                  329.15
                                                                                112.98
       110.00
                                                                                                                             4857.2
                                                                                                                                              31.85
                                                                                                                                                            243.41
                                                    29.72
                                                                  251.97
                                                                                128.24
                   19 21 29
                                   5457.18
       110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY -
   DIFFERENTIAL CORRECTIONS
                                                                     RRT - .5227 RRT - .5078 RTF . .9626
SGB 5789.0 R23 .0028 R13 - .9626
SGI 5776.3 SGZ 383.6 THA 177.65
                                                                                                                          ST 2223.9 SR 432.3 SS 554.0
CRT -.7886 CRS .7023 CST -.9913
    TOE-1.9839 TRA 5.4567 TC3-1.5908 BAU 1.0458
    RDE .5268 RRA -.1422 RC3 -.0030 FAU .00794
                                                                                                                          LSA 2316.0 MSA 274.4 SSA 12.6
    FOE -.4366 FRA 1.5607 FC3 -.1396 BSP 18679
                                                                                                                           EL1 2250.2 EL2 262.7 ALF 171.16
    BOE 2.0527 BRA 5.4586 BC3 1.5908 FSP -437
                                                                                                                                     ARRIVAL DATE JAN 31 1968
                                                                          FLIGHT TIME 210.00
LAUNCH DATE JUL 5 1967
                                                                         DISTANCE 599.621
    RL 152.10 LAL -.00 LOL 282.31 VL 25.357 GAL 13.19 A7L 92.14 HCA 301.58 SMA 120.42 ECC .34307 INC 2.1414 V1 29.291

RP 108.24 LAP 1.82 LOP 223.91 VP 36.745 GAP 19.24 A7P 91.12 TAL 151.50 TAP 93.08 RCA 79.11 APO 161.73 V2 35.012

RC 188.449 GL -7.10 GP 5.07 7AL 39.16 ZAP 174.68 ETS 104.85 ZAE 127.16 ETE 176.01 ZAC 43.44 ETC 12.54 CLP 178.39
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 55.672 VHL 7.461 OLA -27.86 RAL 240.18 RAD 6569.0 VEL 13.305 PTH 2.43 VHP 11.922 DPA -8.96 RAP 222.24 ECC 1.9162
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                               117.15 14 8 18

117.15 15 32 28

119.68 14 40 4

111.01 19 2 46

124.04 14 45 10

107.97 21 7 3
                                                                               123.14
        90.00 13 46 46 1291.72
                                                                 348.18
                                                     8.39
                                                                                                                                                            323.73
                                                                                                                                402.4
                                                                                                                                              19.81
                   15 15 46 1002.40
14 20 21 1163.15
                                                                                127.19
                                                    16.83
                                                                  331.13
        90.00
                                                                                                                                                            331.08
                                                                                                                                583.2
                                                                                                                                               7.62
                                                                                120.59
                                                      3.70
                                                                  337.67
       100.00
                                                                                                                                                            272.74
                                                                                                                              5274.2
                                                                                                                                              24.43
                   17 24 52 5874.24
14 25 44 1166.26
                                                                                129.31
                                                    21.77
                                                                  280.53
       100.00
                                                                                                                                                            325.81
                                                                                                                               566.3
                                                                                                                                                1.15
                                                     -3.34
                                                                  332.02
                                                                                116.22
       110.00
                                                                                                                                                            243.90
                                                                                                                              4863.9
                                                                                                                                              31.75
                                                                  252.44
                                                                                132.34
       110.00
                   19 35 59
                                   5463.90
                                                    29.58
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     RRT -.5362 RRF -.5215 RTF ..9655
SGB 5771.9 R23 ..0019 R13 -.9655
SGI 5759.8 SG2 373.6 THA 177.63
                                                                                                                          ST 2160.7 SR 421.3 SS 547.0
CRT - .7654 CRS .6807 CST - .9922
LSA 2251.2 MSA 278.3 SSA 12.1
     TOE-1.9573 TRA 5.9525 TC3-1.3615 BAU 1.0133
     ROE .5457 RRA -.1653 RC3 -.0017 FAU .00651
FOE -.4164 FRA 1.6267 FC3 -.1013 BSP 18705
                                                                                                                           EL1 2185.0 EL2 268.1 ALF 171.38
     BOE 2.0320 BRA 5.9548 8C3 1.3615 FSP -423
                                                                                                                                      ARRIVAL DATE FEB 2 1968
                                                                          FLIGHT TIME 212.00
LAUNCH DATE JUL 5 1967
                                                                          DISTANCE 603.746
    RL 152.10 LAL -.00 LOL 282.31 VL 25.320 GAL 14.41 AZL 92.02 MCA 304.78 SMA 120.21 ECC .35768 INC 2.0231 VI 29.291 RP 108.28 LAP 1.66 LOP 227.10 VP 36.707 GAP 20.20 AZP 91.15 TAL 150.32 TAP 95.10 RCA 77.21 APO 163.21 VZ 34.999 RC 190.221 GL -6.25 GP 4.98 ZAL 37.65 ZAP 174.36 ETS 114.78 ZAE 126.92 ETE 176.08 ZAC 41.34 ETC 13.02 CLP 177.39
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 63.317 VHL 7.957 DLA -27.29 RAL 241.91 RAD 6569.2 VEL 13.589 PTH 2.48 VHP 12.500 DPA -9.79 RAP 224.30 ECC 2.0420
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                117.89 13 54 41
                                                      5.10
                                                                   354.10
                                                                                125.64
                   13 31 25
                                   1396.22
         90.00
                                                                                                 112.30 16 0 57
119.87 14 36 7
110.78 19 21 36
123.80 14 46 20
108.27 21 20 45
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                                                                                                                                               20.79
                                                                                                                                                             321.06
                                                                                 131.76
                                                                   328.56
                                    960.65
                                                     17.92
         90.00
                    15 44 56
                                                                                                                                 654.8
                                                                                                                                                5.24
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                                                                  341.60
                                                                                 123.54
                                   1254.76
                                                      1.28
                    14 15 12
17 43 50
        100.00
                                                                                                                               5265.4
                                                                                                                                               24.61
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                                   5865.38
                                                     21.96
                                                                   279.96
                                                                                 133.46
        100.00
                                                                                                                                                             328.66
                                                                                                                                 620.9
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                                                      -5.42
                                                                   334.88
                                                                                 119.36
                                   1220.91
        110.00
                     14 25 59
                                                                                                                               4872.0
                                                                                                                                               31.62
                                                                                                                                                             244.50
                                                                   253.01
                                                                                 136.36
                                   5471.99
        110.00
                     19 49 33
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 5732.9 SGR 434.4 SG3 121.6
RRT - .5496 RRF - .5353 RTF .9664
                                                                                                                           ST 2102.8 SR 408.9 SS 543.0
CRT -.7419 CRS .6599 CST -.9931
      TOE-1.9324 TRA 6.4822 TC3-1.1489 BAU .9725
     ROE .5643 RRA -.1896 RC3 -.0012 FAU .00506
FOE -.3987 FRA 1.6978 FC3 -.0692 BSP 18711
                                                                                                                           LSA 2192.1 MSA 280.3 SSA 11.6
                                                                      SGB 5749.3 R23 .0010 R13 -.9685
SGI 5737.9 SG2 362.6 THA 177.61
                                                                                                                           EL1 2125.0 EL2 271.3 ALF 171.65
     BOE 2.0131 BRA 6.4850 BC3 1.1489 FSP -410
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ARRIVAL DATE FEB 4 1968

LAUNCH DATE JUL 5 1967

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HELIOCENTRIC CONIC
                                                                                                  DISTANCE 607.569
     RL 152.10 LAL -.00 LOL 282.31 VL 25.284 GAL 15.74 A7L 91.90 HCA 307.98 SMA 120.01 ECC .37389 INC 1.8953 VI 29.291
RP 108.32 LAP 1.49 LOP 230.30 VP 36.669 GAP 21.27 A7P 91.17 TAL 149.23 TAP 97.21 RCA 75.14 APO 164.89 V2 34.986
RC 191.975 GL -5.43 GP 4.90 7AL 36.28 7AP 173.90 ETS 123.71 7AE 126.64 ETE 176.14 7AC 39.29 ETC 13.58 CLP 176.36
    PLANETOCENTRIC CONIC
     C3 72.353 VHL 8.506 OLA -26.72 RAL 243.48 RAD 6569.4 VEL 13.918 PTH 2.54 VMP 13.139 DPA -10.58 RAP 226.35 ECC 2.1907
     LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 21 13 1482.65 2.33 358.94 128.29 118.23 13 45 56 882.7 6.08 352.27 90.00 16 7 41 937.73 18.51 327.13 135.94 111.82 16 23 19 337.7 21.31 319.57 100.00 14 10 42 1322.83 -1.03 345.34 126.43 119.88 14 32 45 722.8 2.95 338.81 100.00 18 0 53 5860.82 22.09 279.67 137.42 110.67 19 36 34 5260.8 24.70 271.84
                                                                                                                              118.23 13 45 56
111.82 16 23 19
119.88 14 32 45
110.67 19 38 34
123.46 14 47 8
108.60 21 33 33
                                           1275.18
                                                                      -7.47
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         110,00
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         110.00
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                                              5481.24
                                                                     29.21
                                                                                        253.66
                                                                                                            140.23
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 5706.8 SGR 424.6 SG3 117.9

RRT -.5629 RRF -.5492 RTF .9715

SGB 5722.5 R23 .0003 R13 -.9715

SGI 5711.8 SG2 350.7 TMA 177.59
                                                                                                                                                                   ST 2050.2 SR 395.4 SS 542.0
CRT -.7186 CRS .6404 CST -.9941
     TDE-1.9102 TRA 7.0519 TC3 -.9530 BAU .9218
     RDE .5826 RRA -.2151 RC3 -.0013 FAU .00356
     FDE -.3834 FRA 1.7746 FC3 -.0426 BSP 18702
BDE 1.9971 BRA 7.0552 BC3 .9530 FSP -397
                                                                                                                                                                   LSA 2138.9 MSA 280.1 SSA 11.1
                                                                                                                                                                   EL1 2070.2 EL2 272.3 ALF 171.97
                                                                                                   FLIGHT TIME 216.00
                                                                                                                                                                                    ARRIVAL DATE FEB 6 1968
LAUNCH DATE JUL 5 1967
                                                                                                   DISTANCE 611.024
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 25.249 GAL 17.19 A7L 91.76 MCA 311.17 SMA 119.82 ECC .39193 INC 1.7559 V1 29.291
RP 108.36 LAP 1.32 LOP 233.49 VP 36.633 GAP 22.45 A7P 91.16 TAL 148.24 TAP 99.41 RCA 72.86 APO 166.79 V2 34.973
RC 193.712 GL -4.65 GP 4.82 TAL 35.04 ZAP 173.26 ETS 131.44 ZAE 126.31 ETE 176.21 ZAC 37.29 ETC 14.21 CLP 175.29
    PLANETOCENTRIC CONIC
     C3 83.092 VHL 9.115 DLA -26.16 RAL 244.90 RAD 6569.6 VEL 14.298 PTH 2.60 VMP 13.851 DPA -11.33 RAP 228.36 ECC 2.3675
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                118.32 13 39 13
111.52 16 42 22
119.73 14 29 41
110.63 19 53 59
123.00 14 47 34
108.97 21 45 28
                          13 13 13 1560.35
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          90.00
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                                               923.89
          90.00
                          16 26 56
                                            1366.13
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         100.00
                         14 25 25 1328.89
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         110.00
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         110.00
                                               5491.30
                                                                                        254.36
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ST 2001.7 SR 380.7 SS 543.9
CRT -.6950 CRS .6212 CST -.9950
                                                                                             SGT 5677.6 SGR 413.6 SG3 114.3
RRT -.5759 RRF -.5628 RTF .9746
SGB 5692.6 R23 -.0005 R13 -.9746
     TOE-1.8881 TRA 7.6702 TC3 -.7710 BAU .8565
     ROE .6003 RRA -.2418 RC3 -.0020 FAU .00194
FOE -.3696 FRA 1.8595 FC3 -.0202 BSP 18576
BOE 1.9813 BRA 7.6740 BC3 .7710 FSP -382
                                                                                                                                                                   LSA 2090.5 MSA 278.1 SSA 10.5
                                                                                                                                                                   EL1 2019.4 EL2 271.3 ALF 172.33
                                                                                              SG1 5682.6 SG2 337.8 THA 177.59
                                                                                                                                                                                   ARRIVAL DATE FEB 8 1968
                                                                                                   FLIGHT TIME 218.00
LAUNCH DATE JUL 5 1967
                                                                                                  DISTANCE 614.024
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 25.215 GAL 18.80 A7L 91.60 MCA 314.36 SMA 119.64 ECC .41207 INC 1.6024 VI 29.291
RP 108.40 LAP 1.15 LOP 236.68 VP 36.598 GAP 23.77 A7P 91.12 TAL 147.36 TAP 101.72 RCA 70.34 APO 168.94 VZ 34.960
RC 195.431 GL -3.91 GP 4.75 7AL 33.95 7AP 172.47 ETS 137.96 7AE 125.92 ETE 176/27 7AC 35.36 ETC 14.92 CLP 174.15
    PLANETOCENTRIC CONIC
      C3 95.933 VML 9.795 DLA -25.59 RAL 246.14 RAC 6569.9 NEL 14.740 PTH 2.67 VMP 14.646 DPA -12.04 RAP 230.33 ECC 2.5788
     C3 95.933 VML 9.795 DLA -25.59 RAL 246.14 RAD 6569.9 VEL 14.740 PTM 2.67 VMP 14.646 DPA -12.04 RAP 230.33 ECC 2.5788 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 6 18 1632.46 -2.51 7.29 133.54 118.22 13 33 31 1032.5 1.29 .67 90.00 16 43 50 915.52 19.07 325.74 143.51 111.34 16 59 6 315.5 21.80 318.13 100.00 14 2 29 1451.04 -5.36 352.39 131.96 119.45 14 26 40 851.0 -1.40 345.85 100.00 18 30 20 5860.21 22.11 279.63 144.76 110.65 20 8 0 5260.2 24.72 271.60 110.00 14 24 32 1361.87 -11.42 343.49 128.29 122.44 14 47 34 781.9 -7.06 337.11 110.00 20 24 47 5502.14 28.74 255.11 147.43 109.35 21 56 29 4902.1 31.11 246.70
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 5642.7 SGR 401.4 SG3 110.8
RRT -.5887 RRF -.5765 RTF .9776
SG8 5656.9 R23 -.0011 R13 -.9776
                                                                                                                                                                    ST 1958.9 SR 365.2 SS 549.3
CRT -.6736 CRS .6053 CST -.9959
LSA 2048.8 MSA 273.6 SSA 10.0
      TDE-1.8777 TRA 8.3334 TC3 -.6078 BAU .7795
     RDE .6179 RRA -.2690 RC3 -.0029 FAU .00027
FDE -.3599 FRA 1.9512 FC3 -.0025 BSP 18568
BDE 1.9768 BRA 8.3377 BC3 .6078 FSP -370
                                                                                              SG1 5647.6 SG2 324.2 THA 177.59
                                                                                                                                                                    EL1 1974.6 EL2 267.8 ALF 172.71
                                                                                                                                                                                    ARRIVAL DATE FEB 10 1968
                                                                                                   FLIGHT TIME 220.00
LAUNCH DATE JUL 5 1967
                                                                                                   DISTANCE 616.460
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 282.31 VL 25.183 GAL 20.58 A7L 91.43 MCA 317.55 SMA 119.47 ECC .43463 INC 1.4313 V1 29.291
RP 108.44 LAP .97 LOP 239.87 VP 36.564 GAP 25.25 A7P 91.06 TAL 146.62 TAP 104.17 RCA 67.54 APO 171.39 V2 34.947
RC 197.134 GL -3.20 GP 4.68 ZAL 33.02 ZAP 171.55 ETS 143.44 ZAE 125.46 ETE 176.34 ZAC 33.49 ETC 15.72 CLP 172.95
    PLANETOCENTRIC CONIC
      C3 111.396 VHL 10.554 DLA -25.03 RAL 247.22 RAD 6570.1 VEL 15.256 PTH 2.74 VMP 15.539 DPA -12.71 RAP 232.25 ECC 2.8333
     C3 111.396 VHL 10.554 DLA -25.03 RAL 247.22 RAD 6570.1 VEL 15.256 PTM 2.74 VMP 15.539 DPA -12.71 RAP 232.25 ECC 2.8333 LNCM AZMTM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 58 47 910.69 19.18 325.43 146.94 111.24 17 13 57 310.7 21.90 317.81 100.00 13 58 23 1511.78 -7.38 355.77 134.56 119.05 14 23 35 911.8 -3.45 349.19 100.00 18 43 2 5862.59 22.05 279.78 148.11 110.71 20 20 45 5262.6 24.67 271.96 110.00 14 23 12 1433.92 -13.30 346.34 131.03 121.78 14 47 6 833.9 -9.01 359.88 110.00 20 34 42 5513.21 28.49 255.87 150.73 109.74 22 6 36 4913.2 30.91 247.50
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 5603.6 SGR 368.0 SG3 107.6
RRT -.6010 RRF -.5898 RTF .9807
SGB 5617.2 R23 -.0017 R13 -.9807
SGI 5608.6 SG2 309.9 THA 177.61
                                                                                                                                                                  ST 1919.5 SR 348.9 SS 558.2

CRT -.6534 CRS .5910 CST -.9967

LSA 2011.5 MSA 267.2 SSA 9.5

EL1 1933.3 EL2 262.2 ALF 173.10
      TOE-1.8742 TRA 9.0544 TC3 -.4591 BAU .6838
      ROE .6351 RRA -.2967 RC3 -.0041 FAU-.00157
     FDE -.3529 FRA 2.0529 FC3 .0122 8SP 18529
BDE 1.9789 BRA 9.0593 BC3 .4592 FSP -360
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FLIGHT TIME 214.00

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FLIGHT TIME 70,00
                                                                                                                                            ARRIVAL DATE SEP 14 1967
LAUNCH DATE JUL 6 1967
                                                                             DISTANCE 177.459
   HELIOCENTRIC CONIC
    PLE ISCAINFIL CONT.

RE 152.10 LAL -.00 LOL 283.26 VL 25.506 GAL -7.11 AZE 93.39 MCA 76.59 SMA 121.25 ECC .28115 INC 3.3940 VI 29.291
RP 108.69 LAP -3.30 LOP 359.83 VP 36.709 GAP -15.24 AZP 90.79 TAL 199.01 TAP 275.59 RCA 87.16 APO 155.35 VZ 34.865
RC 47.255 GL -16.34 GP -5.87 ZAL 126.25 ZAP 6.71 ETS 60.22 ZAE 151.63 ETE 11.39 ZAC 90.34 ETC 13.67 CLP -3.27
   PLANETOCENTRIC CONIC
    C3 28.361 VHL 5.326 DLA -5.63 RAL 151.11 RAD 6568.1 VEL 12.237 PTH 2.20 VHP 9.533 DPA -.92 RAP 175.78 ECC 1.4667 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 15 5 2124.33
13 48 58 5119.23
4 33 46 1870.52
15 12 58 4848.27
5 35 55 1675.96
16 27 19 4615.60
                                                                                                                                                   -14.05
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                                                      -17.28
                                                                     35.85
                                                                                                      76.10 15 14 17
113.96 5 4 57
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                                                       24.92
                                                                     227.64
                                                                                      20.13
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       100.00
                                                      -18.42
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117.26 6 3 51
71.66 17 44 15
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                                                                     207.37
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       100.00
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       110.00
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       110.00
                                                      29.36
                                                                     188.61
                                                                                      18.69
                                                                                                                                    4015.6
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 350.1 SR 395.2 SS 232.5

CRT -.8795 CRS -.9933 CST .8692

LSA 559.9 HSA 137.1 SSA 22.9

EL1 512.1 EL2 128.6 ALF 131.07
                                                                         SCT 702.4 SCR 423.6 SC3 92.7
RRT -.1251 RRF .1473 RTF -.6578
SCB 820.2 R23 -.0198 R13 .6608
    TOE .3017 TRA -.4022 TC3 .4186 BAU .1601
    RDE -.3650 RRA -.1364 RC3 .0551 FAU .03165
FDE -.2585 FRA -.1135 FC3 -.9661 BSP 1892
                                                                         SG1 705.5 SG2 418.4 THA 173.33
    BOE .4736 BRA .4247 BC3 .4222 FSP
                                                           -223
                                                                              FLIGHT TIME 72.00
                                                                                                                                             ARRIVAL DATE SEP 15 1967
LAUNCH DATE JUL 6 1967
                                                                              DISTANCE 184.237
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 25.737 GAL -7.08 AZL 93.31 MCA 79.76 SMA 122.58 ECC .26891 INC 3.3052 V1 29.291
RP 108.66 LAP -3.25 LOP 3.01 VP 36.879 GAP -14.20 AZP 90.59 TAL 200.20 TAP 279.96 RCA 89.62 APO 155.54 V2 34.875
RC 48.458 GL -16.60 GP -6.23 ZAL 127.88 ZAP 8.35 ETS 47.41 ZAE 150.46 ETE 9.73 ZAC 89.59 ETC 13.71 CLP -5.57
   PLANETOCENTRIC CONIC
    C3 26.566 VHL 5.154 DLA -5.25 RAL 149.39 RAD 6568.1 VEL 12.163 PTH 2.18 VHP 8.956 DPA -1.61 RAP 176.43 ECC 1.4372 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   112.87 3 40 39
75.24 15 9 52
                                                                                                                                  1520.1
                                                                                  14.19
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                       3 5 19 2120.13
                                                      -17.17
                                                                      35.59
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                    16 22 45
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                                    4589.19
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 353.3 SR 398.9 SS 238.3
CRT -.8867 CRS -.9913 CST .8557
LSA 566.7 MSA 137.9 SSA 24.2
                                                                         SCT 722.1 SCR 426.4 SC3 104.3
RRT -.1410 RRF .1699 RTF -.6708
SCB 838.6 R23 -.0272 R13 .6745
     TOE .2965 TRA -.3778 TC3 .4701 BAU .1679
    ROE -.3566 RRA -.1333 RC3 .0490 FAU .03440
    FOE -.2711 FRA -.1585 FC3-1.1210 BSP 1946
BOE .4637 BRA .4007 BC3 .4727 FSP -255
                                                                                                                                EL1 517.8 EL2 125.9 ALF 131.10
                                                                          SG1 725.9 SG2 419.9 THA 172.83
                                                                                                                                            ARRIVAL DATE SEP 18 1967
                                                                             FLIGHT TIME 74.00
LAUNCH DATE JUL 6 1967
                                                                             CISTANCE 191.016
    RL 152.10 LAL -.00 LOL 283.26 VL 25.946 GAL -7.07 AZL 93.22 MCA 82.94 SMA 123.82 ECC .25796 INC 3.2182 VI 29.291
RP 108.63 LAP -3.19 LOP 6.19 VP 37.035 GAP -13.22 AZP 90.40 TAL 201.42 TAP 284.36 RCA 91.88 APO 155.75 V2 34.886
RC 49.776 GL -16.78 GP -6.64 ZAL 129.50 ZAP 10.34 ETS 38.91 ZAE 149.51 ETE 8.15 ZAC 88.92 ETC 13.76 CLP -7.95
   PLANETOCENTRIC CONIC
    C3 25.064 VML 5.006 DLA -4.81 RAL 147.71 RAU 6568.0 VEL 12.101 PTH 2.17 VMP 8.410 DPA -2.30 RAP 176.98 ECC 1.4125
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 55 19 2119.49
13 41 39 5062.75
4 14 24 1864.39
15 5 15 4793.08
5 17 27 1866.98
16 18 41 4563.26
                                                                                   11.65
                                                                                                                                  1519.5
                                                                                                                                                                     28.38
                                                                                                                   3 30 39
                                                                                                                                                  -13.91
                                                                                                    112.88
         90.00
                                                      -17.15
                                                                      35.55
                                                                                                       74.41 15 6 2
                                                                                                                                     4462.8
                                                                                                                                                    21.57
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                                                       23.94
                                                                     223.80
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         90.00
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                                                                                                     114.09
                                                                                                                  4 45 28
                                                                                                                                   1264.4
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                                                      -18.25
                                                                      16.29
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        100.00
                                                                                                                                  4193.1
                                                                                                                16 25 8
                                                                                                                                                                    195.72
                                                                                                       73.20
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                                                       25.09
                                                                     203.60
                                                                                     13.65
       100.00
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                                                                                                                                     1067.0
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25.18
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                                                                                                     117.47
                                                      -21.19
                                                                     359.80
                                                                                       9.64
                                                                                                               17 34 44
       110.00
                                                                                                                                     3963.3
                                                                                                                                                                    177.11
                                                                                                      69.61
                                                                     184.99
                                                                                      12.69
       110.00
                                                       28.19
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 743.3 SGR 429.0 SG3 117.8
RRT -.1654 RRF .1980 RTF -.6878
SGB 858.2 R23 -.0311 R13 .6924
                                                                                                                               ST 357.8 SR 402.2 SS 245.3
CRT -.8962 CRS -.9873 CST .8436
LSA 574.6 MSA 138.3 SSA 25.4
    TOE .2940 TRA -.3506 TC3 .5259 BAU .1767
RDE -.3492 RRA -.1313 RC3 .0398 FAU .03760
    FOE -.2860 FRA -.2121 FC3-1.2988 BSP 2069
BOE .4565 BRA .3744 BC3 .5274 FSP -295
                                                                         SG1 748.3 SG2 420.3 THA 172.01
                                                                                                                                ELI 524.4 ELZ 121.8 ALF 131.28
                                                                                                                                            ARRIVAL DATE SEP 20 1967
                                                                              FLIGHT TIME 76.00
LAUNCH DATE JUL 6 1967
                                                                              DISTANCE 197.791
    RL 152.10 LAL -.00 LOL 283.26 VL 26.134 GAL -7.06 AZL 93.13 MCA 86.12 SMA 124.96 ECC .24819 INC 3.1323 VI 29.291
RP 108.59 LAP -3.13 LOP 9.38 VP 37.178 GAP -12.28 AZP 90.21 TAL 202.64 TAP 288.76 RCA 93.94 APO 155.97 V2 34.897
RC 51.201 GL -16.89 GP -7.09 ZAL 131.09 ZAP 12.59 ETS 33.10 ZAE 148.80 ETE 6.59 ZAC 88.36 ETC 13.82 CLP -10.43
   PLANETOCENTRIC CONIC
    C3 23.806 VHL 4.879 DLA -4.33 RAL 146.11 RAD 6568.0 VEL 12.049 PTH 2.15 VMP 7.894 DPA -3.00 RAP 177.43 ECC 1.3918
    LNCH AZHTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 45 17 2122.00 -17.22 35.70 9.30 112.83 3 20 39 1522.0 -13.98 28.53
                                                                                      11.54
                                                                                                       73.61 15 2 49
                                                                                                                                      4435.0
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                                     5034.96
                                                      23.42
                                                                     221.93
         90.00
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                                                                                                      114.05
                                                                                                                                     1266.1
                                                                                                                                                     -14.90
                       4 4 36
                                   1866.15
                                                      -18.30
                                                                      16.40
                                                                                       8.80
        100.00
                                                                                                       72.39 16 21 42
117.47 5 35 58
68.95 17 30 48
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                                                                     201.77
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                                                                                                                                                      21.91
                                                                                      11.16
        100.00
                     15 2 16
                                     4766.04
                                                      24.55
                                                                                                                                                                     352.79
                                                                                                                                     1067.1
                                                                                                                                                    -17.35
                    5 8 11 1667.07
16 15 10 4537.88
                                                                                                      117.47
        110.00
                                                      -21.19
                                                                      359.81
                                                                                        7.32
                                                                                                                                     3937.9
                                                                                                                                                     24.47
                                                                                                                                                                     175.48
                                                                      163.27
                                                       27.58
                                                                                        9.04
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 760.5 SGR 431.4 SG3 132.6
RRT -.1897 RRF .2292 RTF -.7000
SGB 874.4 R23 -.0387 R13 .7058
                                                                                                                               ST 358.2 SR 404.9 SS 251.1
CRT -.9029 CRS -.9812 CST .8276
LSA 578.8 MSA 140.1 SSA 26.5
     TOE .2885 TRA -.3260 TC3 .5763 BAU .1836
     ROE -.3426 RRA -.1305 RC3 .0274 FAU .04119
     FDE - .3004 FRA - .2721 FC3-1 .4979 BSP 2141
BOE .4478 BRA .3511 BC3 .5770 FSP -338
                                                                                                                                EL1 527.5 EL2 118.2 ALF 131.13
                                                                         SG1 766.8 SG2 420.1 THA 171.20
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ARRIVAL DATE SEP 22 1967

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FLIGHT TIME 78.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 204.559
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.303 GAL -7.07 A7L 93.05 MCA 89.30 SMA 126.01 ECC .23953 INC 3.0469 V1 29.291
RP 108.56 LAP -3.05 LOP 12.56 VP 37.308 GAP -11.38 AZP 90.04 TAL 203.85 TAP 293.15 RCA 95.83 APO 156.19 V2 34.908
RC 52.722 GL -16.91 GP -7.59 ZAL 132.62 ZAP 15.03 ETS 28.99 ZAE 148.33 ETE 5.02 ZAC 87.91 ETC 13.88 CLP -13.01
  PLANETOCENTRIC CONIC
    C3 22.751 VHL 4.770 OLA -3.81 RAL 144.59 RAD 6567.9 VEL 12.005 PTH 2.14 VMP 7.407 OPA -3.71 RAP 177.77 ECC 1.3744
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              112.73 3 10 46
72.85 15 0 14
113.96 4 26 3
71.61 16 18 53
117.41 5 26 52
68.14 17 27 27
                                                                                                                               1527.2
                                                                                                                                              -14.13
                                                   -17.36
                                                                   36.03
                                                                                   7.14
                     2 35 19 2127.24
                                                                                                                                               20.32
                                                                                                                                4407.6
                                                                  220.10
                                                                                    9.07
        90.00
                   13 36 46
                                  5007.59
                                                     22.88
                                                                                                                                               -15.03
                                                                                                                                1270.6
                    3 54 53 1870.59
                                                   -18.43
                                                                   16.67
                                                                                    6.66
      100.00
                                                                                                                                               21.26
                   14 59 54
                                   4739.47
                                                    23.99
                                                                   199.99
                                                                                    8.58
                                                                                                                                4139.5
      100.00
                                                                                                                                              -17.44
                                                                                                                                                              352.94
                                                                  359.97
                                                                                    5.20
                                                                                                                                1069.7
                     4 59 2 1669.73
                                                   -21.28
      110.00
                                                                                                                                               23.75
                   16 12 14
                                                                  181.60
                                                                                    7,47
                                                                                                                                3913.1
      110.00
                                   4513.09
                                                    26.96
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 356.8 SR 407.1 SS 256.9

CRT -.9086 CRS -.9730 CST .8094

LSA 581.3 MSA 142.8 SSA 27.5
                                                                      SGT 775.3 SGR 434.1 SG3 150.0
RRT -.2179 RRF .2654 RTF -.7102
SGB 888.6 R23 -.0476 R13 .7177
   TOE .2824 TRA -.3027 TC3 .6230 BAU .1895
RDE -.3366 RRA -.1308 RC3 .0113 FAU .04528
   FDE -.3154 FRA -.3407 FC3-1.7230 BSP 2207
BDE .4394 BRA .3298 BC3 .6231 FSP -389
                                                                                                                            EL1 529.1 ELZ 114.7 ALF 130.86
    BOE .4394 BRA .3298 BC3 .6231 FSP
                                                                      5G1 783.4 SG2 419.2 THA 170.22
                                                                                                                                       ARRIVAL DATE SEP 24 1967
                                                                           FLIGHT TIME 80.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 211.316
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.455 GAL -7.08 AZL 92.96 MCA 92.48 SMA 126.97 ECC .23188 INC 2.9616 V1 29.291
RP 108.52 LAP -2.96 LOP 15.75 VP 37.425 GAP -10.52 AZP 89.87 TAL 205.03 TAP 297.51 RCA 97.53 APO 156.41 V2 34.920
RC 54.330 GL -16.86 GP -8.15 ZAL 134.08 ZAP 17.66 ETS 25.95 ZAE 148.12 ETE 3.40 ZAC 87.59 ETC 13.94 CLP -15.72
  PLANETOCENTRIC CONIC
   C3 21.862 VHL 4.676 DLA -3.25 RAL 143.18 RAD 6567.9 VEL 11.968 PTH 2.13 VHF 6.948 DPA -4.41 RAP 177.97 ECC 1.3598 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                112.58
                                                                                                                                              -14.34
                                                    -17.56
                                                                                    5.19
                                                                                                               3 1 8
                                                                                                                                1534.8
                                                                                                                                                                29.29
        90.00
                     2 25 33 2134.81
                                                                    36.49
                                                                   218.32
                                                                                                   72.12 14 58 17
                                                                                                                                 4380.7
                                                                                                                                                19.68
                                                                                                                                                               210.65
                   13 35 16
                                 4980.70
                                                   22.33
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        90.00
                 3 45 23 1877.31
14 58 8 4713.43
                                                                                                 113.82 4 16 40
70.87 16 16 42
                                                                                     4.72
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                                                   -18.61
                                                                    17.08
      100.00
                                                                                                                                                               190.61
                                                                                                                                4113.4
                                                                                                                                               20.60
                                                   23.42
                                                                   198.27
                                                                                     6.40
      100.00
                                                                                                 117.29 5 16 3
67.38 17 24 41
                   4 50 8 1674.58
16 9 52 4488.92
                                                                                                                                               -17.60
                                                                                                                                1074.6
                                                                                                                                                               353.22
                                                   -21.43
                                                                      .26
                                                                                    3.28
      110.00
                                                                                                                                3688.9
                                                                                                                                                23.04
                                                                                                                                                               172.39
                                                                   180.00
                                                                                    5.18
      110.00
                                                    26.34
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 352.9 SR 408.7 SS 262.3
CRT -.9127 CRS -.9626 CST .7881
                                                                     SGT 786.3 SGR 437.2 SG3 169.4
RRT - 2492 RRF .3068 RTF - .7179
    TDE .2749 TRA -.2814 TC3 .6640 BAU .1941
    RDE -.3312 RRA -.1324 RC3 -.0087 FAU .04990
    FDE -.3306 FRA -.4185 FC3-1.9761 BSP 2261
BDE .4304 BRA .3109 BC3 .6640 FSP -447
                                                                     SGB 899.7 R23 -. 0591 R13 .7275
                                                                                                                            LSA 581.5 MSA 146.7 SSA
                                                                                                                                                                  2A.3
                                                                       SG1 796.7 SG2 417.9 THA 169.07
                                                                                                                            EL1 528.4 EL2 111.6 ALF 130.41
                                                                                                                                       ARRIVAL DATE SEP 26 1967
                                                                           FLIGHT TIME 82.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 218.059
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.589 GAL -7.09 AZL 92.88 MCA 95.67 SMA 127.85 ECC .22514 INC 2.8759 V1 29.291
RP 108.48 LAP -2.86 LOP 18.94 VP 37.532 GAP -9.70 AZP 89.72 TAL 206.16 TAP 301.83 RCA 99.06 APO 156.63 V2 34.932
RC 56.016 GL -16.75 GP -8.78 ZAL 135.46 ZAP 20.47 ETS 23.62 ZAE 148.16 ETE 1.69 ZAC 87.43 ETC 14.00 CLP -18.56
   PLANETOCENTRIC CONIC
    C3 21.109 VHL 4.594 OLA -2.68 RAL 141.88 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 6.517 DPA -5.12 RAP 178.02 ECC 1.3474 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 112.39 2 51 49
71.43 14 56 58
113.64 4 7 36
70.18 16 15 7
                                                                                3.44
                                                                                                112.39
                                                                                                                                              -14.61
                                                                                                                               1544.3
                   2 16 5 2144.31
13 34 24 4954.31
                                                                   37.08
        90.00
                                                  -17.80
                                                                                    4.74
                                                                                                                                4354.3
                                                                                                                                                               208.99
                                                     21.77
                                                                   216.59
                                                                                                                                1285.9
                                                                                                                                               -15.49
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                     3 36 10 1885.94
                                                                                    2.98
                                                   -18.85
                                                                    17.61
                                                                                                                                4087.9
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                    14 56 59
                                  4687.91
                                                     22.84
                                                                   196.60
                                                                                    4.34
                                                                                                  70.10
117.13 5 5 5
56 17 22 31
                                                                                                                                1081.3
                                                                                                                                             -17.83
22.33
                                                                                                                                                               353.61
                                                                                    1.57
                     4 41 33 1681.27
                                                    -21.64
                                                                      .67
                                                                                                                                3665.4
                    16 8 6
                                  4465.35
                                                     25.71
                                                                   178.45
                                                                                    3.00
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 793.2 SGR 441.4 SG3 191.3
RRT -.2840 RRF .3538 RTF -.7229
SGB 907.7 R23 -.0731 R13 .7357
                                                                                                                            ST 347.0 SR 409.8 SS 267.6
    TOE .2664 TRA - .2622 TC3 .6981 BAU
                                                        .1972
                                                                                                                            CRT -.9153 CRS -.9503 CST .7635
LSA 579.7 MSA 151.8 SSA 28.8
    RDE -.3261 RRA -.1353 RC3 -.0334 FAU .05514
    FOE -.3459 FRA -.5059 FC3-2.2614 BSP 2299
BOE .4211 BRA .2951 BC3 .6989 FSP -512
                                                                                                                            EL1 525.8 ELZ 109.0 ALF 129.82
                                                                       SG1 806.7 SG2 416.2 THA 167.69
                                                                                                                                        ARRIVAL DATE SEP 28 1967
                                                                           FLIGHT TIME 84.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 224.786
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.709 GAL -7.10 A7L 92.79 MCA 98.86 SMA 128.64 ECC .21924 INC 2.7891 V1 29.291 RP 108.45 LAP -2.76 LOP 22.13 VP 37.628 GAP -8.92 A7P 89.57 TAL 207.24 TAP 306.09 RCA 100.43 APO 156.84 V2 34.945 RC 57.772 GL -18.56 GP -9.48 7AL 136.76 7AP 23.46 ETS 21.79 7AE 148.46 ETE 359.82 7AC 87.42 ETC 14.05 CLP -21.56
   PLANETOCENTRIC CONIC
    C3 20.467 VHL 4.524 DLA -2.08 RAL 140.71 RAD 6567.8 VEL 11.910 PTH 2.12 VHP 6.113 DPA -5.84 RAP 177.90 ECC 1.3368
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 6 56 2155.42 -18.09 37.77 1.89 112.16 2 42 53 1555.4 -14.93 30.52
                                                                                                    70.77
                                                                                                              14 56 17
                                                                                                                                 4328.4
                                                                                                                                                 18.38
                                                                                                                                                               207.36
                    13 34 9
                                                                   214.90
                                                                                     2.88
                                  4928.40
                                                    21.20
        90.00
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                     3 27 20
                                  1896.15
                                                    -19.13
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       100.00
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       100.00
                    14 56 28
                                  4662.90
                                                    22.25
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                  4 33 21 1689.48
16 6 56 4442.34
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       110.00
                                                    -21.89
                                                                     1.17
                                                                                      .05
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                                                    25.08
                                                                   176.96
                                                                                     1.21
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      361 797.5 SGR 447.7 SG3 216.5
RRT - 3253 RRF .4079 RTF -.7271
SGB 914.5 R23 -.0882 R13 .7442
                                                                                                                         ST 341.0 SR 410.5 SS 274.2

CRT -.9174 CRS -.9354 CST .7378

LSA 578.0 MSA 158.0 SSA 29.2

ELI 522.9 EL2 106.6 ALF 129.25
    TOE .2586 TRA -.2441 TC3 .7273 BAU .1998
    RDE -.3214 RRA -.1400 RC3 -.0633 FAU .06115
    FOE -.3630 FRA -.6062 FC3-2.5865 BSP 2368
BDE .4125 BRA .2814 BC3 .7300 FSP -592
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SG1 815.5 SGZ 414.0 THA 165.96

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FLIGHT TIME 86.00
                                                                                                                                      ARRIVAL DATE SEP 30 1967
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 231.495
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.814 GAL -7.12 AZL 92.70 MCA 102.05 SMA 129.34 ECC .21409 INC 2.7008 VI 29.291
RP 108.41 LAP -2.64 LOP 25.32 VP 37.715 GAP -8.16 AZP 89.44 TAL 208.24 TAP 310.29 RCA 101.65 APO 157.03 VZ 34.957
RC 59.590 GL -16.32 GP -10.26 ZAL 137.96 ZAP 26.65 ETS 20.29 ZAE 149.03 ETE 357.74 ZAC 87.61 ETC 14.09 CLP -24.74
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90,00 1 58 16 2167.81 -18.41 38.54 .54 111.90 2 34 23 1567 8 -15 27 27 27 27
                    13 34 31
                                 4902.93
1907.62
                                                   20.62
                                                                  213.26
                                                                                    1.22
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                                                                                                                                4302.9
                                                                                                                                               17.73
        90.00
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                                                                   18.96
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                   14 56 32
       100,00
                                  4638.34
                                                   21.66
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                                                                     1.75
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       110.00
                     4 25 36
                                 1698.91
                                                   -22.18
                                                                                                   65.33 17 20 1
                                                                                 359.53
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                                                                                                                                                              168.15
                                                                   175.52
       110 00
                   16 6 21
                                  4419.83
                                                     24.45
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 792.8 SCR 456.3 SC3 244.3
RRT - 3646 RRF .4660 RTF - .7245
SCB 914.8 R23 - .1102 R13 .7481
                                                                                                                           ST 330.8 SR 410.4 SS 279.2

CRT -.9155 CRS -.9207 CST .7039

LSA 572.3 MSA 165.6 SSA 29.3
    TDE .2476 TRA -.2313 TC3 .7426 BAU .1994
RDE -.3166 RRA -.1461 RC3 -.0987 FAU .06779
    FOE -.3777 FRA -.7154 FC3-2.9472 BSP 2375
                                                                                                                           EL1 516.4 EL2 105.8 ALF 128.33
                                                                      SG1 816.4 SG2 412.6 THA 163.95
    BOE .4019 BRA .2736 BC3 .7491 FSP
                                                                                                                                       ARRIVAL DATE OCT 2 1967
                                                                           FLIGHT TIME AR.00
LAUNCH DATE JUL 6 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 238.184
    RL 152.10 LAL -.00 LOL 283.26 VL 26.906 GAL -7.13 A7L 92.61 MCA 105.24 SMA 129.97 ECC .20962 INC 2.6103 VI 29.291
RP 108.37 LAP -2.52 LOP 28.32 VP 37.792 GAP -7.44 A7P 89.31 TAL 209.16 TAP 314.40 RCA 102.73 APO 157.21 V2 34.970
RC 61.464 GL -16.01 GP -11.12 ZAL 139.06 ZAP 30.06 ETS 19.03 ZAE 149.86 ETE 355.35 ZAC 88.00 ETC 14.09 CLP -28.10
   PLANETOCENTRIC CONIC
    C3 19.429 VHL 4.408 DLA -.85 RAL 138.75 RAD 6567.8 VEL 11.866 PTH 2.11 VHP 5.387 DPA -7.27 RAP 177.08 ECC 1.3198 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 50 0 2181.25 -18.75 39.38 359.37 111.62 2 26 22 1581.3 -15.65 32.08
                    1 50 0 2181.25
13 35 29 4877.80
                                                                                 359.37
                                                                  211.65
                                                                                                             14 56 47
                                                                                  359.76
                                                                                                                                4277.8
                                                   20.03
                                                                                                   69.56
                                                                                                                                                17.07
                                                                                                                                                               204.23
        90.00
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                                                                   19.74
                                                                                  358.92
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14 57 13
                                 1920.14
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                                 1709.34
4397.71
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                    16 6 22
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                                                                                 358.04
                                                                                                                                                              166.43
       110.00
                                                   23.82
   DIFFERENTIAL CORRECTIONS
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 781.1 SGR 466.6 SG3 275.4
RRT -.4035 RRF .5263 RTF -.7166
SGB 910.9 R23 -.1373 R13 .7503
                                                                                                                            ST 318.9 SR 409.6 55 283.9
    TOE .2356 TRA -.2225 TC3 .7462 BAU .1972
                                                                                                                           CRT -.9105 CRS -.9035 CST .6635
LSA 564.7 MSA 174.3 SSA 29.4
    ROE -.3117 RRA -.1539 RC3 -.1406 FAU .07520
    FOE -.3909 FRA -.8353 FC3-3.3507 BSP 2362
                                                                                                                           EL1 308.1 EL2 106.3 ALF 127.24
    BOE .3907 BRA .2706 BC3 .7593 FSP -775
                                                                       SG1 812.2 SG2 412.3 THA 161.45
                                                                          FLIGHT TIME 90.00
                                                                                                                                      ARRIVAL DATE OCT 4 1967
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 244.850
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.986 CAL -7.13 AZL 92.52 MCA 108.43 SMA 130.52 ECC .20574 INC 2.5169 V1 29.291
RP 108.33 LAP -2.39 LOP 31.71 VP 37.861 CAP -6.75 AZP 89.20 TAL 209.98 TAP 318.42 RCA 103.67 APO 157.57 V2 34.983
RC 63.388 GL -15.65 CP -12.08 ZAL 140.07 ZAP 33.68 ETS 17.93 ZAE 150.94 ETE 352.54 ZAC 88.61 ETC 14.06 CLP -31.68
   PLANETOCENTRIC CONIC
    C3 18.998 VHL 4.359 OLA -.21 RAL 137.97 RAD 6567.8 VEL 11.848 PTH 2.10 VHP 5.066 OPA -7.99 RAP 176.33 ECC 1.3127
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO-CST TIM INJ 2 LAT INJ 2 LONG
                                                                                358.37
                                                                                               111.31
                                                                                                              2 18 48
                                                                                                                              1595.6
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                     1 42 13 2195.57
                                                   -19.10
                                                                   40.28
        90.00
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                                                                  210.07
                                                                                 358.47
        90.00
                    13 37 4
                                  4852.89
                                                    19.43
                                                                   20.57
                                                                                 357.93
                                                                                                112.59
                                                                                                              3 35 41
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                    3 3 27 1933.51
14 58 30 4590.18
       100.00
                                                   -20.12
                                                                                 358.04
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       100.00
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64.14 17 19 55
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19.50
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                                                                                 356.61
                     4 11 28 1720.60
16 6 59 4375.85
                                                                    3.09
       110.00
                                                   -22.84
                                                                                                                               3775.9
                  16 6 59
                                                                  172.74
                                                                                 356.73
       110.00
                                                    23.17
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 761.4 SGR 485.8 SG3 309.9
RRT -.4383 RRF .5931 RTF -.7016
SGB 903.2 R25 -.1704 R13 .7511
                                                                                                                           ST 305.4 SR 408.2 SS 288.2
    TOE .2224 TRA -.2185 TC3 .7362 BAU .1931
                                                                                                                          CRT -.9013 CRS -.8850 CST .6141
LSA 555.1 MSA 184.1 SSA 29.3
    ROE -.3066 RRA -.1636 RC3 -.1896 FAU .08339
FOE -.4017 FRA -.9652 FC3-3.7999 BSP 2329
BOE .3787 BRA .2730 BC3 .7602 FSP -882
                                                                                                                           EL1 498.1 EL2 108.4 ALF 125.96
                                                                      SG1 802.6 SG2 414.3 THA 158.34
                                                                                                                                       ARRIVAL DATE OCT 6 1967
                                                                          FLIGHT TIME 92.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 251.493
   HELIOCENTRIC CONIC
   RL 152:10 LAL -.00 LOL 283:26 VL 27.055 GAL -7.13 AZL 92.42 MCA 111.63 SMA 131.00 ECC .20238 INC 2.4199 VI 29.291
RP 108:29 LAP -2.25 LOP 34:91 VP 37.922 GAP -6.08 AZP 89:11 TAL 210.70 TAP 322.34 RCA 104:49 APO 157.51 V2 34:996
RC 65:357 GL -15:23 GP -13:15 ZAL 140.97 ZAP 37:55 ETS 16:92 ZAE 152:24 ETE 349:17 ZAC 89:46 ETC 13:98 CLP -35:49
   PLANETOCENTRIC CONIC
                                           .43 RAL 137.33 RAD 6567.8 VEL 11.832 PTH 2.10 VHP 4.772 DPA -8.71 RAP 175.34 ECC 1.3062
    C3 18.608 VHL 4.314 DLA
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 34 31 2210.86 -19.47 41.23 357.54 110.97 2 11 42 1610.7 -16.45 33.86
                    13 39 16 4828.03
2 56 24 1947.63
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        90.00
                    13 39 16
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                                                                                  357.11
       100.00
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                                  4566.29
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       110.00
                     4 5 6 1732.58
                                                   -23.20
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                   16 8 11 4354.11
                                                                                 355.59
       110.00
                                                    22.52
                                                                  171.39
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 735.1 SGR 509.8 SG3 348.0
RRT -.4668 RRF .6587 RTF -.6783
SGB 894.6 R23 -.2074 R13 .7528
                                                                                                                        ST 292.1 SR 406.2 SS 293.1

CRT -.8877 CRS -.8663 CST .5570

LSA 545.4 MSA 194.8 SSA 29.1

ELI 487.7 EL2 112.0 ALF 124.64
    TOE .2095 TRA -.2186 TC3 .7133 BAU .1878
    ROE -.3012 RRA -.1754 RC3 -.2473 FAU .09242
    FOE -.4114 FRA-1.1064 FC3-4.3000 BSP 2307
BDE .3669 BRA .2803 BC3 .7549 FSP -1007
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SG1 790.2 SG2 419.5 THA 154.36

ARRIVAL DATE OCT 8 1967

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FLIGHT TIME 94.00
LAUNCH CATE JUL 6 1967
                                                                   DISTANCE 258.112
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 27.114 GAL -7.13 A7L 92.32 HCA 114.83 SMA 131.41 ECC .19950 INC 2.3184 V1 29.291
RP 108.25 LAP -2.10 LOP 38.11 VP 37.976 GAP -5.44 A7P 89.03 TAL 211.32 TAP 326.15 RCA 105.19 APO 157.63 V2 35.009
RC 67.365 GL -14.76 GP -14.32 7AL 141.78 7AP 41.66 ETS 15.95 7AE 153.74 ETE 345.03 7AC 90.56 ETC 13.82 CLP -39.55
   PLANETOCENTRIC CONIC
   C3 18.246 VHL 4.272 DLA 1.09 RAL 136.81 RAD 6567.7 VEL 11.816 PTH 2.09 VMP 4.506 DPA -9.43 RAP 174.08 ECC 1.3003
                                             INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
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67.91 15 2 9
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                                                                                                                   1626.5
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                                                            42.23
                   1 27 56 2226.46
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       90.00
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                                                                          356.39
                  13 42 6
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                               1962.45
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                               4542.27
                                               19.18
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                                                                                        115.51 4 28 16
63.04 17 22 13
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                   3 59 11 1745.20
                                              -23.57
                                                              4.63
                                                                         355.17
                                                                                                                  3732.3
                                                                                                                                 18.06
                                                                                                                                               162.97
                                               21.85
                                                            170.05
                                                                         354.61
                  16 10 1
                               4332.28
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 697.6 SGR 540.9 SG3 388.4

RRT -.4746 RRF .7203 RTF -.6369

SGB 882.8 R23 -.2491 R13 .7544

SG1 770.3 SG2 431.2 THA 149.23
                                                                                                               ST 276.2 SR 403.1 SS 295.3
CRT -.8639 CRS -.8453 CST .4790
LSA 531.5 MSA 206.5 SSA 28.9
    TOE .1940 TRA - .2264 TC3 .6691 BAU
                                                   .1802
    ROE - .2951 RRA - .1890 RC3 - .3135 FAU .10196
   FOE -.4129 FRA-1.2506 FC3-4.8379 BSP 2236
BOE .3531 BRA .2949 BC3 .7389 FSP -1136
                                                                                                                EL1 474.1 EL2 118.3 ALF 122.93
                                                                                                                          ARRIVAL DATE OCT 10 1967
                                                                   FLIGHT TIME 96.00
                                                                   DISTANCE 264.706
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 27.163 GAL -7.11 AZL 92.21 MCA 118.03 SMA 131.76 ECC .19702 INC 2.2114 V1 29.291 RP 108.20 LAP -1.95 LOP 41.31 VP 38.023 GAP -4.83 AZP 88.96 TAL 211.83 TAP 329.87 RCA 105.80 APO 157.72 V2 35.023
   RC 69.409 GL -14.23 GP -15.61 TAL 142.49 TAP 46.02 ETS 14.98 TAE 155.36 ETE 339.87 TAC 91.92 ETC 13.57 CLP -43.86
   PLANETOCENTRIC CONIC
                                      1.77 RAL 136.43 RAD 6567.7 VEL 11.802 PTH 2.09 VMP 4.269 DPA -10.16 RAP 172.54 ECC 1.2947
    C3 17.904 VHL 4.231 OLA
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                -17.31
                                                                                                                                                35.85
                                                                                        110.23
                                                                                                     1 58 47
                                                                                                                   1643.0
                    1 21 24 2243.01
                                               -20.25
                                                             43.29
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                              4777.63
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                  13 45 36
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                                                             23.39
                                                                          355.95
      100.00
                    2 43 35
                                               -21.26
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                 15 6 7 4517.89
3 53 41 1758.48
16 12 28 4310.16
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                                                                                                                    3917.9
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                                                18.52
                                                             185.82
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                                                                                          66.11
      100.00
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                                               -23.95
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                                                                                          62.51 17 24 19
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                                                             164.70
                                                                          353.79
                                                21.16
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 653.1 SGR 580.8 SG3 430.8
RRT -.4546 RRF .7762 RTF -.5716
                                                                                                                ST 260.5 SR 39A.9 SS 296.0
CRT -.8276 CRS -.8226 CST .3795
LSA 515.6 MSA 218.9 SSA 28.8
    TOE .1779 TRA -.2408 TC3 .6050 BAU .1722
    RDE -. 2880 RRA -. 2042 RC3 -. 3895 FAU .11196
                                                                SGB 874.0 R23 - .2835 R13 .7632
    FOE -.4069 FRA-1.3955 FC3-5.4136 BSP 2164
                                                                                                                EL1 459.1 EL2 127.0 ALF 121.03
    BOE .3385 BRA .3158 BC3 .7196 FSP -1273
                                                                SG1 748.4 SG2 451.4 THA 142.26
                                                                                                                          ARRIVAL DATE OCT 12 1967
                                                                    FLIGHT TIME 98.00
LAUNCH DATE JUL 6 1967
                                                                   DISTANCE 271.274
    RL 152.10 LAL -.00 LOL 283.26 VL 27.203 GAL -7.10 AZL 92.10 HCA 121.24 SMA 132.04 ECC .19491 INC 2.0978 V1 29.291 RP 108.16 LAP -1.79 LOP 44.52 VP 38.064 GAP -4.24 AZP 88.91 TAL 212.23 TAP 333.47 RCA 106.31 APO 157.78 V2 35.036
    RC 71.485 GL -13.63 GP -17.01 ZAL 143.11 ZAP 50.63 ETS 13.95 ZAE 157.01 ETE 333.38 ZAC 93.53 ETC 13.22 CLP -48.44
   PLANETOCENTRIC CONIC
    C3 17.573 VHL 4.192 DLA 2.47 RAL 136.18 RAC 6567.7 VEL 11.788 PTH 2.08 VHP 4.062 CPA -10.89 RAP 170.74 ECC 1.2892
    ENCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 15 11 2260.44
13 49 48 4751.54
                                                                                                                  1660.4
                                                                         355.99
                                                                                        109.61
                                                                                                     1 52 51
                                               -20.65
                                                             44.41
        90.00
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                                               16.83
                                                             203.77
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        90.00
                   13 49 48
                   2 37 40 1994.36
15 10 0 4492.85
3 48 33 1772.51
16 15 36 4287.47
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                                                            184.29
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       100.00
                                                                                         114.76 4 18 6
61.99 17 27 4
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                                               -24.36
                                                              6.36
                                                                          354.35
                                                                                         114.76
       110.00
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                                                             167.33
                                                                          353.11
                  16 15 36
                                                20.44
       110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 606.6 SGR 631.1 SG3 475.1
RRT -.3960 RRF .8254 RTF -.4719
SGB 875.3 R23 -.2857 R13 .7903
                                                                                                                ST 247.1 SR 393.7 SS 296.5
CRT -.7762 CRS -.7995 CST .2596
LSA 499.2 MSA 232.2 SSA 28.5
    TOE .1626 TRA - .2611 TC3 .5211 BAU .1660
    ROE -.2801 RRA -.2214 RC3 -.4769 FAU .12229
FOE -.3949 FRA-1.5399 FC3-6.0244 BSP 2135
BOE .3239 BRA .3424 BC3 .7064 FSP -1423
                                                                                                                 EL1 443.8 EL2 138.2 ALF 119.05
                                                                561 731.7 SG2 480.4 THA 132.14
                                                                                                                           ARRIVAL DATE OCT $4 1967
                                                                    FLIGHT TIME 100.00
LAUNCH DATE JUL 6 1967
                                                                    DISTANCE 277.816
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.234 GAL -7.07 AZL 91.98 MCA 124.44 SMA 132.27 ECC .19310 INC 1.9761 V1 29.291
RP 108.12 LAP -1.63 LOP 47.72 VP 38.099 GAP -3.67 AZP 88.88 TAL 212.52 TAP 336.97 RCA 106.73 APO 157.81 V2 35.049
RC 73.590 GL -12.97 GP -18.52 ZAL 143.63 ZAP 55.45 ETS 12.84 ZAE 158.52 ETE 325.23 ZAC 95.39 ETC 12.73 CLP -53.27
   PLANETOCENTRIC CONIC
    C3 17.247 VHL 4.153 DLA 3.20 RAL 136.06 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 3.885 DPA -11.62 RAP 168.67 ECC 1.2838
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1678.9
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12.77
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                  1 9 14 2278.92
13 54 47 4724.38
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                   2 32 4 2011.73
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       100.00
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15.72
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17 30 31
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                                               -24.7A
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       110.00
                    3 43 44
                              1787.41
                                                                                                                     3663.9
                                                             165.93
                                                                                          61.47
       110.00
                  16 19 27
                                 4263.90
                                                19.68
                                                                           352.57
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 235.0 SR 386.1 S5 292.7

CRT -.6988 CRS -.7701 CST .0996

LSA 478.1 MSA 246.3 SSA 28.4
                                                                SCT 563.2 SCR 690.0 SC3 518.0
RRT - 2703 RRF .8655 RTF - .3122
SCB 890.7 R23 - .2109 R13 .8433
     TOE .1462 TRA -.2901 TC3 .4098 BAU .1627
    RDE -.2703 RRA -.2394 RC3 -.5744 FAU .13220
FDE -.3C 1 FRA-1.6677 FC3-6.6358 BSP -2124
BDE .3G 3 BRA .3761 BC3 .7056 FSP -1563
                                                                                                                EL1 425.5 EL2 152.6 ALF 116.75
                                                                 561 726.8 562 514.8 THA 116.46
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LAUNCH DATE JUL 6 1967
                                                                                        FLIGHT TIME 102.00
                                                                                                                                                                ARRIVAL DATE OCT 16 1967
                                                                                        DISTANCE 284.332
    HELIOCENTRIC CONIC
     RL 152:10 LAU -.00 LOL 283.26 VL 27.259 GAL -7.04 AZL 91.84 MCA 127.65 8MA 132.44 ECC .19158 INC 1.8445 V1 29.291
RP 108.08 LAP -1.46 LOP 50.93 VP 38.128 GAP -3.12 AZP 88.87 TAL 212.71 TAP 340.36 RCA 107.07 APO 157.82 VZ 35.062
RC 75.721 GL -12.22 GP -20.13 ZAL 144.07 ZAP 60.48 ETS 11.60 ZAE 159.70 ETE 315.23 ZAC 97.46 ETC 12.09 CLP -58.34
    PLANETOCENTRIC CONIC
      C3 16.921 VHL 4.114 DLA
                                                  3.98 RAL 136.07 RAD 6567.7 VEL 11.760 PTH
                                                                                                                        2.08 WHP 3.739 DPA -12.37 RAP 166.35 ECC 1.2785
     LNCH AZMTH LNCH TING L-I TING INJLAT INJ LONG INJRT ASC INJ AZMTH INJ TINE PO CAT TIN INJ 2 LAT INJ 2 LONG 90.00. 1 3 27 2298.79 -21.52 46.89 355.69 108.86 1 41 45 1698.8 -18.75 39.31
          90.00 1 3 27 2296.79
90.00 14 0 39 4695.71
                                                                                                                 108.86
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64.58 16 34 7
113.87 4 9 14
60.95 17 34 45
                         2 26 30 2030.41
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        100.00
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        100.00 15 20 8
                                          4439.32
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        110.00
                         3 39 10 1803.44
                                                             -24.22
                                                                                 4.34
                                                                                                                                                       1203.4
                                                                                                354.11
                                                                                                                                                                         -21.78
                                                                                                                                                                                               .88
                      16 24 6
                                                                                                                                                                                           157.65
        110.00
                                          4230.06
                                                                               164.46
                                                                                                352.16
                                                                                                                                                       3639.1
                                                                                                                                                                          14.85
                                                              18.87
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                   HIO-COURSE EXECUTIVE RECONSTRUCTION SGT 539.0 SGR 757.8 SG3 558.2 RRT -.0861 RRF -.0830
     TOE .1309 TRA -.3850 TC3 .2725 BAU .1662
ROE -.8564 RRA -.2577 RC3 -.6625 FAU .14136
                                                                                                                                                  ST 227.9 SR 376.2 SS 286.5
CRT -.5951 CRS -.7345 CBT -.0906
     FOE -.3226 FRA-1.7743 FC3-7.2326 BBP 2203
BDE .2897 BRA .4154 BC3 .7349 FBP -1666
                                                                                   868 929.9 RE3 -.0395 R13 .8968
861 759.6 862 536.5 THA 95.54
                                                                                                                                                  LBA 454.3 MSA 261.3 SSA 28.4
                                                                                                                                                  EL1 405.7 EL2 169.8 ALF 114.36
LAUNCH DATE JUL 6 1067
                                                                                        FLIGHT TIME 104.00
                                                                                                                                                                ARRIVAL DATE OCT 18 1967
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 200.821
    RL 152.10 LAL -.00 LOL 283.26 VL 27.276 GAL -6.98 AZL 91.70 MCA 130.86 8MA 132.57 ECC .19029 INC 1.7010 V1 29.291
RP 108.04 LAP -1.29 LOP 54.14 VP 38.153 GAP -2.58 AZP 88.89 TAL 212.78 TAP 343.65 RCA 107.54 APO 157.80 V2 35.075
RC 77.874 GL -11.38 GP -21784 ZAL 144.42 ZAP 65.65 ETB 10.20 ZAE 160.27 ETE 303.56 ZAC 99.70 ETC 11.29 CLP -63.62
   PLANETOCENERIC CONIC
     C3 16.591 WHL 4.073 DLA
                                                  4.82 RAL 136.21 RAD 6567.7 VEL 11.746 PTH
                                                                                                                        2.07 WHP 3.626 DPA -13.14 RAP 163.83 ECC 1.2731
    LNOW APRITY LNCW TING L-1 TING INJLAT INJ LONG INJRT ASC INJAPRITY INJ TIME PO CST TIM INJ ELAT INJ 2 LONG 90.00 0 97 42 2320.50 -21.99 40.50 555.76 100.30 1 36 22 1720.5 -19.29 40.68
                      0 57 48 2380.50
                    14 7 51 4564.96
2 21 18 2050.83
15 26 36 4409.87
3 34 45 1820.98
                                                                                                                     65.30
                                                                                                                                  15 25 16
                                                                               190.53
         90.00
                                                             14.45
                                                                                                 353,77
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        100.00
                                                             -23.00
                                                                                25.10
                                                                                                                    109.64
                                                                                                 355.36
                                                                                                                     109.64
64.07 16 40 5
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                                                                                                                                                        1450.8
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                                                                                                                                                                                             20.49
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        100.00
                                                                              179.30
                                                                                                353.30
                                                             15.41
                                                                                                                                                                         11.80
                                                                                                                                                                                           172.37
                                                             -25.70
        110.00
                                                                                 9.40
                                                                                                                   113.35
                                                                                                                                                       1221.0
                                                                                                                                                                         -22.32
                                                                                                354.21
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                       16 29 30
                                       4212.46
                                                                                                                     60.43 17 39 51
        110.00
                                                              17.98
                                                                               142.01
                                                                                                351.60
                                                                                                                                                       3612.5
                                                                                                                                                                          13.91
                                                                                                                                                                                           156.16
                                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   8GT 551.6 8GR 834.8 8G3 594.6

RRT .1871 RRF .9225 RTF .1909

8G8 1000.6 R23 .1029 R13 .9170

8G) 845.6 8G2 535.0 THA 78.15
     TOE .1183 TRA -.3671 TC3 .1101 BAU .1796
                                                                                                                                                  ST 227.8 SR 363.6 SS 279.1
CRT -.4720 CRS -.6926 CST -.2920
     ROE -.2444 RRA -.2761 RC3 -.8020 FAU .14844
FOE -.2644 FRA-1.8991 FC3-7.7868 BSP 2414
BOE .2715 BRA .4593 BC3 .8095 FSP -1826
                                                                                                                                                  LSA 429.3 MSA 277.4 SSA 28.4
ELI 364.9 EL2 189.7 ALF 112.11
                                                                                        FLIGHT TIME 106.00
                                                                                                                                                               ARRIVAL DATE OCT 20 1967
LAULICH DATE JUL 6 1967
                                                                                       DISTANCE 297.285
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.287 GAL -6.94.AZL 91.54 MCA 134.08 MA 132.65 ECC .18921 INC 1.5427 V1 29.291
RP 108.00 LAP -1.11 LOP 57.35 VP 38.172 GAP -2.08 AZP 88.93 TAL 212.76 TAP 346.83 RCA 107.55 APO 157.75 V2 35.088
RC 80.046 GL -10.42 GP -23.63 ZAL 144.69 ZAP 70.90 ETS 8.60 ZAE 160.03 ETE 291.01 ZAC 102.06 ETC 10.30 CLP -69.07
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 16.255 VML 4.032 OLA 5.73 RAL 136.49 RAO 6567.7 VEL 11.732 PTH 2.07 VMP 3.545 DPA -13.95 RAP 161.15 ECC 1.2675
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 51 50 2544.67 -22.50 49.09 355.90 107.66 1 30.55 1744.7 -19.87 42.21
90.00 14 15 34 4651.43 13.49 106.54 353.66 64.86 15 32 46 4031.4 9.99 109.61
100.00 2 15 54 2073.56 -23.51 29.59 355.61 109.01 2 50 27 1473.6 -20.70 21.92
100.00 15 34 12 4377.78 14.45 177.41 353.18 63.55 16 47 10 3777.8 10.78 170.54
110.00 3 30 21 1840.52 -26.22 10.76 354.47 112.76 4 1 2 1240.5 -22.91 3.17
110.00 16 36 14 4183.57 17.01 161.24 351.75 59.09 17 45 58 3583.6 12.08 154.57
                     0 51 50 2344.67
14 15 34 4631.43
2 15 54 2073.56
15 34 12 4377.78
3 30 21 1840.52
16 36 14 4183.57
                                                                               161.24
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  BGT 614.9 SGR 916.0 SG3 622.5
RRT .4397 RRF .9413 RTF .4511
SGB 1103.2 R23 .1718 R13 .9265
SG1 972.8 SG2 520.3 THA 66.50
                                                                                                                                                ST 234.9 SR 346.3 SS 268.4
CRT -.3350 CRS -.6323 CST -.5017
     TOE .1082 TRA -.4142 TC3 -.0820 BAU
                                                                  .2026
     RDE -.2264 RRA -.2924 RC3 -.9287 FAU .15540
    FOE -.1876 FRA-1.8913 FC3-8.2766 BBP 2736
BOE .2512 BRA .5070 BC3 .9323 FBP -1922
                                                                                                                                                LSA 399.7 MSA 294.3 SSA 28.6
EL1 360.4 EL2 212.7 ALF 110.04
                                                                                                                                                               ARRIVAL DATE OCT 22 1967
                                                                                       FLIGHT TIME 104.00
LAUNCH DATE JUL 6 1967
   MELIOCENTRIC CONIC
                                                                                       DISTANCE 303.722
    RL 152.10 LAL -.00 LOL 283.26 VL 27.292 GAL -6.68 AZL 91.37 MCA 137.29 SMA 132.69 ECC .18831 INC 1.3660 V1 29.291
RP 107.96 LAP -.93 LOP 80.56 VP 36.186 GAP -1.59 AZP 80.00 TAL 212.63 TAP 349.92 RCA 107.70 APO 157.67 V2 35.101
RC 82.236 GL -9.32 GP -25.51 ZAL 144.86 ZAP 76.15 ETS 6.79 ZAE 158.87 ETE 278.78 ZAC 104.47 ETC 9.12 CLP -74.62
   PLANETOCENTRIC CONIC
     C3 15.912 WHL 3.589 OLA 6.76 RAL 136.90 RAO 6967.6 VEL 11.717 PTH 2.06 WHP 3.497 DPA -14.82 RAP 158.36 ECC 1.2619
LNCH AZMTH LNCH TIME L-I TIME INU LAT INU LONG INU RT ASC INU AZMTH INU TIME PO CST YIM INU 2 LAT INU 2 LONG
90.00 0 45 40 2372.20 -23.06 51.72 356.37 106.91 1 23 12 1772.2 -20.52 43.96
                                                                                                               106.91 1 25 1a
64.54 15 41 39
2 45 14
                                                                                            354.37
                      0 45 40 2372.20
14 25 5 4504.17
                                                                                                353.69
                                                                                                                                                       3994.2
                                                                                                                                                                                           187.47
                                                             12.40
                                                                              194.34
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         90.00
                                                                                                                  2 10 14 2000.44
19 43 12 4342.16
                                                                                                356.02
                                                                                                                                                       1499.4
                                                                                                                                                                         -21.35
                                                                                                                                                                                            23.57
                                                            -24.00
        100.00
                                                                                31.31
                                                                                                                                                       3742.2
                                                             13.36
        100.00
                                                                              175.33
                                                                                                353.20
                                                                                                                                                                           9.63
                                                                                                                                                                                          168.52
                        3 25 51 1062.79
14 44 4 4151.57
                                                                                                                                                       1262.8
                                                                                                                                                                        -23.57
                                                            -26.80
                                                                                12.23
                                                                                                354.91
                                                                                                                                                                                             4.56
        110.00
                                                                              159.42
                                                                                                351.76
                                                                                                                                                       3551.6
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                                                                                                                                                                                           152.81
        110.00
                        16 44 4
                                         4151.57
                                                              15.90
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFEMENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY

SGT 727.6 SGR 1002.7 SG3 642.3

RRT .6256 RRF .9556 RTF .6396

SGB 1236.9 R23 .1964 R13 .9368

SGI 1232.4 SG2 502.7 THA 58.77
     TOE .1035 TRA -.4640 TC3 -.2909 BAU .2352
                                                                                                                                                  ST 250.4 SR 324.9 SS 258.7
                                                                                                                                                  CRT -.2078 CRS -.5565 CST -.6816
     ROE -. 2056 RRA -. 3067 RC3-1.0647 FAU .15925
                                                                                                                                                LSA 372.6 MSA 309.0 88A 28.9
ELI 333.8 ELZ 238.4 ALF 109.13
     FOE -.0953 FRA-1.8879 FC3-8.6651 BOP 3197
     BOE .2502 BRA .5562 BC3 1.1059 FSP -2000
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ARRIVAL DATE OCT 24 1967

LAUNCH DATE JUL 6 1967

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DISTANCE 310.135
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.292 GAL -6.81 AZL 91.17 HCA 140.51 SHA 132.68 ECC .18758 INC 1.1663 VI 29.291 RP 107.92 LAP -.74 LOP 63.78 VP 38.199 GAP -1.12 AZP 89.10 TAL 212.41 TAP 352.92 RCA 107.79 APO 157.57 V2 35.113 RC 84.440 GL -8.04 GP -27.48 ZAL 144.95 ZAP 81.33 ETS 4.74 ZAE 156.85 ETE 267.94 ZAC 106.86 ETC 7.76 CLP -80.21
   PLANETOCENTRIC CONIC
                                           7.92 RAL 137.48 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 3.483 OPA -15.79 RAP 155.54 ECC 1.2561
    C3 15,560 VHL 3,945 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    106.01 1 18 59
63.60 15 52 15
107.39 2 39 34
62.46 17 5 37
111.21 3 52 32
56.76 18 2 2
                                                                                                                                                                       46.04
                                                                                                                                     1804.3
                                                                                                                                                   -21.25
                      0 38 55 2404.31
                                                      -23.67
                                                                      53.67
                                                                                   356.96
        90.00
                                                                                                                                                                     145.06
                                                                                                                                     3041.9
                                                                                                                                                       7.53
                                                                                     353.69
                    14 36 24 4551.95
                                                      15.14
                                                                     191.66
        90.00
                                                                                                                                                                      25.51
                      2 4 5 2129.63
                                                      -24.71
                                                                       33.33
                                                                                     356.62
                                                                                                                                     1529.6
                                                                                                                                                     -22.09
       100.00
                                                                                 353.39
                                                                                                                                                       8.32
                                                                                                                                                                    166.25
                   15 53 55 4301.86
                                                                                                                                     3701.9
                                                     12.10
                                                                     172.99
       100.00
                    3 21 3 1888.77
16 53 26 4115.49
                                                                                                                                                    -24.32
                                                                       13.97
                                                                                    355.55
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                                                                                                                                                                       6.20
                                                    -27.45
       110.00
                                                                                  351.92
                                                                                                                                                                     150.85
                                                                                                                                     3515.5
                                                                                                                                                      10.40
                                                      14.64
                                                                     157.34
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 273.5 SR 296.3 SS 250.4
CRT -.0951 CRS -.4470 CST -.8333
                                                                         $6T 881.7 $6R 1088.3 $65 649.4

RRT .7471 RRF .9662 RTF .7594

$6B 1400.6 R23 .2094 R13 .9458
    TOE .1049 TRA -.5154 TC3 -.5419 BAU .2746
    FOE .1790 RRA .3162 RC3-1.2036 FAU .15998
FOE .0204 FRA-1.8278 FC3-8.9012 BBP .3734
BOE .2075 BRA .6047 BC3 1.3200 FBP -2027
                                                                                                                                LBA 365.0 MSA 301.9 SSA 29.6
EL1 302.3 EL2 266.9 ALF 114.97
                                                                          861 1313.8 862 485.4 THA 52.92
                                                                                                                                             ARRIVAL DATE OCT 26 1967
                                                                              FLIGHT TIME 112.00
LAUNCH DATE JUL 6 1967
                                                                              DISTANCE 316.521
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.287 GAL -6.73 AZL 30.94 MCA 143.73 SMA 132.65 ECC .18699 INC .9372 V1 29.291
RP 107.69 LAP -.55 LOP 67.00 VP 38.206 GAP -.66 AZP 89.24 TAL 212.10 TAP 355.63 RCA 107.84 APO 157.45 V2 35.125
RC 86.855 GL -6.53 GP -29.55 ZAL 144.93 ZAP 86.33 ETS 2.43 ZAE 154.11 ETE 258.99 ZAC 109.15 ETC 6.21 CLP -85.78
   PLANETOCENTRIC CONIC
    C3 15.204 WHL 3.899 DLA 9.28 RAL 138.22 RAD 6567.6 VEL 11.667 PTH 2.06 WHP 3.504 DPA -16.69 RAP 152.72 ECC 1.2502 LNCH AZRITH LNCH TING L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 31 11 2442.82 -24.37 56.46 357.79 104.88 1 11 54 1842.8 -22.09 48.55
                   14 50 2 4503.03
1 57 4 2165.82
16 6 50 4255.29
3 15 39 1919.90
                                                                                                                                      3903.0
                                                                                                                                                        5.99
                                                                                                                                                                      182.29
                                                        9.64
                                                                     109.05
                                                                                     354.26
                                                                                                        63.25
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        90.00
                                                                                                                   2 33 10
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                                                      -25.42
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                                                                                     357.47
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       100.00
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110.17 3 47 39
56.16 18 12 38
                                                                                     353.77
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       100.00
                                                      10.62
                                                                      170.33
                                                                                                                                      1319.9
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                                                      -20.20
                                                                       14.06
                                                                                     354.44
       110.00
   110.00 17 4 44 0
                                                                      155.07
                                                                                     362.27
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                                                                                                                                                       8.86
                                                                                                                                                                      148.62
                                     4073.95
                                                      13.16
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        967 1083.5 968 1178.0 863 646.1

RRT .8210 RRF .9743 RTF .8309

968 1383.5 R23 .2066 R13 .9537

861 1513.8 862 471.7 TMA 48.50
                                                                                                                                 ST 304.8 SR 262.2 SS 250.4
CRT -.0008 CRS -.3283 CST -.9309
    TOE .1157 TRA -.5648 TC5'-.8057 BAU .5194
    ROE -.1477 RRA -.3217 RC3-1.3488 FAU .15807
    FOE .1449 FRA-1.7259 FC3-9.0006 BSP 4365
BOE .1877 BRA .6500 BC3 1.5712 FSP -2031
                                                                                                                                 LSA 390.7 MSA 266.0 SSA 30.6
                                                                                                                                 EL1 304.8 EL2 262.2 ALF 179.84
                                                                                                                                             ARRIVAL DATE OCT 28 1967
                                                                              FLIGHT TIME 114.00
LAUNCH DATE JUL 6 1967
                                                                            DISTANCE 322.883
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.277 GAL -6.65 AZL 90.67 MCA 146.95 SMA 132.58 ECC .18653 INC .6701 VI 29.291
RP 107.65 LAP -.37 LOP 70.21 VP 38.210 GAP -.21 AZP 88.44 TAL 211.70 TAP 358.65 RCA 107.85 APO 157.31 V2 35.137
RC 88.880 GL -4.72 GP -31.77 ZAL 144.80 ZAP 91.06 ET8 359.84 ZAE 150.83 ETE 251.92 ZAC 111.26 ETC 4:47 CLP -91.25
    PLANETOCENTRIC CONIC
     C3 14.850 VHL 3.854 OLA 10.89 RAL 139.15 RAD 6567.6 VEL 11.672 PTH 2.05 VHP 3.562 OPA -18.19 RAP 149.95 ECC 1.2444
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ E LONG 90.00 0 21 53 2490.35 -25.16 59.73 556.92 103.43 1 3 24 1890.4 -23.07 51.69 90.00 15 6 48 4444.95 7.66 185.73 554.92 62.71 16 20 53 3844.9 4.14 179.03
                                                                                                   103.43 1 3 24
62.71 16 20 53
104.87 2 25 31
                                                                                                                                      1610.4
                                                                                                                                                      -23.94
                                                                                                                                                                       30.60
                   1 48 41 2210.44
16 22 41 4200.10
                                                                                     350.62
                                                     -26.24
                                                                       30.85
        100.00
                                                                                                      61.33 17 32 41
100.62 3 41 55
57.55 18 25 40
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                                                                                     354.39
                                                        8.84
                                                                     167.21
       110.00 3 9 17 1958.23
110.00 17 18 35 4025.07
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                                                      -29.07
                                                                       18.72
                                                                                                                                      3425.1
                                                                                                                                                        7.03
                                                      11.39
                                                                      152.39
                                                                                     352.86
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 1264.2 SGR 1256.7 SG3 628.9
RRT .8465 RRF .9604 RTF .8740
SGB 1783.9 R23 .2072 R13 .9595
SG1 1723.4 SG2 480.8 THA 44.86
                                                                                                                                 ST 345.8 SR 219.6 SS 264.2
CRT .1050 CRS -.2179 CST -.9814
    TOE .1363 TRA -.6096 TC3-1.0883 BAU .3668
     ROE -. 1083 RRA -. 3196 RC3-1.4931 FAU .15282
                                                                                                                                LSA 434.9 MSA 217.7 SSA 32.3
ELI 347.1 ELZ 217.5 ALF 6.30
    FOE .2904 FRA-1.5665 FC3-6.9094 BSP 5025
BOE .1756 BRA .6665 BC3 1.8476 FSP -1900
                                                                                                                                              APPIVAL DATE OCT 30 1967
LAUNCH DATE JUL 6 1967
                                                                              FLIGHT TIME 116.00
                                                                              DISTANCE 329.221
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.263 GAL -6.55 AZL 90.35 MCA 150.17 9MA 132.48 ECC .18619 INC .3515 V1 29.291
RP 107.92 LAP -.17 LOP 73.44 VP 38.211 GAP .22 AZP 88.69 TAL 211.22 TAP 1.39 RCA 107.81 APO 157.14 V2 35.149
RC 91.113 GL -2.50 GP -34.18 ZAL 144.50 ZAP 95.43 ETS 356.95 ZAE 147.15 ETE 246.48 ZAC 113.14 ETC 2.53 CLP -96.57
   PLANETOCENTRIC CONIC
     C3 14.510 WHL 3.809 DLA 12.85 RAL 140.32 RAD 6567.6 VEL 11.657 PTH 2.05 WHP 3.660 DPA -19.75 RAP 147.26 ECC 1.2388
    LNOI AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ E LAT INJ Z LONG 90.00 0 10 7 2551.05 -26.06 63.05 .44 101.50 0 52 39 1951.1 -24.21 55.77
                                   2551 .05
4373 .95
                                                                                                                   16 40 49
                                                                                                                                       3774.0
                                                                                                                                                         1.86
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                                                                                      355.69
                                                                                                        62.20
         90.00
                     15 27 55
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                                                                      181.71
                       1 36 7 2267.29
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                                                                                                                                       1667.3
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        100.00
                                                     -27.17
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        100.00
                     16 42 36
                                    4138.95
                                                        6.62
                                                                      163.45
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                                                                                                      107.03 3 34 47
56.94 18 41 59
                                                                                                                                       1406.9
                                                                                                                                                      -27.47
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                                                   -30.00
                       3 1 20 2004.90
                                                                       22.15
                                                                                      359.25
        110.00
                                                                                                        56.94
                                                                                                                                      3366.1
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                                                                                      343.77
        110.00
                     17 35 53
                                  3966.10
                                                       9.22
                                                                     140.21
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         TOE .1760 TRA -.6464 TC3-1.3029 BAU .4162
     ROE -.0614 RRA -.3114 RC3-1.6402 FAU .14500
FOE .4594 FRA-1.3797 FC3-8.6510 BBP 5734
BOE .1872 BRA .7179 BC3 2.1454 FSP -1804
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FLIGHT TIME 110.00

ARRIVAL DATE NOV 1 1967

ELI 1165.8 EL2 59.2 ALF 23.76

LAUNCH DATE JUL 6 1967

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HELIOCENTRIC CONIC
                                                                                                              DISTANCE 335.534
      RL 152.10 LAL -.00 LOL 283.26 VL 27.245 GAL -6.44 AZL 89.96 MCA 153.40 8MA 132.35 ECC .18595 INC .0313 V1 29.291
RP 107.78 LAP .02 LOP 76.66 VP 38.209 GAP .64 AZP 90.03 TAL 210.66 TAP 4.06 RCA 107.74 APO 156.96 V2 35.160
RC 93.352 GL .26 GP -36.89 ZAL 143.97 ZAP 99.34 ETS 353.72 ZAE 143.16 ETE 242.38 ZAC 114.73 ETC .38 CLP-101.71
    PLANETOCENTRIC CONIC
      C3 14.209 VHL 3.769 DLA 15.28 RAL 141.80 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 3.804 DPA -21.67 RAP 144.65 ECC 1.2338 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 L6T INJ 2 LONG
                                                                                                                                            98.79 24 34 14
61.81 17 6 52
100.34 2 3 2
60.33 16 15 57
            90.00 23 50 22 2631.75
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            90.0d
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          100.00
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                                                2342.53
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          100.00
                            17 8 26
                                                    4048.41
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          110.00
                                                    3092.85
                                                                                6.47
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                   ST 481.7 9R 144.3 9S 355.4

CRT .6415 CRS -.5163 CST -.9788

LSA 602.2 MSA 123.0 SSA 36.8

EL1 490.9 EL2 108.6 ALF 11.45
                                                                                                        SCT 1680.3 SCR 1419.8 SC3 560.9

RRT .9128 RRF .9687 RTF .9177

SC6 2207.5 R25 .2076 R13 .9674

SG1 2180.3 SG2 453.7 THA 39.57
      TOE .2372 TRA -.6709 TC3-1.6828 BAU .4654
      RDE -.0016 RRA -.2931 RC3-1.7809 FAU .13424
     FOE .6028 FRA-1.1509 FC3-8.1791 BSP 6437
BOE .2372 BRA .7321 BC3 2.4502 FSP -1780
                                                                                                              FLIGHT TIME 120.00
                                                                                                                                                                                                        APRIVAL DATE NOV 3 1967
                                                                                                              DISTANCE 341.823
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 27.224 GAL -6.32 AZL 89.48 MCA 156.62 3MA 132.20 ECC .18581 INC .5211 V1 29.291
RP 107.75 LAP .21 LOP 79.86 VP 38.204 GAP 1.04 AZP 80.48 TAL 210.03 TAP 6.65 RCA 107.64 APO 156.76 V2 35.170
RC 95.596 GL 3.78 GP -40.01 ZAL 143.09 ZAP 102.67 ETS 350.08 ZAE 138.84 ETE 239.36 ZAC 115.97 ETC 357.98 CLP-106.65
     RC 95.598 %L 3.70 V
PLANETOCENTRIC CONIC
(3 15.592 WH, 5.741 DLA 18.40 RAL 143.67 RAD 6567.6 VEL 11.635 PTH 2.04 WHP 4.007 DPA -24.06 RAP 142.01 ECC 1.230-
LNOH AZHTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 27 21 2745.14 -27.94 77.83 5.40 94.80 24 13 7 2145.1 -26.98 69.30
90.00 16 33 27 4163.79 -1.13 166.06 359.69 61.70 17 42 50 3563.6 -4.90 163.31
90.00 16 33 27 4163.79 -1.13 166.06 359.69 61.70 17 42 50 3563.6 -4.90 163.31
90.00 16 33 27 4163.79 -1.13 166.06 359.69 61.70 17 42 50 3563.6 -4.90 163.31
    PLANETOCENTRIC CONIC
                          17 43 45 3954.91
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55.92 19 31 15
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                                                 2150.45
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          110.00
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                           18 27 57 3798.45
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         110.00
                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                        SCT 1908.1 SGR 1499.5 SG3 510.4

RRT .9241 RRF .9916 RTF .9288

SGB 2422.7 R23 .2089 R13 .9699

SG1 2379.0 SG2 457.9 THA 37.58
                                                                                                                                                                                    ST 602.2 SR 176.4 SS 439.6

CRT .9519 CRS -.8809 CST -.9732

LSA 759.3 MSA 97.1 SSA 34.1

EL1 625.4 EL2 52.1 ALF 15.69
     TOE .3883 TRA -.6781 TC3-1.8745 BAU .5139
ROE .0744 RRA -.8635 RC3-1.8103 FAU .18106
     FOE .7711 FRA -.8070 FC3-7.4001 840 7136
80E .3366 8RA .7275 8C3 2.7474 FSP -1621
                                                                                                                                                                                                       ARRIVAL DATE NOV 5 1967
                                                                                                              FI I CHT TIME 122.00
LAUNCH DATE JUL 6 1967
                                                                                                            DISTANCE 348.089
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 27.200 GAL -6.20 AZL 88.85 MCA 159.84 SMA 132.03 ECC .18575 INC 1.1541 V1 29.291
RP 107.72 LAP .40 LOP 83.11 VP 38.196 GAP 1.43 AZP 91.08 TAL 209.33 TAP 9.18 RCA 107.50 APO 156.55 V2 35.180
RC 97.843 GL 8.39 GP -43.71 ZAL 141.62 ZAP 105.30 ET6 345.97 ZAE 134.13 ETE 237.18 ZAC 116.82 ETC 355.25 CLP-111.41
    PLANETOCENTRIC CONIC
      C3 13.956 VHL 3.736 DLA 22.47 RAL 146.13 RAD 6567.5 VEL 11.634 PTH 2.04 VHP 4.292 DPA -27.06 RAP 139.30 ECC 1.2297
     C3 13.956 VHL 3.736 OLA 22.47 RAL 146.13 RAD 6567.5 VEL 11.634 PTH 2.04 VHP 4.292 OPA -27.06 RAP 159.30 ECC 1.2297 CHICH AZHTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 49 11 2920.61 -28.28 90.64 9.37 88.39 23 37 51 2320.6 -28.20 81.98 90.00 17 31 16 3987.19 -6.78 160.06 3.54 62.44 18 37 43 3387.2 -10.42 153.27 100.00 0 30 55 2605.24 -29.89 67.46 9.39 90.36 1 14 20 2005.2 -29.52 58.68 100.00 18 36 9 3777.79 -5.36 143.89 2.77 60.55 19 39 6 3177.8 -9.24 137.26 110.00 2 13 4 2285.65 -33.82 42.96 9.16 95.29 2 51 10 1685.7 -32.72 33.90 110.00 19 10 29 3670.14 -2.01 133.66 .69 55.87 20 11 39 3070.1 -6.48 127.42
                          18 36 9 3777.79
2 13 4 2285.65
19 10 29 3670.14
                                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                       RET .9310 RRF .9937 RTF .9366
868 2642.7 R23 .2093 R13 .9720
861 2600.7 862 469.0 THA 35.94
                                                                                                                                                                                      ST 785.3 SR 289.4 SS 546.3
CRT .9949 CRS -.9831 CST -.9761
      TOE .4636 TRA -.6622 TC3-2.2379 BAU .5621 ROE .1721 RRA -.2207 RC3-2.0169 FAU .10999
                                                                                                                                                                                    LSA 994.4 MSA 98.0 SSA 23.4
EL1 836.5 EL2 27.4 ALF 20.16
      FOE .9331 FRA -.6355 FC3-6.5750 BSP 7871
      BOE .4945 BRA .6980 BC3 3.0126 FSP -1444
                                                                                                                                                                                                        ARRIVAL DATE NOV 7 1967
LAUNCH DATE JUL 6 1967
                                                                                                              FLIGHT TIME 124.00
                                                                                                              DISTANCE 354.330
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 27.173 GAL -6.06 AZL 87.98 MCA 163.07 SMA 151.83 ECC .18579 INC 2.0163 VI 29.291
RP 107.69 LAP .59 LOP 86.34 VP 36.185 GAP 1.82 AZP 91.93 TAL 208.57 TAP 11.63 RCA 107.34 APO 156.33 V2 35.190
RC 100.092 GL 14.56 GP -48.22 TAL 139.13 ZAP 107.02 ETS 341.29 ZAE 128.90 ETE 235.63 ZAC 117.21 ETC 352.08 CLP-116.06
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 14.313 VML 3.783 DLA 27.92 RAL 149.53 RAD 6567.6 VEL 11.649 PTH 2.04 VMP 4.703 DPA -30.85 RAP 136.29 ECC 1.2356
LNON AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 21 5 18 3324.46 -84.13 119.33 13.70 74.72 22 0 43 2724.5 -26.00 111.16
90.00 19 42 13 3594.48 -18.18 134.88 11.55 67.91 20 42 7 2994.5 -21.02 129.35
100.00 23 16 2 2903.01 -27.99 69.32 14.70 79.06 24 4 25 2503.0 -29.22 60.73
100.00 20 14 10 3491.16 -14.57 127.60 9.65 63.61 21 12 21 2991.2 -18.00 120.49
110.00 1 31 42 2490.70 -33.96 58.94 15.63 85.86 2 13 15 1890.7 -34.16 49.70
110.00 20 18 95 3476.23 -9.34 123.42 6.80 56.97 21 16 51 2276.2 -13.62 116.95
                                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      96T 2340.9 SGC 1641.9 SG3 382.4
RRT .9342 RRF .9952 RTF .9421
SG8 2839.3 R23 .2098 R13 .9735
SG1 2817.6 SG2 486.7 THA 34.40
                                                                                                                                                                                   ST 1067.2 SR 472.9 SS 678.0
CRT .9906 CRS -.9980 CST -.9825
LSA 1345.1 MSA 112.7 SSA 13.4
      TOE .6726 TRA -. 6099 TC8-2.4187 BAU
                                                                                   . 6069
      RDE .3063 RRA -.1544 RC3-2.0520 FAU .D6666
      FOE 1.0018 FRA -.3424 FC3-5.3439 BBP 8566
BOE .7391 BRA .6291 BC3 3.1719 FBP -1228
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 9 1967

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LAUNCH DATE JUL 6 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 360.544
    RL 152.10 LAL -.00 LOL 283.26 VL 27.144 GAL -5.91 AZL 86.73 HCA 166.29 SHA 131.62 ECC .18589 INC 3.2701 V1 29.291 RP 107.66 LAP .78 LOP 89.57 VF 36.173 GAP 2.19 AZP 93.18 TAL 207.74 TAP 14.02 RCA 107.16 APO 156.09 V2 35.199
    RC 102.344 GL 22.95 GP -53.84 ZAL 134.91 ZAP 107.80 ETS 335.89 ZAE 122.87 ETE 234.41 ZAC 117.05 ETC 348.25 CLP-120.83
   PLANETOCENTRIC CONIC
    C3 15.598 VHL 3.949 DLA 35.25 RAL 154.56 RAD 6567.6 VEL 11.704 PTH 2.06 VMP 5.334 DPA -35.64 RAP 132.59 ECC 1.2567
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.06 18 3 0 3988.71 -25.84 169.88 21.33 65.14 19 9 29 3388.7 -28.97 142.00
                                                                                            65.14 19 9 29
65.13 24 14 8
65.14 19 9 29
65.13 24 14 8
65.14 19 9 29
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      111.94
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1487.9 SR 714.5 SS 817.8
CRT .9899 CRS -.9999 CST -.9887
                                                                     SGT 2568.1 SGR 1694.5 SG3 305.8
    TOE 1.0082 TRA -. 5007 TC3-2.4235 BAU .6477
                                                                     RRT .9341 MAF .9959 RTF .9467
SGB 3076.7 RZ3 .2088 R13 .9749
SG1 3033.8 SG2 512.1 THA 32.69
   ROE .4911 RRA -.0541 RC3-1.9426 FAU .06978
FOE 1.2210 FRA -.1003 FC3-3.8729 BBP 9294
BOE 1.1215 BRA .5037 BC3 3.1059 FBP -994
                                                                                                                         LSA 1837.5 MSA 128.8 SSA
                                                                                                                                                               7.5
                                                                                                                         EL1 1648.0 ELZ 91.4 ALF 25.51
                                                                                                                                    ARRIVAL DATE NOV 11 1967
                                                                         FLIGHT TIME 128.00
LAUMON DATE JUL 6 1967
                                                                         DISTANCE 364,728
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 27.112 GAL -5.75 A7L 84.73 MCA 169.50 BMA 131.40 ECC .18606 INC 5.2743 V1 29.291
RP 107.63 LAP .96-LOP 92.80 VP 38.138 GAP 2.54 AZP 95.19 TAL 206.84 TAP 16.34 RCA 106.95 APO 155.85 V2 35.208
RC 104.598 GL 34.27 GP -60.99 ZAL 127.98 ZAP 106.71 ETB 329.40 ZAE 115.63 ETE 232.86 ZAC 116.25 ETC 343.25 CLP-126.36
  PLANETOCENTRIC CONIC
   C3 19.394 VHL 4.404 DLA 44.79 RAL 162.84 RAD 6567.8 VEL 11.865 PTH 2.10 VHP 6.400 DPA -41.67 RAP 127.41 ECC 1.3192 LNCH AZHTH LHCH TIME L-I TIME INJ LAT INJ LONG INJ RT ABC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 55.22
                                                                                                           18 39 32
                                                                                                                             3629.3
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                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     RET 1920 REF 1965.1 SGS 223.5
RRT 1920 RRF 19949 RTF 19513
SGB 3295.2 R23 12073 R13 19760
SG1 3239.4 SGZ 546.7 THA 29.95
    TOE 1.5966 TRA -.2780 TC3-2.0063 BAU .6742
                                                                                                                         ST 2083.9 SR 966.5 SS 933.1
    ROE .7407 RRA .1118 RC3-1.5522 FAU .04948
FOE 1.2948 FRA .1439 FC3-2.2069 88P 9918
                                                                                                                         CRT .9905 CRS -.9998 CST -.9927
                                                                                                                         LSA 2475.1 MSA 146.6 SSA
                                                                                                                                                                4.2
                                                                                                                         EL1 2293.9 EL2 120.8 ALF 24.75
    BOE 1.7603 BRA .2996 BC3 2.6004 FSP
                                                      -734
                                                                                                                                    ARRIVAL DATE NOV 13 1967
                                                                         FLIGHT TIME 130.00
LAUNCH DATE JUL 6 1967
                                                                        DISTANCE 372.867
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.078 GAL -5.38 AZL 80.99 MCA 172.69 SMA 131.16 ECC .18628 INC 9.0106 V1 29.291
RP 107.61 LAP 1.14 LOP 96.04 VP 38.142 GAP 2.89 AZP 98.94 TAL 205.88 TAP 18.56 RCA 106.73 APO 155.59 V2 35.216
RC 108.849 GL 48.41 GP -70.17 ZAL 117.71 ZAP 103.98 ETS 320.11 ZAE 106.46 ETE 228.79 ZAC 114.74 ETC 335.06 CLP-135.42
   PLANETOCENTRIC CONIC
    C3 31.851 VHL 5.644 DLA 55.39 RAL 178.18 RAD 6568.3 VEL 12.378 PTH 2.23 VHP 8.513 DPA -48.96 RAP 118.76 ECC 1.5242
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
                17 46 11 4455.80
2 53 52 2845.95
17 46 11 4459.80
2 53 52 2845.95
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                                                  -29.91
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     BGT 3144.5 BGR 1486.7 BG3 144.2

RRT .8994 RRF .9637 RTF .9595

BG8 3478.3 R23 .2019 R13 .9778

BG1 3426.8 BG2 596.3 THA 23.80
                                                                                                                         ST 2747.5 SR 950.4 SS 934.7
    TOE 2.7033 TRA .2233 TC3-1.3131 BAU .6609
    RDE .9132 RRA .3669 RC3 -.8276 FAU .02937
FDE 1.2377 FRA .3508 FC3 -.7963 BSP 10516
                                                                                                                                .9844 CRS -.9974 CST -.9945
                                                                                                                         CRT
                                                                                                                         LSA 3048.7 MSA 176.0 SSA
                                                                                                                                                               2.4
                                                                                                                         EL1 2902.9 EL2 158.4 ALF 18.86
    BOE 2.8534 BRA .4467 BC3 1.5521 FSP -480
                                                                                                                                    ARRIVAL DATE NOV 15 1967
                                                                         FLIGHT TIME 132.00
LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 378,906
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 27.043 GAL -5.38 AZL 71.65 MCA 175.80 SMA 130.91 ECC .18644 INC18.3464 VI 29.291 RP 107.39 LAP 1.32 LOP 99.28 VP 38.123 GAP 3,20 AZP 108.30 TAL 204.81 TAP 20.61 RCA 106.50 APO 155.32 V2 35.223 RC 109.101 GL 61.98 GP -80.76 ZAL 105.26 ZAP 99.20 ETS 290.91 ZAE 93.35 ETE 204.28 ZAC 112.92 ETC 305.80 CLP-174.68
   PLANETOCENTRIC CONIC
    C3 92.162 VML 9.800 DLA 61.20 RAL 204.27 RAD 6569.8 VEL 14.612 PTH 2.65 VMP 14.089 DPA -56.57 RAP 100.11 ECC 2.5168 LNDM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 33.18 19 11 54 4749.80 -17.20 232.59 104.49 30.28 20 31 4 4149.8 -24.05 228.60
                 19 11 54 4749.00
                                                                   94.06
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       146.82
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                                                                                104.49
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                   19 11 54
                                  4749.80
                                                  -17.20
                                                                 232.59
        33.16
                                                                                                                                             -24.04
                                                                                                                                                             90.09
                                                                   94.00
                                                                                104.47
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                                 3066.72
                     4 56 19
                                                  -17.19
       146.62
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                                                  -17.20
                                                                 232.50
                                                                                104.49
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                   19 11 54
                                  4749.80
        33.18
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                   94.00
                                                                                                                             2468.7
                                                                                                                                            -24.04
                                                                                                                                                             90.09
                     4 54 19
                                  3044.72
       144.62
                                                  -17.19
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2708.3 SR 543.7 SS 769.0

CRT -.8996 CRS .8559 CST -.9958

LSA 2856.7 MSA 246.7 SSA 1.0

EL1 2752.4 EL2 233.6 ALF 169.69
                                                                     SCT 3561.6 SCR 648.0 SC3 82.6
RRT -. 2216 RRF -. 0668 RTF .. 9677
    TOE 4.3851 TRA 1.8737 TC3 -.3480 BAU .4364
    RDE -.8943 RRA . .8785 RC3 -.0458 FAU .01035
    FOE .9936 FRA .5856 FC3 -.0972 BSP 10805
BOE 4.4754 BRA 1.8943 BC3 .3542 FSP -266
                                                                     SG8 3620.1 R23 -.1612 R13 -.9865
                                                                     SG1 3564.6 SG2 631.4 THA 177.62
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FLIGHT TIME 126.00

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ARRIVAL DATE NOV 17 1967
LAUNCH DATE JUL 6 1967
                                                                       FLIGHT TIME 134.00
                                                                      DISTANCE 384.304
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 27.005 GAL -5.05 AZL 26.62 MCA 178.33 SMA 130.65 ECC .18572 INC63.3798 V1 29.291
RP 107.57 LAP 1.50 LOP 102.51 VP 38.103 GAP 3.33 AZP 153.37 TAL 203.23 TAP 21.56 RCA 106.39 APO 154.92 V2 35.230
RC 111.351 GL 54.12 GP -59.98 ZAL 94.58 ZAP 93.31 ETS 189.77 ZAE 62.36 ETE 107.18 ZAC 114.10 ETC 197.68 CLP 96.63
   PLANETOCENTRIC CONIC
    C3 881.106 VHL 29.603 DLA 46.15 RAL 212.61 RAD 6572.9 VEL 31.661 PTH 3.48 VHP 40.265 DPA -48.20 RAP 50.71 ECC15.5008
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 51.89 20 40 47 4916.56 -.01 227.74 122.62 43.85 22 2 43 4316.6 -5.77 222.60
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                     4 33 57 3481.08
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                  20 40 47 4916.56
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       128.11
                                                                   MIO-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   8GT 805.1 8GR 3188.5 8G3 53.4
RRT .7118 RRF -.9963 RTF -.6704
                                                                                                                      ST 700.1 SR 1762.9 SS 1105.2
CRT .9238 CRS .9984 CST .9006
    TDE-3.6239 TRA -.3274 TC3 -.0654 BAU 2.5679
    ROE-8.2918 RRA-8.8304 RC3 -.2097 FAU-.04073
FOE 1.4528 FRA 1.7840 FC3 .0440 BSP 8214
BOE 9.0491 BRA 8.8364 BC3 .2197 FSP -142
                                                                   SG8 3288.6 R23 -.0888 R13 -.9960
                                                                                                                      LSA 2178.6 MSA 271.0 SSA
                                                                                                                                                             . А
                                                                   861 3241.2 862 556.3 THA 79.50
                                                                                                                      EL1 1880.1 EL2 251.4 ALF 69.47
                                                                                                                                 ARRIVAL DATE NOV 19 1967
                                                                       FLIGHT TIME 136.00
LAUNCH DATE JUL 6 1967
                                                                       DISTANCE 391.948
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.08 LOL 283.26 VL 26.966 GAL -5.15 AZL 123.80 MCA 183.00 SMA 130.38 ECC .18865 INC33.7976 V1 29.291
RP 107.55 LAP 1.67 LOP 105.75 VP 38.081 GAP 4.08 AZP 56.24 TAL 203.27 TAP 26.26 RCA 105.79 APO 154.98 V2 35.236
RC 113.598 GL -63.72 GP 78.84 ZAL 98.33 ZAP 98.18 ETB 148.97 ZAE 81.83 ETE 231.52 ZAC 86.12 ETC 127.35 CLP 137.14
   PLANETOCENTRIC CONIC
    CS 277.633 WHL 16.662 DLA -53.50 RAL 157.80 RAD 6571.6 VEL 19.974 PTH
                                                                                                 3.14 WHP 19.827 DPA 73.58 RAP 300.73 ECC 5.5691
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                   RCT 68.6 SGR 3681.5 SG3 70.3
RRT .7522 RRT .9914 RTF .8307
SGB 3745.3 R25 -.1117 R13 .9955
SG1 3718.3 SG2 449.2 THA 81.87
                                                                                                                     ST 686.9 SR 3002.6 SS 1225.7
CRT .97f1 CRS -.9987 CST -.9821
    TOE-1.9971 TRA .0747 TC3 -.0079 BAU .3937
    ROC-8.5178 RRA-3.8080 RC3 .1058 FAU-.00404
FOC-2.0507 FRA -.6965 FC3 .0126 BBP 11101
BOC 8.7488 BRA 3.8028 BC3 .1061 FBP -213
                                                                                                                      LSA 3310.9 MSA 166.2 SSA
                                                                                                                   EL1 3076.0 EL2 159.9 ALF 77.44
                                                                                                                                ARRIVAL DATE NOV 21 1967
                                                                       FLIGHT TIME 138.00
LAUNCH DATE JUL 6 1967
                                                                      DISTANCE 397.831
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.926 GAL -4.90 AZL 107.74 MCA 186.02 SMA 130.10 ECC .18889 INC17.7446 VI 29.291 RP 107.53 LAP 1.83 LOP 109.00 VP 38.057 GAP 4.35 AZP 72.35 TAL 201.99 TAP 28.01 RCA 105.53 APO 154.68 V2 35.241 RC 115.842 GL -61.79 GP 71.15 ZAL 104.31 ZAP 106.89 ETS 69.17 ZAE 98.88 ETE 154.24 ZAC 88.30 ETC 48.79 CLP-154.03
   PLANETOCENTRIC CONIC
    C3 86.095 VML 9.279 OLA -48.55 RAL 132.71 RAD 6569.7 VEL 14.403 PTH 2.62 VMP 10.239 DPA 75.31 RAP 226.82 ECC 2.4169
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.76 3 12 54 1995.58 15.39 48.64 28.63 136.64 3 46 9 1395.6 21.12 43.18
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3 12 54 1995.58
11 24 21 5792.71
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                                                   15.40
       131.24
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  NID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2825.2 SR 501.7 85 1051.4
CRT -.9026 CRS .9363 CST -.9963
LSA 3047.6 MSA 225.5 85A 1.5
                                                                   SGT 3858.4 SGR 570.1 SG3 125.0
RRT -.3194 RRF -.4857 RTF .9826
    TOE-4.3915 TRA-2.8313 TC3 -.4027 BAU .4669
    RDE .8019 RRA -.8871 RC3 .0485 FAU .01928
FDE-1.8870 FRA -.8351 FC3 -.1939 BSP 11955
BOE 4.4642 BRA 2.8458 BC3 .4056 FSP -394
                                                                   868 3900.3 R25 .1747 R15 -.9656
861 3662.8 862 539.6 THA 177.24
                                                                                                                      EL1 2861.5 EL2 213.3 ALF 170.84
                                                                                                                                 ARRIVAL DATE NOV 23 1967
                                                                       FLIGHT TIME 140.00
LAUNCH DATE JUL 6 1967
                                                                       DISTANCE 403.858
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 28.885 GAL -4.67 AZL 102.55 MCA 189.19 3MA 129.82 ECC .18948 INC12.5521 V1 29.291
RP 107.52 LAP 1.99 LOP 112.24 VP 38.032 GAP 4.65 AZP 77.60 TAL 200.80 TAP 29.99 RCA 105.22 APO 154.42 V2 35.246
RC 118.080 GL -56.73 GP 59.05 ZAL 108.27 ZAP 115.27 ETS 54.41 ZAE 109.13 ETE 144.08 ZAC 91.86 ETC 34.66 CLP-146.08
   PLANETOCENTRIC CONIC
    C3 48.512 VML 6.965 DLA -43.38 RAL 134.57 RAD 6568.8 VEL 13.034 PTH 2.38 VMP 7.406 DPA 67.02 RAP 194.94 ECC 1.7984
    LNOW AZENTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                1793.41
5700
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                                                                            21.73
                                                                 34.37
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                    3 45 41
        55.66
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5720.42
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       124.34
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                                1793.41
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                                                                267.48
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                    11 6 28
                                                   20.14
       124.34
                                  5720.42
                                                                                                                     ORBIT-DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 2560.5 SR 897.3 SS 1122.3
CRT -.9724 CRS .9942 CST -.9919
LSA 2945.0 HSA 225.0 SSA 2.2
     TOE-2.9856 TRA-2.3297 TC3 -.9489 BAU .6352
                                                                    SGT 3636.1 SGR 963.1 SG3 192.4
    ROE 1.0876 RRA .2008 RC3 .2428 FAU .03467
FDE-2.0940 FRA -.9457 FC3 -.6579 BSP 12191
                                                                  RRT -.8596 RRF -.9574 RTF .9674
SGB 3962.0 R23 .2190 R13 -.9739
                                                                                                                      EL1 2724.9 EL2 198.3 ALF 161.21
                                                                    SG1 3931.5 SGE 490.3 THA 167.38
     BOE 3.1775 BRA 2.3363 BC3 .9795 FBP -613
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LAUNCH DATE JUL 6 1967
                                                                     FLIGHT TIME 142.00
                                                                                                                           ARRIVAL DATE NOV 25 1967
    HELIOCENTRIC CONIC
                                                                     DISTANCE 409.906
     RL 152:10 LAL -.00 LOL 283.26 VL 26.842 GAL -4.44 AZL 100.02 MCA 192.40 SMA 129.53 ECC .19022 INC10.0205 V1 29.291
RP 107.50 LAP 2.14 LOP 115.48 VP 38.006 GAP 4.96 AZP 80.21 TAL 199.60 TAP 32.00 RCA 104.89 APO 154.17 V2 35.250
RC 120.312 GL -52.33 GP 49.18 ZAL 110.65 ZAP 122.51 ETS 49.11 ZAE 116.17 ETE 144.70 ZAC 94.80 ETC 29.87 CLP-145.32
    PLANETOCENTRIC CONIC
     C3 34.607 VHL 5.883 OLA -39.45 RAL 137.22 RAO 6568.4 VEL 12.489 PTH 2.26 VHP 6.233 DPA 58.44 RAP 183.00 ECC 1.5695
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         61.30
                     4 20 46
                                1640.57
                                                 21.65
                                                                         18.03
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123.69 4 48 6
123.69 12 27 35
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                                                                                                                                   26.14
    DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
     TOE-2.4351 TRA-2.0385 TC3-1.4758 BAU
                                                                867 3904.0 868 967.4 863 250.6

RRT -.8860 RRF -.9754 RTF ..9598

868 4022.1 RZ3 .2461 R13 -.9661

861 3998.1 862 438.0 THA 167.46
                                                    .7010
                                                                                                                ST 2492.7 SR 841.5 SS 1181.2

CRT -.9747 CRS .9969 CST -.9893

LSA 2875.2 MSA 223.0 SSA 3.0
     ROE .8605 RRA .1979 RC3 .3515 FAU .05086
FOE-2.2196 FRA -.9696 FC3-1.2723 88P 12397
     BOE 2.5808 BRA 2.0481 BC3 1.5171 FSP -804
                                                                                                                 EL1 2624.8 EL2 178.8 ALF 161.70
 LAUNCH DATE JUL 6 1967
                                                                     FLIGHT TIME 144.00
                                                                                                                           ARRIVAL DATE NOV 27 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 415.952
    RL 152.10 LAL -.00 LOL 283.26 VL 26.799 GAL -4.21 AZL 98.52 MCA 195.63 SMA 129.24 ECC .19108 INC 8.5196 V1 29.291
RP 107.49 LAP 2.29 LOP 118.73 VP 37.979 GAP 5.27 AZP 81.79 TAL 198.38 TAP 34.01 RCA 104.54 APO 153.93 VZ 35.253
RC 122.538 GL -48.81 GP 41.38 ZAL 111.86 ZAP 128.53 ET8 45.67 ZAE 120.95 ETE 147.63 ZAC 96.81 ETC 26.92 CLP-146.11
   PLANETOCENTRIC CONIC
    C3 27.688 WHL 5.262 DLA -36.57 RAL 139.89 RAD 6568.1 VEL 12.209 PTH
                                                                                             2.19 WHP
                                                                                                         5.682 DPA 51.10 RAP 177.48 ECC 1.4557
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
        65.82
                    4 54 0 1518.95
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   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
    TOE-2.1515 TRA-1.8510 TC3-1.9723 BAU .7439
                                                                861 4011.7 8GR 861.6 863 292.2
RRT -.8874 RRF -.9757 RTF .9552
                                                                                                                ST 2461.5 SR 735.2 SS 1209.2

CRT -.9741 CRS .9976 CST -.9875

LSA 2830.7 MSA 221.1 SSA 3.9

EL1 2564.0 EL2 159.6 ALF 163.71
    RDE .6728 RRA .1497 RC3 .3854 FAU .06051
    FOE-2.2350 FRA -.0194 FC3-1.0920 BOP 12725
                                                                 868 4103.2 RE3 .2600 R13 -.9602
861 4084.6 862 390.1 THA 169.11
    BOE 2.2542 BRA 1.8570 BC3 2.0096 FSP -948
LAUNCH DATE JUL 6 1967
                                                                    FLIGHT TIME 146.00
                                                                                                                          ARRIVAL DATE NOV 29 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 421.975
   RL 152.10 LAL -.00 LOL 283.26 VL 26.755 GAL -3.97 AZL 97.52 HCA 198.86 SHA 128.94 ECC .19206 INC 7.5224 V1 29.291 RP 107.49 LAP 2.43 LOP 121.98 VP 37.950 GAP 5.58 AZP 82.88 TAL 197.14 TAP 36.00 RCA 104.18 APO 153.71 VZ 35.256
    RC 124.755 GL -45.98 GP 35.23 ZAL 112.29 ZAP 133.48 ETS 42.94 ZAE 124.12 ETE 151.07 ZAC 97.99 ETC 24.65 CLP-147.40
   PLANETOCENTRIC CONIC
    C3 23.611 VML 4.859 OLA -34.47 RAL 142.47 RAD 6568.0 VEL 12.041 PTH 2.15 VMP 5.418 DPA 45.05 RAP 174.68 ECC 1.3886
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 8 LAT INJ 2 LONG
                 5 24 43 1418.42
10 30 27 5734.51
5 24 43 1418.42
10 30 27 5734.51
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      110.54
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       69.46
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                 5 24 43 1418.42
10 30 27 5754.51
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      110.54
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                                                                                                                                               262.73
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SGE 4489.8 RE3 346.6 THA 170.10
    TOE-2.1001 TRA-1.8231 TC3-2.6270 BAU .8411
                                                                                                                ST 2598.1 SR 692.0 SS 1319.0

CRT -.9774 CRS ..9981 CST -.9884

LSA 2986.9 MSA 216.5 SSA 4.9
    RDE .5842 RRA .1501 RC3 .4458 FAU .07446
   FDE-2.3605 FRA-1.0030 FC3-2.7302 BSP 15989
   BOE 2.1799 BRA 1.8293 8C3 2.6645 FSP -1405
                                                                                                                EL1 2684.9 EL2 141.5 ALF 165.37
L'AUNCH DATE JUL 6 1967
                                                                   FLIGHT TIME 148.00
                                                                                                                          ARRIVAL DATE DEC 1 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 428.014
   RL 152.10 LAL -.00 LOL 283.26 VL 26.710 GAL -3.71 A7L 96.81 MCA 202.10 SMA 128.64 ECC .19311 INC 6.8083 V1 29.291
RP 107.48 LAP 2.56 LOP 125.22 VP 37.920 GAP 5.88 AZP 83.69 TAL 195.85 TAP 37.95 RCA 103.80 APO 153.49 V2 35.258
RC 126.964 GL -43.70 GP 30.40 ZAL 112.08 ZAP 137.56 ETS 40.61 ZAE 126.20 ETE 154.37 ZAC 98.46 ETC 22.75 CLP-148.82
  PLANETOCENTRIC CONIC
   C3 20.916 WHL 4.573 DLA -33.00 RAL 145.04 RAD 6567.8 VEL 11.929 PTH 2.12 WHP 5.301 DPA 40.07 RAP 173.36 ECC 1.3442
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZHTH LNCH TIME L-I TIME
                   5 52 22 1339.77
10 23 16 5758.44
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  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   TDE-1.8657 TRA-1.5648 TC3-2.8223 BAU .7942
                                                               SGT 4194.2 SGR 63E.0 SGS 323.8
RRT -.8587 RRF -.9539 RTF ..9470
SGB 4241.6 R23 .2645 R13 -.9497
SGI 4229.4 SGZ 321.2 THA 172.59
                                                                                                              ST 2441.5 SR 552.3 SS 1185.4

CRT -.9719 CRS .9980 CST -.9845

LSA 2761.2 MSA 217.1 SSA 5.9
   RDE .4402 RRA .0667 RC3 .3194 FAU .06711
   FOE-2.0512 FRA -.6643 FC3-2.7779 BSP 12916
   BOE 1.9160 BRA 1.5662 BC3 2.8403 FSP -1021
                                                                                                               EL1 2500.0 EL2 127.1 ALF 167.57
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ARRIVAL DATE DEC 3 1967

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LAUNCH DATE JUL 6 1967
                                                                                 DISTANCE 434.023
    RL 192.10 LAL -.00 LOL 283.26 VL 26.665 GAL -3.44 AZL 96.27 MCA 205.34 SMA 128.34 ECC .19429 INC 6.2688 V1 29.291 RP 107.48 LAP 2.68 LOP 128.47 VP 37.889 GAP 6.19 AZP 84.33 TAL 194.55 TAP 39.90 RCA 103.41 APO 153.28 V2 35.259 RC 129.165 GL -41.80 GP 26.54 ZAL 111.43 ZAP 141.00 ETS 38.63 ZAE 127.53 ETE 157.35 ZAC 98.42 ETC 21.14 CLP-150.31
   HELIOCENTRIC CONIC
    CS 19.010 VHL 4.360 DLA -31.97 RAL 147.59 RAD 6567.8 VEL 11.849 PTH 2.10 VHP 5.270 OPA 35.93 RAP 172.89 ECC 1.3129
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.51 6 17 6 1267.80 22.35 353.25 16.38 113.47 6 38 14 667.8 25.33 349.55
   PLANETOCENTRIC CONIC
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                    12 20 20 5405.05
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       110.00
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                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2468.9 SR 495.8 55 1172.4
CRT -.9724 CRS .9984 CST -.9838
                                                                              SGT 4313.1 SGR 552.9 SG3 328.7
RRT -.8369 RRF -.9318 RTF ..9448
SGB 4348.4 R23 ..2506 R13 -.9467
    TOE-1.8059 TRA-1.4535 TC3-3.2235 BAU .8221
    ROE .3769 RRA .0454 RC3 .2702 FAU .06769
FOE-1.9490 FRA -.5361 FC3-3.0829 BSP 13530
BDE 1.8448 BRA 1.4542 BC3 3.2348 FSP -1047
                                                                                                                                         LSA 2769.4 MSA 214.1 SSA
                                                                                                                                                                                     7.0
                                                                                                                                         EL1 2515.6 EL2 113.5 ALF 168.93
                                                                              SG1 4337.9 SG2 300.9 THA 173.85
                                                                                                                                                      ARRIVAL DATE DEC 5 1967
                                                                                   FLIGHT TIME 152.00
LAUNCH DATE JUL 6 1967
                                                                                   01STANCE 440.017
    RL 152.10 LAL -.00 LOL 283.26 VL 26.619 GAL -3.17 ATL 95.84 HCA 208.58 SHA 128.04 ECC .19559 INC 5.8445 V1 29.291 RP 107.48 LAP 2.79 LOP 131.72 VP 37.857 GAP 6.49 AZP 84.86 TAL 193.23 TAP 41.82 RCA 103.00 APO 153.08 V2 35.259
   HELIOCENTRIC CONIC
    RC 131.355 GL -40.19 GP 23.42 ZAL 110.40 ZAP 143.95 ETS 36.95 ZAE 128.36 ETE 159.96 ZAC 97.97 ETC 19.75 CLP-151.78
   PLANETOCENTRIC CONIC
                                                                                                                 2.08 WHP 5.292 DPA 32.42 RAP 172.97 ECC 1.2894
     C3 17.587 VHL 4.194 DLA -31.27 RAL 150.18 RAD 6567.7 VEL 11.789 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.14 6 36 36 1214.57 22.37 349.23 17.52 112.45 6 56 51 614.6 25.21 341.47
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10 18 4 5797.77
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        110.00
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                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 2507.2 SR 454.4 55 1157.7
CRT -.9740 CRS .9988 CST -.9834
                                                                               SGT 4427.2 SGR 491.9 SG3 328.1
RRT -.8071 RRF -.9004 RTF .9429
     TOE-1.7722 TRA-1.3443 TC3-3.6005 BAU .8481
     ROE .3324 RRA .0313 RC3 .2174 FAU .06691
FDE-1.8466 FRA -.4062 FC3-3.2939 BSP 13718
                                                                               SG8 4454.4 R23 .2305 R13 -.9445
SG1 4445.0 SG2 289.2 THA 174.85
                                                                                                                                          LSA 2790.8 MSA 210.4 SSA
                                                                                                                                                                                     4.0
                                                                                                                                          EL1 2546.1 EL2 101.3 ALF 169.97
     BOE 1.8031 BRA 1.3447 BC3 3.6071 FSP -1058
                                                                                                                                                      ARRIVAL DATE DEC 7 1967
                                                                                   FLIGHT TIME 154.00
 LAUNCH DATE JUL 6 1967
     RL 152.10 LAL -.00 LOL 283.26 VL 26.573 GAL -2.88 A7L 95.50 MCA 211.83 SMA 127.74 ECC .19700 INC 5.5003 VI 29.291
RP 107.48 LAP 2.90 LOP 134.97 VP 37.824 GAP 6.80 A7P 85.32 TAL 191.89 TAP 43.72 RCA 102.57 APO 152.90 V2 35.259
RC 133.537 GL -38.79 GP 20.88 ZAL 109.07 ZAP 146.52 ETS 35.52 ZAE 128.87 ETE 162.19 ZAC 97.20 ETC 18.55 CLP-153.21
                                                                                   DISTANCE 445.996
    HELIOCENTRIC CONIC
      C3 16.487 VHL 4.060 DLA -30.85 RAL 152.83 RAD 6567.7 VEL 11.742 PTH 2.07 VHP 5.347 DPA 29.40 RAP 173.46 ECC 1.2713
     PLANETOCENTRIC CONIC
     C3 16.487 VML 4.UBU DLA -3U.B3 RAL 13Z.B3 RAU D3D7.7 VEL 11.782 PIN 2.UT VMP 3.37 UPR 29.40 RAF 173.40 ECC 12.01 G
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
77.20 6 56 45 1175.74 22.46 346.35 19.02 111.73 7 16.21 575.7 25.21 338.55
102.80 10 21 2 5806.84 22.47 275.79 19.03 111.72 11.57 49 5206.8 25.22 267.99
                      10 21 2 5806.84

9 15 11 725.74

10 21 2 5806.84

9 15 11 725.30

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         110.00
                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                               SGT 4532.5 SGR 446.0 SG3 323.3
RRT -,7680 RRF -,8583 RTF ,9410
SGB 4554.4 R23 ,2073 R13 -,9420
SGI 4545.5 SG2 284.8 THA 175.66
                                                                                                                                         ST 2553.5 SR 424.2 55 1141.4
CRT -.9767 CRS .9992 CST -.9831
      TOE-1.7563 TRA-1.2326 TC3-3.9516 BAU .8717
      ROE .3005 RRA .0222 RC3 .1641 FAU .06512
F0E-1.7472 FRA -.2822 FC3-3.4192 BSP 14049
BOE 1.7818 BRA 1.2328 BC3 3.9550 FSP -1037
                                                                                                                                         LSA 2821.4 MSA 206.2 SSA
                                                                                                                                                                                     9.1
                                                                                                                                           EL1 2586.9 EL2 89.9 ALF 170.77
                                                                                                                                                       ARRIVAL DATE DEC 9 1967
                                                                                     FLIGHT TIME 156.00
  LAUNCH DATE JUL 6 1967
      RL 152.10 LAL -.00 LOL 283.26 VL 26.526 GAL -2.58 AZL 95.21 MCA 215.07 SMA 127.44 ECC .19853 INC 5.2136 V1 29.291
RP 107.48 LAP 2.99 LOP 138.22 VP 37.790 GAP 7.10 AZP 85.73 TAL 190.52 TAP 45.60 RCA 102.14 APO 152.74 V2 35.257
RC 135.709 GL -37.54 GP 18.77 ZAL 107.47 ZAP 148.80 ETS 34.31 ZAE 129.16 ETE 164.09 ZAC 96.18 ETC 17.50 CLP-154.61
                                                                                    DISTANCE 451.958
      C3 15.619 VHL 3.952 DLA -30.65 RAL 159.56 RAD 6567.6 VEL 11.705 PTH 2.06 VHP 5.425 DPA 26.75 RAP 174.23 ECC 1.2571
LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
177.76 7 11 40 1150.75 22.62 344.54 20.85 111.25 7 30 51 550.8 25.31 336.71
     PLANETOCENTRIC CONIC
                                                                                                           111.25 7 30 51
111.23 12 4 43
111.25 7 30 51
                         7 11 40
10 27 56
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121.79 9 34 44
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                        13 16 6
                                       5281.77
                                                             32.66
          110.00
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                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ST 2608.9 SR 403.3 SS 1127.0
CRT -,9802 CRS .9995 CST -.9831
      DIFFERENTIAL CORRECTIONS
                                                                               SGT 4635.5 SGR 414.3 SG3 316.7

RRT -.7223 RRF -.8072 RTF .9394

SG8 4653.9 R23 .1822 R13 -.9401

SG1 4645.1 SG2 285.9 THA 176.29
       TDE-1.7554 TRA-1.1182 TC3-4.2829 BAU .8947
       ROE .2782 RRA .0172 RC3 .1144 FAU .06288
FOE-1.6564 FRA -.1645 FC3-3.4852 BSP 14390
BDE 1.7773 BRA 1.1183 BC3 4.2845 FSP -1018
                                                                                                                                           LSA 2863.3 MSA 201.2 SSA 10.3
                                                                                                                                            EL1 2638.7 EL2 79.0 ALF 171.38
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FLIGHT TIME 150.00

ARRIVAL DATE DEC 11 1967

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FLIGHT TIME 158.00
LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 457.903
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.480 GAL -2.27 AZL 94.97 HCA 218.32 SMA 127.13 ECC .20020 INC 4.9697 V1 29.291 RP 107.49 LAP 3.08 LOP 141.47 VP 37.756 GAP 7.40 AZP 86.10 TAL 189.14 TAP 47.46 RCA 101.68 APO 152.59 V2 35.255
    RC 137.871 GL -36.39 GP 17.02 TAL 105.63 TAP 150.84 ETS 33.31 TAE 129.31 ETE 165.71 TAC 94.96 ETC 16.58 CLP-155.96
   PLANETOCENTRIC CONIC
    C3 14.929 VML 3.864 DLA -30.61 RAL 158.39 RAD 6567.6 VEL 11.675 PTH 2.05 VMP 5.521 DPA 24.40 RAP 175.22 ECC 1.2457
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
                                                    22.84
                                                                  343.69
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      110.00
                                                                     HID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2671.8 SR 369.5 SS 1114.0
CRT -.9842 CRS .9995 CST -.9834
                                                                    SGT 4734.6 SGR 394.0 SG3 308.7
RRT -.6725 RRF -.7500 RTF .9381
    TDE-1.7663 TRA -.9969 TC3-4.5923 BAU .9167
    ROE .2626 RRA .0151 RC3 .0691 FAU .06035
FOE-1.5738 FRA -.0542 FC3-3.4995 BSP 14720
BOE 1.7858 BRA .9990 BC3 4.5928 FSP -994
                                                                                                                          LSA 2914.2 MSA 195.7 SSA
                                                                     SGB 4750.9 R23 .1578 R13 -.9386
SG1 4742.0 SG2 291.1 THA 176.79
                                                                                                                                                                 11.4
                                                                                                                           EL1 2699.2 EL2 68.3 ALF 171.83
                                                                                                                                       ARRIVAL DATE DEC 13 1967
                                                                          FLIGHT TIME 160.00
LAUNCH DATE JUL 6 1967
                                                                          DISTANCE 463.632
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.433 GAL -1.95 AZL 94.76 MCA 221.56 SMA 126.83 ECC .20200 INC 4.7586 VI 29.291 RP 107.50 LAP 3.16 LOP 144.73 VP 37.720 GAP 7.71 AZP 86.44 TAL 187.74 TAP 49.30 RCA 101.21 APO 152.45 V2 35.253 RC 140.023 GL -35.30 GP 15.53 ZAL 103.58 ZAP 152.89 ETS 32.50 ZAE 129.37 ETE 167.08 ZAC 93.58 ET€ 15.77 CLP-157.26
   PLANETOCENTRIC CONIC
    C3 14.382 VHL 3.792 DLA -30.70 RAL 161.34 RAD 6567.6 VEL 11.652 PTH 2.05 VMP 5.629 DPA 22.26 RAP 176.38 ECC 1.2367 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.61 7 33 36 1135.82 25.11 343.62 25.37 110.80 7 52 52 535.8 25.73 335.74
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      110.00
                  13 36 15
                                                     32.85
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2736.1 SR 380.6 SS 1099.5
CRT -. 9882 CRS .. 9989 CST -. 9837
                                                                      SGT 4821.3 SGR 382.0 SG3 299.3
RRT -.6202 RRF -.6896 RTF .9365
    TDE-1.7838 TRA -.8705 TC3-4.8698 BAU .9363
    RDE .2519 RRA .0144 RC3 .0278 FAU .05750
                                                                      8G8 4836.4 R23 .1358 R13 -.9369
8G1 4827.2 8G2 299.2 THA 177.18
    FOE-1.4952 FRA .0526 FC3-3.4613 BSP 14976
BOE 1.8015 BRA .8706 BC3 4.8699 FSP -961
                                                                                                                           LSA 2967.1 MSA 189.8 SSA 12.5
                                                                                                                           EL1 2761.8 EL2 57.7 ALF 172.17
                                                                                                                                      ARRIVAL DATE DEC 15 1967
                                                                          FLIGHT TIME 162.00
LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 469.742
    RL 152.10 LAL -.00 LOL 283.26 VL 26.386 GAL -1.61 AZL 94.57 MCA 224.80 SMA 126.53 ECC .20395 INC 4.5728 V1 29.291 RP 107.51 LAP 3.22 LOP 147.98 VP 37.684 GAP 8.01 AZP 86.75 TAL 186.32 TAP 51.12 RCA 100.73 APO 152.34 V2 35.249 RC 142.165 GL -34.25 GP 14.27 ZAL 101.34 ZAP 154.40 ETS 31.86 ZAE 129.37 ETE 168.26 ZAC 92.07 ETC 15.05 CLP-158.51
   PLANETOCENTRIC CONIC
    C3 13.957 VHL 3.736 DLA -30.90 RAL 164.41 RAD 6567.5 VEL 11.634 PTH 2.04 VHP 5.748 OPA 20.31 RAP 177.68 ECC 1.2297
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.09 7 42 9 1140.92 23.41 344.13 28.04 110.76 8 1 10 540.9 26.03 536.22 102.91 11 8 3 5766.90 23.42 273.19 28.05 110.75 12 44 10 5166.9 26.03 265.28
                                                                                                                                 540.9
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                                                                                                  110.76 8 1 10
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11 8 3 5766.90
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121.23 10 13 32
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13 47 15 5270.31
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       110.00
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                                                                  238,30
                                                                                   30.99
                                                     32.81
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RET -.5727 RRF -.6327 RTF ..9357
SGB 4927.7 RZ3 .1155 R13 -.9360
SGI 4918.0 SGZ 309.2 THA 177.47
                                                                                                                          ST 2809.2 SR 376.6 SS 1088.4

CRT -.9920 CRS .9977 CST -.9842

LSA 3030.6 MSA 183.5 SSA 13.7
    TOE-1.8119 TRA -. 7362 TC3-5.1274 BAU .9567
    RDE .2455 RRA .0155 RC3 -.0071 FAU .05478
FDE-1.4272 FRA .1483 FC3-3.3981 BSP 15296
BDE 1.8284 BRA .7384 BC3 5.1274 FSP -935
                                                                                                                           EL1 2834.0 ELZ 47.0 ALF 172.42
                                                                                                                                       ARRIVAL DATE DEC 17 1967
                                                                           FLIGHT TIME 184.00
CAUNCH DATE JUL 6 1967
                                                                          DISTANCE 475.633
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 26.339 GAL -1.26 AZL 54.41 MCA 228.05 SMA 126.23 ECC .20606 INC 4.4071 V1 29.291
RP 107.52 LAP 3.28 LOP 151.23 VP 37.647 GAP 8.32 AZP 87.05 TAL 184.88 TAP 52.93 RCA 100.22 APO 152.25 V2 35.245
RC 144.295 GL -33.22 GP 13.18 ZAL 98.94 ZAP 155.97 ETS 31.36 ZAE 129.33 ETE 169.27 ZAC 90.44 ETC 14.41 CLP-159.73
   PLANETOCENTRIC CONIC
    C3 13.641 WHL 3.693 DLA -31.17 RAL 167.61 RAD 6567.5 VEL 11.620 PTH 2.04 WHP 5.876 DPA 18.49 RAP 179.10 ECC 1.2245
                                                                                                  120.92 10 30 35
100.63 15 23 23
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       110.00
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                                 5280.41
       110.00
                     13 55 23
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                                                                   239.06
                                                                                   33.83
                                                                       MID-COURSE EMECUTION ACCURACY
867 4998-5 SGR 377-8 863 281.1
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2881.9 SR 375.6 SS 1075.9
CRT -.9952 CRS .9956 CST -.9848
     TOE-1.8443 TRA -.5970 TC3-5.3482 BAU .9754
                                                                       RRT -.5294 RRT -.5001 RTF .9350
9GB 5010.7 R23 .0960 R13 -.9353
     ROE .2420 RRA .0172 RC3 -.0373 FAU .05195
FOE-1.3628 FRA .2367 FC3-3.2972 88P 15573
                                                                                                                          LSA 3093.9 MSA 177.0 SSA 14.6
EL1 2906.0 EL2 36.5 ALF 172.61
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BOE 1.8601 BRA .5973 BC3 5.3483 FSF -905

SG1 5000.5 SGE 320.2 THA 177.70

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HELAUNCH DATE JUL 6 1967
                                                                          FLIGHT TIME 166.00
                                                                                                                                     ARRIVAL DATE DEC 19 1967
     HELIOCENTRIC CONIC
                                                                          DISTANCE 481.504
      RL 152.10 LAL -.00 LOL 283.26 VL 26.292 GAL -.90 A7L 94.26 MCA 231.29 SMA 125.94 ECC .20833 INC 4.2576 V1 29.291
RP 107.53 LAP 3.32 LOP 154.48 VP 37.610 GAP 8.63 A7P 87.33 TAL 183.44 TAP 54.73 RCA 99.70 APO 152.17 V2 35.240
RC 146.414 GL -32.18 GP 12.24 ZAL 96.37 ZAP 157.44 ETS 31.04 ZAE 129.27 ETE 170.13 ZAC 88.72 ETC 13.84 CLP-160.90
     PLANETOCENTRIC CONIC
      C3 13.428 VHL 3.664 OLA -31.48 RAL 170.93 RAO 6567.5 VEL 11.611 PTH 2.03 VMP 6.011 OPA 16.79 RAP 180.61 ECC 1.2210
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                       7 57 50 1164.96
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         104.37
                     11 44 22
                                    5725.97
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                    14 2 54
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                                    5295.61
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                                                                      MID-COURSE EXECUTION ACCURACY
     CIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SCT 5083.3 SCR 381.9 SC3 272.4
RRT -.4938 RRF -.5557 RTF .9350
SCB 5097.6 R23 .0828 R13 -.9352
SCI 5086.8 SC2 331.9 THA 177.87
                                                                                                                         ST 2958.1 SR 377.7 SS 1065.0
CRT -.9975 CRS .9927 CST -.9856
LSA 3161.9 MSA 170.5 SSA 15.9
      TOE-1.8836 TRA -.4502 TC3-5.5399 BAU .9946
      ROE .2415 RRA .0195 RC3 -.0614 FAU .04928
FDE-1.3059 FRA .3207 FC3-3.1776 BSP 15877
BDE 1.8990 BRA .4506 BC3 5.5403 FSP -878
                                                                                                                          ELI 2982.0 EL2 26.7 ALF 172.74
                                                                                                                                     ARRIVAL CATE DEC 21 1967
  LAUNCH DATE JUL 6 1967
                                                                           FLIGHT TIME 168.00
    HELIOCENTRIC CONIC
                                                                          DISTANCE 487.355
     RL 152.10 LAL -.00 LOL 283.26 VL 26.245 GAL -.55 A7L 94.12 MCA 234.55 SMA 125.64 ECC .21078 INC 4.1211 V1 29.291
RP 107.55 LAP 3.36 LOP 157.73 VP 37.572 GAP 8.95 A7P 87.61 TAL 181.98 TAP 56.51 RCA 99.16 APO 152.13 V2 35.234
      RC 148.521 GL -31.12 GP 11.42 7AL 93.68 ZAP 158.81 ETS 30.86 ZAE 129.20 ETE 170.88 ZAC 86.92 ETC 13.33 CLP-162.04
     PLANETOCENTRIC CONIC
      C3 13.313 VHL 3.649 DLA -31.82 RAL 174.38 RAD 6567.5 VEL 11.606 PTM
                                                                                                    2.03 VHP 6.154 OPA 15.18 RAP 182.20 ECC 1.2191
      LNCH AZMTH LNCH TIME L-I TIME
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         74.83
                                                                   347.49
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                                    1180.25
                                                     24.34
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102.10 15 38 39
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        110.00
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                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SCT 5162.1 SCR 388.4 SC3 263.5
RRT -.4646 RRF -.4987 RTF .9350
SCB 5176.7 R23 .0705 R13 -.9352
SCI 5165.2 SC2 343.7 THA 177.99
                                                                                                                          ST 3029.8 SR 382.0 SS 1052.5
CRT -.9987 CRS .9890 CST -.9863
      TOE-1.9251 TRA -.2930 TC3-5.6658 BAU 1.0121
      ROE .2431 RRA .0217 RC3 -.0807 FAU .04660
FOE-1.2520 FRA .3992 FC3-3.0303 BSP 16175
                                                                                                                         LSA 3225.9 MSA 164.4 SSA 17.0
      BOE 1.9403 BRA .2938 BC3 5.6864 FSP
                                                      -854
                                                                                                                          EL1 3053.8 EL2 19.2 ALF 172.82
                                                                          FLIGHT TIME 170.00
                                                                                                                                    ARRIVAL DATE DEC 23 1967
  LAUNCH DATE JUL 6 1967
    HELIOCENTRIC CONIC
                                                                         DISTANCE 493.185
      RL 152.10 LAL -.00 LOL 283.26 VL 26.198 GAL -.14 AZL 94.00 MCA 237.77 SMA 125.35 ECC .21342 INC 3.9952 VI 29.291
RP 107.57 LAP 3.38 LOP 160.98 VP 37.533 GAP 9.27 AZP 87.87 TAL 180.50 TAP 58.28 RCA 98.60 APO 152.10 V2 35.228
RC 150.615 GL -50.04 GP 10.71 ZAL 90.86 ZAP 160.11 ETS 30.82 ZAE 129.12 ETE 171.53 ZAC 85.05 ETC 12.88 CLP-163.14
     PLANETOCENTRIC CONIC
      C3 13.297 VHL 3.647 DLA -32.17 RAL 177.94 RAC 6567.5 VEL 11.605 PTH 2.03 VMP 6.304 OPA 13.65 RAP 183.85 ECC 1.2188
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      LNCH AZMTH LNCH TIME L-I TIME
                                                                                                             8 35 4
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          74.06
                     8 15 8 1196.27
12 23 1 5690.42
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12 23 1 5690.42
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14 17 6 5337.75
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103.04 15 46 3
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        110.00
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                                                                  243.34
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                                                     31.88
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SCT 5241.2 SCR 396.1 SG3 254.8
RRT -.4430 RRF -.4687 RTF .9367
SCB 5256.1 R23 .0578 R13 -.9369
                                                                                                                         ST 3093.8 SR 387.8 SS 1036.3
CRT -,9989 CRS .9846 CST -.9872
LSA 3281.9 MSA 157.4 SSA 18.0
      TOF-1.9668 TRA -.1323 TC3-5.7946 BAU 1.0302
      RDE .2467 RRA .0244 RC3 - .0938 FAU .04419
FDE-1.1990 FRA .4647 FC3-2.8769 BSP 16544
                                                                      5G1 5244.1 SG2 355.0 THA 178.07
                                                                                                                          ELI 3118.0 EL2 18.3 ALF 172.86
      BOE 1.9822 BRA .1345 BC3 5.7954 FSP
                                                        - A 3A
                                                                                                                                     ARRIVAL DATE DEC 25 1967
                                                                          FLIGHT TIME 172.00
  LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 498.991
     HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 26.151 GAL .27 AZL 93.88 MCA 241.01 SMA 125.06 ECC .21626 INC 3.8780 VI 29.291 RP 107.59 LAP 3.39 LOP 164.22 VP 37.494 GAP 9.60 AZP 88.12 TAL 179.02 TAP 60.04 RCA 98.02 APO 152.11 V2 35.221 RC 152.696 GL -28.91 GP 10.08 ZAL 87.95 ZAP 161.34 ETS 30.93 ZAE 129.03 ETE 172.09 ZAC 83.12 ETC 12.47 CLP-164.21
    PLANETOCENTRIC CONIC
      C3 13.382 VHL 3.658 DLA -32.50 RAL 181.61 RAD 6567.5 VEL 11.609 PTH 2.03 VHP 6.461 DPA 12.18 RAP 185.57 ECC 1.2202
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.80 350.13 45.10 111.71 8 45 16 612.2 27.52 342 16
      LNCH AZMTH LNCH TIME L-I TIME
                      8 25 4 1212.24
         73.35
                                                                  266.98
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104.07 15 53 39
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        110.00
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                                                                  245.19
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        110.00
                   14 24 16 5362.84
                                                     31.48
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
      TOE-2.0057 TRA .0541 TC3-5.8333 BAU 1.0438

RDE .2516 RRA .0247 RC3 -.1052 FAU .04129

FDE-1.1434 FRA .5493 FC3-2.6714 BSP 16548

BDE 2.0214 BRA .0595 BC3 5.8343 FSP -782
                                                                      SGT 5500.3 SGR 404.1 SG3 245.4
RRT - .4225 RRF - .4430 RTF .9346
                                                                                                                         ST 3144.2 SR 394.3 SS 1014.8
CRT -.9979 CRS .9785 CST -.9873
                                                                  SGB 5315.7 R23 .0511 R13 -.9347
SG1 5303.1 SG2 366.1 THA 178.15
                                                                                                                         LSA 3323.7 MSA 155.4 SSA 18.9
EL1 3168.7 EL2 25.2 ALF 172.87
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ARRIVAL DATE DEC 27 1967
                                                                         FLIGHT TIME 174,00
LAUNCH DATE JUL 6 1967
                                                                        DISTANCE 504.773
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.105 GAL .69 AZL 93.77 HCA 244.25 SNA 124.78 ECC .21932 INC 3.7680 VI 29.291
RP 107.62 LAP 3.79 LOP 167.47 VP 37.454 GAP 9.93 AZP 88.36 TAL 177.53 TAP 61.79 RCA 97.41 APO 152.14 V2 35.214
RC 154.762 GL -27.75 GP 9.52 ZAL 84.96 ZAP 162.50 ETS 31.19 ZAE 128.95 ETE 172.58 ZAC 81.13 ETC 12.11 CLP-165.25
   PLANETOCENTRIC CONIC
                                                                                                   2.04 WHP 6.626 DPA 10.76 RAP 187.34 ECC 1.2234
    C3 13.572 WHL 3.684 OLA -32.79 RAL 185.36 RAD 6567.5 VEL 11.617 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               627.8
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        72.73
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                                 1227.63
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        72.73
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                                  1227.83
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118.88 13 41 59
105.11 16 1 43
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                                                                 266.32
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                                   5667.77
                                                    24.94
       107.27
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                   12 4 36
                                                    19.13
                                                                 276.83
                                                                                 46.18
                                                                                                                              5242.6
       110.00
                                   5642.60
                   14 31 54
                                                                                                                                              32.79
                                                                                                                                                            238.32
                                                                 247.09
                                                                                 51.47
                                                                                                                             4789.0
                                  5369.04
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     8GT 5362.3 8GR 413.0 8G3 236.5
RRT -.4102 ARF -.4252 RTF .9359
8GB 5378.2 R23 .0431 R13 -.9360
8G1 5365.0 8G2 376.5 YHA 178.18
                                                                                                                         ST 3184.3 SR 402.4 SS 992.1
CRT -.9959 CRS .9723 CST -.9879
   TOE-2.0440 TRA .2378 TC3-5.8305 BAU 1.0581
RDE .2585 RRA .0260 RC3 -.1101 FAU .03883
                                                                                                                         LSA 3356.0 MSA 151.1 SSA 19.6
EL1 3209.4 EL2 36.0 ALF 172.83
    FDE-1.0923 FRA .6105 FC3-2.4770 BSP 16850
    BOE 2.0603 BRA .2392 BC3 5.8315 FSP -768
                                                                                                                                     ARRIVAL DATE DEC 29 1967
                                                                         FLIGHT TIME 176.00
LAUNCH DATE JUL 6:1967
                                                                         DISTANCE 510.528
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.058 GAL 1.13 AZL 93.66 MCA 247.49 SMA 124.49 ECC .22261 INC 3.6639 V1 29.291 RP 107.64 LAP 3.38 LOP 170.71 VP 37.414 GAP 10.27 AZP 88.60 TAL 176.03 TAP 63.52 RCA 96.78 APO 152.21 V2 35.205 RC 156.813 GL -26.55 GP 9.02 ZAL 81.92 ZAP 163.62 ETS 31.61 ZAE 128.88 ETE 173.01 ZAC 79.11 ETC 11.80 CLP-166.27
  PLANETOCENTRIC CONIC
   LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.23 8 48 1 1242.50 24.96 352,53 53.38 172.35 9 8 43 649 5 97 70
                                                                                  53.39
                                                                                                            14 54 7
                                                                                                                              5062.7
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                                                                                                                                                            258.00
      107.77
                   13 19 44
                                   5662.72
                                                    25.00
                                                                 265.95
                                                                                                112.34
                                                                                                112.35
                                                                                                           9 8.43
                                                                                                                               642.5
                                                                                                                                              27.79
                                                                                                                                                            344.50
                                   1242.50
                                                    24.90
                                                                 352.53
                                                                                  53.36
        72.23
                     8 48 1
                   15 19 44
                                                                                  53.39
                                                                                                            14 54 7
                                                                                                                              5062.7
                                                                                                                                              27.80
                                                                                                                                                            258.00
       107.77
                                   5662.72
                                                    25.00
                                                                 265.95
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                                                                                                118.54 14 3 36
106.13 16 10 39
                                                                                                                              5226.4
                                                                                                                                              23.32
                                                                                                                                                            268.64
                   12 26 31
                                   5826.37
                                                    19.66
                                                                 275.87
                                                                                 50.65
      110.00
                   14 40 24
                                   5414.89
                                                    30.56
                                                                 248.96
                                                                                 55.50
                                                                                                                              4814.9
                                                                                                                                              32.46
                                                                                                                                                            240.26
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 5418.4 SGR 421.4 SG3 228.0
RRT -.4015 RRF -.4109 RTF .9363
                                                                                                                          ST 3206.4 SR 410.7 SS 964.5
CRT -,9929 CRS .9648 CST -.9882
    TOE-2.0769 TRA .4384 TC3-5.7747 BAU 1.0713
    RDE .2666 RRA .0256 RC3 -.1112 FAU .03642
    FOE-1.0391 FRA .6772 FC3-2.2724 BSP 16990
BDE 2.0939 BRA .4391 BC3 5.7758 FSP -737
                                                                     SG8 5434.8 R23 .0361 R13 -.9364
SG1 5421.1 SG2 385.7 TMA 178.20
                                                                                                                          LSA 3370.0 MSA 150.0 SSA 20.2
                                                                                                                       EL1 3232.2 ELE 48.5 ALF 172.75
                                                                                                                                    ARRIVAL DATE DEC 31 1967
                                                                         FLIGHT TIME 178.00
LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 516.255
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 26.012 GAL 1.59 ATL 93.56 MCA 250.73 SNA 124.21 ECC .22616 INC 3.5646 VI 29.291
RP 107.67 LAP 3.36 LOP 173.96 VP 37.374 GAP 10.63 ATP 88.82 TAL 174.53 TAP 65.26 RCA 96.12 APO 152.30 V2 35.197
RC 158.850 GL -25.31 GP 8.58 TAL 78.85 ZAP 164.68 ETS 32.21 ZAE 128.80 ETE 173.38 ZAC 77.04 ETC 11.52 CLP-167.26
   PLANETOCENTRIC CONIC
                                                                                                                                8.06 RAP 191.00 ECC 1.2353
    C3 14.296 VHL 3.781 DLA -33.21 RAL 193.02 RAD 6567.6 VEL 11.648 PTH 2.04 VHP 6.979 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  9 1 3 1256.20
13 37 24 5662.21
9 1 3 1256.20
13 37 24 5662.21
                                                                                                            9 21 59
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                                                                                             112.68 9 21 59
112.67 15 11 46
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                                                    24.94
                                                                 353.57
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        71.87
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                                                                                                                              5062.2
       108.13
                                                    24.95
                                                                 265.89
                                                                                 57.75
                                                                                                                                              27.79
                                                                                                                                                            345.64
                                                                                                                               656.2
                                                    24.94
                                                                 353.57
                                                                                 57.75
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                                                                                                            9 21 59
        71.87
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                                                                                                112.67 15 11 46
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                                                  24.95
                                                                 265.89
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                   12 47 20 5815.93
14 50 17 5438.52
                                                                                                118.32 14 24 16
107.03 16 20 56
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                                                                                                                              5215.9
                                                                                                                                              23.63
                                                    20.00
                                                                 275.25
                                                                                 55.20
                                                                                                                                                            242.02
                                                    30.10
                                                                 250.65
                                                                                 59.84
                                                                                                                             4838.5
                                                                                                                                              32.13
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                         ST 3219.4 SR 420.0 SS 938.0

CRT -,9890 CRS .9569 CST -.9886

LSA 3376.1 MSA 149.7 SSA 20.5

EL1 3246.1 EL2 61.7 ALF 172.65
   TOE-2.1102 TRA .6443 TC3-5.6751 BAU 1.0848

RDE .2770 RRA .0251 RC3 -.1085 FAU .03416

FOE -.9916 FRA .7357 FC3-2.0688 BSP 17234

BOE 2.1283 BRA .6448 BC3 5.6761 FSP -716
                                                                     SGT 5477.6 SGR 430.1 SG3 220.0
                                                                     MRT -.3977 MRF -.4035 MTF ..9375
868 5494.5 M25 .0312 M13 -.9376
861 5480.3 862 394.4 THA 178.20
                                                                                                                                     ARRIVAL DATE JAN 2 1968
                                                                         FLIGHT TIME 180.00
                                                                         DISTANCE 521.951
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 25.965 GAL 2.07 AZL 93.47 MCA 253.96 SMA 123.94 ECC .22998 INC 3.4592 V1 29.291
RP 107.70 LAP 3.33 LOP 177.20 VP 37.333 GAP 10.99 AZP 89.04 TAL 173.02 TAP 66.98 RCA 95.43 APO 152.44 VZ 35.187
RC 160.871 GL -24.05 GP 8.18 ZAL 75.77 ZAP 165.70 ETS 33.00 ZAE 128.73 ETE 173.71 ZAC 74.94 ETC 11.29 CLP-168.23
   PLANETOCENTRIC CONIC
    C3 14.848 VHL 3.853 DLA -33.32 RAL 196.88 RAD 6567.6 VEL 11.672 PTH 2.05 VHP 7.168 DPA
                                                                                                                                 6.76 RAP 192.89 ECC 1.2444
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             9 36 13
                                                                                                                                           27.69
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                   9 15 5 1266.80
13 54 8 5666.44
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       108.35
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                                  1266.60
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        71.65
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       108.35
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                                   5666.44
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107.75 16 33 6
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                   13 6 15 5613.35
15 2 9 5457.92
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       110.00
                                                    20.09
                                                                  275.10
                                                                                  59.78
                                                                                                                              4857.9
                                                                                                                                              31.84
                                                                                                                                                            243.46
       110.00
                    15 2 9
                                                    29.70
                                                                  252.02
                                                                                  64.27
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 3212.9 SR 429.0 SS 907.4

CRT -.9841 CRS ..9479 CST -.9868

LSA 3362.6 MSA 151.6 SSA 20.5

EL1 3240.6 EL2 75.6 ALF 172.51
    TOE-2.1367 TRA .8631 TC3-5.5241 BAU 1.0968
                                                                      SGT 5529.7 SGR 438.1 SG3 212.0
                                                                     RRT -.3965 RRF -.3969 RTF .9365
SGB 5547.0 RE3 .0270 R13 -.9366
    ROE .2884 RRA .0232 RC3 -.1032 FAU .03194
    FDE -.9428 FRA .7938 FC3-1.8622 BSP 17435
BDE 2.1561 BRA .8634 BC3 5.5251 FSP -692
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SG1 5532.4 SG2 402.0 THA 178.19

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ARRIVAL CATE JAN 4 1968
LAUNCH DATE JUL 6 1967
                                                                            FLIGHT TIME 182.00
                                                                            OISTANCE 527.613
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 25.921 GAL 2.58 AZL 93.38 MCA 257.19 SMA 123.66 ECC .25409 INC 3.3768 VI 29.291 RP 107.73 LAP 3.29 LOP 180.44 VP 37.292 GAP 11.37 AZP 89.25 TAL 171.51 TAP 68.70 RCA 94.71 APO 152.61 VZ 35.178 RC 162.878 GL -22.76 GP 7.82 ZAL 72.70 ZAP 166.67 ETS 34.01 ZAE 128.66 ETE 174.00 ZAC 72.81 ETC 11.09 CLP-169.18
   PLANETOCENTRIC CONIC
    C3 15.542 VHL 3.942 DLA -33.35 RAL 200.71 RAD 6567.6 VEL 11.702 PTH
                                                                                                       2.06 VHP 7.367 DPA
                                                                                                                                     5.50 RAP 194.81 ECC 1.2558
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 113.33 9 51 19
113.32 15 44 25
                                    1280.26
                                                      24.54
                                                                    355.24
                                                                                    66.77
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                                                                                                                                                  27.48
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        71.59
                      9 29 59
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                                                      24.55
                                                                    266.73
                                                                                     66.78
                    14 9 49
                                    5675.50
       108.41
                                                                    355.24
                                                                                     66.77
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                    9 29 59
                                   1280.26
                                                      24.54
        71.59
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118.41 14 59 35
108.25 16 47 36
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                   14 9 49
                                                                                     66.78
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                                                                    266.73
       106.41
                                   5675.50
                                                      24.55
                                                                                                                                  5220.4
                                                                                                                                                                  268.26
                   13 22 34
15 16 24
                                                                    275.52
                                                                                     64.32
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       110.00
                                   5820 .41
                                                      19.46
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                                                                                     68.85
                                                                                                                                  4671.4
                                                                                                                                                   31.63
       110.00
                                   5471.39
                                                     29.42
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 5577.0 SCR 445.5 SC3 204.3

RRT -.3979 RRF -.3975 RTF ..9396

SCB 5594.8 R23 .0235 R13 -.9397

SCI 5579.9 SCZ 408.5 THA 178.17
                                                                                                                              ST 3188.7 SR 437.8 SS 874.8

CRT - .9783 CRS .9379 CST - .9889

LSA 3331.7 MSA 155.4 SSA 20.3
    TOE-2.1569 TRA 1.0937 TC3-5.3292 BAU 1.1075
    ROE .3011 RRA .0201 RC3 -.0956 FAU .02980
FOE -.8946 FRA .8496 FC3-1.6601 BSP 17624
BOE 2.1778 BRA 1.0939 BC3 5.3300 FSP -671
                                                                                                                              EL1 3217.4 EL2 90.0 ALF 172.34
                                                                                                                                          ARRIVAL CATE JAN 6 1968
                                                                            FLIGHT TIME 184.00
LAUNCH DATE JUL 6 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 533.238
   RL 152.10 LAL -.00 LOL 283.26 VL 25.875 GAL 3.10 A7L 93.29 MCA 260.42 SMA 123.39 ECC .23853 INC 3.2870 V1 29.291
RP 107.76 LAP 3.24 LOP 183.67 VP 37.251 GAP 11.76 A7P 89.45 TAL 169.99 TAP 70.42 RCA 93.96 APO 152.83 V2 35.167
RC 164.869 GL -21.46 GP 7.50 ZAL 69.66 ZAP 167.61 ETS 35.27 ZAE 128.60 ETE 174.25 ZAC 70.66 ETC 10.93 CLP-170.11
   PLANETOCENTRIC CONIC
                                                                                                        2.07 WHP 7.577 OPA
                                                                                                                                       4.26 RAP 196.75 ECC 1.2698
    C3 16.394 VHL 4.049 DLA -33.30 RAL 204.50 RAD 6567.7 VEL 11.738 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  71.37
                                                                                                  113.63 10 7 13
                                                                                                                                    690.4
                                                                                                                                                   27.16
                                                                    355.86
                                                                                                                                                                 348.03
                                                      24.18
       71.69
                     9 45 43 1290.44
                                                                                                                                                                  259.83
                    14 24 17
                                                                    267.65
                                                                                     71.38
                                                                                                    113.62
                                                                                                                15 59
                                                                                                                                   5089.6
                                                                                                                                                    27.17
       108.31
                                   5649.56
                                                      24.19
                                                                                                  113.62 15 59 7
113.63 10 7 13
113.62 15 59 7
118.78 15 13 17
108.50 17 4 30
                                                                                     71.37
                                                                                                                                     690.4
                                                                                                                                                    27.16
                                                                                                                                                                  348.03
                                   1290.44
                                                                    355.86
        71.69
                     9 45 43
                                                      24.18
                                                                                                                                                                  259.83
                  14 24 17 5689.56
13 36 0 5837.75
                                                      24.19
                                                                    267.65
                                                                                     71.38
                                                                                                                                   5089.6
                                                                                                                                                    27.17
       108.31
                                                                                                                                   5237.7
                                                      19.29
                                                                    276.54
                                                                                     68.78
                                                                                                                                                    22.98
                                                                                                                                                                  269.35
       110.00
                   15 33 11
                                  5478.28
                                                                    253.45
                                                                                     73.57
                                                                                                                                  4878.3
                                                                                                                                                    31-.51
                                                                                                                                                                  244.96
       110.00
                                                      29.27
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5616.0 SGR 451.8 SG3 196.7
RRT -.4009 RRF -.3978 RTF .9405
SGB 5634.1 R23 .0204 R13 -.9406
SGI 5618.9 SG2 413.7 THA 178.14
                                                                                                                            ST 3144.4 SR 445.6 SS 839.4
CRT -.9713 CRS .9263 CST -.9889
    TOE-2.1677 TRA 1.3391 TC3-5.0899 BAU 1.1158
    TOE-2.1877 IRA 1.3391 103-10385 BB 17725
ROE .3149 RRA .0157 RC3 -.0867 FAU .02769
FOE -.8454 FRA .9054 FC3-1.4620 BSP 17725
ROF 2.1904 BRA 1.3392 BC3 5.0907 FSP -645
                                                                                                                             LSA 3280.8 MSA 161.4 SSA 20.0
                                                                                                                           ELI 3174.0 ELZ 105.0 ALF 172.15
                                                                                                                                         ARRIVAL DATE JAN 8 1968
                                                                            FLIGHT TIME 186.00
LAUNCH DATE JUL 6 1967
                                                                            DISTANCE 538.822
   HELLOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 25.830 GAL 3.65 AZL 93.20 MCA 263.65 SMA 123.13 ECC .24332 INC 3.1988 VI 29.291
RP 107.79 LAP 3.18 LOP 186.91 VP 37.210 GAP 12.16 AZP 89.65 TAL 168.48 TAP 72.13 RCA 93.17 APO 153.09 V2 35.156
RC 166.846 GL -20.16 GP 7.21 ZAL 66.68 ZAP 168.51 ETS 36.82 ZAE 128.53 ETE 174.48 ZAC 68.49 ETC 10.80 CLP-171.03
   PLANETOCENTRIC CONIC
    C3 17.421 VHL 4.174 OLA -33.17 RAL 208.20 RAD 6567.7 VEL 11.782 PTH 2.08 VHP 7.799 DPA
                                                                                                                                     3.06 RAP 198.73 ECC 1.2867
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                113.91 10 23 48
113.90 16 12 35
113.91 10 23 48
113.90 16 12 35
113.90 16 12 35
119.33 15 24 22
108.53 17 23 27
                                                                                75.99
                                                                                                                                                   26.73
                                                     23.71
                                                                                                                                  699.4
                                                                                                                                                                 348.55
        71.95 10 2 8 1299.38
108.05 14 37 27 5708.57
71.95 10 2 8 1299.38
                                                                   356.32
                                                      23.72
                                                                    268.89
                                                                                    75.99
                                                                                                                                  5108.6
                                                                                                                                                   26.74
                                                                                                                                                                 261.12
       104.05
                                                     23.71
                                                                    356.32
                                                                                    75.99
                                                                                                                                   699.4
                                                                                                                                                   26.73
                                                                                                                                                                 348.55
                                                                                                                                  5108.6
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                                                                                    75.99
                                                     23.72
                                                                    268.89
                   14 37 27 5708.57
       108.05
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                   13 46 37 5864.67
                                                                                    73.14
                                                     18.40
                                                                    278.12
       110.00
                  15 52 8 5479.31
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                                                                                                                                                                 245 04
                                                                                    78.39
                                                     29.25
       110.00
                                                                    253.52
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RTT -,4063 RRF -,4010 RTS -,9418
SGB 5673.0 R23 .0178 R13 -,9419
SG1 5657.6 SG2 417.8 THA 178.11
                                                                                                                            ST 3088.6 SR 452.8 SS 804.5
CRT -.9634 CRS .9139 CST -.9889
LSA 3219.2 MSA 168.8 SSA 19.4
    TDE-2.1745 TRA 1.5941 TC3-4.8258 BAU 1.1241
    ROE .3298 RRA .0101 RC3 -.0764 FAU .02572
FDE -.7988 FRA .9577 FC3-1.2780 BSP 17898
BDE 2.1993 BRA 1.5941 BC3 4.8264 FSP -625
                                                                                                                             ELI 3119.3 EL2 120.2 ALF 171.95
                                                                                                                                          ARRIVAL DATE JAN 10 1968
                                                                            FLIGHT TIME 188.00
LAUNCH DATE JUL 6 1967
                                                                            DISTANCE 544.361
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 25.786 GAL 4.23 A7L 93.11 MCA 266.88 SNA 122.87 ECC .24850 INC 3.1118 V1 29.291
RP 107.83 LAP 3.11 LOP 190.14 VP 37.168 GAP 12.59 A7P 89.83 TAL 166.97 TAP 73.85 RCA 92.33 APO 153.40 VZ 35.145
RC 168.808 GL -18.86 GP 6.95 ZAL 63.77 ZAP 169.38 ETS 38.71 ZAE 128.47 ETE 174.67 ZAC 66.29 ETC 10.71 CLP-171.94
   PLANETOCENTRIC CONIC
    C3 18.644 VHL 4.318 DLA -32.97 RAL 211.81 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 8.033 DPA
                                                                                                                                      1.88 RAP 200.72 ECC 1.3068
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 114.17 10 40 58

114.16 16 24 43

114.16 16 24 43

114.16 16 24 43

119.99 14 5 7

108.42 17 43 52
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                                                                                    80.60
                                                                    356.63
                  10 19 11 1307.02
14 49 11 5732.57
        72.37
                                                      23.13
                                                                                                                                                    26.20
                                                                                                                                   5132.6
                                                                                                                                                                  262.74
                                                                                     80.61
                                                                    277.46
       107.63
                                                     23.14
                                                                                                                                    707.0
                                                                                                                                                    26.19
                                                                                                                                                                  348.91
                                                                                     80.60
                                                                    356.63
                   10 19 11
                                   1307.02
                                                      23.13
        72.37
                                                                                                                                                    26.20
                                                                                                                                                                  262.74
                                                                                     80.61
                                                                                                                                   5132.6
                    14 49 11
                                    5732.57
                                                     23.14
                                                                    270.46
       107.63
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                                                                                     77.39
                                                                                                                                     11.5
                                                      17.23
                                                                    302.24
       110.00
                   13 54 56
                                    611.45
                                                                                                                                 4876.1
                                                                                                                                                                  244.80
                                                                                                                                                   31.55
                                                                    253.30
                                                                                     83.29
       110.00
                    16 12 36
                                   5476.14
                                                     29.32
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5688.3 SGR 462.3 SG3 182.5

RRT -.4132 RRF -.4065 RTF .9432

SGB 5707.1 R23 .0158 R13 -.9432

SGI 5691.5 SG2 420.7 THA 178.07
                                                                                                                            ST 3020.4 SR 458.8 SS 770.1
CRT -.9543 CRS .9002 CST -.9888
LSA 3145.5 MSA 177.6 SSA 18.8
    TOE-2.1747 TRA 1.8627 TC3-4.5368 BAU 1.1309
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EL1 3052.0 EL2 135.7 ALF 171.74

ROE .3457 RRA .0032 RC3 -.0658 FAU .02382 FOE -.7539 FRA 1.0094 FC3-1.1060 BSP 18055 BOE 2.2020 BRA 1.8627 BC3 4.5373 FSP -605

ARRIVAL DATE JAN 12 1968

LAUNCH DATE JUL 6 1967

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DISTANCE 549.850
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 283.26 VL 25.742 GAL 4.83 AZL 93.03 HCA 270.11 SMA 122.61 ECC .25409 INC 3.0254 V1 29.291 RP 107.86 LAP 3.03 LOP 193.37 VP 37.127 GAP 13.03 AZP 90.01 TAL 165.46 TAP 75.57 RCA 91.45 APO 153.76 V2 35.134 RC 170.755 GL -17.58 GP 6.71 ZAL 60.94 ZAP 170.20 ETS 41.01 ZAE 128.41 ETE 174.85 ZAC 64.09 ETC 10.66 CLP-172.84
   PLANETOCENTRIC CONIC
                                                                                                                                                                                    .72 RAP 202.74 ECC 1.3306
                                                                                                                                        2.11 VHP 8.281 DPA
     C3 20.086 VHL 4.482 OLA -32.69 RAL 215.29 RAD 6567.8 VEL 11.894 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.94 10 36 46 1313.21 22.46 356.77 85.18 114.40 10 58 39 713.2 25.56 349.12
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14 59 23 5761.64
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         110.00
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ST 2941.1 SR 463.3 SS 735.9
CRT -.9439 CRS .8847 CST -.9887
                                                                                              SGT 5716.1 SGR 466.0 SG3 175.8
RRT -.4214 RRF -.4127 RTF .9445
     TOE-2.1679 TRA 2.1457 TC3-4.2289 BAU 1.1357
     ROE .3824 RRA -.0053 RC3 -.0552 FAU .02198
FOE -.7099 FRA 1.0806 FC3 -.9471 BSP 18186
BOE 2.1979 BRA 2.1457 BC3 4.2292 FSP -586
                                                                                              SGB 5735.0 R23 .0138 R13 -.9445
SGI 5719.4 SGZ 422.4 THA 178.02
                                                                                                                                                                      LSA 3061.1 MSA 187.7 SSA 18.1
                                                                                                                                                                       EL1 2973.5 EL2 151.3 ALF 171.52
                                                                                                                                                                                      ARRIVAL DATE JAN 14 1968
                                                                                                    FLIGHT TIME 192.00
LAUNCH DATE JUL 6 1967
                                                                                                    DISTANCE 555.282
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.698 GAL 5.47 AZL 92.94 MCA 273.33 SMA 122.35 ECC .26015 INC 2.9390 V1 29.291 RP 107.90 LAP 2.93 LOP 195.60 VP 37.085 GAP 13.50 AZP 90.17 TAL 163.97 TAP 77.29 RCA 90.52 APO 154.18 V2 35.122 RC 172.686 GL -16.32 GP 6.49 ZAL 58.21 ZAP 170.99 ETS 43.80 ZAE 128.34 ETE 175.01 ZAC 61.88 ETC 10.64 CLP-173.73
   PLANETOCENTRIC CONIC
                                                                                                                                         2.13 VHP 8.546 DPA
                                                                                                                                                                                   -.41 RAP 204.77 ECC 1.3584
     C3 21.778 VHL 4.667 OLA -32.35 RAL 218.64 RAD 6567.9 VEL 11.965 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.66 10 54 50 1317.99 21.69 356.76 89.72 114.61 11 16 48 718.0 24.82 349.17
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         106.34
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                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5736.8 SGR 468.5 SG3 169.4
RRT -.4300 RRF -.4198 RTF .9457
                                                                                                                                                                       ST 2851.4 SR 466.1 SS 702.5
CRT -.9317 CRS .8670 CST -.9884
LSA 2966.6 MSA 199.2 SSA 17.4
     TDE-2.1519 TRA 2.4472 TC3-3.9048 BAU 1.1370
      RDE .3796 RRA -.0153 RC3 -.0455 FAU .02012
                                                                                               SGB 5755.9 R23 .0121 R13 -.9457
SG1 5740.4 SG2 422.7 THA 177.98
      FOE -.6663 FRA 1.1131 FC3 -.8000 BSP 18230
                                                                                                                                                                      EL1 2884.4 EL2 167.3 ALF 171.31
      BDE 2.1851 BRA 2.4472 BC3 3.9051 FSP -564
                                                                                                                                                                                     ARRIVAL DATE JAN 16 1968
                                                                                                    FLIGHT TIME 194.00
LAUNCH DATE JUL 6 1967
                                                                                                   DISTANCE 560.650
     RL 152.10 LAL -.00 LOL 283.26 VL 25.655 GAL 6.15 A7L 92.85 MCA 276.55 SMA 122.10 ECC .26672 INC 2.8521 VI 29.291 RP 107.94 LAP 2.83 LOP 199.82 VP 37.044 GAP 13.99 A7P 90.33 TAL 162.48 TAP 79.02 RCA 89.54 APO 154.67 V2 35.110 RC 174.603 GL -15.09 GP 6.29 7AL 55.58 ZAP 171.73 ETS 47.19 ZAE 128.27 ETE 175.14 ZAC 59.66 ETC 10.67 CLP-174.62
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 23.754 VHL 4.874 DLA -31.95 RAL 221.83 RAD 6568.0 VEL 12.047 PTH 2.15 VHP 8.827 DPA -1.51 RAP 206.82 ECC 1.3909
     C3 23.734 VPL 4.874 ULA -31.95 MAL 221.85 MAU 0508.U VEL 12.047 PIM 2.15 VPP 8.827 UPA -1.51 MAP 206.82 ECC 1.3909 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2-LONG 74.54 11 13 26 1320.83 20.85 356.56 94.19 114.78 11 35 26 720.8 24.01 349.03 105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.46 15 14 54 5835.05 20.86 277.18 94.20 114.77 16 52 9 5235.0 24.02 269.64 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.00 1105.0
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                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5755.7 SGR 470.1 SG3 163.3
RRT -.4403 RRF -.4287 RTF ..9472
SGB 5774.8 R23 .0105 R13 -.9472
SGI 5759.4 SG2 421.8 TMA 177.93
                                                                                                                                                                      ST 2760.9 SR 467.5 SS 672.3
CRT -.9183 CRS .8484 CST -.9883
LSA 2872.0 MSA 210.8 SSA 16.7
      TOE-2.1342 TRA 2.7609 TC3-3.5833 BAU 1.1380
     RDE .3975 RRA -.0268 RC3 -.0361 FAU .01843
FDE -.6265 FRA 1.1640 FC3 -.6716 BSP 18354
                                                                                                                                                                       EL1 2794.2 EL2 182.9 ALF 171.12
      BDE 2.1709 BRA 2.7610 BC3 3.5835 FSP -546
                                                                                                                                                                                       ARRIVAL DATE JAN 18 1968
                                                                                                     FLIGHT TIME 196.00
LAUNCH DATE JUL 6 1967
                                                                                                    DISTANCE 565.944
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.612 GAL 6.86 AZL 92.76 HCA 279.77 SMA 121.86 ECC .27385 INC 2.7642 V1 29.291
RP 107.97 LAP 2.72 LOP 203.04 VP 37.002 GAP 14.52 AZP 90.47 TAL 161.00 TAP 80.77 RCA 88.49 APO 155.23 V2 35.097
RC 176.504 GL -13.90 GP 6.11 ZAL 53.07 ZAP 172.42 ETS 51.32 ZAE 128.19 ETE 175.27 ZAC 57.44 ETC 10.74 CLP-175.50
    PLANETOCENTRIC CONIC
      C3 26.053 VHL 5.104 OLA -31.51 RAL 224.87 RAD 6568.1 VEL 12.142 PTH 2.18 VHP 9.129 OPA -2.58 RAP 208.89 ECC 1.4288
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.56 11 32 32 1321.66 19.93 356.17 98.59 114.93 11 54 33 721.7 23.12 348.70 104.44 15 20 0 5879.70 19.94 280.11 98.60 114.92 16 57 59 5279.7 23.13 272.64
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                                                                                                               102.82
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                                                                                               HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 5769.3 SCR 470.6 SC3 157.5
RRT -.4512 RRF -.4386 RTF .9489
SCB 5788.5 R23 .0091 R13 -.9489
                                                                                                                                                                       ST 2668.8 SR 467.1 SS 644.6
CRT -.9032 CRS .8283 CST -.9883
      TOE-2.1122 TRA 3.0916 TC3-3.2626 BAU 1.1364
      ROE .4159 RRA -.0397 RC3 -.0278 FAU .01678
                                                                                                                                                                      LSA 2776.1 MSA 222.6 SSA 16.0
EL1 2702.2 EL2 198.1 ALF 170.97
      FOE -.5891 FRA 1.2152 FC3 -.5577 BSP 18456
BOE 2.1527 BRA 3.0919 BC3 3.2628 FSP -529
                                                                                                SG1 5773.2 SG2 419.7 THA 177.88
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FLIGHT TIME 190.00

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LAUNCH DATE JUL 6 1967
                                                                                                          FLIGHT TIME 198.00
     HELIOCENTRIC CONIC
                                                                                                         DISTANCE 571.156
      RL 152.10 LAL -.00 LOL 283.26 VL 25.570 GAL 7.62 ATL 92.67 MCA 282.98 SMA 121.62 ECC .28160 INC 2.6745 V1 29.291
RP 108.01 LAP 2.61 LOP 206.26 VP 36.961 GAP 15.07 AZP 90.60 TAL 159.54 TAP 82.52 RCA 87.37 APO 155.86 V2 35.084
RC 178.389 GL -12.75 GP 5.95 ZAL 50.68 ZAP 173.04 ETS 56.32 ZAE 128.11 ETE 175.38 ZAC 55.22 ETC 10.85 CLP-176.39
     PLANETOCENTRIC CONIC
     C3 28.726 VML 5.360 DLA -31.03 RAL 227.73 RAD 6568.2 VEL 12.252 PTH 2.20 VMP 9.453 DPA -3.63 RAP 210.97 ECC 1.4728 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.75 11 52 18 1319.75 18.95 355.54 102.91 115.04 12 14 17 719.7 22.17 348.14 103.25 15 23 7 642.16 18.96 305.53 102.92 115.03 15 33 49 42.2 22.18 298.12 103.25 15 23 7 642.16 18.96 305.53 102.92 115.03 15 33 49 42.2 22.18 298.12 110.00 14 16 59 849.18 8.71 315.36 97.05 123.19 14 31 8 249.2 13.02 308.93 110.00 17 57 36 5448.76 29.89 251.37 107.57 107.41 19 28 25 4848.8 31.98 242.78
      C3 28.726 VHL 5.360 DLA -31.03 RAL 227.73 RAD 6568.2 VEL 12.252 PTH 2.20 VMP 9.453 DPA -3.63 RAP 210.97 ECC 1.4728
                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5777.9 SGR 470.0 SG3 151.9
RRT -.4627 RRF -.3492 RTF .9507
SGB 5797.0 R23 .0079 R13 -.9507
SGI 5782.0 SGZ 416.4 THA 177.83
                                                                                                                                                                             5T 2576.8 SR 465.0 S5 619.8 CRT -.8863 CRS .8068 CST -.9884
      TDE-2.0859 TRA 3.4415 TC3-2.9469 BAU 1.1318
      RDE .4346 RRA -.0542 RC3 -.0206 FAU .01518
FDE -.5539 FRA 1.2675 FC3 -.4575 85P 18537
                                                                                                                                                                            LSA 2680.6 MSA 234.2 SSA 15.4
EL1 2609.8 EL2 212.7 ALF 170.85
      BOE 2.1307 BRA 3.4419 BC3 2.9470 FSE -511
LAUNCH DATE JUL 6 1967
                                                                                                         FLIGHT TIME 200,00
                                                                                                                                                                                               ARRIVAL DATE JAN 22 1968
    HELIOCENTRIC CONIC
                                                                                                         DISTANCE 576.272
     RL 152.10 LAL -.00 LOL 283.26 VL 25.528 GAL 8.42 AZL 92.58 MCA 286.20 SMA 121.38 ECC .29006 INC 2.5826 V1 29.291
RP 108.05 LAP 2.48 LOP 209.47 VP 36.920 GAP 15.67 AZP 90.72 TAL 158.10 TAP 84.30 RCA 86.17 APO 156.58 V2 35.071
RC 180.257 GL -11.64 GP 5.80 ZAL 48.41 ZAP 173.60 ETS 62.35 ZAE 128.01 ETE 175.48 ZAC 53.00 ETC 11.00 CLP-177.28
    PLANETOCENTRIC CONIC
      C3 31.831 VHL 5.642 OLA -30.52 RAL 230.44 RAD 6568.3 VEL 12.378 PTH
                                                                                                                                               2.23 VHP 9.801 OPA
                                                                                                                                                                                         -4.65 RAP 213.06 ECC 1.5239
     CS 31.831 VML 3.642 OLA -30.32 RAL 230.44 RAD 6568.3 VEL 12.378 PM 2.23 VMP 9.801 DPA -4.65 RAP 215.06 ECC 1.3239 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ. AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.11 12 12 57 1314.23 17.92 354.62 107.14 115.12 12 34 51 714.2 21.16 347.28 101.69 15 24 0 699.15 17.94 309.30 107.15 115.11 15 35 39 99.2 21.17 301.95 78.11 12 12 57 1314.23 17.92 354.62 107.14 115.12 12 34 51 714.2 21.16 347.28 101.69 15 24 0 699.15 17.94 309.30 107.15 115.11 15 35 39 99.2 21.17 301.95 101.69 15 24 0 699.15 17.94 309.30 107.15 115.11 15 35 39 99.2 21.17 301.95 100.00 14 19 17 902.76 6.70 318.23 100.70 123.60 14 34 19 302.8 11.07 311.86 11.00 18 16 51 5446.66 29.93 251.23 112.24 107.35 19 47 37 4846.7 32.01 242.63 DIFFFERNTIAL CORRECTIONS
                                                                                                  HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                 SGT 5781.1 SGR 468.1 SG3 146.7

RRT -.4744 RRF -.4599 RTF .9526

SGB 5800.0 R23 .0065 R13 -.9526

SGI 5785.4 SG2 411.8 THA 177.79
                                                                                                                                                                             ST 2485.1 SR 461.0 SS 597.3
CRT -.8671 CRS .7831 CST -.9885
      TDE-2.0533 TRA 3.8144 TC3-2.6369 BAU 1.1222
      RDE .4553 RRA -.0704 RC3 -.0148 FAU .01356
FDE -.5198 FRA 1.3224 FC3 -.3689 BSP 18522
BDE 2.1027 BRA 3.8150 BC3 2.6370 FSP -492
                                                                                                                                                                            LSA 2585.4 MSA 245.8 SSA 14.8
ELI 2517.3 EL2 226.7 ALF 170.79
                                                                                                                                                                                             ARRIVAL DATE JAN 24 1968
LAUNCH DATE JUL 6 1967
                                                                                                         FLIGHT TIME 202.00
                                                                                                        DISTANCE 581.276
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.487 GAL 9.27 A7L 92.49 MCA 289.41 SMA 121.15 ECC .29929 INC 2.4878 V1 29.291
RP 108.09 LAP 2.35 LOP 212.69 VP 36.879 GAP 16.31 A7P 90.83 TAL 156.69 TAP 86.10 RCA 84.89 APO 157.40 V2 35.058
RC 182.108 GL -10.57 GP 5.66 TAL 46.27 TAP 174.05 ETS 69.55 TAE 127.90 ETE 175.57 ZAC 50.79 ETC 11.21 CLP-178.17
    PLANETOCENTRIC CONIC
      C3 35.438 VHL 5.953 DLA -29.98 RAL 232.97 RAD 6568.4 VEL 12.522 PTH 2.27 VHP 10.178 DPA -5.64 RAP 215.15 ECC 1.5832
     C3 35.438 VML 5.953 DLA -29.98 RAL 232.97 RAD 6568.4 VEL 12.522 PTM 2.27 VMP 10.178 DPA -5.64 RAP 215.15 ECC 1.5832 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.71 12 34 54 1303.57 16.85 353.30 111.28 115.17 12 56 38 703.6 20.10 346.01 100.29 15 22 15 763.96 16.87 313.61 111.29 115.16 15 34 59 164.0 20.12 306.32 79.71 12 34 54 1303.57 16.85 353.30 111.28 115.17 12 56 38 703.6 20.10 346.01 100.29 15 22 15 763.96 16.87 313.61 111.29 115.16 15 34 59 164.0 20.12 306.32 110.00 14 21 9 957.15 4.64 321.09 104.26 123.90 14 37 6 357.2 9.06 314.79 110.00 18 35 10 5446.42 29.94 251.21 116.81 107.32 20 5 57 4846.4 32.01 242.61 DISSESSIVITION CORPECTIONS
                                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 5780.5 SGR 465.2 SG3 141.6

RRT -.4869 RRF -.4719 RTF ..9548

SGB 5799.1 R23 .0054 R13 -.9549

SGI 5784.9 SG2 406.0 THA 177.75
                                                                                                                                                                           ST 2400.5 SR 455.6 SS 578.9

CRT -.8470 CRS .7599 CST -.9889

LSA 2497.9 MSA 256.0 SSA 14.2

EL1 2431.6 EL2 239.1 ALF 170.78
      TOE-2.0230 TRA 4.2046 TC3-2.3449 BAU 1.1110
      ROE .4724 RRA -.0880 RC3 -.0099 FAU .01208
      FOE -.4901 FRA 1.3772 FC3 -.2930 BSP 18598
      BOE 2.0774 BRA 4.2055 BC3 2.3450 FSP -477
                                                                                                                                                                                              ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUL 6 1967
                                                                                                         FLIGHT TIME 204.00
                                                                                                        DISTANCE 586.151
     RL 152.10 LAL -.00 LOL 283.26 VL 25.446 GAL 10.19 ATL 92.39 MCA 292.62 SMA 120.92 ECC .30939 INC 2.3892 V1 29.291
RP 108.13 LAP 2.21 LOP 215.90 VP 36.838 GAP 17.00 AZP 90.92 TAL 155.31 TAP 87.93 RCA 83.51 APO 158.33 VZ 35.045
RC 183.942 GL -9.55 GP 5.53 ZAL 44.25 ZAP 174.39 ETS 77.91 ZAE 127.77 ETE 175.65 ZAC 48.60 ETC 11.47 CLP-179.08
    PLANETOCENTRIC CONIC
      C3 39.635 VHL 6.296 DLA -29.43 RAL 235.33 RAD 6568.5 VEL 12.689 PTH 2.31 VHP 10.586 DPA -6.59 RAP 217.25 ECC 1.6523
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      INJ AZMTH INJ TIME
115.19 13 20 32
115.18 15 30 53
117.72 15 0 58
112.75 16 24 23
124.10 14 39 31
107.39 20 23 20
                                                                                                              115.32
                                                                                                                                                                                                      19.01
                                                                                             351.35
                                                                                                                                                                                      684.6
                                                                                                                                                                                                                              344.11
           81.62 12 59 7 1264.56
                                                                         15.75
                                                                                                                                                                                      239.5
                                                                                                                                                                                                                               311.44
                            15 16 53
                                                 839.53
                                                                          15.76
                                                                                             318.68
                                                                                                                 115.33
                                                                                                                                                                                                           19.03
                          14 45 17
                                                   940.77
                                                                          11.67
                                                                                             324.06
                                                                                                                 113.23
                                                                                                                                                                                      340.8
                                                                                                                                                                                                           15.29
                                                                                                                                                                                                                             317.16
          100,00
                            16 13 25
                                                    658.55
                                                                         19.93
                                                                                              307.21
                                                                                                                  117.28
                                                                                                                                                                                       58.6
                                                                                                                                                                                                           22.84
                                                                                                                                                                                                                              299.62
          100.00
                          14 22 39
                                                                                                                                                                                      412.1
                                                                                                                                                                                                             7.01
                                                                                                                                                                                                                               317.72
                                                1012.06
                                                                           2.55
                                                                                             323.97
                                                                                                                  107.74
         110.00
                                                                                                                                                                                    4848.1
                                                                                                                                                                                                                               242.73
          110.00
                           18 52 32
                                                  5448.07
                                                                          29.91
                                                                                             251.32
                                                                                                                  121.29
                                                                                                                                                                                                           31.99
                                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ST 2320.5 SR 448.4 SS 563.4
CRT -.8252 CRS .7361 CST -.9895
                                                                                                   SGT 5775.0 SGR 461.0 SG3 136.9
RRT -.4995 RRF -.4843 RTF .9573
SGB 5793.4 R23 .0044 R13 -.9573
      TOE-1.9906 TRA 4.6189 TC3-2.0669 BAU 1.0952
      RDE .4914 RRA -.1070 RC3 -.0061 FAU .01061
      FDE -.4626 FRA 1.4344 FC3 -.2317 89P 18652
BDE 2.0504 BRA 4.6202 BC3 2.0670 FSP -461
                                                                                                                                                                            LSA 2415.2 MSA 265.0 SSA 15.6
                                                                                                   5G1 5779.6 SG2 399.1 THA 177.71
                                                                                                                                                                            EL1 2350.2 EL2 250.1 ALF 170.83
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ARRIVAL CATE JAN 28 1968

JPL TM 33-99

LAUNCH DATE JUL 6 1967

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HELIOCENTRIC CONIC
                                                                         DISTANCE 590.873
   RL 152.10 LAL -.00 LOL 283.26 VL 25.407 GAL 11.17 AZL 92.29 HCA 295.82 SMA 120.70 ECC .32048 INC 2.2859 VI 29.291 RP 108.18 LAP 2.06 LOP 219.10 VP 36.798 GAP 17.75 AZP 91.00 TAL 153.97 TAP 89.80 RCA 82.02 APO 159.38 V2 35.032 RC 185.758 GL -8.57 GP 5.42 TAL 42.37 ZAP 174.58 ETS 87.29 ZAE 127.62 ETE 175.73 ZAC 46.42 ETC 11.78 CLP 180.00
   PLANETOCENTRIC CONIC
    C3 44.526 VHL 6.673 DLA -28.87 RAL 237.53 RAD 6568.7 VEL 12.880 PTH 2.35 VHP 11.031 DPA -7.52 RAP 219.35 ECC 1.7328
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.17 13 48 50
115.16 15 21 6
118.78 14 49 48
111.80 16 54 5
124.18 14 41 36
107.52 20 39 47
       84.14
                                                                              119.26
                                                                                                                                                         341.01
                   13 28 1
                                  1249.20
                                                    14.62
                                                                 348.20
                                                                                                                               649.2
                                                                                                                                             17.90
                                                                                                                                333.6
                                                                                                                                                             317.88
       95.86
                  15 5 33
                                  933.58
                                                    14.64
                                                                  325.07
                                                                                119.27
                                                                                                                                               17.91
                                                                                                                                                            322.96
       100.00
                   14 32 28
                                  1040.03
                                                     8.47
                                                                  329.72
                                                                                116.07
                                                                                                                                440.0
                                                                                                                                               12.24
                                                                                                                                               23.75
                                                                                                                                                            296.96
                  16 43 47
                                                                  304.65
                                                                                122.16
                                                                                                                                18.0
      100.00
                                    617.98
                                                    20.98
      110.00
                   14 23 49
                                  1067.25
                                                      .44
                                                                  326.85
                                                                                111.14
                                                                                                                               467.3
                                                                                                                                               4.92
                                                                                                                                                            320.63
                  19 8 55 5451.57
                                                    29.83
                                                                 251.57
                                                                               125.66
                                                                                                                             4851.6
                                                                                                                                              31.94
                                                                                                                                                            242.99
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 2249.8 SR 439.8 SS 551.1
CRT -.8029 CRS .7120 CST -.9900
                                                                     SGT 5764.4 SGR 455.8 SG3 132.3
RRT -.5131 RRF -.4969 RTF .9600
    TDE-1.9630 TRA 5.0600 TC3-1.8005 BAU 1.0718
    RDE .5104 RRA -.1276 RC3 -.0035 FAU .00916
                                                                   SGB 5782.4 R23 .0024 R13 -.9600
SGI 5769.2 SGZ 390.9 THA 177.67
    FDE -.4374 FRA 1.4945 FC3 -.1781 83P 18657
                                                                                                                          LSA 2341.9 MSA 272.3 SSA 13.0
                                                                                                                          EL1 2277.7 EL2 259.0 ALF 170.96
    BOE 2.0283 BRA 5.0616 BC3 1.8005 FSP -446
                                                                         FLIGHT TIME 208.00
                                                                                                                                     ARRIVAL DATE JAN 30 1968
LAUNCH DATE JUL 6 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 595.416
   RL 152.10 LAL -.00 LOL 283.26 VL 25.368 GAL 12.23 ATL 92.18 MCA 299.02 SMA 120.48 ECC .33268 INC 2.1770 V1 29.291
RP 108.22 LAP 1.90 LOP 222.31 VP 36.759 GAP 18.56 APP 91.06 TAL 152.68 TAP 91.71 RCA 80.40 APO 160.56 V2 35.019
RC 187.557 GL -7.64 GP 5.31 ZAL 40.61 ZAP 174.60 ETS 97.25 ZAE 127.45 ETE 175.80 ZAC 44.26 ETC 12.16 CLP 179.06
  PLANETOCENTRIC CONIC
    C3 50.243 VHL 7.088 DLA -28.30 RAL 239.57 RAD 6568.8 VEL 13.100 PTH
                                                                                                    2.39 VHP 11.517 OPA
                                                                                                                                 -8.41, RAP 221.45 ECC 1.8269
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
       90.00 14 15 27 1152.26
                                                    12.61
                                                                  340.11
                                                                              122.67
                                                                                              115.56 14 34 40
                                                                                                                             552.3
                                                                                                                                            15.95
                                                                                                                                                            333.03
                                                                                              114.66 14 52 32
119.39 14 43 6
111.24 18 46 10
124.15 14 43 21
107.71 20 55 16
                                                                                                            14 52 32
                                                                                                                                491.0
                                                                                                                                               17.59
                                                                                                                                                             329.28
        90.00
                   14 34 20
                                  1091.03
                                                    14.36
                                                                  336.49
                                                                                123.52
                 14 24 23 1123.36
                                                                                                                                523.4
                                                                                                                                                             327.72
      100.00
                                                     5.71
                                                                  334.36
                                                                                119.03
                                                                                                                                                9.58
                 17 8 6
14 24 39
                                                                                                                               5283.2
                                                                                                                                               24.24
                                                                                                                                                             273.34
      100.00
                                  5883.19
                                                   21.55
                                                                  281.10
                                                                                126.71
                                                                                                                               522.5
                                                                                                                                               2.82
                                                                                                                                                             323.53
                                 1122.52
                                                    -1.67
                                                                  329.73
                                                                              114.47
                   19 24 20
                                  5456.80
                                                                  251.94
                                                                                129.91
                                                                                                                               4856.8
                                                                                                                                              31.86
                                                                                                                                                             243.38
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    SCT 5751.5 SGR 449.1 SG3 12A.0
RRT -.5252 RRF -.5098 RTF .9626
SG8 5769.0 R23 .0024 R13 -.9626
SG1 5756.3 SG2 381.9 THA 177.64
                                                                                                                        ST 2176.8 SR 429.5 SS 541.6
CRT -.7774 CRS .6674 CST -.9910
LSA 2266.9 MSA 278.5 SSA 12.5
    TOE-1.9214 TRA 5.5331 TC3-1.5561 BAU 1.0452
    RDE .5289 RRA -.1497 RC3 -.0018 FAU .00768
    FOE -.4138 FRA 1.5591 FC3 -.1323 BSP 18608
BDE 1.9929 BRA 5.5351 BC3 1.5561 FSP -430
                                                                                                                       ELI 2202.7 EL2 267.0 ALF 171.15
                                                                         FLIGHT TIME 210.00
                                                                                                                                     ARRIVAL DATE FEB 1 1968
LAUNCH DATE JUL 6 1967
                                                                         DISTANCE 599.743
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 283.26 VL 25.329 GAL 13.37 AFL 92.06 MCA 302.23 SMA 120.27 ECC .34613 INC 2.0612 V1 29.291
RP 108.26 LAP 1.74 LOP 225.51 VP 36.720 GAP 19.46 AFP 91.10 TAL 151.44 TAP 93.67 RCA 78.64 APO 161.90 V2 35.005
RC 189.337 GL -6.75 GP 5.21 7AL 38.98 ZAP 174.45 ETS 107.22 ZAE 127.24 ETE 175.87 ZAC 42.14 ETC 12.61 CLP 178.10
   PLANETOCENTRIC CONIC
    C3 56.948 VHL 7.546 OLA -27.72 RAL 241.44 RAO 6569.0 VEL 13.353 PTH 2.44 VMP 12.050 OPA -9.27 RAP 223.53 ECC 1.9372
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 41 26 1318.38 7.56 349.70 124.42 117.37 14 3 24 718.4 11.17 342.88
                                                                                             117.37 14 3 28
112.82 15 39 46
119.74 14 38 18
110.89 19 6 56
124.00 14 44 47
107.96 21 9 50
                                                                            124.42
        90.00 13 41 26 1318.38
                                                                                129.05
                                                                                                                                386.9
                                                                                                                                                             322.74
                                                                  330.16
        90.00
                 15 23 19 986.87
14 18 19 1199.15
                                                   17.24
                                                                                122.02
                                                                                                                               599.1
                                                                                                                                               7.09
                                                                                                                                                             331.97
                                                                  338.55
      100.00
                                                     3.16
                                                   21.88
                                                                                131.03
                                                                                                                              5269.4
                                                                                                                                               24.53
                                                                                                                                                            272.42
      100.00
                 17 29 7 5869.38
14 25 9 1177.68
                                                                  280.22
                                 5669.36
                                                    -3.76
                                                                                117.71
                                                                                                                                                             326.41
                                                                  332.61
      110.00
                  19 36 46 5463.62
                                                                                                                              4863.6
                                                                                                                                                            243.88
                                                   29.58
                                                                                134.04
      110.00
                                                                  252.42
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                     SCT 5732.7 SCR 441.4 SC3 123.9
RRT -.5382 RRF -.5232 RTF .9655
SCB 5749.7 R23 .0016 R13 -.9655
SCI 5737.7 SC2 _371.7 THA 177.62
                                                                                                                          ST 2115.3 SR 418.1 SS 535.6
CRT -.7529 CRS .6648 CST -.9919
    TOE-1.8907 TRA 6.0337 TC3-1.3267 BAU 1.0116
   ROE .5475 RRA -.1729 RC3 -.0009 FAU .00626
FOE -.3940 FRA 1.6264 FC3 -.0952 BSP 18645
                                                                                                                         LSA 2203.8 MSA 282.2 SSA 12.0
EL1 2139.0 EL2 272.1 ALF 171.40
    BOE 1.9684 BRA 6.0362 BC3 1.3287 FSP -416
                                                                                                                                     ARRIVAL DATE FEB 3 1968
                                                                         FLIGHT TIME 212.00
LAUNCH DATE JUL 6 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 603.811
   RL 152.10 LAL -.00 LOL 283.26 VL 25.292 GAL 14.61 A7L 91.94 MCA 305.42 SMA 120.06 ECC .36103 INC 1.9370 V1 29.291 RP 108.30 LAP 1.58 LOP 228.70 VP 36.682 GAP 20.44 A7P 91.12 TAL 150.28 TAP 95.70 RCA 76.72 APO 163.41 V2 34.992 RC 191.100 GL -5.90 GP 5.12 7AL 37.49 7AP 174.11 ETS 116.62 7AE 127.00 ETE 175.94 7AC 40.05 ETC 13.13 CLP 177.10
  PLANETOCENTRIC CONTC
    C3 64.842 VHL 8.092 OLA -27.15 RAL 243.15 RAD 6569.2 VEL 13.645 PTH 2.49 VHP 12.639 OPA -10.09 RAP 225.60 ECC 2.0671
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             127.00
                                                                                              118.00 13 51 26
112.10 16 6 28
                 13 27 49
15 50 37
                                 1417.31
                                                                  355.28
                                                                                                                                817.3
                                                                                                                                                8.14
                                                     4.42
        90.00
                                                                  327.96
                                                                                133.53
                                                                                                                                351.0
                                                                                                                                               21.01
                                                                                                                                                             320.44
        90.00
                                  951.02
                                                   18.17
                                                                                                119.88 14 34 30
110.68 19 25 28
123.74 14 45 53
108.26 21 23 28
                                                                  342.45
                                                                                                                                670.2
                                                                                                                                                4.72
                                                                                                                                                             335.91
                  14 13 20
17 47 46
                                                      .75
                                                                                124.97
      100,00
                                  1270.23
                                                                  279.70
                                                    22.08
                                                                                                                               5261.4
                                                                                                                                               24.69
      100.00
                                  5861.37
                                                                                135.16
                  14 25 20
19 52 16
                                                    -5.66
                                                                                                                                632.5
                                                                                                                                               -1.39
                                                                                                                                                             329.27
      110.00
                                  1232.55
                                                                  335.50
                                                                                120.87
                                                                                                                                             31.62
                                                                                                                               4871.8
                                                                  253.00
                                                                                138.03
      110.00
                                                    29.41
                                  5471.81
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    SGT 5709.7 SGR 432.4 SG3 120.0
RRT -.5511 RRF -.5366 RTF .9686
SGB 5726.1 R23 .0008 R13 -.9686
SGI 5714.7 SG2 360.5 THA 177.60
                                                                                                                          ST 2059.5 SR 405.3 SS 532.6
CRT -.7281 CRS .6432 CST -.9929
    TOE-1.8614 TRA 6.5706 TC3-1.1179 BAU- .9691
    ROE .5658 RRA -.1974 RC3 -.0006 FAU .00481
FOE -.3765 FRA 1.6989 FC3 -.0642 89P 18649
BOE 1.9455 BRA 6.5737 BC3 1.1179 FSP -403
                                                                                                                        LSA 2146.8 MSA 283.8 SSA 11.5
                                                                                                                         EL1 2080.9 EL2 275.0 ALF 171.70
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FLIGHT TIME 206.00

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FLIGHT TIME 214.00
                                                                                                                                                                                    ARRIVAL CATE FEB 5 1968
LAUNCH CATE JUL 5 1967
                                                                                                   OJSTANCE 607.566
   HELLOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.256 GAL 15.97 AZL 91.80 MCA 308.62 SMA 119.87 ECC .37756 INC 1.8026 V1 29.291 RP 108.34 LAP 1.41 LOP 231.90 VP 36.644 GAP 21.52 AZP 91.13 TAL 149.19 TAP 97.81 RCA 74.61 APO 165.12 VZ 34.979 RC 192.846 GL -5.09 GP 5.04 ZAL 36.13 ZAP 173.61 ETS 125.05 ZAE 126.72 ETE 176.01 ZAC 38.01 ETC 13.72 CLP 176.07
    PLANETOCENTRIC CONIC
      C3 74.184 VHL 8.613 DLA -26.57 RAL 244.71 RAD 6569.4 VEL 13.983 PTH
                                                                                                                                       2.55 VHP 13.290 DPA -10.86 RAP 227.65 ECC 2.2209
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               111.67 13 43 19 111.67 16 28 2 119.86 14 31 14 110.58 19 42 11 123.36 14 46 37 108.60 21 36 10
                                                                                                        129.67
                                                                                                                                                                             901.5
                                                                                         359.99
           90.00 13 18 17 1501.50
                                                                      1.72
                                                                                                                                                                              330.6
                                                                                                            137.66
                          16 12 32
                                               930.58
                                                                      18.69
                                                                                         326.68
           90.00
                                                                                                             127.86
                                                                                                                                                                              737.9
                                                                                                                                                                                                   2.44
                        14 8 56
                                                                                         346.16
         100.00
                                              1337.92
                                                                      -1.54
                                                                                                                                                                          5257.4
                                                                                                                                                                                                 24.77
                                                                                                            139.10
         100.00
                          18 4 34
                                               5857.44
                                                                     22.17
                                                                                         279.45
                                                                                                                                                                            687.0
                                                                                                                                                                                                  -3.46
                                                                                                                                                                                                                    332.11
                        14 25 10 1286.96
                                                                      -7.91
                                                                                         338.38
                                                                                                            123.93
         110.00
                                                                                                                                                                           4881.2
                                                                                                                                                                                               31.47
                                                                                         253.65
                                                                                                            141.67
                         20 4 49
                                               5481.16
                                                                      29.21
         110.00
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5682.6 SGR 422.2 SG3 116.2
RRT -.5639 RRF -.5501 RTF .9717
SG8 5698.3 R23 .0001 R13 -.9717
SG1 5687.6 SG2 348.4 THA 177.59
                                                                                                                                                                      ST 2009.1 SR 391.5 SS 532.6
CRT -.7035 CRS .6229 CST -.9940
     TOE-1.8350 TRA 7.1484 TC3 -.9238 BAU
                                                                            .9162
     RDE .5837 RRA -.2229 RC3 -.0009 FAU .00332
FOE -.3614 FRA 1.7774 FC3 -.0387 BSP 18631
BOE 1.9256 BRA 7.1519 BC3 .9238 FSP -391
                                                                                                                                                                    LSA 2096.0 MSA 283.2 SSA 11.0
                                                                                                                                                                      EL1 2028.3 EL2 275.6 ALF 172.05
                                                                                                                                                                                     ARRIVAL DATE FEB 7 1968
                                                                                                    FLIGHT TIME 216.00
   HELIOCENTRIC CONIC
                                                                                                    DISTANCE 610.938
     RL 152.10 LAL -.00 LOL 283.26 VL 25.221 GAL 17.46 A7L 91.66 MCA 311.81 SMA 119.68 ECC .39597 INC 1.6558 VI 29.291
RP 108.38 LAP 1.23 LOP 235.09 VP 36.608 GAP 22.72 A7P 91.10 TAL 148.21 TAP 100.02 RCA 72.29 APO 167.06 V2 34.966
RC 194.574 GL -4.32 GP 4.96 ZAL 34.92 ZAP 172.95 ETS 132.35 ZAE 126.38 ETE 176.08 ZAC 36.02 ETC 14.40 CLP 174.99
   PLANETOCENTRIC CONIC
     C3 85.301 VHL 9.236 DLA -26.00 RAL 246.10 RAD 6569.7 VEL 14.375 PTH 2.61 VHP 14.016 DPA -11.60 RAP 229.66 ECC 2.4038
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                118.31 13 36 56
                                                                                                                                                                              977.9
                                                                                                            132.33
                         13 10 36
                                              1577.89
                                                                       -.75
                                                                                           4.25
           90.00
                                                                                                                                  111.40 16 46 35
119.68 14 28 13
110.55 19 57 22
122.86 14 46 59
108.97 21 47 58
                                                                                                                                                                              318.2
                                                                                                                                                                                                  21.74
                                                                                                                                                                                                                     318.30
                        16 31 17
                                               918.19
                                                                       19.00
                                                                                         325.90
                                                                                                             141.53
                                                                                                                                                                              802.9
                                                                                                             130.67
                          14 4 50
                                              1402.87
                                                                       -3.74
                                                                                         349.73
         100.00
                                                                                         279.39
                                                                                                             142.64
                                                                                                                                                                           5256.5
                                                                                                                                                                                                                     271.55
         100.00
                        18 19 46 5856.49
                                                                      22.19
                                                                                                            126.90
                                                                                                                                                                             740.7
                                                                                                                                                                                                  -5.51
                                                                                                                                                                                                                     334.93
                                                                                         341.26
         110.00
                          14 24 38
                                              1340.73
                                                                      -9.91
                                                                                                                                                                           4891.4
                                                                                                                                                                                                  31.29
                                                                                         254.36
                        20 16 27 5491.39
                                                                      28.99
                                                                                                            145.54
         110.00
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5652.8 SGR 410.8 SG3 112.8
RRT -.5764 RRF -.5653 RTF .9748
SGB 5667.7 R23 -.0007 R13 -.9748
SGI 5657.7 SG2 335.4 THA 177.59
                                                                                                                                                                      ST 1963.1 SR 376.5 SS 535.5
CRT -.6789 CRS .6032 CST -.9949
     TDE-1.8092 TRA 7.7757 TC3 -.7442 BAU .8487
      ROE .6011 RRA -.2495 RC3 -.0018 FAU .00169
                                                                                                                                                                      LSA 2050.2 MSA 280.6 SSA 10.5
      FOE -.3479 FRA 1.8642 FC3 -.0172 BSP 18508
                                                                                                                                                                      ELI 1980.0 EL2 274.1 ALF 172.44
      BOE 1.9065 BRA 7.7797 BC3 .7442 FSP -376
                                                                                                                                                                                    ARRIVAL DATE FEB 9 1968
                                                                                                    FLIGHT TIME 218.00
LAUNCH DATE JUL 6 1967
                                                                                                   DISTANCE 613.837
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.188 CAL 19.09 AZL 91.49 MCA 315.00 SMA 119.49 ECC .41654 INC 1.4938 VI 29.291
RP 108.42 LAP 1.06 LOP 238.28 VP 36.573 CAP 24.07 AZP 91.06 TAL 147.34 TAP 102.35 RCA 69.72 APO 169.27 VZ 34.953
RC 196.285 GL -3.58 GP 4.89 TAL 33.85 ZAP 172.15 ETS 138.56 ZAE 125.98 ETE 176.15 ZAC 34.09 ETC 15.17 CLP 173.85
    PLANETOCENTRIC CONIC
      C3 98.613 VHL 9.930 DLA -25.43 RAL 247.32 RAD 6569.9 VEL 14.831 PTH 2.68 VHP 14.828 DPA -12.30 RAP 231.63 ECC 2.6229
     C3 98.613 VHL 9.930 DLA -25.43 RAL 247.32 RAD 6569.9 VEL 14.831 PTH 2.68 VHP 14.828 DPA -12.30 RAP 251.65 ECC 2.6269 DPA -10.50 DPA -12.30 RAP 251.65 ECC 2.6269 DPA 
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 5617.0 SGR 398.1 SG3 109.4
RRT -.5885 RRF -.5765 RTF .9780
                                                                                                                                                                    ST 1922.2 SR 360.7 SS 541.9

CRT -.6564 CRS .5867 CST -.9959

LSA 2010.7 MSA 275.7 SSA 9.9
      TOE-1.7939 TRA 8.4492 TC3 -.5829 BAU .7685
      ROE .6183 RRA -.2765 RC3 -.0029 FAU .00001
                                                                                             568 5631.1 R23 -.0012 R13 -.9780
      FDE -.3382 FRA 1.9580 FC3 -.0001 BSP 18493
                                                                                              SG1 5621.9 SG2 321.6 THA 177.60
                                                                                                                                                                      ELI 1937.1 EL2 270.0 ALF 172.84
      BOE 1.8975 BRA 8.4537 BC3 .5829 FSP
                                                                         - 365
                                                                                                                                                                                     ARRIVAL DATE FEB 11 1968
                                                                                                    FLIGHT TIME 220.00
LAUNCH DATE JUL 6 1967
                                                                                                    DISTANCE 616.146
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 283.26 VL 25.156 GAL 20.91 AZL 91.31 MCA 318.19 SMA 119.32 ECC .43961 INC 1.3127 VI 29.291 RP 108.46 LAP .87 LOP 241.46 VP 36.539 GAP 25.59 AZP 90.98 TAL 146.63 TAP 104.82 RCA 66.87 APO 171.78 V2 34.941 RC 197.979 GL -2.88 GP 4.8Z ZAL 32.94 ZAP 171.20 ETS 143.81 ZAE 125.51 ETE 176.22 ZAC 32.25 ETC 16.02 CLP 172.63
    PLANETOCENTRIC CONIC
      C3 114.668 VHL 10.708 DLA -24.87 RAL 248.37 RAD 6570.2 VEL 15.362 PTH 2.75 VHP 15.742 DPA -12.95 RAP 233.54 ECC 2.8871
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 57 44 1716.25 -5.19 11.99 137.42 117.88 13 26 20 1116.2 -1.42 5.34
                                                                                                          137.42
                       12 57 44 1716.25
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                                                                                                                                                                              306.7
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                                                                                          325.18
                           17 2 19
                                                906.67
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110.66 20 23 41
121.62 14 46 22
109.74 22 8 50
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                         13 56 43 1525.61
                                                                      -7.84
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          100.00
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                           18 46 1
                                              5860.39
                                                                     22.10
                                                                                         279.64
                                                                                                             149.69
          100.00
                                                                                                                                                                                                  -9.44
                                                                                                                                                                                                                     340.51
                                                                                                                                                                              845.6
                           14 22 16 1445.64
20 36 57 5513.32
                                                                                          346.99
                                                                                                             132.46
                                                                    -13.72
                                                                                                                                                                                                30.91
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                                                                                                                                                                         4913.3
                                                                 28.49
                                                                                         255.88
                                                                                                             152.29
                                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 1884.8 SR 344.1 S5 551.7

CRT -.6353 CRS .5720 CST -.9967

LSA 1975.6 MSA 268.7 SSA 9.4

EL1 1897.7 EL2 263.9 ALF 173.25
                                                                                             SCT 5577.1 SCR 384.3 SC3 106.2
RRT -.6001 RRF -.5891 RTF .9810
SC8 5590.3 R23 -.0018 R13 -.9810
      TOE-1.7859 TRA 9.1813 TC3 -.4363 BAU .6689
      RDE .6352 RRA -.3037-RC3 -.0041 FAU-.00186
FDE -.3312 FRA 2.0622 FC3 .0141 BSP 18452
BDE 1.8955 BRA 9.1863 BC3 .4363 FSP -355
                                                                                              SG1 5581.9 SG2 307.1 THA 177.62
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JPL TM 33-99

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ARRIVAL DATE SEP 15 1967
                                                                        FLIGHT TIME 70.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 178.452
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.652 GAL -7.47 A7L 93.36 MCA 77.22 SMA 122.08 ECC .27630 INC 3.3616 V1 29.291 RP 108.68 LAP -3.28 LOP 1.42 VP 36.815 GAP -14.78 A7P 90.74 TAL 200.61 TAP 277.83 RCA 88.35 APO 155.82 V2 34.870 RC 47.84 GL -16.23 GP -6.23 TAL 128.48 TAP 7.64 ETS 53.88 TAE 151.07 ETE 10.22 TAC 90.02 ETC 13.69 CLP -4.43
   PLANETOCENTRIC CONIC
    C3 28.460 VHL 5.335 CLA -5.04 RAL 149.88 RAD 6568.1 VEL 12.241 PTH 2.20 VHP 9.290 CPA -1.43 RAP 176.02 ECC 1.4684
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.40 3 37 31
                                                                                                                          1543.7
                                                                                                                                         -14.60
                                                                               15.85
                     3 1 47
                                 2143.73
                                                  -17.79
                                                                37.04
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                 13 44 36 5101.56
4 20 45 1888.99
                                                                226.43
                                                                                18.74
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        90.00
                                                  24.63
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      100.00
                                                 -18.93
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116.86 5 51 45
71.13 17 38 41
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                                                                206.22
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                                                                                                                            4231.5
                 15 8 19 4831.53
                                                 25.82
      100.00
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                                                                                                                                                          354.26
      110.00
                    5 23 33 1692.38
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                                                 -21.98
                                                                  1.35
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                 16 22 0
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                                  4600.90
                                                 29.04
                                                                187.58
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 339.6 SR 395.8 SS 220.4

CRT -.8812 CRS -.9906 CST .8475

LSA 549.1 MSA 136.1 SSA 23.6

EL1 506.2 EL2 125.5 ALF 130.05
                                                                    SGT 693.6 SGR 423.5 SG3 95.9
RRT -.1316 RRF .1588 RTF -.6525
    TOE .2937 TRA -.3870 TC3 .4269 BAU .1635
    ROE - .3662 RRA - .1376 RC3 .0483 FAU .03280
    FOE -.2499 FRA -.1496 FC3 -.9979 BSP 1846
BOE .4694 BRA .4108 BC3 .4296 FSP -231
                                                                    SGB 812.7 R23 -.0242 R13 .6562
                                                                    SG1 697.1 SG2 417.7 THA 172.81
                                                                                                                                   ARRIVAL DATE SEP 17 1967
LAUNCH DATE JUL 7 1967
                                                                        FLIGHT TIME 72.00
                                                                        DISTANCE 185.236
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.874 GAL -7.44 A7L 93.27 MCA 80.40 SMA 123.38 ECC .26463 INC 3.2703 V1 29.291
RP 108.64 LAP -3.22 LOP 4.60 VP 36.979 GAP -13.76 A7P 90.55 TAL 201.85 TAP 282.25 RCA 90.73 APO 156.03 V2 34.881
RC 49.103 GL -16.43 GP -6.63 ZAL 130.11 ZAP 9.47 E1S 43.44 ZAE 150.03 ETE 8.60 ZAC 89.33 ETC 13.73 CLP -6.79
  PLANETOCENTRIC CONIC
                                                                                                  2.18 WHP 8.723 DPA -2.12 RAP 176.60 ECC 1.4406
    C3 26,770 VHL 5.174 DLA -4.62 RAL 148.19 RAD 6568.1 VEL 12.172 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 51 50 2141.88 -17.74 36.93 13.23 112.44 3 27 32 1541.9 -14.55 29.71
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4 11 0
                                  5072.94
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116.96 5 42 25
70.19 17 34 4
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      100.00
                  15 4 36 4803.57
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                                                                204.31
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                    5 14 17 1668.39
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                                                                   1.10
                                                                                11.22
      110.00
                                                                185.75
                                                                                14.27
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                  16 17 50
                                  4574.41
                                                   28.45
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 343.0 SR 399.5 SS 226.1
CRT -.8895 CRS -.9862 CST .8325
LSA 555.9 MSA 136.9 SSA 24.8
    TDE .2897 TRA -.3615 TC3 .4780 BAU .1717 RDE -.3584 RRA -.1354 RC3 .0407 FAU .03576
                                                                    SGT 713.4 SGR 426.6 SG3 108.1
RRT -.1516 RRF .1840 RTF -.6678
    FOE -.2621 FRA -.1995 FC3-1.1565 BSP 1927
BDE .4609 BRA .3860 BC3 .4797 FSP -266
                                                                    SGB 831.2 R23 -. 0297 R13 .6724
SG1 717.8 SG2 419.0 THA 172.12
                                                                                                                        EL1 512.2 EL2 122.3 ALF 130.12
                                                                                                                                   ARRIVAL DATE SEP 19 1967
                                                                        FLIGHT TIME 74.00
LAUNCH CATE JUL 7 1967
                                                                       CISTANCE 192.018
   HELTOCENTRIC CONTC
   RL 152.10 LAL -.00 LOL 284.22 VL 26.074 GAL -7.42 AZL 93.18 HCA 83.58 SMA 124.59 ECC .25422 INC 3.1806 V1 29.291 RP 108.61 LAP -3.16 LOP 7.78 VP 37.130 GAP -12.79 AZP 90.36 TAL 203.10 TAP 286.68 RCA 92.91 APO 156.26 V2 34.891 RC 50.476 GL -16.55 GP -7.06 ZAL 131.70 ZAP 11.61 ETS 36.38 ZAE 149.21 ETE 7.03 ZAC 88.73 ETC 13.79 CLP -9.24
   PLANETOCENTRIC CONIC
    C3 25.357 VML 5.036 DLA -4.14 RAL 146.57 RAD 6568.0 VEL 12.113 PTH 2.17 VHP 8.187 OPA -2.82 RAP 177.09 ECC 1.4173
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            3 17 30
                   2 41 47 2143.32
13 38 12 5044.65
                                                                             10.81
                                                                                            112.41 3 17 30
73.89 15 2 16
113.61 4 32 38
                                                                                                                         1543.3 -14.59 29.80
                                                  -17.78
                                                                 37.02
        90.00
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        90.00
                                                  23.61
                                                                222.58
                                                                                                                           1287.2
                                                                                                                                          -15.53
                                                                                                                                                          10.50
                                                                                10.32
                    4 1 11
                                 1887.18
                                                  -18.88
                                                                 17.69
       100.00
                                                                                               72.69 16 21 5
116.98 5 33 6
69.31 17 29 59
                                                                                                                            4176.0
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                                                                                                                                                          194.61
       100.00
                  15 1 29 4776.02
                                                  24.75
                                                                202.44
                                                                                12.66
                  5 4 59 1687.47
16 14 11 4548.49
                                                                                                                            1087.5
                                                                                                                                           -18.03
                                                                                                                                                          353.97
       110.00
                                                  -21.83
                                                                  1.05
                                                                                8.83
                                                                                                                            3948.5
                                                                                                                                            24.77
                                                  27.84
                                                                 183.98
                                                                                11.48
       110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                       ST 344.3 SR 402.7 SS 231.6
CRT -.8967 CRS -.9795 CST .8150
LSA 560.8 MSA 138.4 SSA 26.0
                                                                   SGT 731.2 SGR 429.4 SG3 122.0
RRT -.1744 RRF .2133 RTF -.5813
SGB 848.0 R23 -.0366 R13 .6871
SGI 736.9 SG2 419.6 THA 171.32
    TOE .2848 TRA -.3367 TC3 .5274 BAU .1791
ROE -.3516 RRA -.1342 RC3 .0300 FAU .03913
    FOE -.2749 FRA -.2564 FC3-1.3359 BSP 2007
BOE .4524 BRA .3625 BC3 .5263 FSP -306
                                                                                                                        ELI 516.3 ELZ 118.8 ALF 130.02
                                                                                                                                   ARRIVAL DATE SEP 21 1967
                                                                        FLIGHT TIME 76.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 198.794
    RL 152.10 LAL -.00 LOL 284.22 VL 26.254 GAL -7.41 AZL 93.09 MCA 86.76 SMA 125.70 ECC .24499 INC 3.0920 V1 29.291
RP 108.58 LAP -3.09 LOP 10.97 VP 37.267 GAP -11.86 AZP 90.17 TAL 204.35 TAP 291.10 RCA 94.90 APO 156.49 V2 34.903
RC 51.950 GL -16.60 GP -7.55 ZAL 133.25 ZAP 13.97 ETS 31.45 ZAE 148.64 ETE 5.47 ZAC 88.25 ETC 13.85 CLP -11.78
   PLANETOCENTRIC CONIC
    C3 24.173 VHL 4.917 OLA -3.63 RAL 145.03 RAD 6568.0 VEL 12.064 PTN 2.16 VHP 7.682 OPA -3.52 RAP 177.46 ECC 1.3978
    ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            112.32
73.10
                                                                                                            3 7 34
                                                                                                                                          -14.71
20.53
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                                                  -17.89
                                                                  37.29
                                                                                 8.59
        90.00
                     2 31 46 2147.65
                                                                                                          14 59 31
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        90.00
                    13 35 55
                                 5016.81
                                                  23.07
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                                                                                               113.54
       100.00
                     3 51 25
                                 1890.72
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       100.00
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                   4 55 46 1689.26
16 11 5 4523.19
                                                                                               116.94 5 23 56
68.47 17 26 28
       110.00
                                                 -21.88
                                                                  1.16
                                                                                                                                          24.05
                                                                                                                             3923.2
       110.00
                                                  27.22
                                                                 182.28
                                                                                  8.89
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 748.4 SGR 432.4 SG3 137.9
RRT -.2029 RRF .2477 RTF -.6950
SGB 864.3 R23 -.0429 R13 .7022
                                                                                                                        ST 345.0 SR 405.4 SS 237.5

CRT -.9041 CRS -.9703 CST .7968

LSA 565.0 MSA 140.7 SSA 27.0
    TOE .2804 TRA -.3117 TC3 .5761 BAU .1862
    RDE -.3455 RRA -.1343 RC3 .0159 FAU .04299
FDE -.2887 FRA -.3231 FC3-1.5397 88P 2109
BDE .4450 BRA .3394 BC3 .5763 FSP -354
                                                                                                                      LSA 565.0 MSA 140.7 SSA
                                                                                                                       EL1 519.7 EL2 115.0 ALF 129.92
                                                                     SG1 755.9 SG2 419.2 THA 170.31
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FLIGHT TIME 78.00
                                                                                                                                  ARRIVAL DATE SEP 23 1967
LAUNCH DATE JUL 7 1967
                                                                       DISTANCE 205.562
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 26.415 GAL -7.41 A7L 93.00 MCA 89.94 SMA 126.72 ECC .23682 INC 3.0040 V1 29.291
RP 108.54 LAP -3.00 LOP 14.16 VP 37.391 GAP -10.98 A7P 90.00 TAL 205.57 TAP 295.51 RCA 96.71 APO 156.72 V2 34.914
RC 53.515 GL -16.57 GP -8.09 ZAL 134.74 ZAP 16.52 ETS 27.87 ZAE 148.31 ETE 3.86 ZAC 87.89 ETC 13.91 CLP -14.45
   PLANETOCENTRIC CONIC
    C3 23.179 VHL 4.814 DLA -3.08 RAL 143.58 RAD 6567.9 VEL 12.023 PTH
                                                                                                 2.15 VHP 7,205 OPA -4.22 RAP 177.71 ECC 1.3815
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            112.18
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                    2 21 55 2154.43
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71.13 16 15 44
116.84 5 15 0
67.68 17 23 32
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                    4 46 46
                                 1693.35
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      110.00
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                  16 8 34
                                  4498.55
                                                 _26.59
                                                                180.64
                                                                                 6.51
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
SGT 761.0 SGR 435.6 SG3 155.8
RRT -.2321 RRF .2864 RTF -.7040
SGB 876.9 R23 -.0533 R13 .7133
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 342.1 SR 407.4 SS 242.6
CRT -.9088 CRS -.9587 CST .7736
LSA 565.9 MSA 144.3 SSA 27.9
    TDE .2735 TRA - .2898 TC3
                                      .6178 BAU
                                                      .1915
    RDE -.3399 RRA -.1356 RC3 -.0019 FAU .04734
FDE -.3018 FRA -.3974 FC3-1.7681 BSP 2169
BDE .4363 BRA .3199 BC3 .6178 FSP -407
                                                                                                                        EL1 520.1 EL2 111.8 ALF 129.53
                                                                    SG1 770.6 SG2 418.5 THA 169.22
                                                                                                                                   ARRIVAL DATE SEP 25 1967
                                                                        FLIGHT TIME 80.00
  HELIOCENTRIC CONIC
                                                                        DISTANCE 212.317
   RL 152.10 LAL -.00 LOL 284.22 VL 26.558 GAL -7.41 A7L 92.92 MCA 93.12 SMA 127.64 ECC .22963 INC 2.9158 V1 29.291 RP 108.50 LAP -2.91 LOP 17.34 VP 37.504 GAP -10.13 A7P 89.84 TAL 206.75 TAP 299.87 RCA 98.33 APO 156.95 V2 34.926 RC 55.163 GL -18.47 GP -8.70 ZAL 136.14 ZAP 19.25 ETS 25.17 ZAE 148.24 ETE 2.18 ZAC 87.67 ETC 13.97 CLP -17.24
  PLANETOCENTRIC CONIC
    C3 22.339 VHL 4.726 DLA -2.51 RAL 142.25 RAD 6567.9 VEL 11.988 PTH
                                                                                                  2.14 VHP 6.757 DPA
                                                                                                                              -4.93 RAP 177.81 ECC 1.3676
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           30.99
                                                                                            112.00
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                    2 12 20 2163.27
                                                  -18.29
                                                                 38.26
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                  13 33 12
                                 4962.69
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                                                                                                                                                         354.67
                                                                                 2.67
                                                                                              116.69
                                                                                                                                          -18.43
                    4 38 5
                                 1699.40
                                                  -22.20
                                                                  1.78
      110.00
                                                                                                66.94 17 21 12
                  16 6 38 4474.56
                                                                                                                            3874.6
                                                                                                                                            22.61
                                                                                                                                                         171.50
                                                   25.96
                                                                179.06
                                                                                 4.35
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 337.2 SR 408.9 SS 247.7
CRT -.9120 CRS -.9448 CST .7471
LSA 565.0 MSA 149.2 SSA 28.5
EL1 518.7 EL2 109.1 ALF 129.00
                                                                    SCT 769.7 SCR 439.7 SC3 176.1
RRT - 2649 RRF .3306 RTF - 7102
SCB 886.4 R23 - .0661 R13 .7224
    TOE .2657 TRA -.2700 TC3 .6533 BAU .1952
    RDE -.3347 RRA -.1383 RC3 -.0239 FAU .05226
    FDE -.3152 FRA -.4816 FC3-2.0254 BSP 2215
BDE .4274 BRA .3033 BC3 .6537 FSP -468
                                                                    SG1 782.0 SG2 417.3 THA 167.90
                                                                                                                                  ARRIVAL DATE SEP 27 1967
                                                                        FLIGHT TIME 82.00
LAUNCH DATE JUL 7 1967
                                                                       DISTANCE 219.057
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 26.686 GAL -7.41 AZL 92.83 MCA 96.31 SMA 128.48 ECC .22332 INC 2.8271 V1 29.291
RP 108.46 LAP -2.81 LOP 20.54 VP 37.606 GAP -9.32 AZP 89.69 TAL 207.88 TAP 304.19 RCA 99.79 APO 157.18 V2 34.938
RC 56.885 GL -16.30 GP -9.37 7AL 137.47 7AP 22.17 ETS 23.06 ZAE 148.43 ETE .37 ZAC 87.60 ETC 14.02 CLP -20.18
   PLANETOCENTRIC CONIC
    C3 21.626 VHL 4.650 DLA -1.91 RAL 141.04 RAD 6567.9 YEL 11.958 PTH 2.13 VHP 6.337 DPA -5.65 RAP 177.75 ECC 1.3559
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 3 6 2173.82 -18.56 38.92 3.13 111.78 2 39 19 1573.8 -15.44 31.63
                                                                                           111.78 2 39 19

70.98 14 55 2

113.02 3 55 27

69.73 16 12 51

116.50 4 58 12

66.24 17 19 28
                                                                                 4.08
                                                                                                                            4336.4
                                                                                                                                           18.59
                                                                215.43
        90.00
                  13 32 46 4936.44
                                                  21.38
                                                                                 2.68
                                                                                                                           1314.3
                                                                                                                                          -16.33
                                                                                                                                                         12.12
                  3 23 33 1914.30
14 55 0 4671.20
                                                                 19.37
                                                 -19.61
       100.00
                                                                                                                                                         187.96
                                                                                                                           4071.2
                                                                                                                                           19.49
                                                                                 3.66
                                                 22.45
                                                                195.51
                 4 29 45 1707.06
16 5 17 4451.20
                                                                                                                          1107.1
                                                                                                                                                         355.11
      110.00
                                                  -22.43
                                                                  2.25
                                                                                 1.28
                                                                                                                            3851.2
                                                                                                                                                         170.06
                                                  25.33
                                                                177.53
                                                                                 2.39
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 773.6 SGR 445.1 SG3 198.9

RRT -.3003 RRF .3803 RTF -.7131

SGB 892.5 R23 -.0822 R13 .7295

SG1 789.7 SG2 415.9 THA 166.34
                                                                                                                      ST 330.1 SR 409.7 SS 252.5
CRT -.9131 CRS -.9285 CST .7158
LSA 561.8 MSA 155.4 SSA 29.0
    TOE .2565 TRA -.2530 TC3 .6812 BAU .1975
    RDE -.3298 RRA -.1424 RC3 -.0505 FAU .05782
    FDE -.3279 FRA -.5756 FC3-2.3148 BSP 2247
BDE .4178 BRA .2903 BC3 .6830 FSP -537
                                                                                                                      EL1 515.2 EL2 107.0 ALF 128.30
                                                                                                                                  ARRIVAL DATE SEP 29 1967
                                                                        FLIGHT TIME 84.00
LAUNCH DATE JUL 7 1967
                                                                        01STANCE 225.779
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 26.799 GAL -7.42 ATL 92.74 HCA 99.50 SHA 129.24 ECC .21782 INC 2.7372 V1 29.291 RP 108.43 LAP -2.70 LOP 23.73 VP 37.698 GAP -8.55 ATP 89.55 TAL 208.93 TAP 308.43 RCA 101.09 APO 157.39 V2 34.951 RC 58.673 GL -16.07 GP -10.12 TAL 138.70 ZAP 25.28 ETS 21.37 ZAE 148.88 ETE 358.36 ZAC 87.72 ETC 14.06 CLP -23.29
   PLANETOCENTRIC CONIC
    C3 21.014 VHL 4.584 DLA -1.31 RAL 139.95 RAD 6567.9 VEL 11.933 PTH 2.12 VHP 5.945 DPA -6.36 RAP 177.52 ECC 1.3458
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             1.72
                                                                                            111.52
                                                                                                           2 30 41
                                                                                                                           1585.7
                                                                                                                                                           32.35
                     1 54 15 2185.74
                                                 -18.86
                                                                 39.66
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                                                                                                                                           17.93
                                                                213.76
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                   13 32 56
                                 4910.70
                                                   20.60
                                                                                               112.77
                                                                                                            3 47 5
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                                                                 20.06
                    3 14 59 1925.31
                                                 -19.90
                                                                                 1.26
       100.00
                                                                                                69.08 16 12 19
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                                                                                                                                          18.82
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                                                  21.86
                                                                 193.90
                                                                                 1.93
       100.00
                   14 54 53
                                 4646.37
                                                                                              116.27
                                                                                                                                                         355.64
                                                                                                           4 50 27
                                                                                                                            1116.0
                                                                                                                                          -18.99
                     4 21 50
                                 1716.04
                                                  -22.70
                                                                  2.61
                                                                              359.89
       110.00
                                                                                                65.58 17 18 20
                                                                                                                                          21.19
                                                                                                                            3828.4
                                 4428.39
                                                                                  . 64
       110.00
                   16 4 31
                                                  24.69
                                                                176.07
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 772.0 SGR 452.6 SG3 224.7
RRT -.3380 RRF .4355 RTF -.7124
SGB 894.9 R23 -.1021 R13 .7347
                                                                                                                    ST 321.3 SR 409.9 SS 257.3

CRT -.9121 CRS -.9101 CST .6793

LSA 556.8 HSA 162.8 SSA 29.3

EL1 509.9 EL2 105.9 ALF 127.45
    TOE .2463 TRA - .2369 TC3 . .7002 BAU .1981
    ROE - .3249 RRA - .1481 RC3 - .0822 FAU .06408
    FOE -. 3399 FRA -. 6809 FC3-2.6399 BSP 2264
                                                                    SG1 793.1 SG2 414.7 THA 164.44
    BOE .4077 BRA .2811 BC3 .7050 FSP -615
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ARRIVAL DATE OCT 1 1967

LAUNCH DATE JUL 7 1967

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DISTANCE 232.481
   RL 152.10 LAL -.00 LOL 284.22 VL 26.898 GAL -7.42 A7L 92.65 MCA 102.69 SMA 129.91 ECC .21303 INC 2.6456 V1 29.291 RP 108.39 LAP -2.58 LOP 26.92 VP 37.780 GAP -7.80 A7P 89.42 TAL 209.91 TAP 312.60 RCA 102.24 APO 157.58 V2 34.964 RC 60.521 GL -15.79 GP -10.95 7AL 139.83 7AP 28.60 ETS 19.96 7AE 149.59 ETE 356.09 7AC 88.03 ETC 14.08 CLP -26.59
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 20.482 VHL 4.526 DLA -.69 RAL 138.99 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 5.581 DPA -7.08 RAP 177.08 ECC 1.3371 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    111.24
                                                                                                                    2 22 30
                                                                                                                                      1598.8
                                                                       40.48 .48
                      1 45 51 2198.78
                                                      -19.18
        90.00
                                                                                                       69.73 14 55 8
                                                                                                                                                       17.27
                                                                                                                                       4285.4
                      13 33 42 4885.38
3 6 53 1937.42
                                                                      212.14
                                                                                          .61
                                                      20.21
                     13 33 42
        90.00
                                                                                                        112.50 3 39 10
68.47 16 12 24
                                                                                                                                      1337.4
                                                                                                                                                       -17.00
                                                      -20.22
                                                                       20.82
                                                                                         .04
                                                                                                       112.50
       100.00
                                                                                                                                       4022.0
                                                                                                                                                      18.14
                                                                      192.34
                                                                                          .38
                                    4621.97
                                                      21.26
                    14 55 22
                                                                                                                                      1126.1 -19.55
       100.00
                                                                                                                                                                       356.23
                                                                                                       116.01 4 43 9
64.95 17 17 47
                                                                                      358.69
                                                      -23.00
                                                                        3.43
                                   1726.10
       110.00
                      4 14 23
                                                                                      359.08
                                    4406.07
                                                       24.06
                                                                     174.64
       110.00
                   16 4 21
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 312.4 SR 409.6 SS 263.4

CRT -.9096 CRS -.8907 CST .6403

LSA 551.8 MSA 171.3 SSA 29.3

EL1 504.2 EL2 105.4 ALF 126.62
    TOE .2367 TRA -.2272 TC3 .7115 BAU .1976
RDE -.3201 RRA -.1557 RC3 -.1202 FAU .07117
                                                                          SGT 766.3 SGR 463.6 SG3 253.9
                                                                          RRT -.3793 RRF .4967 RTF -.7088
SGB 895.6 R23 -.1247 R13 .7399
    FOE -.3529 FRA -.7991 FC3-3.00A2 BSP 2300
BOE .39A1 BRA .2754 BC3 .7215 FSP -709
                                                                          SG1 794.3 SG2 413.9 THA 162.05
                                                                                                                                               ARRIVAL DATE OCT 3 1967
                                                                               FLIGHT TIME 88.00
LAUNCH DATE JUL 7 1967
                                                                              DISTANCE 239.162
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 26.984 GAL -7.42 AZL 92.55 HCA 105.88 SMA 130.50 ECC .20887 INC 2.5515 VI 29.291
RP 108.35 LAP -2.45 LOP 30.12 VP 37.853 GAP -7.09 AZP 89.30 TAL 210.79 TAP 316.67 RCA 103.24 APO 157.76 V2 34.977
RC 62.420 GL -15.44 GP -11.88 ZAL 140.87 ZAP 32.14 ETS 18.75 ZAE 150.55 ETE 353.44 ZAC 88.55 ETC 14.06 CLP -30.08
   PLANETOCENTRIC CONIC
                                            -.06 RAL 138.17 RAD 6567.8 VEL 11.891 PTH
                                                                                                           2.11 VHP 5.244 DPA
                                                                                                                                          -7.80 RAP 176.42 ECC 1.3294
    C3 20.013 VHL 4.474 OLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                         33.99
                                                                                                                                    1612.7
                     1 37 55 2212.72
13 35 4 4860.39
                                                                                                       110.93
                                                                                                                    2 14 47
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                                                       -19.52
                                                                        41.36
                                                                                      359.43
        90.00
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                                                                                                                                       4260.4
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                                                                      210.55
                                                                                      359.46
                                                                                                         69.16
                                                       19.61
        90.00
                                                                                                                                                                         14.30
                                                                                                                                                        -17.37
                    2 59 14 1950.42
14 56 27 4597.91
                                                                                                                     3 31 44
                                                                                                                                       1350.4
                                                                                      359.00
                                                                                                       112.19
                                                      -20.56
                                                                        21.64
       100.00
                                                                                                       67.89 16 13 5
115.73 4 36 21
64.36 17 17 49
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                                                                                                                                                                        183.46
                                                                                                                                       3997.9
                                                                      190.81
                                                                                      359.03
                                                       20.65
       100.00
                                                                                                                                                                        356.88
                     4 7 24 1737.00
16 4 45 4384.10
                                                                                                                                                       -19.67
                                                                                                                                       1137.0
                                                                                      357.67
       110,00
                                                      -23.33
                                                                         4.11
                                                                                                                                                        19.77
                                                                                                                                                                        166.02
                                                                                                                                       3784.1
                                                                                      357.70
                                                       23.42
                                                                      173.26
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 750.7 SGR 476.6 SG3 286.0

RRT - 4145 RRF .5599 RTF -.6963

SGB 890.3 R23 -.1553 R13 .7414
                                                                                                                                 ST 300.0 SR 408.3 SS 267.9

CRT -.9017 CRS -.8691 CST .5888

LSA 543.0 MSA 181.1 SSA 29.3

EL1 495.3 EL2 106.9 ALF 125.43
    TOE .2242 TRA -.2216 TC3 .7074 BAU .1943
    RDE -.3149 RRA -.1650 RC3 -.1644 FAU .07894
FDE -.3617 FRA -.9258 FC3-3.4149 BSP 2276
BDE .3866 BRA .2763 BC3 .7263 FSP -809
                                                                           $G1 787.6 8G2 415.1 THA 159.16
                                                                                                                                              ARRIVAL DATE OCT 5 1967
                                                                               FLIGHT TIME 90.00
LAUNCH DATE JUL 7 1967
                                                                              DISTANCE 245.820
    RL 152.10 LAL -.00 LOL 284.22 VL 27.058 GAL -7.42 A7L 92.45 MCA 109.08 SMA 131.02 ECC .20528 INC 2.4543 V1 29.291 RP 108.31 LAP -2.32 LOP 33.31 VP 37.918 GAP -6.41 A7P 89.20 TAL 211.57 TAP 320.65 RCA 104.12 APO 157.92 V2 34.990 RC 64.367 GL -15.05 GP -12.90 ZAL 141.81 ZAP 35.91 ETS 17.66 ZAE 151.76 ETE 350.29 ZAC 89.31 ETG 13.99 CLP -33.80
   PLANETOCENTRIC CONIC
                                             .58 RAL 137.48 RAD 6567.8 VEL 11.873 PTH 2.11 VHP 4.935 DPA -8.52 RAP 175.52 ECC 1.3224
     C3 19.591 VHL 4.426 DLA
     UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 30 26 2227.42 -19.88 42.30 358.55 110.59 2 7 33 1627.4 -16.90 34.89
                                                                                                     110.59 2 7 33
68.60 14 57 38
         90.00
                                      4835.56
                                                        19.00
                                                                      208.98
                     13 37
                    2 52 2 1964.18
14 58 7 4574.04
4 0 54 1748.63
16 5 45 4362.35
                                                                                                       111.86 3 24 46
67.33 16 14 21
                                                                                                                                                        -17.76
                                                                                                                                                                        15.13
                                                                                                                                       1364.2
                                                                                      35A.12
                                                      -20.91
                                                                       22.51
        100.00
                                                                                                                                       3974.0
                                                                                                                                                        16.78
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                                                                                       347.A4
                                                       20.03
                                                                      189.31
        100.00
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17 18 27
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                                                                                                                                                       -20.05
                                                                                                                                                                       357.57
                                                                                                       115.42
                                                      -23.67
                                                                        4,84
                                                                                       356.82
        110.00
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                                                                                                        63.79
                                                                                                                                       3762.4
                                                                                                                                                       19.06
                                                       22.77
                                                                       171.90
                                                                                      356.50
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 727.1 SGR 498.9 SG3 321.1
RRT -.4424 RRF .6243 RTF -.6743
SGB 881.8 R23 -.1919 R13 .7416
                                                                                                                                   ST 286.6 SR 406.3 SS 271.8
     TOE .2107 TRA - .2214 TC3 .6891 BAU .1891
                                                                                                                                  CRT -.8885 CRS -.8459 CST .5257
LSA 532.3 MSA 191.9 SSA 29.2
     ROE -. 3093 RRA -. 1762 RC3 -. 2160 FAU .08744
     FOE -.3670 FRA-1.0616 FC3-3.8640 BSP 2231
BOE .3743 BRA .2829 BC3 .7221 FSP -920
                                                                           SG1 775.7 SG2 419.4 THA 155.53
                                                                                                                                   EL1 484.8 EL2 110.2 ALF 124.08
                                                                                                                                               ARRIVAL DATE OCT 7 1967
                                                                               FLIGHT TIME 92.00
LAUNCH DATE JUL 7 1967
                                                                              DISTANCE 252.454
    HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 27.122 GAL -7.41 AZL 92.35 MCA 112.28 SMA 131.47 ECC .20218 INC 2.3533 VI 29.291
RP 108.27 LAP -2.18 LOP 36.51 VP 37.976 GAP -5.75 AZP 89.11 TAL 212.24 TAP 324.52 RCA 104.89 APO 158.05 V2 35.003
RC 66.356 GL -14.60 GP -14.03 TAL 142.65 TAP 39.92 ETS 16.64 TAE 153.16 ETE 346.46 TAC 90.31 ETC 13.86 CLP -37.76
    PLANETOCENTRIC CONIC
     C3 19.204 VHL 4.382 DLA 1.23 RAL 136.92 RAD 6567.8 VEL 11.857 PTH 2.10 VMP 4.655 DPA -9.24 RAP 174.37 ECC 1.3161
     ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 32 22 242.83 -20.24 43.28 357.83 110.25 2 0 46 1642.8 -17.31 35.83 90.00 13 39 37 4810.71 18.38 207.42 357.27 68.07 14 59 48 4210.7 15.24 200.15
                     2 45 18 1978.61
15 0 24 4550.17
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                                                                                                        111.51
                                                        -21.27
                                                                        23.43
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        100.00
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115.08 4 24 12
63.24 17 19 40
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                      3 54 51 1760.90
16 7 20 4340.64
        110.00
                                                        -24.02
                                                                          5.62
                                                                                       356.13
                                                                                                                                        3740.6
                                                                                                                                                        18.34
                                                                                                                                                                        163.46
                                                                                       355.47
                                                        22.11
                                                                       170.56
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 697.1 SGR 526.8 SG3 359.8
RRT -.4602 RRF .6882 RTF -.6416
SGB 873.8 R23 -.2304 R13 .7446
                                                                                                                                ST 273.7 SR 403.7 SS 276.4

CRT -.8694 CRS -.8227 CST .4531

LSA 521.4 MSA 203.8 SSA 29.0

ELI 473.9 EL2 115.2 ALF 122.70
     TOE .1977 TRA -.2256 TC3 .6576 BAU .1831
     ROE -.3034 RRA -.1896 RC3 -.2764 FAU .09676
     FOE -.3705 FRA-1.2078 FC3-4.3621 BSP 2206
BOE .3621 BRA .2947 BC3 .7133 FSP -1047
                                                                           SG1 761.8 SG2 428.0 THA 150.83
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FLIGHT TIME 86.00

LAUNCH DATE JUL 7 1967

ARRIVAL DATE OCT 9 1967

HELIOCENTRIC CONIC DISTANCE 259.062 RL 152.10 LAL -.00 LOL 284.22 VL 27.175 GAL -7.40 A7L 92.25 MCA 115.48 SMA 131.84 ECC .19952 INC 2.2474 V1 29.291
RP 108.22 LAP -2.03 LOP 39.71 VP 38.026 GAP -5.12 AZP 89.03 TAL 212.81 TAP 328.29 RCA 105.54 APO 158.15 V2 35.016
RC 68.382 GL -14.09 GP -15.27 7AL 143.39 ZAP 44.17 ETS 15.63 ZAE 154.72 ETE 341.73 ZAC 91.56 ETC 13.64 CLP -41.97 PLANETOCENTRIC CONIC C3 18.841 VHL 4.341 OLA 1.89 RAL 136.49 RAD 6567.8 VEL 11.842 PTH 2.10 VMP 4.404 DPA -9.96 RAP 172.95 ECC 1.3101 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 109.85 1 54 24 67.56 15 2 36 111.13 3 12 12 66.28 16 18 44 114.72 4 18 48 62.71 17 21 30 357.26 -20.62 1 16 45 2258.91 44.31 1658.9 356.41 13 42 50 4785.64 17.73 205.87 4185.6 14.54 198.65 2 38 58 1993.70 -21.65 24.39 356.85 1393.7 -18.58 16.94 100.00 15 3 18 18.74 186.33 355.96 15.38 4526.08 3926.1 179.15 3 49 14 1773.76 -24.39 355.59 110.00 6.44 1173.8 -20.85 359.08 3718.8 110.00 16 9 31 4318.78 21.43 169.23 354.59 17.61 162.19 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ST 259.1 SR 399.6 SS 278.2 CRT -.8374 CRS -.7960 CST .3544 LSA 506.4 MSA 216.5 SSA 28.8 EL1 460.0 EL2 123.0 ALF 120.95 SGT 657.3 SGR 562.0 SG3 400.2 RRT -.4508 RRF .7466 RTF -.5852 TOE .1824 TRA -.2379 TC3 .6044 BAU .1753 ROE -.2963 RRA -.2046 RC3 -.3452 FAU .10645 FOE -.3641 FRA-1.3537 FC3-4.8914 BSP 2136 BOE .3480 BRA .3138 BC3 .6960 FSP -1177 SGB 864.8 R23 -.2685 R13 .7503 SG1 741.8 SG2 444.5 THA 144.62 LAUNCH DATE JUL 7 1967 FLIGHT TIME 96.00 ARRIVAL DATE OCT 11 1967 HELIOCENTRIC CONIC **DISTANCE 265.645** RL 152.10 LAL -.00 LOL 284.22 VL 27.219 GAL -7.38 AZL 92.14 MCA 118.68 SMA 132.16 ECC .19725 INC 2.1356 V1 29.291 RP 108.18 LAP -1.87 LOP 42.92 VP 38.070 GAP -4.52 AZP 88.97 TAL 213.26 TAP 331.94 RCA 106.09 APO 158.22 VZ 35.029 RC 70.443 GL -13.53 GP -16.61 ZAL 144.04 ZAP 48.67 ETS 14.60 ZAE 156.35 ETE 335.80 ZAC 93.07 ETC 13.33 CLP -46.44 PLANETOCENTRIC CONIC C3 18.494 VHL 4.300 DLA 2.58 RAL 136.19 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 4.182 DPA -10.68 RAP 171.26 ECC 1.3044 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 109.44 1 48 24 67.05 15 6 3 110.75 3 6 30 65.77 16 21 53 114.34 4 13 48 62.19 17 23 57 356.85 1 10 28 2275.74 13 46 43 4760.05 90.00 -21.00 45.39 1675.7 37.87 -18.16 17.06 204.29 355.70 90.00 4160.1 13.81 197.12 2 33 1 2009.50 15 6 51 4501.53 -22.03 25.41 356.44 100.00 1409.5 -19.01 17.91 184.82 18.06 355.24 3901.5 14.64 177.70 3 44 1 1787.28 16 12 21 4296.32 7.30 -24.77 110.00 355.20 1187.3 -21.28 359.90 16 12 21 110.00 20.73 167.88 353.66 3696.5 16.85 160.91 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 612.9 SGR 606.0 SG3 442.1 RRT -.4053 RRF .7986 RTF -.4970 SGB 861.9 R23 -.2863 R13 .7692 ST 245.3 5R 394.2 SS 278.8 CRT -.7899 CRS -.7667 CST .2305 LSA 489.4 MSA 230.1 SSA 28.7 EL1 444.7 EL2 133.4 ALF 119.04 TOE .1668 TRA -.2573 TC3 .5309 BAU .1679 ROE -.2882 RRA -.2212 RC3 -.4237 FAU .11644 FOE -.3491 FRA-1.4980 FC3-5.4509 8SP 2074 BOE .3330 BRA .3393 BC3 .6792 FSP -1312 SG1 722.5 SG2 470.0 THA 135.79 FLIGHT TIME 98.00 ARRIVAL DATE OCT 13 1967 LAUNCH DATE JUL 7 1967 DISTANCE 272.201 RL 152.10 LAL -.00 LOL 284.22 VL 27.254 GAL -7.36 AZL 92.02 MCA 121.89 SMA 132.41 ECC .19530 INC 2.0167 V1 29.291
RP 108.14 LAP -1.71 LOP 46.12 VP 38.107 GAP -3.94 AZP 88.93 TAL 213.60 TAP 335.49 RCA 106.55 APO 158.27 V2 35.042 RC 72,534 GL -12,90 GP -18,07 7AL 144,60 7AP 53,41 ETS 13,49 7AE 157,92 ETE 328,37 7AC 94.82 ETC 12.89 CLP -51.17 PLANETOCENTRIC CONIC C3 18.155 VHL 4.261 DLA 3.29 RAL 136.02 RAD 6567.7 VEL 11.813 PTH 2.09 VMP 3.990 DPA -11.41 RAP 169.30 ECC 1.2988 ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 LNCM TIME L-1 INFC 1 4 29 2293.49 13 51 19 4733.64 2 27 22 2026.17 15 11 8 4476.19 3 39 8 1801.56 16 15 51 4273.58 356.57 109.00 1 42 43 1693.5 90.00 -21.40 46.54 -18.61 38.98 109.00 1 42 43 66.56 15 10 13 16.35 202.67 355.13 4133.6 13.04 195.56 90.00 110.30 3 1 8 1426.2 -19.46 18.95 100.00 26.49 356.18 -22.43 110.30 3 1 8 65.27 16 25 44 183.28 3876.2 13.87 176.22 17.35 354.66 100.00 -21.72 113.93 4 9 10 61.68 17 27 5 1201.6 8.22 354.96 110.00 -25.17 353.27 166.50 3673.6 16.06 110.00 20.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 571.0 SGR 660.5 SG3 485.1 RRT - 3105 RRF .8433 RTF - .3644 SG8 873.1 R23 - .2448 R13 .8142 ST 235.0 SR 387.7 SS 279.2 CRT -.7246 CRS -.7369 CST .0864 TOE .1525 TRA -.2827 TC3 .4376 BAU .1637 RDE -.2790 RRA -.2396 RC3 -.5133 FAU .12658 FDE -.3276 FRA-1.6380 FC3-6.0364 BSP 2077 BDE .3179 BRA .3706 BC3 .6745 FSP -1460 LSA 472.0 MSA 244.7 SSA 28.5 5G1 714.5 SG2 501.7 THA 122.41 FL1 429.1 EL2 146.3 ALF 117.12 FLIGHT TIME 100.00 ARRIVAL DATE OCT 15 1967 LAUNCH DATE JUL 7 1967 HELIOCENTRIC CONIC DISTANCE 278.731 RL 152.10 LAL -.00 LOL 284.22 VL 27.281 GAL -7.32 AZL 91.89 HCA 125.10 SMA 132.61 ECC .19364 INC 1.8891 V1 29.291
RP 108.10 LAP -1.55 LOP 49.33 VP 38.139 GAP -3.37 AZP 88.91 TAL 213.83 TAP 338.93 RCA 106.93 APO 158.29 V2 35.056
RC 74.652 GL -12.20 GP -19.62 ZAL 145.07 ZAP 58.35 ETS 12.28 ZAE 159.23 ETE 319.16 ZAC 96.80 ETC 12.31 CLP -56.14 C3 17.817 VHL 4.221 DLA 4.03 RAL 135.97 RAD 6567.7 VEL 11.798 PTH 2.09 VHP 3.830 DPA -12.14 RAP 167.09 ECC 1.2932 ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 D 58 44 2312.38 -21.82 47.77 356.43 108.51 1 37 16 1712.4 -19.09 40.16 90.00 13 56 43 4706.01 15.60 201.00 354.69 66.06 15 15 9 4106.0 12 23 100.00 2 21 58 2043.32 -22.84 27.64 356.03 100.00 15 16 11 4440 70 100.00 15 16 11 4440 70 PLANETOCENTRIC CONIC 108.51 1 37 16 66.06 15 15 9 109.82 2 56 2 64.77 16 30 20 15 16 11 4449.70 3 34 32 1816.77 16 20 5 4249.61 16.59 4 4 49 113,48 1216.8 110.00 -25.59 9.20 354.85 -22.19 1.70 61.17 17 30 55 110.00 19.22 165.06 352.61 3649.6 15.22 158.24 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 540.5 SGR 722.5 SG3 525.4 RRT -.1398 RRF .8792 RTF -.1652 SGB 902.3 R23 -.1014 R13 .8742 SGI 731.0 SG2 529.0 THA 102.70 ST 227.3 SR 378.3 SS 275.7 CRT -.6314 CRS -.6978 CST -.0968 TDE .1376 TRA -.3167 TC3 .3170 BAU .1641 RDE -.2674 RRA -.2582 RC3 -.6118 FAU .13599 LSA 449.7 MSA 260.2 SSA 28.4 EL1 410.3 EL2 162.5 ALF 114.95 FOE - 2878 FRA-1.7555 FC3-6.6075 8SP 2115 80E .3007 8RA .4086 8C3 .6891 FSP -1592

FLIGHT TIME 94.00

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ARRIVAL DATE OCT 17 1967
                                                                         FLIGHT TIME 102.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 285.235
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 27.302 GAL -7.28 ATL 91.75 MCA 128.30 SMA 132.75 ECC .19224 INC 1.7509 V1 29.291
RP 108.06 LAP -1.37 LOP 52.54 VP 38.165 GAP -2.83 ATP 88.91 TAL 213.95 TAP 342.26 RCA 107.23 APO 158.27 V2 35.069
RC 76.795 GL -11.42 GP -21.27 ZAL 145.45 ZAP 63.45 ETS 10.92 ZAE 160.07 ETE 308.19 ZAC 98.97 ETC 11.56 CLP -61.34
   PLANETOCENTRIC CONIC
                                        4.83 RAL 136.06 RAD 6567.7 VEL 11.784 PTH
                                                                                                  2.08 VHP 3.701 DPA -12.88 RAP 164.66 ECC 1.2876
    C3 17.478 VHL 4.181 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 55 5 2332.78 -22.25 49.11 356.44 107.98 1 31 58 1732.8 -19.59 41.43
                                                                                                65.57
                                                                                                                             4076.7
                                                                                                                                            11.36
                                                                                                                                                          192.23
                                                                               354.39
                                                                                                           15 20 59
       90.00
                   14 3 2 4676.68
                                                   14.78
                                                                 199.23
                2 16 42 2063.09
15 22 6 4421.60
3 30 8 1833.21
16 25 9 4224.24
                                                                               356.07
                                                                                                109.30
                                                                                                            2 51 5
                                                                                                                             1463.1
       100.00
                                                  -23.28
                                                                  28.90
                                                                                                                                            12.17
                                                                               353.91
                                                                                                 64.27 16 35 48
                                                                                                                             3821.6
       100.00
                                                  15.76
                                                                 180.00
                                                                                                           4 0 42
                                                                                                                             1233.2
                                                                                                                                           -22.69
       110.00
                                                  -26.03
                                                                  10.28
                                                                               354.89
                                                                                              112.98
                                                                                                60.66 17 35 33
                                                                                                                             3624.2
                                                                                                                                             14.33
                                                                                                                                                          156.82
      110.00
                                                   18.38
                                                                 163.60
                                                                               352.48
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 539.4 SCR 792.5 SG3 562.0
RRT .0975 RRF .9075 RTF .0964
SGB 958.7 R23 .0661 R13 .9051
SGI 795.7 SG2 534.7 THA 83.06
                                                                                                                        ST 225.4 SR 366.1 SS 270.6
CRT -.5145 CRS -.6503 CST -.2993
    TOE .1244 TRA -.3572 TC3 .1712 BAU .1729
    ROE -.2535 RRA -.2768 RC3 -.7200 FAU .14438
                                                                                                                        LSA 424.9 MSA 276.9 SSA
    FOE -.2334 FRA-1.8477 FC3-7.1516 BSP 2263
BOE .2824 BRA .4519 BC3 .7401 FSP -1715
                                                                                                                                                              28.4
                                                                                                                         EL1 389.7 EL2 181.6 ALF 112.78
                                                                                                                                    ARRIVAL DATE OCT 19 1967
LAUNCH DATE JUL 7 1967
                                                                         FLIGHT TIME 104.00
                                                                         DISTANCE 291.711
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 27.315 GAL -7.23 AZL 91.60 MCA 131.52 SMA 132.85 ECC .19105 INC 1.5997 V1 29.291
RP 108.02 LAP -1.20 LOP 55.75 VP 38.187 GAP -2.31 AZP 88.94 TAL 213.97 TAP 345.49 RCA 107.47 APO 158.23 V2 35.082
RC 78.958 GL -10.53 GP -23.00 ZAL 145.75 ZAP 68.66 ETS 9.38 ZAE 160.19 ETE 295.97 ZAC 101.27 ETC 10.65 CLP -66.72
   PLANETOCENTRIC CONIC
    C3 17.134 VHL 4.139 DLA 5.69 RAL 136.27 RAD 6567.7 VEL 11.769 PTH 2.08 VMP 3.605 DPA -13.64 RAP 162.06 ECC 1.2820 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             107.38
                                                                                                            1 26 40
                                                                                                                           1755.2
                                                                                                                                            -20.12
                                                                                                                                                            42.88
       90.00
                    0 47 25 2355.21
                                                  -22.71
                                                                 50.59
                                                                              356.60
                                                                                                            15 27 49
                                                                                                                                                           190.39
                                                                                                                             4045.0
                                                                                                                                             10.40
        90.00
                   14 10 24
                                 4645.04
                                                   13.68
                                                                 197.35
                                                                                354.21
                                                                                                 65.07
                                                                                                                             1484.2
                                                                                                                                            -20.97
                                                                                                                                                            22.59
      100.00
                    2 11 27 2084.17
                                                  -23.75
                                                                  30.29
                                                                                356.23
                                                                                                108.71
                                                                                                            2 46 11
                                                                                                 63.76 16 42 15
                                                                                                                             3791.3
      100.00
                   15 29 3
                                 4391.31
                                                   14.86
                                                                 178.20
                                                                                353.73
                                                                                                                                             11.21
                                                                                                                                                           171.31
                                                                                               112.42 3 56 42
60.13 17 41 5
                   3 25 51 1851.31
16 31 8 4196.94
                                                  -26.51
                                                                  11.47
                                                                                355.09
                                                                                                                             1251.3
                                                                                                                                            -23.23
                                                                                                                                                             3.84
      110.00
                                                                 162.01
       110.00
                                                   17.46
                                                                                352.29
                                                                                                                             3596.9
                                                                                                                                             13.36
                                                                                                                                                           155.30
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 582.4 SGR 870.3 SG3 593.7
RRT .3491 RRF .9296 RTF .3611
SGB 1047.2 R23 .1543 R13 .9176
SG1 906.8 SG2 523.8 THA 69.88
                                                                                                                         ST 231.3 SR 351.4 SS 265.3
CRT -.3875 CRS -.5962 CST -.4926
    TOE .1147 TRA -.4028 TC3 .0012 BAU--.1920
    ROE -.2373 RRA -.2949 RC3 -.8381 FAU .15141
    FOE -.1680 FRA-1.9096 FC3-7.6507 BSP 2548
BDE .2636 BRA .4992 BC3 .8381 FSP -1830
                                                                                                                         LSA 399.6 MSA 294.6 SSA 28.5
                                                                                                                         EL1 368.2 EL2 203.5 ALF 110.99
                                                                                                                                   ARRIVAL DATE OCT 21 1967
                                                                         FLIGHT TIME 106.00
LAUNCH DATE JUL 7 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 298.162
    RL 152.10 LAL -.00 LOL 284.22 VL 27.322 GAL -7.17 AZL 91.43 MCA 134.73 BMA 132.90 ECC .19006 INC 1.4328 V1 29.291
RP 107.98 LAP -1.02 LOP 58.96 VP 38.203 GAP -1.81 AZP 88.99 TAL 213.88 TAP 348.61 RCA 107.64 APO 158.16 V2 35.094
RC 81.139 GL -9.52 GP -24.80 ZAL 145.96 ZAP 73.91 ETS 7.64 ZAE 159.43 ETE 283.56 ZAC 103.65 ETC 9.55 CLP -72.22
   PLANETOCENTRIC CONIC
                                        6.63 RAL 136.62 RAD 6567.7 VEL 11.754 PTH 2.07 VHP 3.542 DPA -14.45 RAP 159.33 ECC 1.2762
    C3 16.781 VHL 4.097 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 41 34 2380.37
14 19 2 4610.32
2 6 4 2107.61
                                                                                            106.68 1 21 14
                                                                                                                         1780.4 -20.71
                                                                                                                                                           44.49
                                                  -23.22
                                                                 52.27
                                                                             356.91
        90.00
                                                                                                                                                          188.39
                                                                                354.18
                                                                                                 64.56
                                                                                                           15 35 52
                                                                                                                             4010.3
                                                                                                                                             9.34
                                                                 195.29
        90.00
                                                   12.87
                                                                                356.55
                                                                                               108.03
                                                                                                            2 41 12
                                                                                                                             1507.8
                                                                                                                                            -21.56
                                                                                                                                                           24.10
                                                  -24.25
                                                                  31.87
       100.00
                                                                                               63.24 16 49 51
111.77 3 52 44
                                                                                                                                                           169.42
                   15 37 13
                                                                                353.69
                                                                                                                             3758.1
                                                                                                                                             10.15
                                                   13.85
                                                                 176.26
       100.00
                                 4358.11
                     15 37 15
3 21 32 1871.61
15 38 14 4167.08
                                                  -27.03
                                                                  12.82
                                                                                355.44
                                                                                                                             1271.6
                                                                                                                                            -23.83
                                                                                                                                                            5.11
       110.00
                                                                                                 59.60 17 47 41
                                                                                                                                                           153.66
                                                                                352.23
                                                                                                                             3567.1
                                                                                                                                            12.28
                                                                 160.30
       110.00
                   16 38 14
                                                   16.44
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 675.6 SGR 950.3 SG3 616.0
RRT .5600 RRF .9462 RTF .5757
SGB 1166.0 R23 .1916 R13 .9282
                                                                                                                        ST 244.3 SR 331.2 SS 258.1
CRT -.2565 CRS -.5185 CST -.6779
LSA 371.3 MSA 311.6 SSA 28.8
    TDE .1083 TRA -.4534 TC3 -.1964 BAU .2202
    RDE -.2168 RRA -.3100 RC3 -.9615 FAU .15603
FDE -.0797 FRA-1.9231 FC3-8.0495 BSP 2937
BDE .2424 BRA .5493 BC3 .9813 FSP -1908
                                                                     SG1 1050.2 SG2 506.5 THA 60.92
                                                                                                                         EL1 342.3 EL2 228.4 ALF 109.84
                                                                         FLIGHT TIME 108.00
                                                                                                                                    ARRIVAL DATE OCT 23 1967
LAUNCH DATE JUL 7 1967
                                                                         DISTANCE 304.586
   HELIOCENTRIC CONTC
    RL 152.10 LAL -.00 LOL 284.22 VL 27.324 GAL -7.10 A7L 91.25 MCA 137.95 SMA 132.91 ECC .18924 INC 1.2458 V1 29.291
RP 107.94 LAP -.83 LOP 62.17 VP 38.216 GAP -1.33 AZP 89.07 TAL 213.70 TAP 351.65 RCA 107.76 APO 158.07 V2 35.107
RC 83.336 GL -8.37 GP -26.68 ZAL 146.08 ZAP 79.12 ETS 5.68 ZAE 157.78 ETE 272.13 ZAC 106.04 ETC 8.28 CLP -77.80
   PLANETOCENTRIC CONIC
                                        7.70 RAL 137,11 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 3.512 DPA -15.33 RAP 156.55 ECC 1.2703
    C3 16.422 VHL 4.052 DLA
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 35 18 2409.25
14 29 12 4571.51
                                                  -23.77
                                                                                                             1 15 27
                                                                                                                             1809.2
                                                                                                                                                            46.36
                                                                  54.20
                                                                                357.39
                                                                                               105.86
                                                                                                                                            -21.36
        90.00
                                                                                                                                                           186.17
                                                                                                           15 45 24
                                                                                                                              3971.5
        90.00
                   14 29 12
                                                   11.73
                                                                 193.02
                                                                                354.29
                                                                                                 64.04
                                                                                                                                             8.14
                     2 0 20 2134.95
15 46 51 4321.05
                                                                                                             2 35 55
                                                                                                                              1534.9
                                                                                                                                                            25.85
                                                  -24.61
                                                                   33.69
                                                                                357.05
                                                                                                107.23
                                                                                                                                            -22.22
       100.00
                   15 46 51
                                                                                                                                                           167.33
                                                  12.70
                                                                 174.10
                                                                                353.79
                                                                                                 62.71
                                                                                                                              3721.0
                                                                                                                                              8.95
       100.00
                     3 17 2
                                                                                                             3 48 37
                                                                                                                                            -24.50
                                                                                                                                                            6.59
       110.00
                                 1894.92
                                                  -27.60
                                                                   14.39
                                                                                355.98
                                                                                                111.01
                                                                                                                             1294.9
                   16 46 36
                                                                                                 59.05 17 55 32
                                                                                                                           3533.8
                                                                                                                                                          151.85
                                                                 158.41
       110.00
                                  4133.84
                                                   15.28
                                                                                352.31
                                                                                                                                           11.07
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 811.0 SGR 1034.2 SG3 629.7
RRT .7020 RRF .9589 RTF .7171
SG8 1314.3 R23 .2035 R13 .9391
    TOE .1083 TRA -.5056 TC3 -.4165 BAU .2566
                                                                                                                        ST 265.3 SR 307.0 SS 253.8
    ROE -.1931 RRA -.3224 RC3-1.0921 FAU .15841
FOE .0179 FRA-1.8948 FC3-8.3510 83P 3443
                                                                                                                     CRT -.1431 CRS -.4300 CST -.8177
LSA 361.0 MSA 312.8 SSA 29.2
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SG1 1219.6 SG2 489.8 THA 54.64

ELI 314.6 EL2 256.2 ALF 112.15

BOE .2214 BRA .5997 BC3 1.1688 FSP -1965

ARRIVAL DATE OCT 25 1967

LAUNCH DATE JUL 7 1967

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HELIOCENTRIC CONIC
                                                                                  DISTANCE 310.985
    RL 152.10 LAL -.00 LOL 284.22 VL 27.320 GAL -7.03 AZL 91.03 MCA 141.17 SMA 132.89 ECC .18857 INC 1.0340 V1 29.291 RP 107.91 LAP -.65 LOP 65.39 VP 38.225 GAP -.86 AZP 89.19 TAL 213.42 TAP 354.59 RCA 107.83 APO 157.95 V2 35.119 RC 85.546 GL -7.01 GP -28.64 ZAL 146.11 ZAP 84.19 ETS 3.47 ZAE 155.38 ETE 262.40 ZAC 108.36 ETC 6.82 CLP -83.38
   PLANETOCENTRIC CONIC
     C3 16.056 VHL 4.007 DLA 8.91 RAL 137,75 RAD 6567.6 VEL 11.723 PTH 2.07 VHP 3.515 DPA -16.31 RAP 153.75 ECC 1.2642
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 28 19 2443.23
14 41 20 4527.25
1 54 0 2166.87
15 58 20 4278.85
5 12 9 1922.34
16 56 41 4096.14
                                                                                                           104.87
                                                                                                                                             1845.2
                                                                                        358.09
                                                                                                                                                                                48.57
                                                         -24.38
                                                                          56.50
                                                                                                                          1 9 2
                                                                                                                                                             -22.10
                                                                                                           63.51 15 56 47
106.25 2 30 7
62.17 17 9 39
110.08 3 44 11
58.47 18 4 57
                                                                                                                                              3927.2
                                                          10.40
                                                                          190.45
                                                                                          354.58
                                                                                                                                                                 6.76
                                                                                                                                                                               183.66
                                                         -25.44
                                                                           35.85
                                                                                          357.76
                                                                                                                                              1566.9
                                                                                                                                                              -22.97
                                                                                                                                                                                27.93
                                                                          171.67
                                                                                          354.07
                                                                                                                                              3678.8
                                                                                                                                                                7.56
                                                                                                                                                                              164.96
                                                         11.37
                                                        -28.26
                                                                           16.25
                                                                                          356.73
                                                                                                                                             1322.3
                                                                                                                                                             -25.26
                                                                                                                                                                                 8.36
       110.00
                                                                                       352.56
                                                                                                                                                                               149.81
                                                                          156.30
                                                                                                                                             3496.1
                                                                                                                                                                9.68
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 979.4 SGR 1115.1 SG3 630.8
RRT .7919 RRF .9683 RTF .8042
SG8 1484.2 R23 .2077 R13 .9477
                                                                                                                                       ST 293.7 SR 275.4 SS 253.8
CRT -,0427 CRS -.3153 CST -.9216
    TOE .1155 TRA -.5581 TC3 -.6597 BAU .2984
     RDE -.1633 RRA -.3293 RC3-1.2237 FAU .15762
                                                                                                                                         LSA 383.2 MSA 280.6 SSA 30.0
EL1 295.5 EL2 273.5 ALF 163.20
    FOE .1373 FRA-1.8105 FC3-8.4990 BSP 4011
                                                                             SGI 1406.4 SG2 474.2 THA 49.67
    BOE .2000 BRA .6480 BC3 1.3902 FSP -1973
                                                                                   FLIGHT TIME 112.00
                                                                                                                                                     ARRIVAL DATE OCT 27 1967
LAUNCH DATE JUL 7 1967
                                                                                   DISTANCE 317.358
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 27.312 GAL -6.94 A7L 90.79 MCA 144.39 SMA 132.83 ECC .18802 INC .7900 V1 29.291
RP 107.87 LAP -.46 LOP 68.61 VP 38.230 GAP -.41 A7P 89.36 TAL 213.05 TAP 357.44 RCA 107.85 APO 157.80 V2 35.131
RC 87.767 GL -5.42 GP -30.70 7AL 146.02 ZAP 89.04 ETS 1.01 ZAE 152.38 ETE 254.55 ZAC 110.54 ETC 5.19 CLP -88.88
   PLANETOCENTRIC CONIC
    C3 15.688 WHL 3.961 DLA 10.33 RAL 138.57 RAD 6567.6 VEL 11.708 PTH 2.06 VHP 3.554 DPA -17.45 RAP 151.01 ECC 1.2582
    C3 15,688 VHL 3,961 DLA 10.33

LNCH AZHTH LNCH TIME L-I TIME

90.00 0 20 11 2484.35

90.00 14 56 1 4475.62

100.00 16 12 13 4229.74

110.00 3 6 33 1955.46

110.00 17 8 49 4052.51
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         103.62 1 1 35
62.98 16 10 36
105.03 2 23 25
61.62 17 22 43
108.92 3 39 8
57.88 18 16 22
                                                         -25.07
                                                                          59.32
                                                                                       359.04
                                                                                                                                             1444.4
                                                                                                                                                              -22.95
                                                                                                                                                                                51.29
                                                                          187.48
                                                                                          355.07
                                                                                                                                              3675.6
                                                                                                                                                                 5.12
                                                                                                                                                                                180.75
                                                            8.81
                                                                           38.50
                                                                                          358.73
                                                                                                                                              1605.5
                                                                                                                                                               -23.83
                                                                                                                                                                                 30.47
                                                         -26.15
                                                                          168.88
                                                                                          354.55
                                                                                                                                              3629.7
                                                                                                                                                                 5.93
                                                                                                                                                                               162.23
                                                            9.80
                                                                                                                                                              -26.16
                                                         -29.01
                                                                           18.53
                                                                                          357.74
                                                                                                                                              1355.5
                                                                                                                                                                                 10.52
                                                          12.39
                                                                          153.89
                                                                                          353.01
                                                                                                                                              3452.5
                                                                                                                                                                8.06
                                                                                                                                                                               147.47
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                                         ST 330.6 SR 239.3 SS 263.7
CRT .0507 CRS -.2189 CST -.9739
     TOE .1331 TRA -.6072 TC3 -.9208 BAU .3445
                                                                              SGT 1168.9 SGR 1197.3 SG3 621.8
                                                                            RRT .8471 RRF .9756 RTF .8568
SGB 1673.2 R23 .2078 R13 .9550
SG1 1608.1 SG2 462.5 TMA 45.81
     ROE -.1289 RRA -.3318 RC3-1.3600 FAU .15430
    FOE .2612 FRA-1.6869 FC3-8.5148 BSP 4656
BOE .1853 BRA .6920 BC3 1.6424 FSP -1959
                                                                                                                                         LSA 421.6 MSA 239.5 SSA 31.0
                                                                                                                                         EL1 331.1 EL2 238.6 ALF
                                                                                                                                                                                 4.38
                                                                                                                                                     ARRIVAL DATE OCT 29 1967
                                                                                  FLIGHT TIME 114.00
LAUNCH DATE JUL 7 1967
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 323.706
    RL 152.10 LAL -.00 LOL 284.22 VL 27.299 GAL -6.85 A7L 90.50 MCA 147.61 SMA 132.73 ECC .18760 INC .5043 V1 29.291 RP 107.83 LAP -.27 LOP 71.83 VP 38.231 GAP .03 A7P 89.57 TAL 212.60 TAP .21 RCA 107.83 APO 157.64 V2 35.143 RC 89.996 GL -3.50 GP -32.92 TAL 145.80 ZAP 93.57 ETS 358.28 TAE 148.96 ETE 248.42 TAC 112.51 ETC 3.38 CLP -94.26
   PLANETOCENTRIC CONIC
    C3 15.326 VML 3.915 DLA 12.03 RAL 139.60 RAD 6567.6 VEL 11.692 PTH 2.06 VMP 3.629 DPA -18.80 RAP 148.33 ECC 1.2522
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 10 13 2535.61 -25.84 62.87 .31 102.00 0 52 29 1935.6 -23.93 54.73 90.00 15 14 8 4413.84 6.89 183.97 355.85 62.47 16 27 42 3813.8 3.14 177.28 100.00 1 37 42 2253.49 -26.95 41.84 .03 103.44 2 15 15 1655.5 -24.83 33.68
                                                                                                        102.00 0 52 29
62.47 16 27 42
103.44 2 15 15
61.07 17 38 52
107.42 3 33 5
57.28 18 30 25
                    16 29 21 4171.19
2 59 48 1996.59
17 23 44 4000.86
                                                                          165.58
                                                                                         355.30
                                                                                                                                             3571.2
                                                            7.89
       100.00
                                                                                       359.11
353.72
                                                                                                                                                                                13.25
                                                                                                                                             1396.6
                                                                                                                                                             -27.21
                                                         -29.89
                                                                           21.42
       110.00
                                                                         151.08
                                                                                                                                             3400.9
                                                                                                                                                                 6.11
                                                                                                                                                                               144.74
                                                         10.50
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      TOE .1641 TRA -.6501 TC3-1.1960 BAU .3914

RDE -.0848 RRA -.3250 RC3-1.4896 FAU .14743

FDE .4097 FRA-1.5060 FC3-8.3277 BSP 5290

BDE .1847 BRA .7268 BC3 1.9103 FSP -1877
                                                                             SCT 1371.5 SCR 1269.7 SC3 598.3

RRT .8817 RRF .9611 RTF .8889

SC8 1869.0 R23 .2094 R13 .9598

SCI 1813.3 SC2 453.1 THA 42.50
                                                                                                                                       ELI 381.3 EL2 190.1 ALF
                                                                                                                                                     ARRIVAL DATE OCT 31 1967
                                                                                   FLIGHT TIME 116.00
LAUNCH DATE JUL 7 1967
                                                                                  DISTANCE 330.030
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 27.282 GAL -6.74 A7L 90.16 MCA 150.83 SMA 132.61 ECC .18729 INC .1615 V1 29.291 RP 107.80 LAP -.08 LOP 75.05 VP 38.230 GAP .46 A7P 89.86 TAL 212.07 TAP 2.90 RCA 107.78 APO 157.45 V2 35.154 RC 92.232 GL -1.14 GP -35.36 ZAL 145.40 ZAP 97.71 ETS 355.24 ZAE 145.20 ETE 243.72 ZAC 114.22 ETC 1.39 CLP -99.47
   PLANETOCENTRIC CONIC
    C3 14.988 VHL 3.871 DLA 14.10 RAL 140.87 RAD 6567.6 VEL 11.678 PTH 2.05 VMP 3.746 DPA -20.44 RAP 145.75 ECC 1.2467 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    23 53 25 2601.81
15 37 9 4337.63
1 26 11 2315.33
16 51 1 4099.34
                                                                                                          99.81 24 36 47
62.01 16 49 27
                                                         -26.70
                                                                                            2.02
                                                                                                                                              2001.8
                                                                                                                                                              -25.07
                                                                                                                                                                                 59.24
                                                                           67.53
         90.00
                                                                                                                                              3737.6
                                                                                                                                                                               173.03
                                                                                          357.00
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                                                           4.47
                                                                          179.67
         90.00
                                                                                            1.77
                                                                                                            101.31
                                                                                                                           2 4 46
                                                                                                                                              1715.3
                                                                                                                                                               -26.01
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                                                         -27.85
                                                                            46.22
       100.00
                                                                                                              60.57 17 59 20
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                                                                                          356.43
                                                                                                                                              3499.3
                                                                                                                                                                 1.54
                                                            5.50
                                                                          161.58
        100.00
                                                                                                             105.40 3 25 22
56.69 18 48 7
                       2 51 12 2049.30
17 42 29 3934.13
                                                                                                            105.40
                                                                                                                                              1449.3
                                                                                                                                                              -28.48
                                                                                                                                                                                16.82
                                                         -30.90
                                                                           25.19
                                                                                              .94
        110.00
                                                                                      354.79
                                                                                                                                             3336.1
                                                                                                                                                                 3.74
                                                                                                                                                                               141.44
                     17 42 29
                                                         8.17
                                       3936.13
        110.00
                                                                            HID-COURSE EXECUTION ACCUMALY
SCT 1581.8 SCR 1349.5 SC3 568.3
RRT .9037 RRF .9056 RT .9097
SCB 2079.2 R23 .2089 R13 .9642
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                                      ST 444.7 SR 157.6 SS 330.9

CRT .4269 CRS -.3177 CST -.9842

LSA 555.9 MSA 147.7 SSA 34.8

EL1 450.3 EL2 140.7 ALF 9.55
     TOE .2121 TRA -.6837 TC3-1.4810 BAU .4410
     ROE -.0353 RRA -.3142 RC3-1.6277 FAU .13695
FOE .5451 FRA-1.3104 FC3-8.0261 85P 6017
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FLIGHT TIME 110.00

SG1 2029.9 SG2 450.2 THA 40.00

BOE .2151 BRA .7524 BC3 2.2006 FSP -1804

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ARRIVAL DATE NOV 2 1967
LAUNCH DATE JUL 7 1967
                                                                                                     FLIGHT TIME 118.00
    HELIOCENTRIC CONIC
                                                                                                     DISTANCE 336.329
     RL 152.10 LAL -.00 LOL 284.22 VL 27.262 GAL -6.63 AZL 89.74 MCA 154.05 SMA 132.47 ECC .18707 INC .2543 V1 29.291
RP 107.77 LAP .11 LOP 78.27 VP 38.225 GAP .87 AZP 90.23 TAL 211.46 TAP 5.52 RCA 107.69 APO 157.25 V2 35.165
RC 94.474 GL 1.80 GP -38.12 ZAL 144.72 ZAP 101.34 ETS 351.85 ZAE 141.17 ETE 240.20 ZAC 115.62 ETC 359.19 CLP-104.47
    PLANETOCENTRIC CONIC
     C3 14.703 VHL 3.834 OLA 16.70 RAL 142.46 RAD 6567.6 VEL 11.666 PTH 2.05 VHP 3.912 DPA -22.47 RAP 143.22 ECC 1.2420
                                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.57 73.92 4.34 96.73 24.20 33 2091.1 -26.35 65.46 1.32 174.20 358.75 61.71 17.18.15 3639.8 -2.47 167.57
     LNCH AZMTH LNCH TIME L-I TIME
                          23 35 42 2691.09
16 7 35 4239.76
           90.00
           90.00
                         1 10 27 2398.23
17 19 28 4007.85
2 39 37 2119.25
18 6 47 3859.60
         100.00
                                                                                                                                    98.31 1 50 25
60.20 18 26 16
102.57 3 14 56
56.17 19 11 7
                                                                                                                                       98.31
                                                                                            52.19
                                                                                                                                                       1 50 25
                                                                                                                                                                              1798.2
                                                                                                                                                                                                   -27.37
                                                                                                                                                                                                                         43.69
                                                                       -2A.A2
                                                                                                                 4.15
         100.00
                                                                         2.42
                                                                                           156.54
                                                                                                               358.14
                                                                                                                                                                              3407.A
                                                                                                                                                                                                   -1.56
                                                                                                                                                                                                                       150.02
         110.00
                                                                      -32.05
                                                                                                                                                                                                                         21.71
                                                                                            30.31
                                                                                                                  3.46
                                                                                                                                                                              1519.3
                                                                                                                                                                                                  -29.99
         110.00
                                                                         5.22
                                                                                           143.56
                                                                                                               356.40
                                                                                                                                                                              3259.6
                                                                                                                                                                                                        .74
                                                                                                                                                                                                                       137.34
   DIFFERENTIAL CORRECTIONS
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TOE .2845 TRA -.7032 TC3-1.7656 BAU .4892
ROE .0289 RRA -.2915 RC3-1.7535 FAU .12748
FOE .6986 FRA-1.0739 FC3-7.5063 BSP 6703
BOE .2860 BRA .7612 BC3 2.4886 FSP -1671
                                                                                               SCT 1793.9 SCR 1420.2 SC3 525.8
RRT .9178 RRF .9890 RTF .9231
SCB 2288.0 R23 .2107 R13 .9671
                                                                                                                                                                        ST 539.2 SR 148.7 SS 395.9
CRT .8096 CRS -.6925 CST -.9757
                                                                                                                                                                        LSA 675.2 MSA 110.9 SSA 35.6
                                                                                                5G1 2243.1 SG2 451.0 THA 37.80
                                                                                                                                                                        EL1 552.8 EL2 85.1 ALF 12.90
LAUNCH DATE JUL 7 1967
                                                                                                     FLIGHT TIME 120.00
                                                                                                                                                                                        ARRIVAL DATE NOV 4 1967
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 342.605
     RL 152.10 LAL -.00 LOL 284.22 VL 27.238 GAL -6.50 AZL 89.22 MCA 157.28 SMA 132.30 ECC .18694 INC .7829 VI 29.291
RP 107.73 LAP .30 LOP 81.50 VP 38.218 GAP 1.27 AZP 90.72 TAL 210.79 TAP 8.07 RCA 107.57 APO 157.03 VZ 35.175
RC 96.719 GL 5.57 GP -41.32 ZAL 143.63 ZAP 104.35 ETS 348.05 ZAE 136.83 ETE 237.62 ZAC 116.66 ETC 356.74 CLP-109.27
   PLANETOCENTRIC CONIC
     C3 14.530 VHL 3.812 DLA 20.02 RAL 144.50 RAD 6567.6 VEL 11.658 PTH
                                                                                                                                         2.05 VMP 4.141 DPA -24.99 RAP 140.69 ECC 1.2391
     LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 9 1 2819.53 -28.25 83.25 7.51 92.10 23 56 0 2219.5 -27.66 74.63
         90.00 25 9 1 2819.55

90.00 16 50 32 4106.06

100.00 0 47 7 2515.87

100.00 17 59 2 3884.96

110.00 2 22 51 2216.34

110.00 18 39 48 3757.24
                                                                                                                                       61.83 17 58 58
                                                                       -2.99
                                                                                           166.74
                                                                                                                   1.49
                                                                                                                                                                               3506.1
                                                                                                                                                                                                     -6.73
                                                                                                                                                                                                                        160.06
         100.00
                                                                      -29.67
                                                                                            60.83
                                                                                                                   7.43
                                                                                                                                       93.84
                                                                                                                                                       1 29 3
                                                                                                                                                                               1915.9
                                                                                                                                                                                                    -28.82
                                                                                                                                                                                                                          52.13
                                                                                                                                       60.15 19 3 47
96.40 2 59 47
55.84 19 42 25
         100.00
                                                                       -1.75
                                                                                           149.80
                                                                                                                    .80
                                                                                                                                                                               3285.0
                                                                                                                                                                                                    -5.70
                                                                                                                                                                                                                        143.25
         110.00
                                                                      -33.26
                                                                                            37.63
                                                                                                                   6.98
                                                                                                                                                                               1616.3
                                                                                                                                                                                                   -31.74
                                                                                                                                                                                                                          28.73
         110.00
                                                                         1.32
                                                                                           136,20
                                                                                                              358.89
                                                                                                                                                                               3157.2
                                                                                                                                                                                                    -3.17
                                                                                                                                                                                                                        131.99
   DIFFERENTIAL CORRECTIONS
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                               SCT 2005.3 SCR 1488.8 SC3 474.2
RRT .9266 RRF .9917 RTF .9320
SCB 2497.6 R23 .2127 R13 .9693
SCI 2455.4 SC2 457.4 THA 35.97
                                                                                                                                                                         ST 679.5 SR 210.9 S5 483.5
CRT .9840 CRS -.9394 CST -.9741
     TOE .3911 TRA -.7034 TC3-2.0362 BAU .5363
     RDE .1102 RRA -.2570 RC3-1.8644 FAU .11388
                                                                                                                                                                       LSA 854.3 MSA 96.0 SSA 29.9
EL1 710.6 EL2 35.9 ALF 17.03
     FOE .8539 FRA -.8185 FC3-6.7855 BSP 7382
     BOE .4064 BRA .7488 BC3 2.7608 FSP -1509
LAUNCH DATE JUL 7 1967
                                                                                                     FLIGHT TIME 122.00
                                                                                                                                                                                       ARRIVAL DATE NOV 6 1967
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 348.856
     RL 152.10 LAL -.00 LOL 284.22 VL 27.212 GAL -6.37 A7L 88.52 MCA 160.50 SMA 132.11 ECC .18690 INC 1.4759 V1 29.291
RP 107.70 LAP .49 LOP 84.73 VP 38.208 GAP 1.65 A7P 91.39 TAL 210.04 TAP 10.54 RCA 107.42 APO 156.80 V2 35.185
RC 98.967 GL 10.51 GP -45.15 TAL 141.83 ZAP 106.61 ETS 343.77 ZAE 132.10 ETE 235.77 ZAC 117.29 ETC 353.95 CLP-113.92
    PLANETOCENTRIC CONIC
     C3 14.592 VML 3.820 OLA 24.38 RAL 147.19 RAD 6567.6 VEL 11.661 PTH 2.05 VMP 4.461 OPA -28.15 RAP 138.02 ECC 1.2401
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         22 21 6 3030.27
17 59 55 3897.22
0 7 13 2700.85
                                                                                                            11.76
                                                                                                                                      84.42 23 11 37
63.22 19 4 52
           90.00
                                                                      -27.81
                                                                                            98.63
                                                                                                                                                                              2430.3
                                                                                                                                                                                                 -28.29
                                                                                                                                                                                                                         89.99
           90.00
                                                                        -9.58
                                                                                           154.93
                                                                                                                   6.20
         100.00
                                                                      -29:72
                                                                                            74.56
                                                                                                                11.93
                                                                                                                                                       0 52 13
                                                                                                                                       86.63
                                                                                                                                                                              2100.8
                                                                                                                                                                                                  -29.87
                                                                                                                                                                                                                          65.76
         100,00
                         19 0 25
                                            3701.87
                                                                       -7,88
                                                                                           139.67
                                                                                                                  5.30
                                                                                                                                       61.07 20 2 7
                                                                                                                                                                              3101.9
                                                                                                                                                                                                  -11.68
                                             2360.32
                            1 56 3
                                                                      -34.14
         110.00
                                                                                             48.77
                                                                                                                12.00
                                                                                                                                       91.87
                                                                                                                                                      2 35 24
                                                                                                                                                                                                  -33.50
                                                                                                                                       56.03 20 28 19
                          19 28 4
         110.00
                                                                                           130.70
                                                                                                                  2.98
                                                                                                                                                                              3015.2
                                                                                                                                                                                                    -8.54
   DIFFERENTIAL CORRECTIONS
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TDE .5485 TRA -.6773 TC3-2.2662 BAU .5824
RDE .2153 RRA -.2078 RC3-1.9437 FAU .09859
                                                                                               SGT 2217.8 SGR 1557.7 SG3 415.0
RRT .9316 RRF .9937 RTF .9365
SG8 2710.2 R23 .2138 R13 .9711
                                                                                                                                                                        ST 889.7 SR 341.7 SS 591.2
CRT .9943 CRS -.9912 CST -.9787
     FOE 1.0020 FRA -.5572 FC3-5.8492 BSP 8096
BOE .5893 BRA .7085 BC3 2.9856 FSP -1332
                                                                                                                                                                        LSA 1116.8 MSA 101.8 SSA 19.5
                                                                                                361 2669.0 SG2 470.6 THA 34.42
                                                                                                                                                                        FL1 952.5 FL2 33.9 ALF 20.93
LAUNCH DATE JUL 7 1967
                                                                                                     FLIGHT TIME 124.00
                                                                                                                                                                                       ARRIVAL DATE NOV 8 1967
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 355.083
    RL 152.10 LAL -.00 LOL 284.22 VL 27.183 GAL -6.23 A7L 87.57 MCA 163.72 SMA 131.90 ECC .18694 INC 2.4313 V1 29.291
RP 107.67 LAP .68 LOP 87.96 VP 38.196 GAP 2.03 A7P 92.33 TAL 209.23 TAP 12.96 RCA 107.24 APO 156.56 V2 35.195
RC 101.218 GL 17.12 GP -49.84 TAL 138.84 ZAP 107.92 ETS 338.90 ZAE 126.79 ETE 234.43 ZAC 117.46 ETC 350.69 CLP-118.50
   PLANETOCENTRIC CONIC
     C3 15.166 WHL 3.894 OLA 30.19 RAL 150.95 RAO 6567.6 VEL 11.686 PTH. 2.06 WHP 4.926 DPA -32.14 RAP 134.97 ECC 1.2496
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 100.09 100.09 100.09 100.09 100.09 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.0
                         1 2 53 2607.42
20 51 12 3365.31
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        110.00
                                                                      -12.67
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                                                                                                                                       57.98 21 47 37
                                                                                                                                                                              2785.3
                                                                                                                                                                                                  -16.81
   DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TOE .7913 TRA -.6097 TC3-2.3943 BAU .6246
                                                                                               SGT 2431.0 SGR 1615.0 SG3 347.1
RRT .9332 RRF .9951 RTF .9431
SGB 2918.6 R23 .2147 R13 .9725
                                                                                                                                                                      ST 1206.3 SR 534.1 SS 719.4
CRT .9904 CRS -.9990 CST -.9849
     RDE .3588 RRA -.1327 RC3-1.9381 FAU .08131
    FOE 1.1422 FRA -.2900 FC3-4.6414 BSP 8754
BOE .8688 BRA .6239 BC3 3.0804 FSP -1118
                                                                                                                                                                       LSA 1498.1 MSA 116.7 SSA
                                                                                                                                                                                                                             11.2
                                                                                               SG1 2877.1 SG2 490.3 THA 32.87
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EL1 1317.6 EL2 67.7 ALF 23.74

ARRIVAL DATE NOV 10 1967

TOE 4.2036 TRA 2.5416 TC3 -.1430 BAU .2633 ROE-2.8484 RRA - . 7027 RC3 .0068 FAU .00528 FOE .9672 FRA .6811 FC3 -.0332 BSP 10606 BOE 5.0778 BRA 2.6370 BC3 .1432 FSP -227

ARRIVAL CATE NOV 18 1967

LAUNCH CATE JUL 7 1967

DISTANCE 384.394 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 27.005 GAL -5.06 AZL 3.01 MCA 178.42 SMA 130.65 ECC .18588 INC86.9651 V1 29.291
RP 107.56 LAP 1.58 LOP 104.13 VP 38.105 GAP 3.35 AZP 176.99 TAL 203.29 TAP 21.70 RCA 106.36 APO 154.93 V2 35.233
RC 112.475 GL 43.85 GP -47.15 ZAL 93.50 ZAP 92.58 ETS 185.55 ZAE 49.47 ETE 105.14 ZAC 115.67 ETC 189.50 CLP 93.80 PLANETOCENTRIC CONIC C31503.729 VHL 38.778 OLA 36.08 RAL 208.30 RAD 6573.2 VEL 40.311 PTH 3.56 VHP 51.889 CPA -37.97 RAP 40.02 ECC25.7476 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG CH A7MTH LNCH TIME L-1 TIME 66.65 21 25 36 4754.02 113.35 3 6 55 36A6.90 66.65 21 25 36 4754.02 113.35 3 6 55 36A6.90 66.65 21 25 36 4754.02 113.35 3 6 55 36A6.90 119.50 .46 4154.0 53.93 22 44 50 -3.85 213.08 4 8 22 -3.A3 .88 132.95 119.49 53.93 3086.9 126.89 113.35 119.50 207.02 53.93 22 44 50 4154.0 -3.A5 .86 213.08 113.35 .88 132.95 119.49 53.93 4 8 22 3046.9 -3.83 126.89 207.02 .86 213.08 119.50 53.93 22 44 50 4154.0 -3.A5 132.95 119.49 53.93 4 8 22 3086.9 -3.83 126.89 .88 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 1046.7 SCR 2675.3 SC3 51.9 RRT .A36A RRF -.9993 RTF -.8155 SCB 2872.7 R23 -.1033 R13 -.9946 ST 755.2 SR 1274.0 SS 1218.2 CRT .9331 CRS .9991 CST .9166 LSA 1898.8 MSA 268.3 SSA .7 TOE-5.0872 TRA-1.2792 TC3 -.0890 BAU 4.3133 RCE-7.7178 RR-10.3265 RC3 -.1952 FAU-.07517 FOE 1.6089 FRA 2.3928 FC3 .0433 BSP 6319 BCE 9.2436 BRA10.4054 BC3 .2146 FSP -124 SG1 2820.9 SG2 543.5 THA 71.14 ELI 1462.0 EL2 236.6 ALF 60.19 ARRIVAL DATE NOV 20 1967 FLIGHT TIME 136,00 **DISTANCE 392.577** HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.964 GAL -5.27 ATL 119.00 HCA 183.61 SMA 130.36 ECC .18973 INC29.0743 V1 29.291
RP 107.54 LAP 1.75 LOP 107.37 VP 38.082 GAP 4.26 AZP 61.04 TAL 203.68 TAP 27.28 RCA 105.63 APO 155.10 V2 35.239
RC 114.720 GL -64.15 GP 79.37 ZAL 99.79 ZAP 99.92 ETS 129.82 ZAE 85.97 ETE 212.30 ZAC 86.40 ETC 107.50 CLP 159.04 PLANETOCENTRIC CONIC C3 209.282 VHL 14.467 OLA -53.06 RAL 135.82 RAD 6571.2 VEL 18.182 PTH 3.72 VHP 16.967 DPA 75.85 RAP 286.15 ECC 4.4443 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.73 40.19 142.70 3 40 B 1605.5 13.75 56.16 43.05 3 3 22 2205.53 7.42 142.70 12 1 22 30.7 290.53 136.95 11 50 51 630.72 7.43 295.09 40.20 13.76 60.73 3 40 8 1605.5 13.75 56.16 45.05 3 3 22 2205.53 7.42 40.19 142.70 142.70 12 1 22 290.53 11 50 51 30.7 13.76 136.95 630.72 7.43 295.09 40.20 142.70 3 40 8 1605.5 13.75 56.16 43.05 3 3 22 2205.53 7.42 60.73 40.19 142.70 12 1 22 11 50 51 295.09 40.20 30.7 13.76 136.95 63/1.72 ORBIT CETERMINATION ACCURACY HIO-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1825.0 SGR 3316.5 SG3 77.2 TOE-4.1152 TRA-1.2438 TC3 -.0159 BAU .1189 ST 1648.3 SR 2513.7 SS 1123.5 RRT .9576 RRF .9813 RTF .9949 SGB 3785.4 R23 -.1261 R13 .9918 ROE-6.1105 RRA-3.4363 RC3 .0394 FAU .00180 CRT .9923 CRS -.9964 CST -.9992 FOE-1.9007 FRA -.7280 FC3 -.0074 BSP 11483 LSA 3204.1 MSA 177.9 SSA EL1 3001.0 EL2 170.7 ALF 56.43 BCE 7.3670 BRA 3.6545 BC3 .0425 FSP -239 SG1 3756.9 SG2 464.3 THA 61.74 ARRIVAL CATE NOV 22 1967 FLIGHT TIME 138.00 LAUNCH CATE JUL 7 1967 CISTANCE 398.500 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.922 GAL -5.02 AZL 106.66 HCA 186.68 SMA 130.08 ECC .19004 INC16.6621 V1 29.291 RP 107.52 LAP 1.91 LOP 110.62 VP 38.057 GAP 4.53 AZP 73.44 TAL 202.41 TAP 29.09 RCA 105.36 APO 154.80 V2 35.244 RC 116.961 GL -60.83 CP 68.89 7AL 105.42 7AP 108.64 ETS 66.00 7AE 100.78 ETE 151.34 7AC 88.98 ETC 44.64 CLP-152.51 PLANETOCENTRIC CONIC C3 77.561 VHL B.ROT CLA -47.60 RAL 133.17 RAC 6569.5 VEL 14.104 PTH 2.57 VHP 9.666 CPA 74.15 RAP 218.37 ECC 2.2765 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH ATHTH LNCH TIME L-I TIME 27.66 3 47 43 21.91 3 15 2 1961.47 11 18 4 5779.31 46.30 135.37 1361.5 49.99 16.31 135.36 12 54 23 269.27 27.68 5179.3 21.92 130.01 16.32 3 15 2 1961,47 11 18 4 5779,31 3 15 2 1961,47 11 18 4 5779,31 3 47 43 1361.5 21.91 27.66 135.37 49.99 16.31 46.30 135.36 12 54 23 21.92 263.64 27.68 5179.3 130.01 16.32 269.27 40.67 135.37 3 47 43 135.36 12 54 23 1361.5 21.91 49.99 16.31 46.30 27.66 5179.3 21.92 130.01 16.32 269.27 27.6A MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3849.7 SCR 630.8 SC3 132.5 RRT -.5425 RRF -.6983 RTF .9789 SCB 3901.0 R23 .1870 R13 -.9813 SCI 3865.2 SC2 527.8 THA 174.82 ST 2743.2 SR 602.5 SS 1038.3 TDE-4.0304 TRA-2.7830 TC3 -.4865 BAU .5104 CRT -.9334 CRS .9640 CST -.9952 LSA 2985.8 MSA 226.4 SSA 1.6 RDE .9238 RRA -.1436 RC3 .0750 FAU .02210 FCE-1.8727 FRA -.8541 FC3 -.2467 BSP 11920 EL1 2800.6 EL2 211.8 ALF 168.35 BOE 4.1350 BRA 2.7867 BC3 .4922 FSP -417 FLIGHT TIME 140.00 ARRIVAL DATE NOV 24 1967 LAUNCH DATE JUL 7 1967 DISTANCE 404.524 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.879 GAL -4.79 AZL 102.16 MCA 189.86 SMA 129.78 ECC .19064 INC12.1551 V1 29.291
RP 107.51 LAP 2.07 LOP 113.86 VP 38.030 GAP 4.83 AZP 78.02 TAL 201.20 TAP 31.06 RCA 105.04 APO 154.53 V2 35.248
RC 119.197 GL -55.87 GP 57.36 ZAL 109.10 ZAP 116.80 ETS 54.31 ZAE 110.22 ETE 144.43 ZAC 92.30 ETC 33.50 CLP-146.70 PLANETOCENTRIC CONIC C3 46.426 VHL 6.814 DLA -42.67 RAL 135.25 RAD 6568.7 VEL 12.953 PTH 2.36 VHP 7.262 CPA 65.55 RAP 192.47 ECC 1.7640 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 20.32 32.60 21.55 128.37 4 18 0 1171.6 25.14 26.09 LNCH AZMTH LNCH TIME L-I TIME 3 48 28 1771.65 11 1 15 5720.16 3 48 28 1771.65 56.64 128.36 12 36 35 128.37 4 18 0 5120.2 25.16 261.11 123.36 20.34 267.62 21.57 56.64 29.32 32.60 21.55 1171.6 25.14 26.09 128.36 12 36 35 128.37 4 18 0 128.36 12 36 35 11 1 15 5720.16 3 48 28 1771.65 11 1 15 5720.16 5120.2 25.16 261.11 123.36 20.34 267,62 21.57 56.64 20.32 32.60 21.55 1171.6 25.14 26.09 25.16 123.36 20.34 267.62 21.57 5120.2 261.11 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2544.7 SR 854.6 SS 1105.2 CRT -.9705 CRS .9940 CST -.9911 LSA 2894.2 MSA 225.7 SSA 2.4 EL1 2677.2 EL2 195.9 ALF 161.85 SGT 3855.9 SGR 942.2 SG3 195.7 RRT -.8548 RRF -.9564 RTF ..9554 SGB 3969.3 R23 .2279 R13 -.9716 SGI 3940.4 SG2 478.4 THA 168.02 TDE-2.8728 TRA-2.3286 TC3-1.0221 BAU .6529 RDE 1.0133 RRA .1887 RC3 .2488 FAU .03860 FDE-2.0584 FRA -.9472 FC3 -.7198 BSP 12243

FLIGHT TIME 134.00

BDE 3.0462 BRA 2.3363 BC3 1.0519 FSP -626

ARRIVAL CATE NOV 26 1967

ST 2420.1 &R 530.5 SS 1147.9 CRT -.9695 CRS .9978 CST -.9835 LSA 2721.8 MSA 218.2 SSA 6.1

EL1 2474.3 EL2 127.1 ALF 167.97

LAUNCH DATE JUL 7 1967

HELIOCENTRIC CONIC DISTANCE 410.563 RL 152.10 LAL -.00 LOL 284.22 VL 26.836 GAL -4.56 A7L 99.84 HCA 193.07 SMA 129.49 ECC .19138 INC 9.8397 V1 29.291
RP 107.50 LAP 2.22 LOP 117.11 VP 38.003 GAP 5.14 A7P 80.41 TAL 199.97 TAP 33.04 RCA 104.71 APO 154.27 V2 35.252 RC 121.426 GL -51.65 GP 48.00 TAL 111.28 TAP 123.80 ETS 49.46 TAE 116.74 ETE 145.48 TAC 94.94 ETC 29.12 CLP-146.23 PLANETOCENTRIC CONIC C3 33.981 VHL 5.829 OLA -38.95 RAL 137.89 RAD 6568.3 VEL 12.464 PTH 2.25 VMP 6.222 OPA 57.22 RAP 182.30 ECC 1.5592 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1025.8 25.98 18.25 123.12 4 23 4 1625.81 21.78 4 50 10 14.20 62.05 21.23 267.76 18.26 123.12 12 22 52 5108.6 26.00 260.72 10 47 43 5708.57 21.80 117.95 21.78 21.23 18.25 123.12 4 50 10 1025.8 25.98 14.20 4 23 4 1625.81 62.05 267.76 18.26 123.12 12 22 52 5108.6 26.00 260.72 10 47 43 21.80 5708.57 117.95 4 50 10 1025.8 25.98 14.20 21.78 21.23 18.25 123.12 4 23 4 1625.81 62.05 267.76 123.12 12 22 52 5108.6 26.00 260.72 10 47 43 570A . 57 21.80 18.26 117.95 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS \$6T 3930.9 \$6R 913.0 \$63 248.3 RRT -.8780 RRF -.9723 RTF .9581 \$68 4035.6 R23 .2526 R13 -.9639 ST 2468.4 SR 793.4 SS 1154.1 CRT -.9723 CRS .9965 CST -.9884 LSA 2829.2 MSA 224.0 SSA 3.2 TOE-2.3819 TRA-2.0583 TC3-1.5353 BAU .7144 ROE .8041 RRA .1797 RC3 .3402 FAU .05137 FOE-2.1523 FRA -.9554 FC3-1.3088 BSP 12470 BOE 2.5140 BRA 2.0661 BC3 1.5725 FSP -799 EL1 2586.7 EL2 176.9 ALF 162.56 SG1 4012.8 SG2 428.1 THA 168.34 ARRIVAL DATE NOV 28 1967 FLIGHT TIME 144.00 LAUNCH DATE JUL 7 1967 **DISTANCE 416.599** HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.791 GAL -4.31 AZL 98.43 MCA 196.30 SMA 129.18 ECC .19223 INC 8.4271 VI 29.291
RP 107.49 LAP 2.36 LOP 120.35 VP 37.974 GAP 5.44 AZP 81.91 TAL 198.72 TAP 35.02 RCA 104.35 APO 154.02 V2 35.255
RC 123.648 GL -48.26 GP 40.57 ZAL 112.40 ZAP 129.60 ETS 46.16 ZAE 121.19 ETE 148.40 ZAC 96.69 ETC 26.29 CLP-147.05 PLANETOCENTRIC CONIC C3 27.529 VHL 5.247 DLA -36.23 RAL 140.53 RAD 6568.1 VEL 12.203 PTH 2.19 VHP 5.722 DPA 50.14 RAP 177.47 ECC 1.4531 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 20 51 908.4 25.95 4 55 43 1508.39 10 36 7 5720.32 22.21 11.92 16.63 119.38 66.40 12 11 28 5120.3 25.96 261.66 22.23 269.00 16.64 119.37 10 36 7 113.60 1508.39 16.63 5 20 51 25.95 11.92 119.34 908.4 4.59 4 55 43 22.21 66.40 119.37 12 11 28 5120.3 25.96 261.66 10 36 7 22.23 269.00 16.64 113.60 11.92 4 55 43 1508.39 5 20 51 25.95 4.59 16.63 119.36 908.4 66.40 22.21 119.37 12 11 28 25.96 5120.3 261.66 10 36 7 269.00 16.64 113.60 5720.32 22.23 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2440.5 SR 695.7 SS 1175.4 CRT -.9717 CRS .9972 CST -.9866 SGT 4039.9 SGR 813.4 SG3 285.4 TOE-2.1221 TRA-1.8776 TC3-2.0193 BAU .7552 ROE .6350 RRA .1359 RC3 .3653 FAU .06003 FOE-2.1507 FRA -.8968 FC3-1.8878 BSP 12810 RRT -.8785 RRF -.9717 RTF .9535 3G8 4121.0 R23 .2648 R13 -.9581 3G1 4103.2 SG2 382.6 THA 169.88 LSA 2787.8 MSA 222.3 SSA 4.1 EL1 2532.7 EL2 158.4 ALF 164.46 BOE 2.2151 BRA 1.8825 BC3 2.0521 FSP -928 ARRIVAL DATE NOV 30 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 7 1967 DISTANCE 422.597 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.746 GAL -4.07 AZL 97.47 MCA 199.54 SMA 128.88 ECC .19323 INC 7.4713 VI 29.291
RP 107.48 LAP 2.49 LOP 123.60 VP 37.944 GAP 5.75 AZP 82.95 TAL 197.48 TAP 37.01 RCA 103.98 APO 153.78 V2 35.257
RC 125.861 GL -45.52 GP 34.69 ZAL 112.77 ZAP 134.40 ETS 43.51 ZAE 124.15 ÉTE 151.74 ZAC 97.68 ETC 24.09 CLP-148.32 PLANETOCENTRIC CONIC C3 23.636 VML 4.862 DLA -34.22 RAL 143.09 RAD 6568.0 VEL 12.042 PTH 2.15 VMP 5.481 DPA 44.29 RAP 175.01 ECC 1.3890 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 26 3 1410.20 10 26 12 5743.25 5 26 3 1410.20 10 26 12 5743.25 25.65 116.69 5 49 33 810.2 356.67 16.08 22.26 4.18 69.93 270.84 16.09 116.68 12 1 55 5143.3 25.66 263.32 22.27 110.07 5 49 33 810.2 25.65 356.67 22.26 4.18 16.08 116.69 69.93 270.84 16.09 116.68 12 1 55 5143.3 25.66 263.32 110.07 22.27 16.08 116.69 5 49 33 610.2 25.65 356.67 4.18 69.93 5 26 3 1410.20 10 26 12 5743.25 22.26 116.68 12 1 55 5143.3 25.66 263.32 16.09 270.84 110.07 22.27 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CIFFERENTIAL CORRECTIONS ST 2729.7 SR 715.4 SS 1391.8 CRT -.9792 CRS .9982 CST -.9896 SGT 4736.8 SGR 898.6 SG3 382.7 TOE-2.2015 TRA-1.9745 TC3-2.8698 BAU .9203 RRT -.9236 RRF -.9799 RTF .9680 SG8 4821.2 R23 .2121 R13 -.9707 ROE .6032 RRA .1845 RC3 .4963 FAU .08179 FOE-2.4566 FRA-1.1643 FC3-2.9956 BSP 19171 LSA 3139.0 MSA 215.7 SSA 5.2 EL1 2818.4 EL2 140.5 ALF 165.57 SG1 4809.3 SG2 339.3 THA 170.01 BOE 2.2826 BRA 1.9831 BC3 2.9124 FSP -1746 FLIGHT TIME 148.00 ARRIVAL DATE DEC 2 1967 LAUNCH DATE JUL 7 1967 DISTANCE 428.640 HELIOCENTRIC CONIC RL 132.10 LAL -.00 LOL 284.22 VL 26.700 GAL -3.80 AZL 96.78 HCA 202.77 SMA 128.57 ECC .19426 INC 6.7782 VI 29.291 RC 128.066 GL -43.32 GP 30.06 ZAL 112.50 ZAP 138.35 ETS 41.24 ZAE 126.12 ETE 154.89 ZAC 97.98 ETC 22.23 CLP-149.69 PLANETOCENTRIC CONIC C3 21.006 VHL 4.583 DLA -32.84 RAL 145.67 RAD 6567.9 VEL 11.933 PTH 2.12 VHP 5.373 DPA 39.46 RAP 173.91 ECC 1.3457 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.63 5 53 4 1330.20 22.25 357.98 16.32 114.80 6 15 15 730.2 25.40 350.35 272.60 16.33 114.79 11 55 50 5166.1 25.41 264.98 107.37 10 19 44 5766.06 22.26 730.2 25.40 350.35 16.32 114.80 6 15 15 5 53 4 1330.20 22.25 357.96 72.63 11 55 50 5166.1 25.41 264.98 16.33 114.79 272.60 107.37 10 19 44 5766.06 22.26 120.64 9 34 32 109.05 13 19 52 50.7 19.83 297.58 12.78 110.00 9 23 41 650.70 15.88 304.48 19.30 4893.6 31.26 246.08 11 48 18 5493.57 28.94 254.51 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS

FLIGHT TIME 142.00

-986

TOE-1.8496 TRA-1.5911 TC3-2.8485 BAU .8043 RDE .4238 RRA .0606 RC3 .2975 FAU .06560 FDE-1.9637 FRA -.6415 FC3-2.7036 BSP 12969

BOE 1.8975 BRA 1.5923 BC3 2.8640 FSP

\$6T 4215.3 \$6R 602.6 \$63 312.5 RRT -.8466 RRF -.9463 RTF ..9450 \$6B 4258.1 R23 .2662 R13 -.9475

SG1 4246.2 SG2 318.4 THA 173.06

ARRIVAL DATE DEC 4 1967

EL1 2615.7 EL2 80.1 ALF 171.42

LAUNCH DATE JUL 7 1967

HELIOCENTRIC CONIC DISTANCE 434.638 RL 152.10 LAL -.00 LOL 284.22 VL 26.653 GAL -3.53 AZL 96.25 MCA 206.01 SMA 128.26 ECC .19544 INC 6.2498 VI 29.291 RP 107.48 LAP 2.74 LOP 130.10 VP 37.881 GAP 6.35 AZP 84.38 TAL 194.83 TAP 40.85 RCA 103.20 APO 153.33 VZ 35.259 RC 130.261 GL -41.47 GP 26.33 ZAL 111.81 ZAP 141.70 ETS 39.31 ZAE 127.39 ETE 157.74 ZAC 97.81 ETC 20.66 CLP-151.12 PLANETOCENTRIC CONIC C3 19.128 VHL 4.374 DLA -31.86 RAL 148.23 RAD 6567.8 VEL 11.854 PTH 2.10 VHP 5.347 DPA 35.42 RAP 173.57 ECC 1.3148 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 17.08 22.23 74.75 6 17 21 1264.16 352.92 113.43 6 38 25 664.2 113.41 11 52 21 113.43 6 38 25 10 15 53 5787.51 6 17 21 1264.16 22.25 274.23 17.08 51A7.5 25.22 105.25 664.2 25.21 352.92 17.08 22.23 74.75 113.41 11 52 21 121.45 9 22 57 105.53 13 51 7 5187.5 266.53 17.0A 25.22 10 15 53 5787.51 274.23 105.25 22.25 100.2 18.20 307.26 700.18 12.66 110.00 9 11 17 14.14 12 21 7 5399.48 4799.5 32.66 239.10 110.00 30.84 247.85 20.48 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4359.0 SGR 532.7 SG3 317.7 RRT -.8244 RRF -.9229 RTF ..9432 SGB 4371.6 R23 .2502 R13 -.9449 SGI 4361.3 SG2 300.0 TMA 174.19 ST 2451.2 SR 481.0 SS 1138.3 CRT -.9705 CRS ..9982 CST -.9829 LSA 2736.6 MSA 215.0 SSA 7.2 TDE-1.7953 TRA-1.4811 TC3-3.2489 BAU .8333 ROE .3668 RRA .0423 RC3 .2519 FAU .06619 FOE-1.8708 FRA -.5209 FC3-2.9956 BSP 13440 EL1 2495.4 EL2 114.0 ALF 169.19 BOE 1.8324 BRA 1.4818 BC3 3.2587 FSP -1017 ARRIVAL DATE DEC 6 1967 LAUNCH DATE JUL 7 1967 FLIGHT TIME 152,00 HELIOCENTRIC CONIC DISTANCE 440.622 RL 152.10 LAL -.00 LOL 284.22 VL 26.606 GAL -3.25 ATL 93.83 MCA 209.26 SMA 127.96 ECC .19673 INC 5.8312 VI 29.291
RP 107.48 LAP 2.85 LOP 133.35 VP 37.848 GAP 6.65 ATP 84.91 TAL 193.49 TAP 42.75 RCA 102.78 APO 153.13 V2 35.259
RC 132.447 GL -39.89 GP 23.31 ZAL 110.75 ZAP 144.58 ETS 37.66 ZAE 128.19 ETE 160.24 ZAC 97.26 ETC 19.31 CLP-152.55 PLANETOCENTRIC CONIC C3 17.713 WHL 4.209 DLA -31.21 RAL 150.83 RAD 6567.7 VEL 11.794 PTH 2.09 WHP 5.370 DPA 31.98 RAP 173.75 ECC 1.2915
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 36 23 1212.69 10 15 36 5802.98 18.26 112.44 341.30 6 58 36 612.7 25.12 76.30 349.05 22.28 112.43 11 52 19 275.42 5203.0 267.67 103.70 10 15 36 22.29 18.27 25.14 6 5*8* 36 612.7 341.30 76.30 6 36 23 1212.69 22.28 349.05 18.26 112.44 25.12 112.44 6 38 36 112.43 11 52 19 121.76 9 21 26 103.21 14 12 47 103.70 10 15 36 5802.98 22.29 275.42 18.27 5203.0 25.14 267.67 110.00 9 9 24 721 .81 13.37 30A.46 13.44 121.8 17.47 301.75 5341 .86 4741.9 234.73 110.00 12 43 45 31.82 243.64 21.70 33.31 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE-1.7606 TRA-1.3674 TC3-3.6162 BAU .8577 SGT 4441.9 SGR 476.0 SG3 316.0 RRT -.7915 RRF -.8886 RTF .9408 SG8 4469.3 R23 .2302 R13 -.9421 ST 2465.9 SR 443.0 SS 1121.7 CRT -.9723 CRS .9987 CST -.9823 LSA 2754.8 MSA 211.3 SSA 8.3 NOE .3253 MRA .0290 RC3 .2001 FAU .06514 FOE-1.7694 FRA -.3920 FC3-3.1836 BSP 13764 BOE 1.7904 BRA 1.3678 BC3 3.6218 FSP -1013 5G1 4459.9 5G2 289.8 THA 175.13 EL1 2523.0 EL2 102.1 ALF 170.15 LAUNCH DATE JUL 7 1967 FLIGHT TIME 154.00 ARRIVAL DATE DEC 8 1967 DISTANCE 446.591 RL 152.10 LAL -.00 LOL 284.22 VL 26.559 GAL -2.95 AZL 95.49 MCA 212.50 SMA 127.65 ECC .19814 INC 5.4896 VI 29.291 RP 107.48 LAP 2.95 LOP 136.60 VP 37.814 GAP 6.95 AZP 85.37 TAL 192.12 TAP 44.62 RCA 102.36 APO 152.94 V2 35.258 RC 134.624 CL -38.50 CP 20.84 7AL 109.39 ZAP 147.09 ETS 36.27 ZAE 128.70 ETE 162.38 ZAC 96.41 ETC 18.14 CLP-153.94 PLANETOCENTRIC CONIC C3 16.613 VHL 4.076 DLA -30.82 RAL 153.50 RAC 6567.7 VEL 11.747 PTH 2.07 VHP 5.426 DPA 29.00 RAP 174.30 ECC 1.2734 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.29 6 56 5 1175.58 22.39 346.31 19.80 111.75 7 15 41 575.6 25.16 268.24 77.29 6 56 5 1175.58 22.39 346.31 19.80 111.75 7 15 41 575.6 25.15 338.51 10 19 11 5810.47 9 13 23 728.76 13 1 3 5305.28 111.74 11 56 1 121.85 9 25 32 101.69 14 29 28 5210.5 22.41 276.04 19.81 25.16 268.24 128.8 13.12 308.84 14.89 17.24 302.15 4705.3 231.92 32.35 240.93 23.17 33.62 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2532.3 SR 416.5 SS 1107.2 CRT -.9753 CRS .9992 CST -.9821 LSA 2787.3 MSA 207.0 SSA 9.4 SCT 4548.3 SCR 435.2 SC3 311.6 RRT -.7514 RRF -.8445 RTF .9389 SCB 4569.1 R23 .2064 R13 -.9398 TOE-1.7460 TRA-1.2536 TC3-3.9660 BAU .8815 ROE .2962 RRA .0210 RC3 .1499 FAU .06342 FDE-1.6763 FRA -.2701 FC3-3.3049 BSP 14103 BDE 1.7709 BRA 1.2538 BC3 3.9688 FSP -1001 5G1 4560.1 SG2 286.5 THA 175.87 EL1 2564.7 EL2 90.9 ALF 170.88 FLIGHT TIME 156.00 ARRIVAL DATE DEC 10 1967 HELIOCENTRIC CONIC DISTANCE 452.543 RL 152.10 LAL -.00 LOL 284.22 VL 26.512 GAL -2.65 A7L 95.20 MCA 215.74 SMA 127.34 ECC .19968 INC 5.2038 V1 29.291 RP 107.48 LAP 3.04 LOP 139.85 VP 37.779 GAP 7.25 A7P 85.77 TAL 190.74 TAP 46.48 RCA 101.91 APO 152.77 V2 35.256 RC 136.791 GL -37.26 GP 18.78 TAL 107.76 ZAP 149.32 ETS 35.10 ZAE 128.99 ETE 164.21 ZAC 95.33 ETC 17.12 CLP-155.29 PLANETOCENTRIC CONIC C3 15.740 VHL 3.967 DLA -30.64 RAL 156.25 RAD 6567.6 VEL 11.710 PTH 2.06 VHP 5.505 DPA 26.39 RAP 175.13 ECC 1.2590 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.77 7 10 35 1152.19 22.58 344.63 21.66 111.29 7 29 48 552.2 25.27 336.80 102.23 10 26 40 5809.26 22.59 276.02 21.67 111.28 12 3 29 5209.3 25.28 268.19 1152.19 5809.26 7 10 35 344.63 7 29 48 552.2 25.27 336.80 77.77 22.58 21.66 111.29 268.19 102.23 10 26 40 22.59 276.02 21.67 111.28 12 3 29 5209.3 25.28 121.82 9 33 32 100.75 14 43 4 110.00 9 21 25 726.20 13.21 306.70 16.75 126.2 17.32 302.00 13 15 0 5283.25 4683.3 110.00 239.27 24.92 33.78 230.22 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY 9GT 4646.8 SGR 407.1 SG3 305.1 RRT -.7047 RRF -.7917 RTF .9371 SGB 4664.6 R23 .1815 R13 -.9378 ST 2586.5 SR 398.0 SS 1093.3 CRT -.9791 CRS .9995 CST -.9821 TDE-1.7452 TRA-1.1358 TC3-4.2934 BAU .9037 RDE .2755 RRA .0166 RC3 ,1025 FAU .06117 FDE-1.5898 FRA -.1542 FC3-3.3648 BSP 14420 LSA 2828.9 MSA 201.9 SSA 10.5

FLIGHT TIME 150.00

BOE 1.7668 BRA 1.1359 BC3 4.2947 FSP

SG1 4655.7 SG2 288.3 THA 176.45

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ARRIVAL DATE DEC 12 1967
                                                                          FLIGHT TIME 158.00
LAUNCH CATE JUL 7 1967
                                                                         DISTANCE 458.479
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 26.464 GAL -2.33 AZL 94.96 HCA 218.99 SMA 127.03 ECC .20135 INC 4.9597 V1 29.291
RP 107.49 LAP 3.12 LOP 143.10 VP 37.744 GAP 7.56 AZP 86.14 TAL 189.34 TAP 48.32 RCA 101.45 APO 152.61 V2 35.254
    RC 138.949 GL -36.12 GP 17.06 TAL 105.89 TAP 151.33 ETS 34.13 TAE 129.16 ETE 165.77 TAC 94.05 ETC 16.22 CLP-156.60
   PLANETOCENTRIC CONIC
    C3 15.042 VHL 3.878 DLA -30.63 RAL 159.12 RAD 6567.6 VEL 11.680 PTH 2.05 VHP 5.600 DPA 24.04 RAP 176.16 ECC 1.2476
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 22 20 1140.94
10 37 45 5800.10
                                                                                                                                             25.47
                                                                                23.82
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                                                    22.83
       102.19
                   7 22 20 1140.94
10 37 45 5800.10
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       102.19
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                                    716.84
                                                    13.55
                                                                  308.18
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                                                                                                                                116.8
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                    9 32 35
       110.00
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100.27 14 54 33
                   13 26 41 5272.20
                                                                                  26.97
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                                                                                                                                              33.85
                                                                                                                                                            229.37
                                                                  238.44
      110.00
                                                    32.78
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4736.8 SCR 389.2 SC3 297.0
RRT -.6540 RRF -.7334 RTF .9354
SCB 4752.8 R23 .1577 R13 -.9359
                                                                                                                          ST 2645.7 SR 385.8 SS 1079.6-
CRT -.9834 CRS .9995 CST -.9823
    TOE-1.7543 TRA-1.0113 TC3-4.5954 BAU .9242
    ROE .2611 RRA .0146 RC3 .0588 FAU .05859
FOE-1.5094 FRA -.0436 FC3-3.3719 BSP 14687
                                                                                                                          LSA 2876.7 MSA 196.3 SSA 11.6""
                                                                      SG1 4743.7 SG2 294.0 THA 176.91
                                                                                                                          EL1 2672.8 EL2 69.3 ALF 171.83
    BOE 1.7737 BRA 1.0114 BC3 4.5958 FSP
                                                       -952
                                                                                                                                      ARRIVAL DATE DEC 14 1967
                                                                          FLIGHT TIME 160.00
LAUNCH DATE JUL 7 1967
                                                                          DISTANCE 464.397
   HELIOCENTRIC CONIC
   RL 152:10 LAL -.00 LOL 284.22 VL 26.416 GAL -2.01 AZL 94.75 MCA 222.23 SMA 126.73 ECC .20315 INC 4.7476 V1 29.291
RP 107.50 LAP 3.19 LOP 146.35 VP 37.707 GAP 7.86 AZP 86.48 TAL 187.92 TAP 50.15 RCA 100.98 APO 152.47 V2 35.251
RC 141.095 GL -35.04 GP 15.61 ZAL 103.81 ZAP 153.15 ETS 33.35 ZAE 129.23 ETE 167.10 ZAC 92.62 ETC 15.43 CLP-157.87
   PLANETOCENTRIC CONIC
    C3 14.487 VHL 3.806 DLA -30.74 RAL 162.09 RAD 6567.6 VEL 11.656 PTH 2.05 VHP 5.707 DPA 21.92 RAP 177.36 ECC 1.2384
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 31 59 1139.66
10 51 52 5784.64
7 31 59 1139.66
10 51 52 5784.64
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       102.49
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      110.00
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                                 5269.86
                                                                  236.26
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                   13 36 44
                                                    32.81
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
SGT 4830.7 SGR 380.2 SG3 289.1
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          $1 2714.6 SR 379.0 55 1069.1
CRT -.9877 CRS .9988 CST -.9828
LSA 2935.9 MSA 190.1 SSA 12.8
    TOE-1.7753 TRA -.8834 TC3-4.8801 BAU .9452
    RDE .2518 RRA .0147 RC3 .0209 FAU .05601
                                                                      RRT -.6053 RRF -.6752 RTF .9344
    FDE-1.4392 FRA .0562 FC3-3.3472 BSP 15010
BDE 1.7930 BRA .8835 BC3 4.8801 FSP -929
                                                                      SGB 4845.7 R23 .1350 R13 -.9348
SG1 4836.2 SG2 302.3 THA 177.26
                                                                                                                          EL1 2740.3 EL2 58.6 ALF 172.14
                                                                                                                                     ARRIVAL DATE DEC 16 1967
                                                                          FLIGHT TIME 162.00
LAUNCH DATE JUL 7 1967
                                                                         DISTANCE 470.297
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 26.369 GAL -1.67 AZL 94.56 HCA 225.48 SMA 126.42 ECC .20511 INC 4.5605 V1 29.291
RP 107.51 LAP 3.25 LOP 149.60 VP 37.670 GAP 8.16 AZP 86.80 TAL 186.48 TAP 51.96 RCA 100.49 APO 152.35 V2 35.247
    RC 143.232 GL -33.99 GP 14.36 TAL 101.55 TAP 154.82 ETS 32.74 TAE 129.25 ETE 168.24 TAC 91.07 ETC 14.72 CLP-159.10
   PLANETOCENTRIC CONIC
    C3 14.056 VHL 3.749 DLA -30.95 RAL 165.20 RAD 6567.6 VEL 11.638 PTH 2.04 VHP 5.826 DPA 19.97 RAP 178.70 ECC 1.2313
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.96 7 40 23 1145.53 23.41 344.48 28.95 110.84 7 59 29 545.5 26.03 336.57 103.04 11 8 13 5765.40 23.42 273.08 28.96 110.83 12 44 19 5165.4 26.04 265.17 76.96 7 40 23 1145.53 23.41 344.48 28.95 110.84 7 59 29 545.5 26.03 336.57
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110.83 12 44 19
110.84 7 59 29
110.85 12 44 19
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                  11 8 13 5765.40
10 2 11 684.23
13 45 36 5274.70
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                                                    23.42
                                                                  273.06
       103.04
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100.38 15 13 30
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                                                    14.71
                                                                  306.37
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                                                     32.75
                                                                  238.63
                                                                                  31.91
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RTI --5601 RRF --6202 RTF --9337
SGB 4935.4 R23 .1149 R13 --9340
SGI 4925.5 SG2 312.4 THA 177.53
                                                                                                                          ST 2788.1 SR 376.3 SS 1059.6

CRT -.9917 CRS .9975 CST -.9835

LSA 3000.6 MSA 183.6 SSA 13.9
    TDE-1.8039 TRA -.7485 TC3-5.1371 BAU .9653
    RDE .2462 RRA .0159 RC3 -.0121 FAU .05339
FCE-1.3756 FRA .1496 FC3-3.2882 BSP 15312
BOE 1.8206 BRA .7486 BC3 5.1372 FSP -903
                                                                                                                          EL1 2813.0 EL2 47.8 ALF 172.37
                                                                                                                                      ARRIVAL DATE DEC 18 1967
                                                                          FLIGHT TIME 164.00
LAUNCH DATE JUL 7 1967
                                                                          DISTANCE 476.178
    RL 152.10 LAL -.00 LOL 284.22 VL 26.321 GAL -1.31 ATL 94.39 MCA 228.72 SMA 126.12 ECC .20723 INC 4.3932 V1 29.291 RP 107.53 LAP 3.30 LOP 152.85 VP 37.632 GAP 8.47 ATP 87.10 TAL 185.03 TAP 53.75 RCA 99.98 APO 152.25 V2 35.243 RC 145.356 GL -32.95 GP 13.29 TAL 99.11 TAP 156.37 ETS 32.29 TAE 129.23 ETE 169.22 TAC 89.41 ETC 14.10 CLP-160.28
   PLANETOCENTRIC CONIC
    C3 13.734 VHL 3.706 DLA -31.23 RAL 168.43 RAD 6567.5 VEL 11.624 PTH 2.04 VHP 5.952 DPA 18.15 RAP 180.14 ECC 1.2260
    LNCH AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.25 7 48 15 1156.36 23.74 345.43 31.92 110.91 8 7 31 556.4 26.37 337.50 103.75 11 26 10 5744.43 23.75 271.64 31.93 110.90 13 1 55 5144.4 26.38 263.71
                    7 48 15 1156.36
11 26 10 5744.43
                                                                                                  110.91
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        76.25
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120.88 10 31 2
100.85 15 21 42
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       103.75
                                                                   305.18
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       110.00
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                                     663.20
                     10 19 59
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                    13 53 37 5285.58
                                                                  239.45
                                                                                                                               4685.6
                                                                                                                                               33.77
       110.00
                                                     32.62
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2862.0 SR 376.4 SS 1048.8
CRT -.9950 CRS .9954 CST -.9841
LSA 3066.1 MSA 176.9 SSA 15.1
                                                                     SCT 5006.1 SCR 378.9 SC3 272.4
RRT -.5199 RRF -.5704 RTF .9331
SCB 5020.4 R23 .0974 R13 -.9334
     TOE-1.8373 TRA -.6053 TC3-5.3618 BAU .9846
    ROE .2434 RRA .0178 RC3 -.0401 FAU .05072
FOE-1.3157 FRA .2376 FC3-3.1972 BSP 15612
                                                                                                                          EL1 2886.4 EL2 37.2 ALF 172.54
                                                                      SG1 5010.0 SG2 323.4 THA 177.74
     BOE 1.8534 BRA .6056 BC3 5.3620 FSP -877
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ARRIVAL CATE CEC 20 1967

LAUNCH DATE JUL 7 1967

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HELIOCENTRIC CONIC
                                                                              DISTANCE 482.040
    RL 152.10 LAL -.00 LOL 284.22 VL 26.273 GAL -.94 A7L 94.24 MCA 231.96 SMA 125.82 ECC .20951 INC 4.2418 V1 29.291
RP 107.54 LAP 3.34 LOP 156.10 VP 37.594 GAP 8.78 AZP 87.38 TAL 183.57 TAP 55.53 RCA 99.46 APO 152.18 V2 35.237
RC 147.469 GL -31.90 GP 12.36 ZAL 96.51 ZAP 157.81 ETS 32.00 ZAE 129.19 ETE 170.06 ZAC 87.65 ETC 13.54 CLP-161.43
   PLANETOCENTRIC CONIC
    C3 13.517 VHL 3.677 CLA -31.56 RAL 171.80 RAD 6567.5 VEL 11.615 PTH 2.04 VHP 6.087 CPA 16.45 RAP 181.67 ECC 1.2225
    C3 13.517 VHL 3.677 DLA -31.56 RAL 171.80 RAD 6567.5 VEL 11.615 PTH 2.04 VHP 6.087 DPA 16.45 RAP 181.67 ECC 1.2225 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.46 7 56 10 1170.18 24.06 346.61 35.14 111.06 8 15 40 570.2 26.70 338.67 104.54 11 45 6 5723.63 24.07 270.20 35.15 111.05 13 20 30 5123.6 26.71 262.26 104.54 11 45 6 5723.63 24.07 270.20 35.15 111.05 13 20 30 5123.6 26.71 262.26 110.00 10 39 24 640.28 16.24 303.89 31.13 120.50 10 50 4 40.3 20.17 296.96 110.00 14 1 3 530.54 32.41 240.65 37.91 101.53 15 29 24 4701.5 33.65 231.63
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                           SCI 5089.6 SG2 335.0 THA 177.89
                                                                                                                                    ST 2935.1 SR 379.0 SS 1036.9
CRT -.9974 CRS .9923 CST -.9849
LSA 3131.2 MSA 170.3 SSA 16.2
    TOE-1.8750 TRA -.4543 TC3-5.5477 BAU 1.0026
    ROE .2431 RRA .0199 RC3 -.0634 FAU .04803
    FOE-1.2593 FRA .3194 FC3-3.0761 BSP 15898
BOE 1.8907 BRA .4548 BC3 5.5481 FSP -851
                                                                                                                                    EL1 2959.4 EL2 27.1 ALF 172.66
                                                                                FLIGHT TIME 168.00
                                                                                                                                                 ARRIVAL DATE DEC 22 1967
LAUNCH DATE IUL 7 1967
                                                                               DISTANCE 487.881
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 26.225 GAL -.56 AZL 94.10 HCA 235.20 SMA 125.52 ECC .21198 INC 4.1032 VI 29.291
RP 107.56 LAP 3.37 LOP 159.35 VP 37.555 GAP 9.09 AZP 87.66 TAL 182.09 TAP 57.29 RCA 98.91 APO 152.13 V2 35.231
    RC 149.570 GL -30.84 GP 11.55 ZAL 93.78 ZAP 159.16 ETS 31.85 ZAE 129.13 ETE 170.79 ZAC 85.82 ETC 13.05 CLP-162.54
   PLANETOCENTRIC CONIC
    C3 13.400 VHL 3.661 OLA -31.91 RAL 175.29 RAD 6567.5 VEL 11.610 PTH 2.03 VHP 6.230 DPA 14.84 RAP 183.28 ECC 1.2205 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      8 4 35 1185.59
12 4 34 5704.44
                                                                                                                       8 24 20
                                                        24.36
                                                                       347.91
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                                                                                                       111.27
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        74.65
                                                                                                         111.25 13 39 38
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                     12 4 34
                                                        24.37
                                                                       266.87
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       105.35
                                                                       347.91
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5704.44
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120.08 11 10 27
102.38 15 36 49
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                                       616.33
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       110.00
                     14 8 8
                                     5321.70
                                                        32.12
                                                                       242.15
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SCT 5156.9 SCR 390.0 SC3 254.9
RRT - .4580 RRF - .4911 RTF .9327
SCB 5171.7 R23 .0698 R13 - .9329
                                                                                                                                    ST 3000.9 SR 383.5 SS 1022.4
CRT -.9987 CRS .9883 CST -.9855
    TOE-1.9128 TRA -.2918 TC3-5.6880 BAU 1.0191
    ROE .2449 RRA .0219 RC3 -.0814 FAU .04539
FOE-1.2046 FRA .3984 FC3-2.9327 BSP 15113
BOE 1.9284 BRA .2927 BC3 5.6886 FSP -822
                                                                                                                                   LSA 3189.1 MSA 164.2 SSA 17.2
                                                                                                                                     EL1 3025.2 EL2 19.5 ALF 172.73
                                                                           SG1 5160.0 SG2 346.5 THA 178.01
                                                                                                                                                ARRIVAL DATE DEC 24 1967
                                                                                FLIGHT TIME 170.00
LAUNCH DATE JUL 7 1967
                                                                               DISTANCE 493.700
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 26.178 GAL -.17 A7L 93.98 MCA 238.44 SMA 125.23 ECC .21463 INC 3.9752 V1 29.291 RP 107.58 LAP 3.39 LOP 162.60 VP 37.516 GAP 9.41 A7P 87.92 TAL 180.60 TAP 59.05 RCA 98.35 APO 152.10 V2 35.225 RC 151.657 GL -29.74 GP 10.84 7AL 90.93 7AP 160.44 ETS 31.85 7AE 129.07 ETE 171.43 7AC 83.93 ETC 12.61 CLP-163.62
   PLANETOCENTRIC CONIC
    C3 13.383 VHL 3.658 DLA -32.25 RAL 178.90 RAD 6567.5 VEL 11.609 PTH 2.03 VHP 6.379 DPA 13.30 RAP 184.96 ECC 1.2203
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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12 24 10 5687.93
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103.35 15 44 12
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14 15 6 5345.14
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                                                                                         44.86
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5233.6 SCR 398.0 SC3 246.5
RRT -.4376 RRF -.4628 RTF .9338
SCB 5248.7 R23 .0581 R13 -.9339
SCI 5236.5 SC2 357.7 THA 178.09
                                                                                                                                    ST 3065.1 SR 389.7 SS 1006.8
CRT -.9988 CRS .9837 CST -.9864
LSA 3245.8 MSA 157.9 SSA 18.2
     TDE-1.9549 TRA -.1260 TC3-5.7925 BAU 1.0365
    RDE .2487 RRA .0241 RC3 -.0940 FAU .04294 FDE-1.1538 FRA .4664 FC3-2.7778 BSP 16420
                                                                                                                                    EL1 3089.7 EL2 18.6 ALF 172.76
    BOE 1.9706 BRA .1283 BC3 5.7933 FSP -802
                                                                                                                                                 ARRIVAL DATE DEC 26 1967
                                                                                FLIGHT TIME 172.00
LAUNCH DATE JUL 7 1967
                                                                               DISTANCE 499.496
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 26.131 GAL .25 ATL 93.86 MCA 241.68 SMA 124.93 ECC .21749 INC 3.8559 V1 29.291
RP 107.60 LAP 3.39 LOP 165.85 VP 37.476 GAP 9.74 AZP 88.17 TAL 179.11 TAP 60.79 RCA 97.76 APO 152.11 V2 35.217
RC 153.750 GL -28.61 GP 10.21 ZAL 87.99 ZAP 161.65 ETS 32.01 ZAE 129.01 ETE 171.98 ZAC 81.97 ETC 12.22 CLP-164.67
   PLANETOCENTRIC CONIC
    C3 13.470 VHL 3.670 DLA -32.58 RAL 182.61 RAD 6567.5 VEL 11.613 PTH 2.03 VHP 6.536 DPA 11.82 RAP 186.69 ECC 1.2217
                                                    INJ LAT INJ LONG INJ RT ASC INJ ATATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    UNCH AZMTH UNCH TIME L-I TIME
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119.18 13 22 7
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14 22 15 5370.66
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        110.00
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                                                                        245.77
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                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5291.3 SGR 406.1 SG3 237.8
RRT -.4195 RRF -.4387 RTF .9322
SGB 5306.8 R23 .0503 R13 -.9323
SGI 5294.0 SG2 368.4 THA 178.15
                                                                                                                                    ST 3113.4 SR 396.6 SS 985.4
CRT -.9979 CRS .9774 CST -.9865
LSA 3285.8 MSA 155.5 SSA 19.1
     TOE-1.9925 TRA .0614 TC3-5.8294 BAU 1.0499
     ROE .2539 RRA .0244 RC3 -.1036 FAU .04021
    FOE-1.1000 FRA .5466 FC3-2.5841 B3P 16552
B0E 2.0086 BRA .0661 BC3 5.8303 FSP -762
                                                                                                                                    EL1 3138.4 EL2 25.6 ALF 172.76
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FLIGHT TIME 166,00

FLIGHT TIME 174.00 ARRIVAL DATE DEC 28 1967 LAUNCH DATE JUL 7 1967 DISTANCE 505.267 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.083 GAL .68 AZL 93.74 MCA 244.92 SMA 124.65 ECC .22058 INC 3.7436 VI 29.291
RP 107.65 LAP 3.39 LOP 169.09 VP 37.436 GAP 10.07 AZP 88.41 TAL 177.60 TAP 62.53 RCA 97.15 APO 152.14 VZ 35.210
RC 155.789 GL -27.43 GP 9.66 ZAL 84.97 ZAP 162.79 ETS 32.32 ZAE 128.94 ETE 172.46 ZAC 79.97 ETC 11.87 CLP-165.69 PLANETOCENTRIC CONIC C3 13.664 VHL 3.697 OLA -32.87 RAL 186.41 RAD 6567.5 VEL 11.621 PTH 2.04 VMP 6.701 DPA 10.40 RAP 188.47 ECC 1.2249 ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 351.77 632.8 8 35 8 1232.78 24.95 50.34 72.56 50.34 27.74 258.22 5065.8 13 2 43 24.97 266.18 5665.77 632.8 27.73 343.82 72.56 8 35 8 1232.78 24.95 351.77 50.34 112.11 14 37 9 118.77 13 44 24 105.45 15 59 52 27.74 258.22 13 2 43 5665.77 24.97 266.18 50.34 5065.8 110.00 12 7 7 5836.98 19.32 276.50 47.44 5237.0 23.00 269.30 14 29 54 5397.60 247.71 110.00 30.88 52.61 4797.6 32.69 238.96 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3159.0 SR 405.5 SS 967.9
CRT -.9959 CRS .9713 CST -.9874
LSA 3325.2 MSA 151.2 SSA 19.9
EL1 3184.7 EL2 36.5 ALF 172.71 SCT 5364.3 SCR 415.6 SC3 230.2 RRT -.4107 RRF -.4245 RTF ..9342 SCB 5380.4 R23 ..0427 R13 -.9343 SCI 5367.0 SC2 378.8 THA 178.17 TOE-2.0345 TRA .2458 TC3-5.8376 BAU 1.0666 ROE .2615 RRA .0255 RC3 -.1069 FAU .03800 FOE-1.0561 FRA .6059 FC3-2.4075 BSP 16858 BOE 2.0512 BRA .2471 BC3 5.8386 FSP -747 FLIGHT TIME 176.00 ARRIVAL DATE DEC 30 1967 LAUNCH DATE JUL 7 1967 DISTANCE 511.012 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 26.037 GAL 1.13 A7L 93.64 MCA 248.16 SMA 124.36 ECC .22390 INC 3.6572 V1 29.291
RP 107.65 LAP 3.38 LOP 172.33 VP 37.395 GAP 10.41 A7P 88.65 TAL 176.09 TAP 64.25 RCA 96.52 APO 152.20 V2 35.201
RC 157.834 GL -26.22 GP 9.16 ZAL 81.89 ZAP 163.89 ETS 32.80 ZAE 128.87 ETE 172.88 ZAC 77.92 ETC 11.57 CLP-166.69 PLANETOCENTRIC CONIC C3 13.973 VHL 3.738 DLA -33.11 RAL 190.27 RAD 6567.6 VEL 11.634 PTH 2.04 VHP 6.873 DPA 9.05 RAP 190.30 ECC 1.2300 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.45 9 8 14 112.44 14 55 33 27.82 54.61 647.2 344.96 8 47 27 1247.17 25.00 352.90 112.45 72.07 257.89 5061.2 27.83 107.93 13 21 12 5661.16 25.01 265.84 54.62 112.45 9 8 14 112.44 14 55 33 647.2 27.82 344.96 8 47 27 1247.17 25.00 352.90 54.61 257.89 13 21 12 5661.16 25.01 265.84 54.62 5061.2 27.83 107.93 118.42 14 6 20 106.47 16 8 53 12 29 19 5820.58 19.85 275.53 51.96 5220.6 23.49 268.27 110.00 4823.8 32.34 240.93 14 36 30 5425.78 30.39 249.60 56.76 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5414.3 SGR 424.1 SG3 221.8 RRT -.4025 RRF -.4117 RTF .9344 SGB 5430.8 R23 .0367 R13 -.9345 SGI 5417.0 SG2 388.0 THA 178.18 ST 3178.4 SR 414.1 SS 940.9 CRT -.9928 CRS .9636 CST -.9877 TOE-2.0656 TRA .4492 TC3-5.7709 BAU 1.0782 RDE .2700 RRA .0251 RC3 -.1079 FAU .03553 FDE-1.0049 FRA .6711 FC3-2.2014 BSP 16977 BDE 2.0832 BRA .4499 BC3 5.7719 FSP -716 LSA 3337.1 MSA 150.0 SSA 20.4 EL1 3204.9 EL2 49.3 ALF 172.63 ARRIVAL DATE JAN 1 1968 FLIGHT TIME 178.00 LAUNCH CATE JUL 7 1967 DISTANCE 516.727 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 25.990 GAL 1.59 AZL 93.54 MCA 251.39 SMA 124.08 ECC .22747 INC 3.5356 V1 29.291
RP 107.68 LAP 3.35 LOP 175.58 VP 37.354 GAP 10.77 AZP 88.87 TAL 174.58 TAP 65.97 RCA 95.85 APO 152.30 V2 35.192
RC 159.863 CL -24.97 GP 8.72 ZAL 78.79 ZAP 164.93 ETS 33.47 ZAE 128.81 ETE 173.25 ZAC 75.84 ETC 11.30 CLP-167.67 PLANETOCENTRIC CONIC C3 14.404 VML 3.795 DLA -33.29 RAL 194.16 RAD 6567.6 VEL 11.653 PTH 2.05 VMP 7.054 DPA 7.69 RAP 192.16 ECC 1.2371 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 660.6 345.99 59.03 112.78 9 21 48 27.81 9 0 47 1260.59 353.91 71.73 24.95 27.82 59.03 112.77 15 13 15 5061.1 257.89 265.81 13 38 54 5661.14 24.96 108.27 345.99 59.03 112.78 9 21 48 660.6 27.81 353.91 9 0 47 1260.59 24.95 71.73 112.78 9 21 48 112.77 15 13 15 59.03 5061.1 27.82 257.89 13 38 54 5661.14 24.96 265.81 108.27 118.19 14 27 6 107.36 16 19 24 12 50 15 5810.42 14 48 36 5447.36 5210.4 23.79 267.63 56.56 274.92 20.16 110.00 251.27 61.07 4847.4 32.00 242.68 29.92 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5474,0 SGR 432.7 SG3 214.3 RRT -,4000 RRF -,4048 RTF .9359 SGB 5491.1 R23 .0310 R13 -.9360 ST 3188.8 SR 423.3 SS 914.3 CRT -.9887 CRS ..9555 CST -.9881 TOE-2.0973 TRA .6583 TC3-5.6706 BAU 1.0922 RDE .2803 RRA .0240 RC3 -.1043 FAU .03340 FDE -.9582 FRA .7294 FC3-2.0075 BSP 17235 LSA 3340.8 MSA 149.9 SSA 20.7 SG1 5476.8 SG2 396.3 THA 178.18 EL1 3216.2 EL2 62.8 ALF 172.52 BOE 2.1159 BRA .6588 BC3 5.6716 FSP -698 ARRIVAL DATE JAN 3 1968 FLIGHT TIME 180.00 LAUNCH DATE JUL 7 1967 DISTANCE 522.412 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 25.943 GAL 2.08 AZL 93.44 HCA 254.63 SMA 123.80 ECC .23133 INC 3.4379 V1 29.291
RP 107.71 LAP 3.51 LOP 178.82 VP 37.313 GAP 11.13 AZP 89.09 TAL 173.06 TAP 67.68 RCA 95.16 APO 152.44 V2 35.183
RC 161.876 GL -23.69 GP 8.33 ZAL 75.67 ZAP 165.93 ETS 34.34 ZAE 128.75 ETE 173.57 ZAC 73.73 ETC 11.08 CLP-168.62 PLANETOCENTRIC CONIC C3 14.968 VHL 3.869 DLA -33.38 RAL 198.06 RAD 6567.6 VEL 11.677 PTH 2.05 VHP 7.244 DPA 6.39 RAP 194.06 ECC 1.2463 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.53 9 15 7 1272.88 24.79 354.79 63.55 113.11 9 36 20 672.9 27.70 346.89 15 30 5 258.22 63.55 113.10 5066.0 27.71 266.11 13 55 39 24.80 108.47 5665.97 9 36 20 672.9 27.70 346.89 63.55 113.11 354.79 9 15 7 1272.68 24.79 71.53 15 30 5 27.71 258.22 63.55 113.10 5066.0 24.80 266.11 13 55 39 5665.97 14 45 55 16 31 57 5208.7 267.53 118.16 23.84 274.82 110.00 13 9 6 5ADA . 71 20.23 61.18 108.06 4866.2 31.71 244.07 252.60 65.55 15 0 51 5466.18 29.53 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3179.1 SR 432.3 SS 883.6 CRT -.9837 CRS .9461 CST -.9882 LSA 3324.3 MSA 152.2 SSA 20.7 SGT 5524.4 SGR 440.5 SG3 206.6 RRT -.3993 RRF -.4007 RTF .9370 TOE-2.1215 TRA .8802 TC3-5.5150 BAU 1.1038 ROE .2918 RRA .0217 RC3 -.0987 FAU .03122 SGB 5541.9 R23 .0268 R13 -.9370 SGI 5527.2 SG2 403.7 THA 178.17 FOE -.9103 FRA .7870 FC3-1.8057 BSP 17423 BDE 2.1414 BRA .8805 BC3 5.5159 FSP -675 ELI 3207.4 EL2 76.9 ALF 172.38

ARRIVAL DATE JAN 5 1968

LAUNCH DATE JUL 7 1967

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DISTANCE 528.062
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.897 GAL 2.59 A7L 93.34 MCA 257.86 SMA 123.52 ECC .23549 INC 3.3431 VI 29.291
RP 107.74 LAP 3.27 LOP 182.05 VP 37.271 GAP 11.51 A7P 89.30 TAL 171.53 TAP 69.39 RCA 94.44 APO 152.61 V2 35.172
RC 163.875 GL -22.40 GP 7.97 ZAL 72.58 ZAP 166.89 ETS 35.44 ZAE 128.69 ETE 173.86 ZAC 71.58 ETC 10.89 CLP-169.56
   PLANETOCENTRIC CONIC
    C3 15.679 VML 3.960 OLA -33.40 RAL 201.93 RAD 6567.6 VEL 11.707 PTM 2.06 VMP 7.443 OPA 5.12 RAP 195.99 ECC 1.2580
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.41 15 45 55
113.42 9 51 44
113.41 15 45 55
118.34 15 2 6
108.50 16 47 0
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                     9 30 20 1284.01
14 11 20 5675.71
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       110.00
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       110.00
                                                         29.27
                                                                       253.46
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RET - 4012 REF - .3997 RTF .9382
SGB 5588.6 R23 .0231 R13 - .9383
SGI 5573.6 SG2 409.9 THA 178.14
                                                                                                                                     ST 3151.7 SR 440.9 SS 851.5
CRT -.9777 CRS .9357 CST -.9884
    TOE-2.1392 TRA 1.1141 TC3-5.3157 BAU 1.1144
    ROE .3046 RRA .0183 RC3 -.0907 FAU .02915
FOE -.8631 FRA .8426 FC3-1.6096 BSP 17604
BOE 2.1608 BRA 1.1143 BC3 5.3165 FSP -654
                                                                                                                                     LSA 3290.5 MSA 156.3 SSA 20.5
                                                                                                                                     EL1 3181.0 EL2 91.6 ALF 172.21
                                                                                                                                                  ARRIVAL DATE JAN 7 1968
                                                                                FLIGHT TIME 184.00
LAUNCH DATE JUL 7 1967
                                                                               DISTANCE 533.675
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.852 GAL 3.12 AZL 93.25 MCA 261.09 SMA 123.25 ECC .23998 INC 3.2507 V1 29.291
RP 107.78 LAP 3.21 LOP 185.29 VP 37.230 GAP 11.90 AZP 89.50 TAL 170.01 TAP 71.10 RCA 93.67 APO 152.83 V2 35.162
RC 165.860 GL -21.09 GP 7.65 ZAL 69.52 ZAP 167.81 ETS 36.80 ZAE 128.64 ETE 174.11 ZAC 69.42 ETC 10.74 CLP-170.48
   PLANETOCENTRIC CONIC
                                                                                                                                              3.89 RAP 197.94 ECC 1.2724
    C3 16.551 VHL 4.068 DLA -33.34 RAL 205.75 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 7.654 DPA
   C3 16.551 VHL 4.068 DLA -33.34 RAL 205.75 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 7.654 DPA 3.89 RAP 197.94 ECC 1.2724 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.63 9 46 22 1293.85 24.14 356.10 72.78 113.72 10 7 56 693.8 27.13 348.29 108.37 14 25 45 5690.51 24.15 267.70 72.79 113.71 16 0 35 5090.5 27.15 259.89 108.37 14 25 45 5690.51 24.15 267.70 72.79 113.71 16 0 35 5090.5 27.15 259.89 110.00 13 38 8 5836.58 19.33 276.47 70.23 118.76 15 15 24 5236.6 23.02 269.27 110.00 15 33 10 5483.82 29.15 253.83 74.96 108.70 17 4 34 4883.8 31.42 245.37
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5607.7 SGR 453.9 SG3 191.9

RRT -.4044 RRF -.4004 RTF .9392

SGB 5626.0 R23 .0201 R13 -.9393

SGI 5610.7 SG2 414.9 THA 178.11
                                                                                                                                      ST 3103.7 SR 448.5 SS 816.5
CRT -.9706 CRS .9237 CST -.9883
     TOE-2.1470 TRA 1.3628 TC3-5.0712 BAU 1.1223
    RDE .3184 RRA .0134 RC3 -.0818 FAU .02707
                                                                                                                                     LSA 3236.4 MSA 162.7 SSA 20.0
    FDE -.8148 FRA .8979 FC3-1.4158 BSP 17708
                                                                                                                                      EL1 3134.1 EL2 107.0 ALF 172.01
    BOE 2.1705 BRA 1.3629 BC3 5.0719 FSP -630
                                                                                                                                                  ARRIVAL DATE JAN 9 1968
                                                                                FLIGHT TIME 186.00
LAUNCH DATE JUL 7 1967
                                                                               DISTANCE 539.246
    RL 152.10 LAL -.00 LOL 284.22 VL 25.806 GAL 3.68 AZL 93.16 HCA 264.32 SMA 122.99 ECC .24482 INC 3.1600 V1 29.291
RP 107.81 LAP 3.14 LOP 188.52 VP 37.188 GAP 12.30 AZP 89.69 TAL 168.48 TAP 72.80 RCA 92.88 APO 153.09 V2 35.151
RC 167.829 GL -19.78 GP 7.36 ZAL 66.52 ZAP 168.69 ETS 38.46 ZAE 128.58 ETE 174.33 ZAC 67.23 ETC 10.63 CLP-171.39
   PLANETOCENTRIC CONIC
    C3 17.603 VHL 4.196 DLA -33.19 RAL 209.48 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 7.877 DPA
                                                                                                                                              2.68 RAP 199.93 ECC 1.2897
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                        348.76
                                                                                                                                                          26.69
                      10 3 7
                                     1302.35
                                                         23.65
                                                                       356.52
                                                                                         77.44
                                                                                                        113.99 10 24 50
                                                                                                                                          702.4
        71.92
                      14 38 48 5710.41
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                                                         23.66
                                                                        269.00
                                                                                         77,44
                                                                                                         113.98 16 13 58
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        108.08
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                                                                                          77.44
                                                                                                          113.99
                                                                                                                       10 24 50
                                                                                                                                           702.4
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                      10 3 7
                                     1302.35
                                                         23.65
                                                                        356.52
         71.92
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119.35 15 26 2
108.68 17 24 12
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                                                                                          77.44
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                      14 38 48 5710.41
                                                         23.66
                                                                        269.00
        108.08
                      13 48 16 5865.58
15 52 49 5483.22
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                                                         18.37
                                                                        278.18
       110.00
                                                                                                                                                                           245.32
                                                                                                                                                            31.43
                                                                                         79.84
                                                                                                                                         4883.2
                                                                        253.79
       110.00
                                                         29.16
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5645.4 SGR 459.4 SG3 185.0
RRT -.4102 RRF -.4040 RTF .9406
SG8 5664.0 R23 .0176 R13 -.9406
SG1 5648.5 SG2 418.8 THA 178.08
                                                                                                                                     ST 3045.3 SR 455.4 SS 782.4
CRT -.9624 CRS .9106 CST -.9882
     TOE-2.1511 TRA 1.6213 TC3-4.8027 BAU 1.1304
    ROE .3334 RRA .0074 RC3 -.0715 FAU .02514
FOE -.7694 FRA .9506 FC3-1.2366 85P 17868
                                                                                                                                     LSA 3172.3 MSA 170.5 SSA 19.5
EL1 3076.7 EL2 122.5 ALF 171.80
     BOE 2.1768 BRA 1.6214 BC3 4.8032 FSP -610
                                                                                                                                                  ARRIVAL DATE JAN 11 1968
                                                                                 FLIGHT TIME 188.00
LAUNCH DATE JUL 7 1967
                                                                                 DISTANCE 544.771
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 25.761 GAL 4.26 A7L 93.07 MCA 267.54 SMA 122.72 ECC .25005 INC 3.0703 VI 29.291
RP 107.84 LAP 3.07 LOP 191.75 VP 37.146 GAP 12.73 A7P 89.87 TAL 166.96 TAP 74.51 RCA 92.03 APO 153.41 V2 35.139
RC 169.783 GL -18.47 GP 7.09 ZAL 63.59 ZAP 169.54 ETS 40.49 ZAE 128.53 ETE 174.53 ZAC 65.03 ETC 10.55 CLP-172.29
   PLANETOCENTRIC CONIC
    C3 18.856 VHL 4.342 OLA -32.97 RAL 213.11 RAD 6567.8 VEL 11.842 PTH 2.10 VHP 8.112 DPA
                                                                                                                                              1.50 RAP 201.93 ECC 1.3103
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.37 10 20 27 1309.59 23.05 356.79 82.08 114.24 10 42 17 709.6 26.13 349.08
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        107.63
                      14 50 24
                                     5735.32
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                                     1309.59
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13 56 7 614.30
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108.51 17 45 13
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        110.00
                                     5478.61
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        110.00
                     16 13 55
                                                         29.26
                                                                        253.47
                                                                                          84.78
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                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2973.6 SR 460.9 SS 748.1
CRT -.9529 CRS .8960 CST -.9881
LSA 3095.5 MSA 179.8 SSA 18.8
                                                                            SGT 5677.6 SGR 463.9 SG3 178.4
RRT -.4172 RRF -.4091 RTF .9420
     TOE-2.1477 TRA 1.8935 TC3-4.5093 BAU 1.1368
     ROE .3493 RRA -.0001 RC3 -.0610 FAU .02328
FOE -.7249 FRA 1.0024 FC3-1.0691 83P 18024
BOE 2.1759 BRA 1.8935 8C3 4.5097 FSP -592
                                                                            SG8 5696.5 R23 .0153 R13 -.9420
                                                                                                                                      ELI 3005.9 EL2 138.3 ALF 171.58
                                                                            SG1 5680.9 SG2 421.4 THA 178.04
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FLIGHT TIME 182.00

LAUNCH CATE JUL 7 1967

ARRIVAL DATE JAN 13 1968

EL1 2649.5 EL2 202.1 ALF 170.82

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CISTANCE 550.245
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 25.717 GAL 4.88 ATL 92.98 MCA 270.76 SMA 122.46 ECC .25572 INC 2.9811 VI 79.291 RP 107.88 LAP 2.98 LOP 194.98 VP 37.104 GAP 13.17 AZP 90.04 TAL 165.45 TAP 76.21 RCA 91.15 APO 153.78 VZ 35.128
    RC 171.722 GL -17.19 GP 6.85 TAL 60.75 ZAP 170.34 ETS 42.94 TAE 128.47 ETE 174.70 ZAC 62.82 ETC 10.51 CLP-173.18
   PLANETOCENTRIC CONIC
     C3 20.335 VHL 4.509 DLA -32.67 RAL 216.61 RAD 6567.8 VEL 11.904 PTH 2.12 VHP 8.362 DPA
                                                                                                                                           .35 RAP 203.96 ECC 1.3347
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                   114.46 11 0 16
114.45 16 36 32
114.46 11 0 16
114.45 16 36 32
120.78 14 13 12
108.26 18 6 54
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         72.98 10 38 21 1315,34
                                                      22.36
                                                                     356.89
                                                                                    86.69
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        107.02
                     15 0 26
                                    5765.37
                                                       22.37
                                                                     272.60
                                                                                      86.69
                                                                                                                                     5165.4
                                                                                                                                                      25.48
                                                                                                                                                                     264.95
                    10 38 21
                                                                                      86.69
                                                                                                                                      715.3
                                                                                                                                                      25.47
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        72.98
                                   1315.34
                                                       22.36
                                                                     356.89
                     15 0 26
                                                                     272.60
                                                                                      86.69
                                                                                                                                     5165.4
                                                                                                                                                      25.48
                                                                                                                                                                     264.95
        107.02
                                    5765.37
                                                       22.37
                                                                                                                                      56.8
                   14 2 15
                                                                                      82.99
                                                                                                                                                                     297.95
                                      656.82
                                                       15.67
                                                                     304.82
                                                                                                                                                      19.63
                                                                                                                                     4871.9
                                    5471.89
                                                                                      89.75
                                                                                                                                                                     244.49
                    16 35 42
                                                                     253.00
                                                                                                                                                      31.62
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SCT 5704.6 SCR 467.4 SC3 172.0
RRT -.4254 RRF -.4157 RTF .9434
SCB 5723.7 R23 .0135 R13 -.9434
SCI 5708.0 SC2 422.8 THA 177.99
                                                                                                                                ST 2892.2 SR 465.0 55 714.9
CRT -.9420 CRS .8798 CST -.9880
LSA 3009.3 MSA 190.4 SSA [8.1
     TOE-2.1377 TRA 2.1801 TC3-4.1982 BAU 1.1414
    ROE .3660 RRA -.0090 RC3 -.0507 FAU .02148
    FOE -.6820 FRA 1.0538 FC3 -.9145 BSP 18159
    BOE 2.1688 BRA 2.1801 BC3 4.1985 FSP -573
                                                                                                                                 ELI 2925.3 ELZ 154.4 ALF 171.36
LAUNCH DATE JUL 7 1967
                                                                              FLIGHT TIME 192,00
                                                                                                                                             ARRIVAL DATE JAN 15 1968
                                                                             DISTANCE 555.661
    RL 152.10 LAL -.00 LOL 284.22 VL 25.673 GAL 5.53 AZL 92.89 MCA 273.99 SMA 122.21 ECC .26185 INC 2.8919 VI 29.291
RP 107.92 LAP 2.88 LOP 198.21 VP 37.062 GAP 13.65 AZP 90.20 TAL 163.94 TAP 77.93 RCA 90.21 APO 154.21 V2 35.116
RC 173.647 GL -15.93 GP 6.64 ZAL 58.00 ZAP 171.10 ETS 45.91 TAE 128.41 ETE 174.86 ZAC 60.60 ETC 10.51 CLP-174.06
   PLANETOCENTRIC CONIC
    C3 22.070 VHL 4.698 DLA -32.31 RAL 219.97 RAD 6567.9 VEL 11.977 PTH
                                                                                                         2.13 VHP 8.629 DPA
                                                                                                                                        -.78 RAP 206.00 ECC 1.3632
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.75 10 56 44 1319.51 21.58 356.82 91.25 114.66 11 18 43 719.5 24.72 349.24 106.25 15 8 50 5800.57 21.59 274.91 91.25 114.64 16 45 30 5200.6 24.73 267.32
                                                                                                     349.24
                    10 56 44
                                    1319.51
                                                                     356.82
                                                                                                                                      719.5
                                                                                                                                                      24.72
                                                       21.58
                                                                                      91.25
                   15 8 50 5800.57
                                                                     274.91
                                                                                                                                     5200.6
                                                                                                                                                      24.73
                                                                                                                                                                     267.32
                                                       21.59
                                                                                      91.25
                  14 7 7 703.50
16 57 37 5464.58
       110.00
                                      703.50
                                                       14.02
                                                                     307.44
                                                                                      87.02
                                                                                                                                      103.5
                                                                                                                                                      18.09
                                                                                                                                                                     300.69
       110.00
                                                       29.56
                                                                     252.49
                                                                                      94,70
                                                                                                                                     4864.6
                                                                                                                                                     31.74
                                                                                                                                                                     243.95
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                ST 2800.4 SR 467.3 SS 682.3
CRT -.9291 CRS .8610 CST -.9877
    TOE-2.1181 TRA 2.4851 TC3-3.8711 BAU 1.1422
                                                                          SGT 5723.9 SGR 469.7 SG3 165.8
                                                                        RRT -.4341 RRF -.4228 RTF .9447
SGB 5743.1 R23 .0116 R13 -.9447
    RDE .3831 RRA -.0195 RC3 -.0413 FAU .01967
    FOE -.6391 FRA 1.1064 FC3 -.7717 BSP 18197
                                                                                                                               LSA 2912.9 MSA 202.3 SSA 17.3
    BOE 2.1524 BRA 2.4852 BC3 3.8713 FSP -552
                                                                         SG1 5727.5 SG2 422.9 THA 177.95
                                                                                                                                EL1 2834.0 EL2 170.7 ALF 171.15
                                                                                                                                           ARRIVAL DATE JAN 17 1968
                                                                            FLIGHT TIME 194.00
LAUNCH DATE JUL 7 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 561.011
    RL 152.10 LAL -.00 LOL 284.22 VL 25.629 GAL 6.21 AZL 92.80 MCA 277.21 SMA 121.96 ECC .26851 INC 2.8020 VI 29.291
RP 107.96 LAP 2.78 LOP 201.43 VP 37.020 GAP 14.14 AZP 90.35 TAL 162.45 TAP 79.65 RCA 89.21 APO 154.70 VZ 35.103
RC 175.555 GL -14.70 GP 6.44 ZAL 55.37 ZAP 171.82 ETS 49.49 ZAE 128.34 ETE 175.00 ZAC 58.38 ETC 10.55 CLP-174.94
  PLANETOCENTRIC CONIC
    C3 24.096 VHL 4.909 DLA -31.90 RAL 223.17 RAD 6568.0 VEL 12.061 PTH 2.16 VHP 8.913 DPA -1.88 RAP 208.06 ECC 1.3966
    C3 24.096 VML 4.909 DLA -31.90 RAL 223.17 NAD 6568.0 VEL 12.061 PM 2.16 VMP 8.913 DPA -1.88 NAP 208.06 ECC 1.3966 LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.66 11 15 39 1321.73 20.71 356.57 95.74 114.82 11 37 40 721.7 23.88 349.04 105.34 15 15 27 5641.16 20.73 277.58 95.75 114.81 16 52 48 5241.2 23.90 270.05 105.34 15 15 27 5641.16 20.73 277.58 95.75 114.81 16 52 48 5241.2 23.90 270.05 110.00 14 11 2 753.15 12.24 310.18 90.95 122.17 14 23 35 155.1 16.40 303.55 110.00 17 19 14 5457.74 29.71 252.01 99.61 107.75 18 50 11 4657.7 31.84 243.45
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 5741.5 SCR 471.0 SC3 159.9
RRT -.4442 RRF -.4317 RTF .9463
SCB 5760.8 R23 .0101 R13 -.9463
SCI 5745.4 SC2 421.7 THA 177.90
                                                                                                                                ST 2708.7 SR 468.2 SS 652.9
CRT -.9149 CRS .8413 CST -.9876
    TOE-2.0969 TRA 2.8026 TC3-3.5473 BAU 1.1428
    ROE .4009 RRA -.0314 RC3 -.0323 FAU .01800
                                                                                                                                LSA 2817.2 MSA 214.3 SSA 16.6
    FDE -.6000 FRA 1.1576 FC3 -.6466 BSP 18315
                                                                                                                                EL1 2742.6 EL2 186.6 ALF 170.97
    BOE 2.1349 BRA 2.8028 BC3 3.5474 FSP -535
                                                                             FLIGHT TIME 196.00
                                                                                                                                            ARRIVAL DATE JAN 19 1968
LAUNCH DATE JUL 7 1967
                                                                            DISTANCE 566.286
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.586 GAL 6.94 AZL 92.71 MCA 280.42 SMA 121.71 ECC .27574 INC 2.7109 V1 29.291
RP 107.99 LAP 2.67 LOP 204.65 VP 36.978 GAP 14.67 AZP 90.49 TAL 160.96 TAP 81.39 RCA 88.15 APO 155.27 V2 35.091
RC 177.448 GL -13.51 GP 6.26 ZAL 52.86 ZAP 172.48 ETS 53.83 ZAE 128.27 ETE 175.12 ZAC 56.15 ETC 10.64 CLP-175.82
  PLANETOCENTRIC CONIC
    C3 26.457 VHL 5.144 DLA -31.44 RAL 226.20 RAD 6568.1 VEL 12.159 PTH 2.18 VHP 9.217 DPA -2.95 RAP 210.14 ECC 1.4354
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75,73 11 35 7 1321.72 19.78 356.10 100.16 114.95 11 57 8 721.7 22.97 348.64
                                                                                                   114.95 11 57 8
114.94 16 58 19
        75.73 11 35 7
                                                       19.79
                                                                     280.61
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       104.27
                    15 20 12
                                    5887.25
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114.94 16 58 19
122.76 14 27 39
107.53 19 11 7
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                   11 35 7
                                   1321.72
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                    15 20 12
                                   5887.25
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                   14 14 14
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                                                                     313.00
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       110.00
                    17 40 15 5452.07
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                                                                     251.61
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                                                                                                                                                                    243.03
                                                                       HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SCT 5754.1 SCR 471.3 SC3 154.3
RRT -.4550 RRF -.4415 RTF .9481
SCB 5773.4 R23 .0087 R13 -.9481
                                                                                                                                ST 2615.8 SR 467.3 SS 626.3
CRT -.8989 CRS .8200 CST -.9876
LSA 2720.6 MSA 226.4 SSA 16.0
    TOE-2.0710 TRA 3.1376 TC3-3.2249 BAU 1.1407
    ROE .4192 RRA -.0449 RC3 -.0244 FAU .01638
    FOE - .5634 FRA 1.2094 FC3 - .5361 BSP 18413
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FLIGHT TIME 190.00

SG1 5758.1 SG2 419.4 THA 177.85

BOE 2.1130 BRA 3.1380 BC3 3.2250 FSP -518

ARRIVAL DATE JAN 21 1968

LAUNCH DATE JUL 7 1967

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RL 152.10 LAL -.00 LOL 284.22 VL 25.544 GAL 7.70 A7L 92.62 MCA 283.64 SMA 121.47 ECC .28361 INC 2.61  vl 29.291 RP 108.03 LAP 2.54 LOP 207.87 VP 36.937 GAP 15.23 A7P 90.62 TAL 159.50 TAP 83.14 RCA 87.02 APO 155.92 V2 35.078 RC 179.325 GL -12.35 GP 6.09 7AL 50.46 7AP 173.07 ETS 59.05 7AE 128.19 ETE 175.23 7AC 53.92 ETC 10.76 CLP-176.70
                                                                        CISTANCE 571.476
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 29.202 VHL 5.404 DLA -30.94 RAL 229.07 RAD 6568.2 VEL 12.271 PTH 2.21 VMP 9.544 DPA -3.99 RAP 212.22 ECC 1.4806
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.97 11 55 17 1318.81 18.78 355.39 104.49 115.05 12 17 15 718.8 22.00 347.99
                                                                                              115.04 15 33 45
115.05 12 17 15
                                                                                                                               51.5
                                                                                                                                            22.01
                                                                                                                                                          298.74
                                                                306.14
                                                                               104.49
                   15 22 54
                                  651.31
                                                  18.80
      103.03
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                                 1318.81
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123.26 14 31 11
107.38 19 31 16
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                 15 22 54
                                                                              104.49
                                 651.31
                                                 18.80
                                                                306.14
      103.03
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                                                                                98.53
                   14 16 52
                                   858.16
                                                    8.37
                                                                315.86
      110.00
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                  18 0 28
                                5448.00
                                                                251.32
                                                                             109.22
                                                  29.91
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2523.3 SR 464.6 SS 602.3

CRT -.8810 CRS .7971 CST -.9876

LSA 2624.6 MSA 238.4 SSA 15.3

EL1 2556.5 EL2 217.0 ALF 170.72
                                                                  SCT 5761.4 SGR 470.3 SG3 149.0
RRT -.4663 RRF -.4519 RTF .9501
SGB 5780.5 R23 .0074 R13 -.9501
SGI 5765.6 SG2 415.7 THA 177.81
    TOE-2.0407 TRA 3.4915 TC3-2.9086 BAU 1.1355
    RDE .4377 RRA -.0598 RC3 -.0176 FAU .01481
   FOE -.5287 FRA 1.2622 FC3 -.4391 BSP 18486
    BOE 2.0871 BRA 3.4920 BC3 2.9086 FSP -501
                                                                                                                                   ARRIVAL DATE JAN 23 1968
                                                                        FLIGHT TIME 200,00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 576.568
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.502 GAL 8.52 ATL 92.52 MCA 286.85 SMA 121.23 ECC .29219 INC 2.5225 V1 29.291
RP 108.07 LAP 2.41 LOP 211.08 VP 36.895 GAP 15.84 AZP 90.73 TAL 158.06 TAP 84.90 RCA 85.81 APO 156.65 V2 35.065
RC 181.185 GL -11.25 GP 5.94 ZAL 48.20 ZAP 173.58 ETS 65.28 ZAE 128.09 ETE 175.33 ZAC 51.70 ETC 10.94 CLP-177.58
  PLANETOCENTRIC CONIC
    C3 32.392 WHL 5.691 DLA -30.42 RAL 231.76 RAD 6568.3 VEL 12.400 PTM
                                                                                                 2.24 VHP 9.897 DPA -5.00 RAP 214.32 ECC 1.5331
   LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.40 12 16 25 1311.95 17.74 354.36 108.73 115.12 12 38 17 711.9 20.98 347.02
                                                                                                                                                          302.70
                                                                                                           15 35 6
                                                                                                                              110.2
                                                                                                                                             20.99
                                   710.24
                                                   17.75
                                                                 310.04
                                                                               108.74
                                                                                               115.11
      101.60
                   15 23 16
                                                                                               115.12 12 38 17
115.11 15 35 6
                                                                                                                                                          547.02
                                                                                                                              711.9
                                                                                                                                             20.98
                                                   17.74
                                                                               108.73
                                 1311.95
                                                                 354.36
       78.40
                   12 16 25
                                                                                                                                                          302.70
                                                                                                                              110.2
                                                                                                                                            20.99
                                710.24
912.46
                                                   17.75
                                                                 310.04
                                                                               108.74
      101.60
                   15 23 16
                                                                                              123.66 14 34 15
107.30 19 50 34
                                                                                                                                                          312.39
                                                                                                                             312.5
                                                                                                                                            10.71
                                                    6.33
                                                                 318.74
                                                                               102.18
      110.00
                   14 19 2
                                 5445.77
                                                                251.16
                                                                               113.90
                                                                                                                            4845.8
                                                                                                                                            32.02
                                                                                                                                                          242.56
                   18 19 49
                                                   29.95
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 5763.7 SGR 468.1 SG3 144.0
RRT -.4778 RRF -.4626 RTF .9521
                                                                                                                        ST 2432.5 SR 460.1 SS 581.1
CRT -.8607 CRS .7722 CST -.9878
    TOE-2.0048 TRA 3.8687 TC3-2.5988 BAU 1.1254
    ROE .4562 RRA -.0765 RC3 -.0122 FAU .01323
FOE -.4954 FRA 1.3175 FC3 -.3556 BSP 18476
BOE 2.0561 BRA 3.8694 BC3 2.5988 FSP -483
                                                                                                                        LSA 2530.5 MSA 250.1 SSA 14.7
                                                                    SG8 5782.7 R23 .0061 R13 -.9521
                                                                    SG1 5768.1 SG2 410.9 THA 177.77
                                                                                                                        EL1 2464.8 EL2 231.2 ALF 170.67
                                                                                                                                  ARRIVAL DATE JAN 25 1968
                                                                        FLIGHT TIME 202.00
LAUNCH DATE JUL 7 1967
                                                                       CISTANCE 581.545
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 25,460 GAL 9.39 AZL 92.42 MCA 290.06 SMA 121.00 ECC .30157 INC 2.4238 V1 29.291 RP 108.11 LAP 2.28 LOP 214.29 VP 36.854 GAP 16.49 AZP 90.83 TAL 156.64 TAP 86.70 RCA 84.51 APO 157.48 V2 35.052 RC 183.028 GL -10.18 GP 5.80 ZAL 46.06 ZAP 174.00 ETS 72.61 ZAE 127.98 ETE 175.42 ZAC 49.49 ETC 11.17 CLP-178.47
   PLANETOCENTRIC CONIC
    C3 36.102 VML 6.008 DLA -29.87 RAL 234.29 RAD 6568.4 VEL 12.549 PTH 2.27 VMP 10.278 DPA -5.98 RAP 216.42 ECC 1.5941
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.16 13 0 41
115.15 15 33 44
115.73 15 24 59
                                                                             112.87
                                                                                                                             699.3
                   12 39 Z 1299.35
                                                   16.65
                                                                352.89
        80.07
                                                                                                                              177.6
                                                                                                                                            19.92
                                                                                                                                                          307.25
                                                                               112.88
        99.93
                   15 20 47
                                 777.56
                                                   16.67
                                                                314.53
                                                                                                                              207.1
                                                                                                                                                          309.07
                                   807.10
                                                   15.77
                                                                 316.28
                                                                              112.43
       100.00
                   15 11 32
                                                                                              114.58 15 43 23
123.95 14 36 56
107.29 20 8 56
                                                                                                                                                          305.19
                                                                                                                              145.0
                                                                                                                                            20.73
                                                                               113.31
                  15 30 58
                                   745.04
                                                 17.56
                                                                312.54
                                                                                                                              367.4
                                                                                                                                             8.68
                                                                                                                                                          315.35
       110.00
                   14 20 46
                                   967.45
                                                    4.25
                                                                 321.63
                                                                               105.74
                   18 38 11 5445.50
                                                                                                                            4845.5
                                                                                                                                            32.03
                                                                                                                                                          242.54
                                                   29.96
                                                                251.14
                                                                               118.46
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5762.1 SGR 464.8 SG3 139.1
RRT - 4899 RRF - .4743 RTF .9544
SGB 5780.8 R23 .0050 R13 -.9544
SGI 5766.6 SG2 404.9 TMA 177.73
                                                                                                                        ST 2348.6 SR 454.1 SS 563.7
    TDE-1.9703 TRA 4.2640 TC3-2.3069 BAU 1.1134
                                                                                                                        CRT -.8392 CRS .7476 CST -.9883
LSA 2443.7 MSA 260.4 SSA 14.1
    RDE .4751 RRA -.0944 RC3 -.0077 FAU .01176
    FOE -.4661 FRA 1.3732 FC3 -.2819 BSP 18543
BDE 2.0267 BRA 4.2651 BC3 2.3070 FSP -468
                                                                                                                        EL1 2379.6 EL2 243.7 ALF 170.69
                                                                                                                                    ARRIVAL DATE JAN 27 1968
                                                                         FLIGHT TIME 204.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 586.389
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 284.22 VL 25.420 GAL 10.32 AZL 92.32 MCA 293.27 SMA 120.77 ECC .31184 INC 2.3211 V1 29.291 RP 108.16 LAP 2.13 LOP 217.50 VP 36.813 GAP 17.18 AZP 90.92 TAL 155.26 TAP 88.52 RCA 83.11 APO 158.43 V2 35.039 RC 184.853 GL -9.17 GP 5.68 ZAL 44.05 ZAP 174.29 ETS 81.00 ZAE 127.86 ETE 175.51 ZAC 47.30 ETC 11.45 CLP-179.37
   PLANETOCENTRIC CONIC
    C3 40.420 VHL 6.358 OLA -29.31 RAL 236.64 RAD 6568.6 VEL 12.720 PTH 2.31 VHP 10.693 OPA
                                                                                                                                -6.93 RAP 218.53 ECC 1.6652
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             115.16 13 25 34
115.15 15 28 35
                                1277.08
                                                                             116.92
                                                                                                                                                          343.47
                                                                                                                              677.1
        82.11 13 4 17
                                                   15.54
                                                                 350.70
                                                                                                                                                           312.64
                                                                                                                              256.9
                                                                                                                                             18.82
        97.89
                    15 14 18
                                  856.93
                                                    15.56
                                                                 319.87
                                                                               116.93
                                                                                               117.99 14 57 1
112.45 16 31 4
                                                                                                                              363.8
45.4
                                                                                                                                                           318.53
                                                                                                                                             14.59
                  14 40 57
                                    963.84
                                                    10.93
                                                                 325.40
                                                                               114.55
       100.00
                                                                                                                                        23.14
                                                                                                                                                           298.76
                    16 20 19
                                    645.40
                                                   20.27
                                                                 306.39
                                                                               119.11
       100.00
                                                                                               124.12 14 39 15
107.35 20 26 20
                                                                                                                                                           318.29
                    14 22 13 1022.86
18 55 33 5447.18
                                                                                                                               422.9
                                                    2.14
                                                                 324.53
                                                                               109.23
       110.00
                                                                                                                                           32.00
                                                                                                                             4847.2
                                                                                                                                                          242.67
       110.00
                                                   29.92
                                                                 251.26
                                                                               122.96
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2269.9 SR 446.4 SS 549.4
CRT -.8160 CRS .7225 CST -.9889
                                                                     SCT 5755.6 SCR 460.4 SC3 134.5
RRT -.5023 RRF -.4865 RTF .9570
SCB 5774.0 R23 .0040 R13 -.9570
    TDE-1.9341 TRA 4.6836 TC3-2.0297 BAU 1.0968
    RDE .4938 RRA -.1139 RC3 -.0044 FAU .01031
                                                                                                                       LSA 2362.4 MSA 269.4 SSA 13.5
    FOE -.4392 FRA 1.4312 FC3 -.2209 BSP 18596
                                                                                                                       EL1 2299.3 EL2 254.8 ALF 170.77
                                                                     SG1 5760.3 SG2 397.8 THA 177.69
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FLIGHT TIME 198.00

BOE 1.9961 BRA 4.6849 BC3 2.0297 FSP -453

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ARRIVAL CATE JAN 29 1968
                                                                        FLIGHT TIME 206,00
LAUNCH DATE JUL 7 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 591.076
    RL 152.10 LAL -.00 LOL 284.22 VL 25.380 GAL 11.32 ATL 92.21 MCA 296.47 SMA 120.55 ECC .32312 INC 2.2134 V1 29.291
RP 108.20 LAP 1.98 LOP 220.70 VP 36.773 GAP 17.94 ATP 90.99 TAL 153.92 TAP 90.39 RCA 81.59 APO 159.50 V2 35.025
RC 186.660 GL -8.20 GP 5.56 TAL 42.17 TAP 174.43 ETS 90.22 TAE 127.71 ETE 175.59 TAC 45.12 ETC 11.80 CLP 179.71
   PLANETOCENTRIC CONIC
    C3 45.458 VHL 6.742 DLA -28.73 RAL 238.82 RAD 6568.7 VEL 12.916 PTH 2.35 VHP 11.144 DPA -7.85 RAP 220.64 ECC 1.7481
    LNCH AZHTH LNCH TIME L'I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.13 13 56 7
115.12 15 16 27
118.94 14 47 10
111.59 16 59 21
124.18 14 41 16
107.49 20 42 45
                                                                                                                                         17.68
                                                                            120.86
                                                  14.41
                                                                346.98
                                                                                                                              634.1
                                                                                                                                                          339.80
                 13 35 33 1234.07
                                                                               120.86
                                                                                                                              359.1
                                                                                                                                            17.69
                                                                                                                                                          319.66
        95.09
                   15 0 28
                                   959.12
                                                   14.42
                                                                 326.84
                  14 29 31 1058.86
                                                     7.85
                                                                 330.77
                                                                              117.45
                                                                                                                              458.9
                                                                                                                                            11.65
                                                                                                                                                          324.04
       100.00
                    16 49 11
                                   609.56
                                                   21.19
                                                                 304.12
                                                                               123.93
                                                                                                                               9.6
                                                                                                                                            23.93
                                                                                                                                                          296.40
       100.00
                                                                                                                              478.5
                                                                                                                                             4.50
                                                                                                                                                          321.22
                    14 23 17
                                 1078.47
                                                      .01
      110.00
                                                                                                                                            31.95
                                                                                                                            4850.8
                                                                                                                                                          242.93
       110.00
                   19 11 54
                                  5450.76
                                                   29.85
                                                                251.52
                                                                               127.33
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5744.0 SGR 454.7 SG3 130.1
RRT -.5147 RRF -.4989 RTF .9597
SGB 5761.9 R23 .0031 R13 -.9597
                                                                                                                       ST 2196.9 SR 437.3 SS 538.2
CRT -.7914 CRS .6973 CST -.9897
LSA 2287.0 MSA 276.9 SSA 13.0
    TDE-1.8964 TRA 5.1294 TC3-1.7682 BAU 1.0746
    ROE .5125 RRA -.1347 RC3 -.0021 FAU .00889
FOE -.4145 FRA 1.4924 FC3 -.1693 BSP 18633
BOE 1.9644 BRA 5.1311 BC3 1.7682 FSP -439
                                                                     SG1 5748.8 SG2 389.5 THA 177.66
                                                                                                                        EL1 2224.4 EL2 264.0 ALF 170.92
                                                                                                                                    ARRIVAL DATE JAN 31 1968
LAUNCH DATE JUL 7 1967
                                                                         FLIGHT TIME 208,00
                                                                        DISTANCE 595.577
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 25.341 CAL 12.39 ATL 92.10 MCA 299.67 SMA 120.33 ECC .33554 INC 2.0996 V1 29.291
RP 108.24 LAP 1.82 LOP 223.91 VP 36.734 CAP 18.77 AZP 91.04 TAL 152.62 TAP 92.30 RCA 79.95 APO 160.70 V2 35.012
RC 188.449 GL -7.27 GP 5.45 ZAL 40.42 ZAP 174.41 ETS 99.88 ZAE 127.53 ETE 175.66 ZAC 42.97 ETC 12.21 CLP 178.77
                        -7.27 GP
   PLANETOCENTRIC CONIC
    C3 51.351 VHL 7.166 DLA -28.15 RAL 240.85 RAD 6568.9 YEL 13.142 PTH
                                                                                                  2.40 WHP 11.638 DPA
                                                                                                                               -8.73 RAP 222.74 ECC 1.8451
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                   10.77
                                                                                              116.35
        90.00
                   13 59 19
                                 1213.87
                                                                 343.71
                                                                               123.46
                                                                                                          14 19 33
                                                                                                                              613.9
                  14 52 49
                                                   15.80
                                                                 333.43
                                                                               125.87
                                                                                               113.81 15 10 9
                                                                                                                              440.3
                                 1040.27
        90.00
                                                                                               119.49 14 40 58
111.08 18 50 48
124.13 14 42 57
107.68 20 58 12
                                                     5.13
                   14 21 58
                                  1140.61
                                                                 335.32
                                                                               120.44
                                                                                                                              540.6
                                                                                                                                              9.02
      100.00
                                                                                                                             5276.8
                  17 12 52
                                                                                                                                             24.37
                                5876.80
                                                   21.70
                                                                 280.69
                                                                               128.45
                                                                                                                                                          272.92
      100.00
                   14 24 3
                                 1134.07
                                                    -2.11
                                                                 330.33
                                                                              115.95
                                                                                                                              534.1
                                                                                                                                             2.38
                                                                                                                                                          324.13
      110.00
                  19 27 16 5456.11
                                                                                                                                           31.87
      110.00
                                                                 251.89
                                                                               131.58
                                                                                                                            4856.1
                                                                                                                                                          243.33
                                                   29.74
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 5729.9 SCR 447.7 SC3 126.0
RRT -.5272 RRF -.5115 RTF .9625
SCB 5747.4 R23 .0021 R13 -.9625
                                                                                                                        ST 2130.1 SR 426.6 SS 529.8 CRT -.7653 CRS .6715 CST -.9906
    TOE-1.8571 TRA 5.6089 TC3-1.5216 BAU 1.0446
    RDE .5308 RRA -.1571 RC3 -.0008 FAU .00742
FOE -.3913 FRA 1.5580 FC3 -.1251 BSP 18556
                                                                                                                       LSA 2218.1 MSA 282.7 SSA 12.4
                                                                     SG1 5734.8 SG2 380.1 THA 177.63
                                                                                                                        EL1 2155.4 EL2 271.3 ALF 171.15
    BOE 1.9314 BRA 5.6111 BC3 1.5216 FSP -423
                                                                                                                                   ARRIVAL DATE FEB 2 1968
                                                                        FLIGHT TIME 210.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 599.854
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 284.22 VL 25.302 GAL 13.56 AZL 91.98 MCA 302.87 SMA 120.12 ECC .34924 INC 1.9785 V1 29.291
RP 108.28 LAP 1.66 LOP 227.10 VP 36.695 GAP 19.67 AZP 91.07 TAL 151.39 TAP 94.26 RCA 78.17 APO 162.07 VZ 34.999
RC 190.221 GL -6.39 GP 5.35 ZAL 38.81 ZAP 174.21 ETS 109.40 ZAE 127.32 ETE 175.74 ZAC 40.84 ETC 12.69 CLP 177.81
   PLANETOCENTRIC CONIC
    C3 58.268 VHL 7.635 DLA -27.57 RAL 242.70 RAD 6569.1 VEL 13.402 PTH 2.45 VHP 12.180 DPA -9.57 RAP 224.83 ECC 1.9589
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              117.56 13 58 51
112.54 15 46 42
                                                                                                                            743.9
                                                                                                                                           10.39
                                                                                                                                                        344.36
                                                                351.15
                                                                              125.71
                 13 36 27 1343.94
                                                    6.75
        90.00
                                                                                                                             372.5
                                                                               130.89
                                                                                                                                            20.52
                                                                                                                                                          321.82
                   15 30 30
                                  972.55
                                                   17.61
                                                                 329.29
        90.00
                                                                                              119.79 14 36 27
110.75 19 11 11
123.95 14 44 18
107.94 21 12 42
                                                                                                                             615.6
                                                                                                                                            6.55
                                                                                                                                                          332.88
                                                                339.45
                                                                               123.44
                                                    2.60
       100.00
                  14 16 11
                                 1215.55
                                                                               132.75
                                                                                                                            5264.2
                                                                                                                                            24.63
                                                                                                                                                          272.07
                                                                279.88
       100.00
                   17 33 27
                                 5864.21
                                                   22.01
                                                                                                                             589.5
                                                                                                                                              .26
                                                                                                                                                          327.02
                                                                333.23
       110.00
                   14 24 29 1189.48
19 41 39 5463.04
                                                                               119.19
                  14 24 29
                                                   -4.23
                                                                                                                                            31.76
                                                                                                                            4863.0
                                                                                                                                                          243.84
                                                                               135.70
       110.00
                                                   29.60
                                                                252.30
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RRT -.5398 RRF -.5245 RTF ..9656
SGB 5727.3 R23 ..0013 R13 -.9656
SGI 5715.3 SG2 369.7 TMA 177.61
                                                                                                                        ST 2070.8 SR 414.7 SS 524.8
CRT -.7394 CRS .6479 CST -.9916
    TOE-1.8220 TRA 6.1166 TC3-1.2958 BAU 1.0094
    ROE .5491 RRA -.1805 RC3 -.0001 FAU .00601
FOE -.3718 FRA 1.6267 FC3 -.0893 BSP 18581
                                                                                                                        LSA 2157.2 MSA 286.1 SSA 11.9
                                                                                                                        EL1 2093.7 EL2 276.2 ALF 171.43
    BOE 1.9029 BRA 6.1192 BC3 1.2958 FSP -410
                                                                                                                                   ARRIVAL DATE FEB 4 1968
                                                                        FLIGHT TIME 212.00
LAUNCH DATE JUL 7 1967
                                                                        DISTANCE 603.864
   HELLOCENTRIC CONTC
    RL 152.10 LAL -.00 LOL 284.22 VL 25.265 GAL 14.82 ATL 91.85 MCA 306.07 SMA 119.91 ECC .36442 INC 1.8483 V1 29.291 RP 108.32 LAP 1.49 LOP 230.30 VP 36.656 GAP 20.67 AZP 91.09 TAL 150.23 TAP 96.30 RCA 76.21 APO 163.61 V2 34.986 RC 191.975 GL -5.55 GP 5.26 ZAL 37.33 ZAP 173.85 ETS 118.30 ZAE 127.08 ETE 175.81 ZAC 38.76 ETC 13.24 CLP 176.81
   PLANETOCENTRIC CONIC
    C3 66.423 VHL 8.150 DLA -26.99 RAL 244.40 RAD 6569.3 VEL 13.703 PTH 2.50 VHP 12.779 DPA -10.38 RAP 226.90 ECC 2.0931
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 24 13 1438.38 3.75 356.46 128.35 118.09 13 48 12 838.4 7.48 349.77
                                                                               135.29
                                                                                               111.90
                                                                                                          16 11 57
                                                                                                                              341.5
                                                                                                                                            21.23
                                                                                                                                                          319.82
                                                                 327.36
        90.00
                  15 56 15
                                  941.48
                                                   18.41
                                                                                               111.90 16 11 57
119.89 14 32 48
110.57 19 29 25
123.67 14 45 20
108.25 21 26 14
                                                                                                                              686.1
                                                                                                                                             4.19
                                                                 343.32
                                                                               126.39
       100,00
                   14 11 22
                                 1286.08
                                                     .21
                                                                                                                             5257.1
                                                                                                                                            24.78
                                                                                                                                                          271.59
                                                   22.18
                                                                               136.65
       100.00
                  17 51 48
                                  5857.05
                                                                279.42
                                                                                                                                            -1.84
                                                                               122.35
       110.00
                    14 24 36
                                 1244.54
                                                   -6.31
                                                                 336.13
                                                                                                                             4871.4
                                                                                                                                            31.65
                                                                                                                                                          244.45
       110.00
                    19 55 3 5471.37
                                                   29.42
                                                                 252.97
                                                                               139.66
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    $GT 5686.6 $GR 430.2 $G3 118.2
RRT -.5523 RRF -.5376 RTF .9687
                                                                                                                       ST 2017.3 SR 401.6 SS 522.8
CRT -.7132 CRS .6254 CST -.9928
LSA 2102.8 MSA 287.2 SSA 11.4
    TOE-1.7887 TRA 6.6610 TC3-1.0870 BAU .9653
    ROE .5671 RRA -.2051 RC3 -.0001 FAU .00457
                                                                    SGB 5702.8 R23 .0006 R13 -.9687
SGI 5691.6 SG2 358.3 THA 177.60
    FOE -.3546 FRA 1.7006 FC3 -.0595 8SP 18585
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BOE 1.8765 BRA 6.6642 BC3 1.0870 FSP -397

EL1 2038.0 EL2 278.6 ALF 171.76

ARRIVAL CATE FEB 6 1968

LAUNCH DATE JUL 7 1967 HELIOCENTRIC CONIC DISTANCE 607.548 RL 152.10 LAL -.00 LOL 284.22 VL 25.229 GAL 16.21 AZL 91.71 MCA 309.26 SMA 119.72 ECC .38128 INC 1.7072 V1 29.291 RP 108.36 LAP 1.32 LOP 233.49 VP 36.619 GAP 21.78 AZP 91.08 TAL 149.15 TAP 98.42 RCA 74.07 APO 165.36 V2 34.973 RC 193.712 GL -4.75 GP 5.18 ZAL 35.99 ZAP 173.32 ETS 126.27 ZAE 126.79 ETE 175.88 ZAC 36.72 ETC 13.88 CLP 175.77 PLANETOCENTRIC CONIC C3 76.083 VHL 8.723 OLA -26.41 RAL 245.93 RAD 6569.5 VEL 14.051 PTH 2.56 VHP 13.444 DPA -11.14 RAP 228.94 ECC 2.2521 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.30 13 40 39 111.51 16 32 47 119.83 14 29 38 110.48 19 45 52 123.27 14 46 1 108.59 21 38 51 354.40 131.05 90.00 13 15 18 1520.53 1.11 1.05 920.5 4.88 139.38 323.3 21.63 318.64 16 17 24 923.31 18.87 326.23 340.49 100.00 14 7 4 1353.34 -2.07 347.01 129.29 753.3 1.92 100.00 18 8 19 5853.77 22.26 279.21 140.77 5253.8 24.85 271.37 14 24 22 110.00 1299.05 -8.36 339.02 125.41 699.0 -3.92 332.74 20 7 30 29.22 110.00 5480.83 253.63 143.51 4880.8 31.47 245.15 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1969.2 SR 387.4 SS 523.7 CRT -.6874 CRS .6044 CST -.9939 LSA 2054.3 MSA 286.2 SSA 10.9 SGT 5658.5 SGR 419.6 SG3 114.6 RRT -.5646 RRF -.5507 RTF .9719 TOE-1.7579 TRA 7.2467 TC3 -.8949 BAU .9102 ROE .5647 RRA - .2306 RC3 - .0006 FAU .00307 FDE -.3397 FRA 1.7807 FC3 -.0350 BSP 18565 BDE 1.8526 BRA 7.2504 BC3 .8949 FSP -385 SG8 5674.0 R23 -.0001 R13 -.9719 SG1 5663.5 SG2 346.1 THA 177.59 ELI 1987.5 ELZ 278.8 ALF 172.14 ARRIVAL DATE FER 8 1968 LAUNCH DATE JUL 7 1967 FLIGHT TIME 216,00 HELIOCENTRIC CONIC DISTANCE 610.434 RL 152.10 LAL -.00 LOL 284.22 VL 25.194 GAL 17.72 ATL 91.55 MCA 312.46 SMA 119.53 ECC .4000A INC 1.5527 VI 29.291
RP 108.40 LAP 1.15 LOP 236.68 VP 36.583 GAP 23.00 ATP 91.05 TAL 148.18 TAP 100.64 RCA 71.71 APO 167.35 V2 34.960
RC 195.431 GL -3.98 GP 5.10 ZAL 34.80 ZAP 172.64 ETB 133.20 ZAE 126.45 ETE 175.95 ZAC 34.74 ETC 14.61 CLP 174.68 PLANETOCENTRIC CONIC C3 87.595 VHL 9.359 DLA -25.84 RAL 247.30 RAD 6569.7 VEL 14.455 PTH 2.63 VMP 14.184 DPA -11.87 RAP 230.96 ECC 2.4416 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 133.72 90.00 13 7 59 1595.66 90.00 16 35 37 912.31 118.29 13 34 35 111.27 16 50 50 -1.32 5.24 13 34 35 995.7 2.47 358.61 21.87 325.53 143.21 312.3 317.92 19.14 119.62 14 26 40 110.47 20 0 49 122.76 14 46 19 108.96 21 50 32 14 3 2 1417.91 18 23 16 5853.34 350.56 -.27 100,00 -4.25 132.10 617.9 344.03 100.00 22.27 5253.3 24.86 271.34 279.18 144.49 335.57 110.00 14 23 46 1352.85 -10.35 341.91 128.36 752.8 -5.96 20 19 1 110.00 24.99 254.35 147.15 4891.2 31.30 245.90 5491.16 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5627.7 SGR 407.8 SG3 111.2 RRT -.5765 RRF -.5634 RTF .9751 SG8 5642.4 R23 -.0008 R13 -.9751 SG1 5632.6 SG2 332.9 THA 177.60 ST 1925.5 SR 372.1 SS 527.7 CRT -.6615 CRS .5841 CST -.9949 LSA 2011.0 MSA 283.1 SSA 10.4 TOE-1.7276 TRA 7.8831 TC3 -.7173 BAU .8400 ROE .6017 RRA -.2570 RC3 -.0017 FAU .00144 FOE -.3262 FRA 1.6694 FC3 -.0142 BSP 18436 BOE 1.6294 BRA 7.8872 BC3 .7173 FSP -371 EL1 1941.5 EL2 276.7 ALF 172.56 FLIGHT TIME 218.00 ARRIVAL DATE FEB 10 1968 LAUNCH DATE JUL 7 1967 DISTANCE 613.626 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 284.22 VL 25.161 GAL 19.40 AZL 91.38 HCA 315.65 SMA 119.35 ECC .42110 INC 1.3817 V1 29.291
RP 108.44 LAP .97 LOP 239.87 VP 36.548 GAP 24.38 AZP 90.99 TAL 147.33 TAP 102.98 RCA 69.09 APO 169.60 V2 34.947 5.03 ZAL 33.75 ZAP 171.82 ETS 139.13 ZAE 126.04 ETE 176.02 ZAC 32.83 ETC 15.44 CLP 173.54 RC 197.134 GL -3.26 GP PLANETOCENTRIC CONIC C3 101.399 VHL 10.070 OLA -25.27 RAL 248.49 RAD 6570.0 VEL 14.924 PTH 2.69 VHP 15.014 CPA -12.55 RAP 232.92 ECC 2.6688 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.11 13 29 16 111.13 17 6 46 119.28 14 23 43 110.51 20 14 23 122.15 14 46 11 109.35 22 1 17 136.31 1065.9 90.00 13 1 30 1665.90 90.00 16 51 40 905.88 2.53 -3.58 9.16 .21 22.01 305.9 317.50 19.30 325.13 145.80 13 59 3 1480.10 134.80 880.1 347.44 -2.38 100.00 -6.33 354.01 5254.9 24.82 271.45 100.00 18 36 48 5854.95 22.23 279.29 147.99 131.22 14 22 45 1405.75 20 29 35 5502.07 805.7 -7.95 338.37 110.00 -12.29 344.79 4902.1 110.00 28.75 255.10 150.61 31.11 246.70 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5591.1 SGR 394.7 SG3 108.0 RRT -.5880 RRF -.5760 RTF .9783 SGB 5605.0 R23 -.0014 R13 -.9783 ST 1886.9 SR 356.0 SS 535.0 CRT -.6381 CRS .5671 CST -.9959 LSA 1973.9 MSA 277.6 SSA 9.9 TOE-1.7080 TRA 8.5669 TC3 -.5581 BAU .7565 RDE .6186 RRA -.2836 RC3 -.0028 FAU-.00027 FDE -.3166 FRA 1.9654 FC3 .0023 BSP 18415 ELI 1900.8 ELZ 272.1 ALF 172.99 BOE 1.8166 BRA 8.5716 BC3 .5581 FSP -360 SG1 5596.0 SG2 319.0 THA 177.62 ARRIVAL DATE FER 12 1968 LAUNCH DATE JUL 7 1967 FLIGHT TIME 220,00 HELIOCENTRIC CONIC DISTANCE 615.804 RL 152.10 LAL -.00 LOL 284.22 VL 25.129 GAL 21.26 A7L 91.19 MCA 318.83 SMA 119.18 ECC .44469 INC 1.1903 V1 29.291
RP 108.48 LAP .78 LOP 243.06 VP 36.514 GAP 25.93 A7P 90.90 TAL 146.64 TAP 105.47 RCA 66.18 APO 172.17 V2 34.935
RC 198.819 GL -2.57 GP 4.96 ZAL 32.86 ZAP 170.86 ETS 144.17 ZAE 125.55 ETE 176.10 ZAC 31.00 ETC 16.36 CLP 172.31 PLANETOCENTRIC CONIC C3 118.074 VHL 10.866 OLA -24.70 RAL 249.52 RAD 6570.2 VEL 15.473 PTH 2.76 VHP 15.950 OPA -13.18 RAP 234.83 ECC 2.9432 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMTH INJ TIME 117.78 13 24 18 111.05 17 20 56 118.82 14 20 38 110.59 20 26 40 121.45 14 45 34 109.74 22 11 6 138.79 1132.3 90.00 12 55 25 1732.29 -1.94 -5.70 12.89 6.23 150.14 22.08 90.00 17 5 54 13 54 58 302.5 317.27 902.45 19.39 324.91 1540.06 137.38 357.35 100.00 -8.31 940.1 -4.40 350.75 18 49 2 5857.95 14 21 16 1457.56 20 39 13 5513.22 5258.0 24.76 100.00 22.16 151.26 271.65 279.48 -9.88 110.00 -14.15 347.65 133.93 857.6 341.15 4913.2 30.91 247.50 110.00 28.49 255.87 153.84 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1851.6 SR 339.2 SS 545.7 CRT -.6162 CRS .5521 CST -.9967 LSA 1941.2 MSA 270.1 SSA 9.3 EL1 1863.6 EL2 265.5 ALF 173.42 SCT 5550.5 SCR 380.4 SC3 104.9 RRT -.5989 RRF -.5881 RTF .9814 SCB 5563.5 R23 -.0019 R13 -.9814 TDE-1.6959 TRA 9.3106 TC3 -.4137 BAU .6531 ROE .6332 RRA -.3103 RC3 -.0042 FAU-.00217 FDE -.3097 FRA 2.0721 FC3 .0159 BSP 18376 BDE 1.8109 BRA 9.3158 BC3 .4137 FSP -350

FLIGHT TIME 214.00

SG1 5555.2 SG2 304.3 THA 177.64

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ARRIVAL CATE SEP 16 1967
                                                                              FLIGHT TIME 70.00
LAUNCH DATE JUL 8 1967
                                                                             DISTANCE 179.454.
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 25.797 GAL -7.83 AZL 93.33 MCA 77.86 SMA 122.93 ECC .27174 INC 3.3271 V1 29.291 RP 108.66 LAP -3.25 LOP 3.01 VP 36.921 GAP -14.32 AZP 90.70 TAL 202.27 TAP 280.12 RCA 89.52 APO 156.33 V2 34.875 RC 48.458 GL -16.08 GP -6.62 ZAL 130.70 ZAP 8.66 ETS 48.77 ZAE 150.59 ETE 9.08 ZAC 89.75 ETC 13.71 CLP -5.64
   PLANETOCENTRIC CONIC
    C3 28.660 VHL 5.353 DLA -4.43 RAL 148.68 RAD 6568.2 VEL 12.249 PTH 2.20 VHP 9.050 DPA -1.93 RAP 176.21 ECC 1.4717
    ENCH AZETH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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75.04 15 5 16
113.14 4 39 32
                                                                                    14.89
                                                                                                                                    1564.7
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                      2 48 27 2164.72
                                                      -18.33
                                                                      38.35
        90.00
                                                                                                                                       4464.1
                                                                                       17.44
                                                                      225.24
                    13 40 32 5064.08
                                                      24.32
        90.00
                                                                                                                                      1309.0
                                                                                                                                                       -16.17
                                                                                       14.36
                    4 7 43 1909.03
15 3 57 4815.00
                                                     -19.47
                                                                       19.04
       100.00
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116.42 5 39 42
70.62 17 33 24
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                                                                                       17.07
                                                                      205.09
                                                      25.52
       100.00
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                      5 11 12 1710.30
16 16 58 4586.49
       110.00
                                                      -22.53
                                                                        2.45
                                                                                       12.87
                                                                                                                                       3986.5
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                   16 16 58
                                                       28.72
                                                                      186.59
                                                                                       15.92
       110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    DIFFERENTIAL CORRECTIONS

TDE .2873 TRA -.3709 TC3 .4350 BAU .1674

RDE -.3679 RRA -.1396 RC3 .0409 FAU .03407
                                                                         SGT 685.6 SGR 425.6 SG3 99.3
RRT -.1413 RRF .1717 RTF -.6498
SGB 805.9 R23 -.0262 R13 .6542
SGI 669.7 SGZ 416.6 THA 172.11
                                                                                                                                 ST 330.2 SR 396.4 55 208.8

CRT -.8841 CRS -.9851 CST .8228

LSA 539.4 MSA 134.9 SSA 24.2
    FOE - .2411 FRA - .1862 FC3-1.0291 BSP 1831
                                                                                                                                 ELI 501.2 EL2 122.0 ALF 129.13
    BDE .4668 BRA .3963 BC3 .4369 FSP
                                                           -241
                                                                                                                                               ARRIVAL DATE SEP 18 1967
                                                                               FLIGHT TIME 72.00
LAUNCH DATE JUL 8 1967
                                                                               DISTANCE 186.242
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 26.009 GAL -7.79 AZL 93.23 MCA 81.03 SMA 124.19 ECC .26065 INC 3.2333 V1 29.291
RP 108.63 LAP -3.19 LOP 6.19 VP 37.079 GAP -13.32 AZP 90.50 TAL 203.55 TAP 284.58 RCA 91.82 APO 156.57 V2 34.886
RC 49.776 GL -16.22 GP -7.04 ZAL 132.30 ZAP 10.68 ETS 40.19 ZAE 149.68 ETE 7.49 ZAC 89.13 ETC 13.76 CLP -8.06
  PLANETOCENTRIC CONIC
    C3 27.088 WHL 5.203 DLA -3.97 RAL 147.04 RAD 8588.1 VEL 12.184 PTH 2.19 WHP 8.494 DPA -2.63 RAP 176.72 ECC 1.4455
LNCH AFRITH LICH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 38 25 2165.01 -18.34 38.37 12.39 111.96 3 14 30 1565.0 -15.20 31.10
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                    13 37 29
                                     5055.30
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                                                                      223.29
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        90.00
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73.01 16 20 28
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                      3 57 54 1900.60
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       100.00
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116.47 5 30 22
70 17 29 11
                                     4786.94
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       100.00
                    15 0 41
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                       5 1 53 1708.29
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                                                                                       10.41
       110.00
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                                                                                                                                       3960.0
                                                                                       13.05
                                                       28.11
                                                                       184.77
       110.00
                    16 13 11
                                     4560.02
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 703.8 SCR 426.9 SC3 112.1
RRT -.1623 RRF .1989 RTF -.6640
SCB 823.2 R23 -.0326 R13 .6696
                                                                                                                                  ST 332.0 SR 400.0 SS 213.8

CRT -.8916 CRS -.9777 CST .8036

LSA 544.7 MSA 136.4 SSA 25.4
    TOE .2826 TRA -.3463 TCS .4828 BAU .1751
    ROE -.3608 RRA -.1361 RC3 .0318 FAU .03722
    FOE -.2521 FRA -.2426 FC3-1.1904 BSP 1910
BOE .4583 BRA .3728 BC3 .4838 FSP -278
                                                                           SG1 709.1 SG2 418.1 THA 171.35
                                                                                                                                   EL1 506.1 EL2 118.8 ALF 129.07
                                                                                                                                              ARRIVAL DATE SEP 20 1967
                                                                               FLIGHT TIME 74.00
LAUNCH DATE JUL 8 1967
                                                                              DISTANCE 193.027
    RL 152.10 LAL -.00 LOL 285.17 VL 26.201 GAL -7.76 AZL 93.14 MCA 84.21 SMA 125.37 ECC .25080 INC 3.1411 VI 29.291 RP 108.59 LAP -3.13 LOP 9.38 VP 37.224 GAP -12.36 AZP 90.32 TAL 204.83 TAP 289.04 RCA 93.92 APO 156.81 V2 34.897 RC 51.201 GL -16.28 GP -7.51 TAL 133.87 ZAP 12.95 ETS 34.26 ZAE 149.00 ETE 5.92 ZAC 88.61 ETC 13.82 CLP -10.58
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 25.736 VHL 5.073 DLA -3.46 RAL 145.48 RAD 6568.0 VEL 12.129 PTH 2.17 VHP 7.969 DPA -3.33 RAP 177.13 ECC 1.4236
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                                    1568.3 -15.29
4427.0 20.77
                                                                       38.57
                                                                                      10.09
                       2 28 23 2166.33
13 35 2 5026.98
                                                     -18.42
                                                                                                       73.39 14 58 49
113.09 4 19 58
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                                                                      221.39
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         90.00
                     13 35 2
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                     3 48 6 1911.14
14 58 0 4759.40
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        100.00
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        100.00
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68.83 17 25 31
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24.36
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                     4 52 39 1709.11
16 9 57 4534.20
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                                                                        2.30
                                                      -22.49
       110.00
                                                                                                                                     3934.2
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                                                                       143.02
                                                                                        10.36
                                                      27.49
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 332.0 SR 403.1 SS 21A.7

CRT -.8980 CRS -.9675 CST .7816

LSA 548.2 MSA 13A.8 SSA 26.5

EL1 509.2 EL2 115.6 ALF 128.87
                                                                          SGT 720.1 SGR 430.1 SG3 126.6
RRT -.1863 RRF .2303 RTF -.6764
SGB 838.8 R23 -.0404 R13 .6834
    TOE .2771 TRA -.3226 TC3 .5283 BAU .1819
RDE -.3545 RRA -.1378 RC3 .0196 FAU .04080
FDE -.2633 FRA -.3049 FC3-1.3726 BSP 1979
BDE .4500 BRA .3508 BC3 .5286 FSP -320
                                                                           SG1 726.8 SGZ 418.7 THA 170.46
                                                                                                                                               ARRIVAL DATE SEP 22 1967
                                                                               FI I CHT TIME 76.00
LAUNCH DATE JUL 8 1967
                                                                               DISTANCE 199.804
    PL 152.10 LAL -.00 LOL 285.17 VL 26.372 GAL -7.75 AZL 93.05 MCA 87.40 SMA 126.44 ECC .24208 INC 3.0498 V1 29.291 RP 108,56 LAP -3.05 LOP 12.56 VP 37.356 GAP -11.45 AZP 90.14 TAL 206.09 TAP 293.49 RCA 95.83 APO 157.05 V2 34.908 RC 52.722 GL -16.27 GP -8.03 ZAL 135.37 ZAP 15.42 ETS 30.02 ZAE 148.56 ETE 4.32 ZAC 88.20 ETC 13.88 CLP -13.20
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 24.620 VHL 4.962 DLA -2.92 RAL 144.01 RAD 6564.0 VEL 12.083 PTH 2.16 VMP 7.474 DPA -4.03 RAP 177.42 ECC 1.4052
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 18 28 2174.25 -18.57 34.94 8.00 111.77 2 54 42 1574.2 -15.45 31.65
                                                                                          9.55
                                                                                                          72.62
                                                                                                                    14 56 52
                     13 33 12 4999.20
3 36 27 1916.24
14 55 55 4732.44
                                                                       219.54
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        100.00
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        100.00
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68.01 17 22 26
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                     4 43 34 1712.37
16 7 17 4509.07
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                                                       -22.59
                                                                         2.58
        110.00
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                                                                                                                                                       23.64
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                                                                                          7.92
                                                        26.46
                                                                       161.33
        110.00
                                                                           MIO-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 329.8 SR 405.6 S5 223.4

CRT -.9032 CRS -.9546 CST .7562

LSA 549.8 MSA 142.2 SSA 27.4

EL1 510.5 EL2 312.5 ALF 128.51
                                                                           SGT 733.5 SGR 433.5 SG3 143.1
RRT - .2134 RRF .2663 RTF - .6866
     TOE .2706 TRA -.3003 TC3 .5699 BAU .1876
RDE -.3487 RRA -.1388 RC3 .0040 FAU .04487
                                                                           SG8 852.0 R23 -.0499 R13 .6956
SG1 742.1 SG2 418.6 THA 169.40
     FOE -.2746 FRA -.3757 FC3-1.5779 BSP 2041
BOE -4414 BRA .3309 BC3 .5699 FSP -368
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BOE .4414 BRA .3309 BC3 .5699 FSP

ARRIVAL CATE SEP 24 1967

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FLIGHT TIME 78.00
LAUNCH DATE JUL 8 1967
                                                                             DISTANCE 206.571
   HELIOCENTRIC CONIC
    PL 152.10 LAL -.00 LOL 285.17 VL 26.525 GAL -7.74 AZL 92.96 MCA 90.58 SMA 127.43 ECC .23440 INC 2.9590 V1 29.291 MP 108.52 LAP -2.96 LOP 15.75 VP 37.475 GAP -10.57 AZP 89.97 TAL 207.32 TAP 297.90 RCA 97.56 APO 157.29 V2 34.920 RC 54.330 GL -16.19 GP -8.62 ZAL 136.80 ZAP 18.07 ETS 26.87 ZAE 148.38 ETE 2.66 ZAC 87.93 ETC 13.94 CLP -15.95
   PLANETOCENTRIC CONIC
    C3 23.680 VML 4.866 DLA -2.35 RAL 142.64 RAD 6568.0 VEL 12.044 PTH 2.15 VMP 7.008 DPA -4.74 RAP 177.57 ECC 1.3897
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 8 47 2182.36 -18.77 39.45 6.12 111.60 2 45 9 1582.4 -15.68 32.15
                                                                                                    71.89 14 54 51
112.81 4 1 6
70.67 16 12 51
116.23 5 3 24
67.25 17 19 55
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                                                                     217.75
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                    13 31 59 4972.00
                                                      22.15
                   3 29 2 1923.50
14 54 25 4706.10
4 34 46 1717.72
16 5 11 4484.64
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                                                                     197.79
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                                                     -22.75
                                                                      2.91
                                                                                       4.23
                                                                                                                                    3884.6
                                                                                                                                                     22.91
                                                                                                                                                                    172.13
                                                                     179.72
                                                                                       5.67
       110.00
                                                       26.23
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 743.6 SGR 437.5 SG3 161.6
RRT -.2434 RRF .3074 RTF -.6939
SG8 862.7 R23 -.0619 R13 .7057
SG1 754.7 SG2 418.1 THA 168.17
                                                                                                                                ST 523.7 SR 407.4 SS 227.9

CRT -.9067 CRS -.9367 CST .7267

LSA 549.2 MSA 146.8 SSA 28.2
    TOE .2631 TRA -.2802 TC3 .6061 BAU .1919
     RDE -.3434 RRA -.1411 RC3 -.0154 FAU .04948
    FDE -.2855 FRA -.4556 FC3-1.8089 BSP 2089
BDE .4326 BRA .3137 BC3 .6063 FSP -423
                                                                                                                                EL1 509.9 EL2 109.7 ALF 128.01
                                                                                                                                            ARRIVAL DATE SEP 26 1967
                                                                             FLIGHT TIME #0.00
LAUNCH DATE JUL 8 1967
                                                                             DISTANCE 213.323
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.662 GAL -7.73 AZL 92.87 MCA 93.76 SMA 128.32 ECC .22767 INC 2.8680 V1 29.291 RP 108.48 LAP -2.86 LOP 18.94 VP 37.363 GAP -9.74 AZP 89.81 TAL 208.50 TAP 302.26 RCA 99.11 APO 157.53 V2 34.932 RC 56.016 GL -16.04 GP -9.26 ZAL 136.15 ZAP 20.92 ETS 24.45 ZAE 148.45 ETE .89 ZAC 87.81 ETC 13.99 CLP -18.84
   PLANETOCENTRIC CONIC
    C3 22.885 WHL 4.784 OLA -1.76 RAL 141.39 RAD 6567.9 VEL 12.011 PTH 2.14 WHP 6.571 DPA -5.45 RAP 177.57 ECC 1.5766 LNCH AFRITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 59 25 2192.30 -19.02 40.08 4.44 111.38 2 35 58 1592.3 -15.95 32.75
                                                                                                                  14 53 48
                                                                                                                                                      18.81
                                                                                                                                     4345.4
                                    4945.36
                                                       21.56
                                                                     216.01
                                                                                        5.33
                                                                                                       71.20
         90.00
                    13 31 22
                                                                                                     112.61 3 52 9
69.97 16 11 32
                                                                                                                                                                      13.22
                                                                                                                                    1332.5
                                                                                                                                                     -16.86
                      3 19 57 1932.55
                                                      -20.09
                                                                      20.51
                                                                                       3.98
       100.00
                                                                                                                                                     19.73
                                                                                                                                     4080.4
                    14 55 32
                                                      22.67
                                                                     196.10
                                                                                       4.92
       100,00
                                    4660.37
                                                                                                     116.05 4 55 4
66.52 17 18 0
                                                                                                                                                                     356.16
                                  1724.80
                                                                                                                                    1124.6
                                                                                                                                                    -19.27
                      4 26 19
                                                      -22.96
                                                                       3.35
                                                                                       2.58
       110.00
                                                                                                                                     3460.9
                                                                                                                                                     22.19
       110.00
                     16 3 39
                                  4460.88
                                                      25.59
                                                                     178.16
                                                                                        3.64
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 321.4 SR 408.7 SS 233.7
CRT -.9101 CRS -.9206 CST .6961
LSA 548.6 MSA 152.5 SSA 28.7
                                                                         SGT 751.8 SGR 442.7 SG5 183.0
RRT -.2799 RRF .3552 RTF -.7008
SGB 872.4 R23 -.0743 R13 .7163
     TOE .2563 TRA -.2006 TC3 .6367 BAU .1958
     MOE -.3385 RRA -.1450 RC3 -.0395 FAU .05477
    FOE -.2977 FRA -.5474 FC3-2.0721 BSP 2167
BOE .4245 BRA .2982 BC3 .6399 FSP -490
                                                                                                                                EL1 508.9 ELZ 107.0 ALF 127.54
                                                                         SG1 766.4 SG2 416.9 THA 166.61
                                                                                                                                           ARRIVAL CATE SEP 28 1967
                                                                             FLIGHT TIME $2.00
LAUNCH DATE JUL 8 1967
                                                                            DISTANCE 220.058
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.QO LOL 285.17 VL 26.782 GAL -7.75 AZL 92.78 MCA 96.95 SMA 129.12 ECC .22178 INC 2.7763 VI 29.291
RP 108.45 LAP -2.76 LOP 22.13 VP 37.680 GAP -8.94 AZP 89.66 TAL 209.61 TAP 306.56 RCA 100.49 APO 157.76 VZ 34.945
RC 57.772 GL -15.83 GP -9.99 ZAL 139.41 ZAP 23.95 ETS 22.53 ZAE 148.79 ETE 358.96 ZAC 87.86 ETC 14.03 CLP -21.89
    PLANETOCENTRIC CONIC
     C3 22.205 VHL 4.712 DLA -1.16 RAL 140.26 RAD 6567.9 VEL 11.983 PTH 2.14 VHP 6.163 CPA -6.16 RAP 177.40 ECC 1.3654
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 1603.7
                    1 50 27 2203.70
13 31 22 4919.34
3 11 15 1943.04
14 53 14 4655.23
                                                                                 2.95
                                                                                                                                                  -16.26
                                                                                                  111.13
                                                                                                                  2 27 11
                                                                                                                                                                      33.44
                                                     -19.30
                                                                     40.79
         90.00
                                                                                                                                                                    206.80
                                                                     214.32
                                                                                        3,53
                                                                                                       70.55
                                                                                                                 14 53 21
                                                                                                                                    4319.3
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                                                      20.99
         90.00
                                                     -20.37
                                                                      21.17
                                                                                        2.50
                                                                                                     112.36
                                                                                                                 3 43 38
                                                                                                                                    1343.0
                                                                                                                                                   -17.16
                                                                                                                                                                     13.85
        100.00
                                                                                                       69.31 16 10 50
                                                                                                                                     4055.2
                                                                                                                                                    19.06
                                                                                                                                                                    186.97
                                                     22.07
                                                                     194.47
                                                                                        3.11
        100.00
                    4 18 16 1733.26
16 2 43 4437.76
                                                                                                     115.82 4 47 9
65.84 17 16 41
                                                                                                                                                                    356.66
                                                                                                                                    1133.3
                                                                                                                                                    -19.55
                                                     -23.22
                                                                        3.88
                                                                                        1.13
        110.00
                                                                                                                                    3837.A
                                                                                                                                                    21.48
                                                                                                                                                                     169.24
                                                                     176.67
                                                                                        1.81
        110.00
                                                     24.96
                                                                                                                                ORBIT CETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 313.6 SR 409.3 SS 23A.4

CRT -.9197 CRS -.8998 CST .6572

LSA 544.4 MSA 159.7 SSA 29.0
     TOE .2467 TRA -.2457 TC3 .6605 BAU .1971
ROE -.3336 RRA -.1503 RC3 -.0678 FAU .06066
                                                                         SGT 752.8 SGR 449.4 SG3 206.8
                                                                         RRT - .5156 RRF .4075 RTF - .7015
SGB 876.8 R23 - .0925 R13 .7225
SG1 771.8 SG2 416.0 THA 164.82
     FOE -.3077 FRA -.6483 FC3-2.3652 BSP 2188
BOE .4148 BRA .2880 BC3 .6640 FSP -562
                                                                                                                                EL1 504.7 EL2 105.6 ALF 126.75
                                                                                                                                            ARRIVAL DATE SEP 30 1967
                                                                              FLIGHT TIME 84.00
LAUNCH DATE JUL 8 1967
                                                                             DISTANCE 226.775
   HELIOGENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.888 GAL -7.73 AZL 92.68 MCA 100.14 SMA 129.84 ECC .21665 INC 2.6832 VI 29.291
RP 108.41 LAP -2.64 LOP 25.32 VP 37.767 GAP -8.18 AZP 89.53 TAL 210.64 TAP 310.78 RCA 101.71 APO 157.97 V2 34.957
RC 59.590 GL -15.56 GP -10.79 ZAL 140.58 ZAP 27.19 ETS 20.95 ZAE 149.38 ETE 356.78 ZAC 88.10 ETC 14.05 CLP -25.11
    PLANETOCENTRIC CONIC
                                                                                                         2.13 WHP 5.783 DPA -6.88 RAP 177.04 ECC 1.3558
     C3 21.618 VHL 4.650 DLA
                                           -.54 RAL 139.26 RAD 6567.9 VEL 11.958 PTH
     LNEM AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   1.66
                                                                                                                                                   -16.60
                      1 41 55 2216.26
13 31 56 4893.80
                                                                                                     110.65
                                                                                                                   2 18 51
                                                                                                                                   1616.3
                                                                                                                                                                      34.21
                                                      -19.61
                                                                       41.59
         90.00
                                                                                                                                                                     205.22
                                                                                                                  14 53 30
                                                                                                                                     4293.A
                                                                                                                                                     17.49
                                                      20.41
                                                                      212.66
                                                                                        1.93
                                                                                                       69.93
                      13 31 56
         90.00
                     3 3 0 1954.71
14 53 32 4630.61
4 10 40 1742.89
16 2 21 4415.19
                                                                                                                   3 35 35
                                                                                                                                     1354.7
                                                                                                                                                     -17.49
                                                                                                                                                                      14.56
                                                                       21.91
                                                                                       1.22
                                                                                                      112.09
                                                      -20.67
        100.00
                                                                                                                 16 10 42
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                                                      21.47
                                                                      192.89
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        100.00
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                                                                                                                   4 39 43
                                                                                                                                     1142.9
                                                                                                                                                    -19.86
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                                                     -23.50
                                                                        4.48
                                                                                    359.67
        110.00
                                                                                                       65.20 17 15 56
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                                                                                                                                                                     167.88
                                                      24.32
                                                                     175.22
                                                                                        .15
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 304.1 SR 409.1 SS 243.1

(RT -.9067 (RS -.8765 CST .6114

LSA 538.3 MSA 168.2 SSA 29.2

EL1 498.7 EL2 105.2 ALF 125.82
                                                                         SCT 747.8 SCR 458.8 SC3 235.5
RRT -.3522 RRF .4648 RTF -.6973
SCB 877.3 R23 -.1154 R13 .7265
     TOE .2361 TRA - .2344 TC3
                                          .6726 BAU .1966
     FOE -.3164 FRA -.1574 RC3 -.1010 FRA 1010
FOE -.3164 FRA -.7605 FC3-2.6936 BSP 2196
                                                                          SG1 772.7 SG2 415.6 THA 162.64
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ARRIVAL DATE OCT 2 1967

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LAUNCH DATE AUL # 1967
                                                                              DISTANCE 233.470
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.981 GAL -7.72 ATL 92.59 MCA 103.33 SMA 130.48 ECC .21221 INC 2.5882 V1 29.291
RP 108.37 LAP -2.52 LOP 28.52 VP 37.845 GAP -7.45 AZP 89.40 TAL 211.58 TAP 314.91 RCA 102.79 APO 158.17 V2 .34.970
RC 61.464 GL -15.24 GP -11.68 ZAL 141.64 ZAP 30.64 ETS 19.62 ZAE 150.23 ETE 354.28 ZAC 88.54 ETC 14.05 CLP -28.53
   PLANETOCENTRIC CONIC
                                              .08 RAL 138.40 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 5.431 OPA -7.60 RAP 176.46 ECC 1.3473
    C3 21.104 VHL 4.594 DLA
    LNCH AZMTH LNCH TIME L-1 TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 33 50 2229.82 -19.94 42.45 .55 110.54 2 11 0 1629.8 -16.96 35.04
                                                                                 .55
                  13 33 6 4868.67
                                                                     211.07
                                                                                         .51
                                                                                                       69.34 14 54 15
                                                                                                                                      4268.7
                                                                                                                                                     16.82
                                                                                                                                                                      203.67
                                                      19.81
                                                                                         .12
       100.00
                      2 55 13 1967.31
                                                      -20.99
                                                                       22.71
                                                                                                      111.79
                                                                                                                   3 28 0
                                                                                                                                      1367.3
                                                                                                                                                     -17.85
                                                                                                                                                                      15.32
                                                                                                       68.09 16 11 11
115.29 4 32 46
64.60 17 15 47
                 14 54 24 4606.41
                                                                                         .07
                                                      20.86
                                                                      191.35
                                                                                                                                      4006.4
                                                                                                                                                      17.71
                                                                                                                                                                      183.98
       100.00
                                                                      5.15 358.79
173.82 358.74
       110.00
                   4 3 33 1753.42
16 2 34 4393.07
                                                                                                                                     1153.4
                                                                                                                                                     -20.20
                                                                                                                                                                     357.86
                                                      -23.81
                                                                                                     115.29
                                                                                                                                    3793.1
                                                                                                                                                     20.06
                                                                                                                                                                     166.55
                                     4393.07
                                                       23.68
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 736.2 SGR 471.7 SG3 263.3
RRT -.3674 RRF .5262 RTF -.6872
                                                                                                                                ST 293.1 SR 408.1 SS 247.7

CRT -.9001 CRS -.8512 CST .5572

LSA 530.4 MSA 177.8 SSA 29.2
    TOE .2244 TRA - .2273 TC3 .6739 BAU .1943
    ROE -.3233 RRA -.1662 RC3 -.1414 FM FOE -.3230 FRA -.8833 FC3-3.0607 BSP Z185
    RDE -.3233 RRA -.1662 RC3 -.1414 FAU .07461
                                                                         568 874,4 825 -.1433 R13 .7289
    BOE .3936 BRA .2616 BC3 .6686 FSP
                                                                          SG1 768.8 SGE 416.4 THA 159.95
                                                                                                                                 EL1 491.1 ELZ 106.1 ALF 124.74
                                                                              FLIGHT TIME 88.00
                                                                                                                                             ARRIVAL DATE OCT 4 1967
LAUNCH DATE JUL 8 1967
                                                                              DISTANCE 240.143
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 27.061 GAL -7.72 A7L 92.49 MCA 106.53 SMA 131.04 ECC .20836 INC 2.4906 V1 29.291
RP 108.33 LAP -2.39 LOP 31.71 VP 37.914 GAP -6.74 A7P 89.29 TAL 212.42 TAP 318.95 RCA 103.73 APO 158.34 V2 34.983
RC 63.388 GL -14.86 GP -12.66 ZAL 142.61 ZAP 34.31 ETS 18.44 ZAE 151.33 ETE 351.32 ZAC 89.21 ETC 13.99 CLP -32.16
  PLANETOCENTRIC CONIC
                                              .72 RAL 137.66 RAD 6567.8 VEL 11.917 PTH
                                                                                                         2.12 WHP 5.107 OPA -8.32 RAP 175.66 ECC 1.3398
    C3 20.645 WHL 4.544 OLA
   C3 20.645 WHL 4.544 OLA .72 RAL 137.66 RAD 6567.8 VEL 11.917 PTH 2.12 WHP 5.107 OPA -8.32 RAP 175.66 ECC 1.3398 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 66 13 2244.15 -20.28 45.36 359.61 110.20 2 3 37 1644.2 -17.34 35.92 90.00 13 34 51 4843.81 19.21 209.50 359.27 68.78 14 55 35 4243.8 16.15 202.16 100.00 2 47 53 1980.70 -21.32 23.56 339.19 111.46 3 20 54 1380.7 -18.22 16.14 100.00 14 55 52 4582.50 20.25 189.84 358.83 67.53 16 12 14 3982.5 17.03 182.53 110.00 3 56 53 1764.70 -24.13 5.86 357.88 114.98 4 26 18 -1164.7 -20.56 356.53 110.00 18 3 20 4371.27 23.04 172.46 357.88 64.02 17 16 12 3771.3 19.35 165.25
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 719.3 SGR 489.9 SG3 296.6
RRT - .4207 RRF .5909 RTF -.6711
                                                                                                                                ST 282.5 SR 406.5 SS 253.4

CRT -.8902 CRS -.8257 CST .4976

LSA 522.4 MSA 188.6 SSA 29.1
    TOE .2133 TRA -.2236 TC3 .6652 BAU .1908
    ROE -.3179 RRA -.1772 RC3 -.1883 FAU .08282
    FOE -.3292 FRA-1.0185 FC3-3.4729 BSP 2186
BOE .3829 BRA .2854 BC3 .6913 FSP -844
                                                                         SG8 870.2 R23 -.1752 R13 .7317
                                                                                                                              ELI 483.1 ELZ 108.3 ALF 123.66
                                                                         SG1 762.6 SG2 419.1 THA 156.55
                                                                                                                                            ARRIVAL DATE OCT 6 1967
                                                                             FLIGHT TIME 90.00
LAUNCH DATE JUL 8 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 246.792
    RL 152.10 LAL -.00 LOL 285.17 VL 27.129 GAL -7.71 AZL 92.39 MCA 109.73-SMA 131.52 ECC .20504 INC 2.3897 VI 29.291
RP 108.29 LAP -2.25 LOP 34.91 VP 37.975 GAP +6.07 AZP 89.19 TAL 213.15 TAP 322.88 RCA 104.55 APO 158.48 V2 34.996
RC 65.357 GL -14.43 GP -13.75 ZAL 143.48 ZAP 38.23 ETS 17.35 ZAE 152.64 ETE 347.77 ZAC 90.11 ETC 13.88 CLP -36.03
   PLANETOCENTRIC CONIC
    C3 20.229 VHL 4.498 DLA 1.36 RAL 137.06 RAD 6567.8 VEL 11.900 PTH 2.11 VHP 4.812 DPA -9.04 RAP 174.61 ECC 1.3329
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 358.84
                   1 19 3 2259.15
13 37 11 4619.07
2 41 1 1994.74
                                                                                                   109.84 1 56 42
68.25 14 57 30
                                                      -20.62
                                                                                                                                  1659.2 -17.73
                                                                                                                                                                      36.84
                                                                      44.32
        90.00
                                                       18.59
                                                                     207.95
                                                                                     358.20
                                                                                                                                     4219.1
                                                                                                                                                     15.47
                                                                                                                                                                     200.66
                                                                                                    111.11 3 14 16
66.99 16 13 53
114.65 4 20 19
63.46 17 17 11
       100.00
                                                     -21.67
                                                                      24.46
                                                                                     358.42
                                                                                                                                     1394.7
                                                                                                                                                    -18.61
                                                                                                                                                                      17.00
                    14 57 54
                                                                     188.35
                                                                                     357.75
                                                                                                                                     3958.7
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                                                                                                                                                                     181.10
       100.00
                                   4558.71
                                                      19.62
                                                                                     357.14
                                                                                                                                     1176.6
                                                                                                                                                    -20.94
                                                                                                                                                                     359.25
       110.00
                      3 50 43 1776.60
                                                      -24.47
                                                                        6.62
                                                                                     356.39
                                                                                                                                     3749.6
                                                                                                                                                     18.64
                                                                                                                                                                     163.98
       110.00
                   16 4 42 4349.62
                                                      22.36
                                                                      171.11
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 691.8 SGR 513.5 SG3 332.3
RRT -.4390 RRF .6541 RTF -.6402
                                                                                                                                 ST 269.2 SR 403.7 SS 257.0

CRT -.8716 CRS -.7964 CST .4175

LSA 510.3 MSA 200.5 SSA 29.0
    TOE .1995 TRA -.2275 TC3 .6385 BAU .1847
    ROE -.3117 RRA -.1899 RC3 -.2422 FAU .09159
    FOE -.3280 FRA-1,1593 FC3-3,9199 BSP 2136
BOE .3701 BRA .2963 BC3 .6830 FSP -957
                                                                          SG8 861.5 R23 -. 2142 R13 .7324
                                                                                                                                 EL1 471.9 EL2 112.9 ALF 122.23
    BOE .3701 BRA .2963 BC3 .6630 FSP
                                                                          SG1 748.7 SGZ 426.3 THA 152.28
                                                                                                                                             ARRIVAL DATE OCT 8 1967
                                                                              FLIGHT TIME 92.00
LAUNCH DATE JUL 8 1967
                                                                              01STANCE 253.415
   HELIOCENTRIC CONIC
    RU 152.10 LAL -.00 LOL 285.17 VL 27.187 GAL -7.69 A7L 92.28 MCA 112.93 SMA 131.93 ECC .20218 INC 2.2845 VI 29.291
RP 108.25 LAP -2.10 LOP 38.11 VP 38.029 GAP -5.42 A7P 89.11 TAL 213.77 TAP 326.70 RCA 105.26 APO 158.60 V2 35.009
RC 67.365 GL -13.95 GP -14.94 ZAL 144.26 ZAP 42.38 ETS 16.30 ZAE 154.13 ETE 343.41 ZAC 91.26 ETC 13.70 CLP -40.14
   PLANETOCENTRIC CONIC
                                           2.01 RAL 136.58 RAD 6567.8 VEL 11.884 PTH
                                                                                                          2.11 WHP 4.546 OPA -9.75 RAP 173.30 ECC 1.3265
    C3 19.842 WHL 4.454 DLA
    LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 12 16 2274.79
13 40 8 4794.23
                                                      -20.96
                                                                       45.33
                                                                                    358.22
                                                                                                   109.46
                                                                                                                    1 50 13
                                                                                                                                     1674.8
                                                                                                                                                    -18.14
        90.00
                                                                                                       67.73 15 0 2
                                                                                     357.29
                                                                                                                                      4194.2
                                                                                                                                                      14.78
                                                                                                                                                                     199.16
                                                      17.96
                                                                      206.40
        90.00
                                                                                     357.81
                                                                                                                                      1409.4
                                                                       25.40
                                                                                                     110.73
                                                                                                                    3 8 4
                                                                                                                                                     -19.01
                                                                                                                                                                       17.91
                      2 34 35 2009.40
                                                      -22.03
       100.00
                 15 0 33 4534.65
                                                                      186.87
                                                                                                        66.46 16 16 7
                                                                                                                                      3934.9
                                                                                                                                                     15.64
                                                                                                                                                                     179.67
                                                      18.98
                                                                                     356.83
       100.00
                                                                                                     114.29 4 14 48
62.93 17 18 46
                      3 44 58 1789.07
                                                                                                                                      1189.1
                                                                                                                                                     -21.33
                                                                                                                                                                         .01
                                                      -24.83
                                                                        7.41
                                                                                     356.55
       110.00
                                                                                                                                                     17.92
                   16 6 36
                                                                                                                                   3727.9
                                                                                                                                                                     162.72
                                                       21.72
                                                                      169.78
                                                                                     355.45
                                    4327.94
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                        SGT 697.1 SGR 544.5 SG3 370.6
RRT -.4384 RRF .7145 RTF -.5916
SGB 853.4 RZ3 -.2535 R13 .7363
SG1 731.4 SG2 439.7 THA 146.67
                                                                                                                              ST 255.8 SR 399.9 SS 260.1

CRT -.8434 CRS -.7655 CST .3195

LSA 496.6 MSA 213.4 SSA 28.9

EL1 459.4 EL2 119.7 ALF 120.65
    TOE .1853 TRA -.2376 TCS .5956 BAU .1774
    ROE -.3047 RRA -.2045 RC3 -.3045 FAU .10097
FOE -.3213 FRA-1.3052 FC3-4.4057 BSP 2074
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FLIGHT TIME 86.00

BDE .3566 BRA .3134 BC3 .6649 FSP -1079

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LAUNCH DATE JUL 8 1967
                                                                         FLIGHT TIME 94.00
                                                                                                                                    ARRIVAL DATE OCT 10 1967
    HELIOCENTRIC CONIC
                                                                         DISTANCE 260,013
     RL 152.10 LAL -.00 LOL 285.17 VL 27.235 GAL -7.67 AZL 92.17 HCA 116.13 SMA 132.27 ECC .19973 INC 2.1741 V1 29.291 RP 108.20 LAP -1.95 LOP 41.31 VP 38.075 GAP -4.80 AZP 89.04 TAL 214.28 TAP 330.41 RCA 105.85 APO 158.69 V2 35.023 RC 69.409 GL -13.42 GP -16.23 ZAL 144.94 ZAP 46.78 ETS 15.25 ZAE 155.72 ETE 337.98 ZAC 92.66 ETC 13.42 CLP -44.50
    PLANETOCENTRIC CONIC
      C3 19.475 VHL 4.413 DLA
                                         2.68 RAL 136.23 RAD 6567.8 VEL 11.868 PTH 2.11 VMP 4.310 OPA -10.47 RAP 171.71 ECC 1.3205
      LNCH AZMTH LNCH TIME L-I TIME
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             109.06 1 44 8
67.23 15 3 12
110.34 3 2 17
65.96 16 18 59
113.91 4 9 41
         90.00
                      1 5 57 2291.10
                                                   -21.35
                                                                  46.39
                                                                               357.76
                                                                                                                            1691.1
                                                                                                                                          -18.55
         90.00
                    13 43 43
                                   4769.06
                                                    17.30
                                                                 204.84
                                                                                356.53
                                                                                                                             4169.1
                                                                                                                                           14.07
                                                                                                                                                          197.66
                    2 28 32 2024.70
15 3 49 4510.69
3 39 39 1802.14
16 9 11 4306.02
        100.00
                                                   -22.39
                                                                  26.39
                                                                                357.35
                                                                                                                             1424.7
                                                                                                                                           -19.42
                                                                                                                                                           18.86
        100.00
                                                   18.32
                                                                 185.36
                                                                                356.06
                                                                                                                             3910.7
                                                                                                                                           14.92
                                                                                                                                                          178.24
                                                   -25.19
                                                                   8.26
                                                                                356.11
                                                                                                                             1202.1
                                                                                                                                           -21.74
                                                                                                                                                             .80
        110.00
                    16 9 11
                                   4306.02
                                                                                                62.41 17 20 57
                                                    21.03
                                                                 168.45
                                                                               354.67
                                                                                                                             3706.0
                                                                                                                                            17.17
                                                                                                                                                          161.45
    DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
     TOE .1719 TRA -.2532 TC3 .5367 BAU .1707
RDE -.2970 RRA -.2212 RC3 -.3763 FAU .11091
                                                                     SGT 618.5 SGR 584.5 SG3 411.4
RRT -.4115 RRF .7705 RTF -.5191
                                                                                                                        ST 244.4 SR 395.2 SS 263.7
CRT -.8040 CRS -.7348 CST .2068
LSA 482.7 MSA 227.3 SSA 28.6
     FDE -.3105 FRA-1.4553 FC3-4.9304 BSP 2045
BDE .3431 BRA .3362 BC3 .6555 FSP -1216
                                                                    SGB 850.9 R23 - .2790 R13 .7516
                                                                     SG1 715.7 SG2 460.3 THA 138.92
                                                                                                                        EL1 446.5 EL2 128.7 ALF 119.08
 LAUNCH DATE JUL 8 1967
                                                                         FLIGHT TIME 96.00
                                                                                                                                    ARRIVAL CATE OCT 12 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 266.584
    RL 152.10 LAL -.00 LOL 285.17 VL 27.275 GAL -7.65 AZL 92.06 HCA 119.33 SMA 132.56 ECC .19764 INC 2.0574 VI 29.291
RP 108.16 LAP -1.79 LOP 44.52 VP 38.115 GAP -4.21 AZP 88.99 TAL 214.67 TAP 334.00 RCA 106.36 APO 158.75 V2 35.036
RC 71.485 GL -12.82 GP -17.63 ZAL 145.53 ZAP 51.42 ETS 14.14 ZAE 157.31 ETE 331.19 ZAC 94.32 ETC 13.02 CLP -49.13
   PLANETOCENTRIC CONIC
    C3 19:119 VHL 4.373 DLA
                                        3.37 RAL 136.01 RAD 6567.8 VEL 11.853 PTH
                                                                                                  2.10 WHP 4.103 DPA -11.18 RAP 169.87 ECC 1.3146
     LNCH AZHTH LNCH TIME L-I TIME
                                                INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
                     0 59 56 2306.18
13 47 56 4743.27
        90.00
                                                                              357.43
                                                   -21.72
                                                                 47.50
                                                                                              108.62
                                                                                                            1 38 24
                                                                                                                           1708.2
                                                                                                                                          -18.98
                                                                                                                                                           39.90
         90.00
                   13 47 56
                                                    16.61
                                                                 203.26
                                                                                355.90
                                                                                                66.73 15 7 2
                                                                                                                             4143.3
                                                                                                                                           15.32
                                                                                                                                                          196.13
                  2 22 51 2040.73
15 7 44 4485.94
3 34 42 1815.84
16 12 23 4283.60
       100.00
                                                   -22.77
                                                                  27.44
                                                                                357.04
                                                                                               109.91
                                                                                                           2 56 51
                                                                                                                                                           19.86
                                                                                                                            1440.7
                                                                                                                                           -19.85
       100.00
                                                   17.62
                                                                 183.87
                                                                                                65.46 16 22 30
                                                                               355.43
                                                                                                                            3885.9
                                                                                                                                           .14.17
                                                                                                                                                          176.79
       110.00
                                                  -25.56
                                                                             355.82
                                                                                               113.51
                                                                                                           4 4 5A
                                                                                                                            1215.8
                                                                                                                                          -22.16
                                                                                                                                                           1.64
       110.06
                                                   20.32
                                                                 167.10
                                                                               354.02
                                                                                                         17 23 46
                                                                                                61.90
                                                                                                                            3683.6
                                                                                                                                          16.41
                                                                                                                                                          160.17
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
    TOE .1570 TRA -.2777 TC3 .4542 BAU .1646
                                                                     SGT 577.0 SGR 632.3 SG3 452.2
RRT -.3338 RRF .8183 RTF -.4016
                                                                                                                        ST 233.3 SR 388.5 SS 264.4
CRT -.7432 CRS -.6977 CST .0583
    RDE -.2875 RRA -.2390 RC3 -.4566 FAU .12076
FOE -.2862 FRA-1.5961 FC3-5.4683 83P 2006
BOE .3276 BRA .3664 BC3 .6440 FSP -1349
                                                                     568 856.0 R23 - .2641 R13 .7864
                                                                                                                       LSA 464.5 MSA 242.3 SSA 28.5
                                                                     561 701.9 862 490.0 THA 127.32
                                                                                                                       EL1 430.7 EL2 140.8 ALF 117.20
LAUNCH DATE JUL # 1967
                                                                        FLIGHT TIME 98.00
                                                                                                                                  ARRIVAL DATE OCT 14 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 273.129
    RL 152:10 LAL -.00 LOL 285.17 VL 27.305 GAL -7.61 AZL 91.93 MCA 122.54 SMA 132.78 ECC .19584 INC 1.9330 VI 29.291
RP 108.12 LAP -1.63 LOP 47.72 VP 38.149 GAP -3.63 AZP 88.96 TAL 214.95 TAP 337.49 RCA 106.77 APO 158.78 V2 35.049
RC 73.590 GL -12.17 GP -19.13 ZAL 146.03 ZAP 56.27 ETS 12.94 ZAE 158.73 ETE 322.74 ZAC 96.20 ETC 12.49 CLP -54.00
   PLANETOCENTRIC CONIC
    C3 18.769 VML 4.332 DLA 4.08 RAL 135.92 RAD 6567.8 VEL 11.839 PTH 2.10 VMP 3.928 DPA -11.90 RAP 167.77 ECC 1.3089
    LNCH AZMTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   0 54 10 2326.22
13 52 58 4716.51
                                                                                           108.15 1 32 56
66.25 15 11 34
109.45 2 51 43
64.97 16 26 44
113.07 4 0 34
61.40 17 27 15
                                                                            357.24
                                                  -22.11
                                                                 48.68
                                                                                                                         1726.2
        90.00
                                                                201.63
                                                   15,89
                                                                               355.41
                                                                                                                            4116.5
                   2 17 25 2057.68
15 12 24 4460.28
       100.00
                                                  -23.16
                                                                 28.55
                                                                              356.86
                                                                                                                           1457.7
                                                                                                                                                          20.92
       100.00
                                                  16.89
                                                                              354.94
                                                                182.32
                                                                                                                            3860.3
                                                                                                                                          13.3A
                                                                                                                                                        175.29
                   3 30 4 1830.35
16 16 15 4260.38
       110.00
                                                  -25.95
                                                                 10.09
                                                                              355.66
                                                                                                                           1230.3
                                                                                                                                         -22.60
                                                                                                                                                           2.54
       110.00
                                                  19.57
                                                                165.72
                                                                              353.51
                                                                                                                           3660.4
                                                                                                                                           15.60
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TOE .1439 TRA -.3082 TC3 .3518 BAU .1633
                                                                   SCT 544.2 SCR 690.2 SC3 493.3

RRT -.1979 RRF .8588 RTF -.2312

SCB 879.0 R23 -.1580 R13 .8464

SCI 709.3 SC2 519.1 THA 109.76
                                                                                                                       ST 226.6 SR 380.5 SS 265.3
   RDE -.2768 RRA -.2583 RC3 -.5476 FAU .13055
FDE -.2552 FRA-1.7286 FC3-6.0220 BSP 2047
BDE .3120 BRA .4021 BC3 .6508 FSP -1491
                                                                                                                       CRT -.6637 CRS -.6603 CST -.1051
                                                                                                                       LSA 446.2 MSA 258.2 SSA 28.3
                                                                                                                       EL1 414.7 EL2 155.6 ALF 115.39
LAUNCH DATE JUL 8 1967
                                                                        FLIGHT TIME 100.00
                                                                                                                                  ARRIVAL DATE OCT 16 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 279.646
   RL 152.10 LAL -.00 LOL 285.17 VL 27.328 GAL -7.57 AZL 91.80 MCA 125.75 SMA 132.94 ECC .19432 INC 1.7993 V1 29.291

RP 108.08 LAP -1.46 LOP 50.93 VP 38.178 GAP -3.08 AZP 88.95 TAL 215.12 TAP 340.87 RCA 107.11 APO 158.78 V2 35.062

RC 75.721 GL -11.43 GP -20.72 ZAL 146.44 ZAP 61.30 ETS 11.62 ZAE 159.77 ETE 312.51 ZAC 98.28 ETC 11.81 CLP -59.11
  PLANETOCENTRIC CONIC
   C3 18.418 VHL 4.292 DLA
                                        4.84 RAL 135.94 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 3.785 OPA -12.62 RAP 165.44 ECC 1.3031
   LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 48 35 2345.51 -22.52 49.95 357.19 107.64 1 27 40 1745.5 -19.80 42.25
                                                  -22.52
                                                                49.95
                                                                                            107.64
                                                                                                                        1745.5
                                                                                                          1 27 40
       90.00
                   13 58 47 4688.37
                                                  15.11
                                                               199.94
                                                                              344.06
                                                                                               65.76
                                                                                                         15 16 55
                                                                                                                           4088.4
                                                                                                                                          11.71
                                                                                                                                                        192.91
                                2075.79
      100.00
                    2 12 12
                                                 -23.56
                                                                 29.74
                                                                              356.81
                                                                                              108.95
                                                                                                          2 46 48
                                                                                                                           1475.8
                                                                                                                                          -20.76
                                                                                                                                                        22.06
      100.00
                   15 17 51
                                4433.31
                                                 16.11
                                                               180.70
                                                                              354.58
                                                                                               64.47 16 31 44
                                                                                                                           3833.3
                                                                                                                                           12.54
                                                                                                                                                        173.72
      110.00
                    3 25 40
                                1845.86
                                                 -26.36
                                                                 11.11
                                                                                              112.59 3 56 26
60.89 17 31 28
                                                                              355.64
                                                                                                                           1245.9
                  16 20 52 4236.01
     110.00
                                                 18.77
                                                               164.28
                                                                              353.13
                                                                                                                           3636.0
                                                                                                                                           14.75
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   TDE .1310 TRA -.3471 TC3 .2230 BAU .1684
                                                                  SGT 532.4 SGR 754.8 SG3 530.6
RRT .0126 RRF .8908 RTF .0057
SG8 923.7 R23 .0167 R13 .8907
                                                                                                                      ST 223.8 SR 369.3 SS 263.1
   RDE -.2634 RRA -.2774 RC3 -.6465 FAU .13935
FDE -.2059 FRA-1.8342 FC3-6.5499 BSP 2149
                                                                                                                     CRT -.5572 CRS -.6113 CST -.2988
LSA 423.2 MSA 275.4 SSA 28.3
   BOE .2942 BRA .4443 BC3 .6839 FSP -1615
                                                                   $61 754.9 $62 532.4 THA 88.98
                                                                                                                      EL1 395.4 EL2 173.6 ALF 113.43
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ARRIVAL DATE OCT 18 1967
                                                                           FLIGHT TIME 102.00
LAUNCH DATE JUL # 1967
                                                                           DISTANCE 286.136
   RELICENTRIC CONTC.

RELISC.10 LAL -.00 LOL 285.17 VL 27.344 GAL -7.52 AZL 91.65 MCA 128.96 SMA 133.06 ECC .19303 INC 1.6543 V1 29.291

RP 108.04 LAP -1.29 LOP 54.14 VP 38.201 GAP -2.55 AZP 88.96 TAL 215.18 TAP 344.14 RCA 107.38 APO 158.74 V2 35.075

RC 77.874 GL -10.61 GP -22.39 ZAL 146.77 ZAP 66.46 ETS 10.13 ZAE 160.20 ETE 300.78 ZAC 100.53 ETC 10.97 CLP -64.41
  HELIOCENTRIC CONIC
                                         5.65 RAL 136.10 RAO 6567.7 VEL 11.809 PTH 2.09 VHP 3.673 OPA -13.35 RAP 162.92 ECC 1.2973
  PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  107.07
                                                                                357.28
                                                    -22.94
                     0 43 3 2366.45
                                                                    51.34
        00.00
                                                                                                                                                   10.81
                                                                                                     65.27 15 23 11
                                                                                                                                   4058.3
                                                                                   354.83
                    14 5 33 2 7 4
                                                                    198.14
                                   4658.32
                                                     14.26
        90.00
                                                                                                                                                  -21.26
                                                                                                    108.39
                                                                                                                 2 41 59
                                                                                                                                   1495.5
                                                                                   356.91
                                                    -23.99
                                                                     31.04
                                  2095.47
                                                                                                   63.98 16 37 38
112.06 3 52 29
60.38 17 36 30
       100.00
                                                                                                                                                                 172.07
                                                                                                                                   3804.5
                                                                                                                                                   11.63
                                                    15.26
                                                                    178.99
                                                                                   354.34
                                    4404.54
                   15 24 13
       100.00
                                                                                                                                                                    4.55
                                                                                                                                   1262.7
                                                                                                                                                  -23.57
                                                                     12.23
                                                                                   355.77
                                                     -26.80
                                   1662.72
       110.00
                     3 21 26
                                                                                                                                                                  156.03
                                                                                                                                                   13.A3
                                                                                                                                   3610.1
                  16 26 20 4210.06
                                                                    162.77
                                                                                   352.88
                                                     17.90
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
  OFFERENTIAL CORRECTIONS
                                                                        RET .2619 RRF .9159 RTF .2716
SGB 997.0 R23 .1341 R13 .9066
SG1 847.2 SGZ 525.6 THA 73.%1
                                                                                                                              ST 227.5 SR 354.9 SS 259.7
CRT -.4332 CRS -.5510 CST -.4966
    TOE .1203 TRA - .3923 TC3 .0696 BAU .1827
   ROE -.2473 RRA -.2956 RC3 -.7535 FAU .14676
FOE -.1411 FRA-1.9063 FC3-7.0346 BSP 2364
BOE .2750 BRA .4912 BC3 .7567 FSP -.1723
                                                                                                                              LSA 397.5 MSA 293.9 SSA
                                                                                                                                                                     28.4
                                                                                                                               EL1 374.0 EL2 194.6 ALF 111.65
                                                                                                                                          ARRIVAL DATE OCT 20 1967
                                                                             FLIGHT TIME 104.00
LAUNCH DATE JUL 8 1967
    RL 152.10 LAL -.00 LOL 285.17 VL 27.354 GAL -7.46 A7L 91.50 MCA 132.17 SMA 133.13 ECC .19194 INC 1.4953 VI 29.291 RP 108.00 LAP -1.11 LOP 57.35 VP 38.220 GAP -2.04 A7P 89.00 TAL 215.13 TAP 347.30 RCA 107.58 APO 158.68 V2 35.088 RC 80.046 GL -9.68 GP -24.12 7AL 147.01 7AP 71.69 ETS 8.45 7AE 159.82 ETE 288.40 7AC 102.87 ETC 9.95 CLP -69.87
                                                                            DISTANCE 292.600
  HELIOCENTRIC CONIC
    C3 17.702 VML 4.207 DLA 6.54 RAL 136.36 RAD 6567.7 VEL 11.793 PTH 2.09 VMP 3.594 DPA -14.11 RAP 160.26 ECC 1.2913 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   PLANETOCENTRIC CONIC
                    0 37 26 2369.64
14 13 25 4625.73
                                                      -23.40
                                                                     52.89
        90.00
                                                                                                                                                                   189.28
                                                                                                                                   4025.7
                                                                                                                                                     9.82
                                                                                                      64.78
                                                                                                                15 30 31
                                                                     196.20
                                                                                    354.73
                                                     13.32
         90.00
                                                                                                                                                                    24.71
                                                                                                                                                   -21.79
                                                                                                                                    1517.2
                                                                                                     107.75
                                                                                                                2 37 11
                                                                      32.50
                                                                                    357.16
                      2 1 53 2117.24
                                                     -24.45
       100.00
                                                                                                      63.48 16 44 33
111.46 3 48 37
59.86 17 42 29
                                                                                                                                                                   170.29
                                                                                                                                    3773.4
                                                                                                                                                   10.64
                                                                     177.15
                                                                                    354.24
                                                      14.32
                                  4373.36
                    15 31 39
       100.00
                                                                                                                                                                     5.73
                                                                                                                                    1281.4
                                                                                                                                                   -24.11
                                                                                                     111.46
                                                                      13.47
                                                                                    356.05
                      3 17 15 1861.39
16 32 47 4181.96
                                                     -27.21
       110.00
                                                                                                                                    3582 0
                                                                                                                                                    12.82
                                                                     161.15
                                                                                    352.76
                                                      16.95
                                                                                                                               ORBIT DETERMINATION ACCURACY
                    16 32 47
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 239.0 SR 337.8 SS 257.3
CRT -. 3092 CRS -. 4859 CST -. 6654
                                                                        SGT 631.4 SGR 903.0 SG3 589.8
RRT .4852 RRT .9355 RTF .5023
SGB 1101.9 R23 .1824 R13 .9192
SG1 976.4 SG2 510.6 THA 63.50
     TOE .1140 TRA -.4417 TC3 -.1063 BAU .2072
     RDE - . 2288 RRA - . 3128 RC3 - . 8688 FAU . 15262
                                                                                                                               LSA 372.5 MSA 312.9 SSA 28.5
EL1 351.4 EL2 218.5 ALF 110.60
     FOE -. 0678 FRA-1.9492 FC3-7.4641 BSP 2716
     BOE .2557 BRA .5413 BC3 .8753 FSP -1823
                                                                                                                                          ARRIVAL DATE OCT 22 1967
                                                                             FLIGHT TIME 106.00
 LAUNCH DATE JUL 8 1967
     RL 152.10 LAL -.00 LOL 285.17 VL 27.357 GAL -7.40 A7L 91.32 MCA 135.39 SMA 133.15 ECC .19102 INC 1.3192 VI 29.291
RP 107.96 LAP -.93 LOP 60.56 VP 38.234 GAP -1.54 A7P 89.06 TAL 214.99 TAP 350.37 RCA 107.72 APO 158.59 V2 35.101
RC 82.236 GL -8.63 GP -25.92 7AL 147.17 ZAP 76.91 ETS 6.57 ZAE 158.56 ETE 276.52 ZAC 105.24 ETC 8.75 CLP -75.42
                                                                            DISTANCE 299.037
    HELIOCENTRIC CONIC
                                           7.51 RAL 136.80 RAD 6567.7 VEL 11.778 PTH 2.08 VHP 3.548 DPA -14.92 RAP 157.52 ECC 1.2853
     PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ. RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 1815.8
                                                                                                   105.67 1 11 49
64.28 15 39 8
                      0 31 34 2415.65
14 22 36 4589.76
                                                                                  357.92
                                                      -23.89
                                                                     54.65
          90.00
                                                                                                                                                     8.71
                                                                                                                                                                   187.22
                                                                                                                                    3989.8
                                                                                     354.77
                                                       12.27
                                                                     194.08
          90.00
                                                                                                     26.30
                                                                                                                                                   -22.38
                                                                                                                                    1541.8
                                                                                     357.57
                     1 56 31 2141.85
15 40 22 4338.99
                                                      -24.95
                                                                      34.15
        100.00
                                                                                                                                                                   168.34
                                                                                                                                   3739.0
                                                                                                                                                     9.53
                                                                                    354.27
                                                      13.26
                                                                     175.14
        100.00
                                                                                                                                                                    7.08
                                                                                                                                   1302.5
                     3 13 0 1902.48
16 40 22 4151.12
                                                                                     356.49
                                                       -27.79
                                                                       14.90
        110.00
                                                                                                                                                   11.70
                                                                                                                                                                   152.79
                                                                                                                                    3551.1
                                                                                    352.78
                                                                     159.39
                                                      15.89
         110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ST 257.5 SR 315.0 SS 254.9
CRT -.1896 CRS -.3973 CST -.8115
     DIFFERENTIAL CORRECTIONS
                                                                         SGT 749.6 SGR 980.6 SG3 606.4
RRT .6509 RRF .9501 RTF .6683
SGB 1234.3 R23 .2017 R13 .9308
SG1 1131.5 SG2 493.2 THA 56.34
      TOE .1119 TRA -.4952 TC3 -.3076 BAU .2397
     ROE -.2057 RRA -.3263 RC3 -.9876 FAU .15586
FOE .0269 FRA-1.9368 FC3-7.7849 BSP 3158
BOE .2342 BRA .5931 BC3 1.0344 FSP -1882
                                                                                                                               LSA 355.6 MSA 321.2 SSA 28.8
                                                                                                                                EL1 324.5 EL2 245.4 ALF 111.51
                                                                                                                                           APPIVAL DATE OCT 24 1967
                                                                              FLIGHT TIME 108.00
  LAUNCH DATE JUL 8 1967
      RL 152.10 LAL -.00 LOL 285.17 VL 27.355 GAL -7.32 A7L 91.12 MCA 138.60 SMA 133.14 ECC .19026 INC 1.1217 VI 29.291

RP 107.92 LAP -.74 LOP 63.78 VP 36.244 GAP -1.06 A7P 89.16 TAL 214.74 TAP 353.34 RCA 107.81 APO 158.47 V2 35.113

RC 84.440 GL -7.41 GP -27.79 7AL 147.23 ZAP 82.04 ETS 4.46 ZAE 156.50 ETE 266.08 ZAC 107.58 ETC 7.38 CLP -80.99
                                                                              DISTANCE 305.447
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                         2.08 WHP 3.536 DPA -15.80 RAP 154.75 ECC 1.2791
                                            8.62 RAL 137.36 RAD 6567.7 VEL 11.762 PTH
      ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    104.78 1 5 56
63.77 15 49 20
106.14 2 26 52
62.44 17 2 20
109.93 3 40 36
58.78 17 57 59
                                                                                     358.50
                       0 25 10 2446.18
14 33 31 4549.30
1 50 42 2170.33
                                                       -24.43
                                                                       56.70
                                                                                                                                                                    184.91
          90.00
                                                                                                                                     3949.3
                                                                                     354.97
                                                        11.06
                                                                      191.73
                                                                                                                                                                     28.15
           90.00
                                                                                                                                     1570.3
                                                                                                                                                     -23.05
                                                                                      358.17
                                                                       36.09
                                                       -25.50
                                                                                                                                     3700.4
                                                                                                                                                       8.27
                                                                                                                                                                    166.16
                                                                      172.91
                                                                                      354.46
                                                       12.06
                                     4300.39
                      15 50 40
                                                                                                                                                   -25.39
                                                                                                                                                                      8.65
                                                                                                                                     1326.9
                                                                                      357.13
                                                       -28.37
                                                                       16.56
                        3 8 29 1926.90
          110.00
                                                                                                                                                      10.44
                                                                                                                                                                    150.91
                                                                                                                                     3516.6
                                                                                      352.94
                      16 49 22 4116.57
                                                        14.68
                                                                      157.44
                                                                                                                                ORBIT DETERMINATION ACCURACY
          110.00
                                                                          HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                         SGT 902.2 SGR 1060.5 SG3 614.1
RRT .7573 RRF .9614 RTF .7725
SGB 1392.3 R23 .2070 R13 .9414
SG1 1307.8 SG2 477.8 THA 51.05
                                                                                                                                ST 283.5 SR 288.3 SS 256.5
CRT -. 0886 CRS -. 3062 CST -. 9083
       TOE .1169 TRA -.5493 TC3 -.5292 BAU .2791
      ROE -.1792 RRA -.3365 RC3-1.1117 FAU .15676
FOE .1281 FRA-1.8867 FC3-8.0032 BSP 3701
BOE .2140 BRA .6442 BC3 1.2312 FSP -1922
                                                                                                                                LSA 375.9 MSA 295.3 SSA 29.3
ELI 298.5 EL2 272.7 ALF 129.63
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LAUNCH DATE JUL 8 1967
                                                                            FLIGHT TIME 110.00
                                                                                                                                          ARRIVAL DATE OCT 26 1967
                                                                            DISTANCE 311.832
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 27.348 GAL -7.24 AZL 90.90 MCA 141.82 SMA 133.09 ECC .18964 INC .8970 V1 29.291
RP 107.89 LAP -.55 LOP 67.00 VP 38.250 GAP -.60 AZP 89.29 TAL 214.41 TAP 356.23 RCA 107.85 APO 158.33 VZ 35.125
RC 86.655 GL -5.99 GP -29.74 ZAL 147.20 ZAP 86.98 ETS 2.12 ZAE 153.79 ETE 257.46 ZAC 109.81 ETC 5.85 CLP -86.52
   PLANETOCENTRIC CONIC
    C3 16.576 VHL 4.071 DLA 9.89 RAL 138.08 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 3.556 DPA -16.81 RAP 152.02 ECC 1.2728
    ENCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 17 55 2482.18 -25.03 59.17 359.30 103.68 0 59 17 1882.2 -22.91 51.15
        90.00
                                    4502.86
                                                                                   355.35
                                                                                                     63.25
                                                                                                                 16 1 33
                                                                                                                                   3902.9
                                                                                                                                                     5.99
                    14 46 30
                                                       9.65
                                                                    189.04
                                                                                                                                                                   182.28
                     1 44 8 2204.10
                                                                                                                 2 20 52
       100.00
                                                     -26.12
                                                                      36.41
                                                                                   358.99
                                                                                                    105.07
                                                                                                                                   1604.1
                                                                                                                                                   -23.80
                                                                                                                                                                    30.36
                   16 2 58 4256.19
3 3 28 1955.85
17 0 7 4077.19
                                                                                                     61.90 17 15 54
       100.00
                                                    10.65
                                                                    170.36
                                                                                   354.82
                                                                                                                                   3656.2
                                                                                                                                                     6.81
                                                                                                                                                                  163.69
                                                                     18.56
                                                                                   357.99
                                                                                                                 3 36 4
                                                                                                                                                   -26.17
                                                                                                                                                                   10.54
       110.00
                                                     -29.02
                                                                                                   108.91
                                                                                                                                   1355.9
                                                                                                               18 8 4
                                                                    155.25
                                                                                                     58.21
                                                                                                                                   3477.2
       110.00
                                                     13.28
                                                                                   353.28
                                                                                                                                                     8.98
                                                                                                                                                                  148.79
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       SGT 1080.4 SGR 1136.2 SG3 609.6
RRT .8243 RRF .9699 RTF .8364
SG8 1567.8 R23 .2090 R13 .9494
SG1 1497.6 SG2 464.0 THA 46.75
    TOE .1302 TRA -.6021 TC3 -.7707 BAU .3227 ROE -.1466 RRA -.3406 RC3-1.2352 FAU .15455
                                                                                                                              ST 317.0 SR 254.5 SS 264.7
CRT .0053 CRS -.2068 CST -.9681
                                                                                                                              LSA 410.8 MSA 256.3 SSA 30.2
ELI 317.0 EL2 254.5 ALF .68
   FOE .2477 FRA-1.7801 FC3-8.0717 BSP 4288
BOE .1961 BRA .6917 BC3 1.4559 FSP -1910
LAUNCH DATE JUL 8 1967
                                                                                                                                           ARRIVAL DATE OCT 28 1967
                                                                            FLIGHT TIME 112.00
  HELIOCENTRIC CONTC
                                                                            DISTANCE 318.192
   RL 152.10 LAL -.00 LOL 285.17 VL 27.336 GAL -7.15 AZL 90.64 MCA 145.04 SMA 133.00 ECC .18913 INC .6374 V1 29.291
RP 107.85 LAP -.37 LOP 70.22 VP 38.253 GAP -.15 AZP 89.48 TAL 213.99 TAP 359.03 RCA 107.85 APO 158.16 V2 35.137
RC 88.880 GL -4.30 GP -31.79 ZAL 147.04 ZAP 91.66 ETS 359.52 ZAE 150.61 ETE 250.61 ZAC 111.86 ETC 4.15 CLP -91.95
  PLANETOCENTRIC CONIC
   C3 16.197 VHL 4.025 DLA 11.38 RAL 138.98 RAD 6567.6 VEL 11.729 PTH 2.07 VHP 3.612 DPA -17.98 RAP 149.36 ECC 1.2666 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 9 19 2526.15
15 2 16 4448.32
       90.00
                                                    -25.71
                                                                    62.21
                                                                                      .37
                                                                                                  102.30
                                                                                                                 0 51 25
                                                                                                                                  1926.1
                                                                                                                                                  -23.76
                                                                                                                                                                   54.09
        90.00
                                                       7.97
                                                                    185.92
                                                                                   355.96
                                                                                                     62.74
                                                                                                                 16 16 25
                                                                                                                                    3848.3
                                                                                                                                                     4.25
                                                                                                                                                                   179.21
                  1 36 24 2245.30
16 17 52 4204.39
2 57 37 1991.12
17 13 6 4031.34
                                                                                                   .08
355.42
       100.00
                                                    -26.82
                                                                     41.27
                                                                                                                                   1645.3
                                                                                                                                                   -24.67
                                                                                                                                                                    33.13
       100.00
                                                      8.98
                                                                    167.45
                                                                                                                                   3604.4
                                                                                                                                                     5.08
                                                                                                                                                                  160.82
                                                                     21.03
       110.00
                                                    -29.77
                                                                                   359.14
                                                                                                                                   1391.1
                                                                                                                                                  -27.08
                                                                                                                                                                   12.80
       110.00
                                                     11.62
                                                                    152.74
                                                                                   353.83
                                                                                                                                   3431.3
                                                                                                                                                     7.26
                                                                                                                                                                   146.35
  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SCT 1274.0 SCR 1211.7 SC3 595.5
RRT .8661 RRF .9767 RTF .8756
SC8 1758.2 R23 .2090 R13 .9559
SC1 1698.5 SC2 454.4 THA 43.34
    TDE .1550 TRA -.6501 TC3-1.0268 BAU .3693
                                                                                                                               ST 359.9 SR 217.0 SS 283.1
CRT .1080 CRS -.1528 CST -.9890
    RDE -.1091 RRA -.3396 RC3-1.3615 FAU .14989
   FDE .3696 FRA-1.6363 FC3-8.0119 BSP 4936
BDE .1896 BRA .7335 BC3 1.7053 FSP -1879
                                                                                                                              LSA 457.7 MSA 215.1 SSA 31.3
                                                                                                                               EL1 361.1 EL2 215.0 ALF 5.78
                                                                                                                                         ARRIVAL DATE OCT 30 1967
LAUNCH DATE JUL # 1967
                                                                            FLIGHT TIME 114.00
  HELIOCENTRIC CONIC
                                                                           DISTANCE 324.526
   RL 152.10 LAL -.00 LOL 285.17 VL 27.321 GAL -7.04 AZL 90.33 MCA 148.26 SMA 132.89 ECC .18874 INC .3326 V1 29.291
RP 107.82 LAP -.17 LOP 73.44 VP 38.252 GAP .28 AZP 89.72 TAL 213.48 TAP 1.75 RCA 107.81 APO 157.97 VZ 35.149
RC 91.113 GL -2.27 GP -34.02 ZAL 146.73 ZAP 95.98 ETS 356.64 ZAE 147.08 ETE 245.30 ZAC 113.67 ETC 2.29 CLP -97.22
  PLANETOCENTRIC CONIC
    C3 15.830 VHL 3.979 DLA 13.16 RAL 140.09 RAD 6567.6 VEL 11.714 PTH 2.06 VHP 3.706 DPA -19.40 RAP 146.80 ECC 1.2605
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                100.49 24 37 40
62.25 16 34 55
101.95 2 5 4
60.85 17 45 24
105.95 3 24 22
57.04 18 35 28
        90.00 23 54 39 2581.50
90.00 15 21 52 4382.54
100.00 1 26 47 2297.07
                                                                     66.10
                                                                                                                               1981.5 -24.74
                                                    -26.45
                                                                                     1.79
                                                       5.90
                                                                    182.20
                                                                                  356.87
                                                                                                                                   3782.5
                                                                                                                                                     2.14
                                                                                                                                                                  175.53
       100.00
                     1 26 47 2297.07
                                                    -27.60
                                                                     44.92
                                                                                     1.53
                                                                                                                                   1697.1
                                                                                                                                                   -25.68
                                                                                                                                                                   36.65
                  16 36 22 4142.20
2 50 26 2035.29
       100.00
                                                       6.93
                                                                    163.96
                                                                                 356.31
                                                                                                                                   3542.2
                                                                                                                                                     2.99
                                                                                                                                                                  157.39
       110.00
                                                    -30.64
                                                                     24.18
                                                                                                                                   1435.3
                                                                                                                                                   -28.15
                                                                                                                                   3376.8
       110.00
                   17 29 11 3976.75
                                                      9.61
                                                                    149.78
                                                                                   354.68
                                                                                                                                                    5.20
                                                                                                                                                                  143.47
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                             CRT .2815 CRS -.1993 CST -.9877
LSA 523.3 MSA 171.0 SSA 33.0
EL1 419.6 EL2 167.5 ALF 8.09
    TOE .1942 TRA -.6907 TC3-1.2944 BAU .4167
                                                                        SGT 1477.4 SGR 1280.9 SG3 569.7
                                                                        RRT .8929 RRF .9818 RTF .9003
SGB 1955.3 R23 .2105 R13 .9604
SGI 1903.4 SGZ 447.7 THA 40.44
    ROE -.0631 RRA -.3303 RC3-1.4837 FAU .14232
   FDE .5051 FRA-1.4476 FC3-7.7855 BSP 5591
BDE .2042 BRA .7656 BC3 1.9689 FSP -1800
                                                                            FLIGHT TIME 116,00
                                                                                                                                          ARRIVAL DATE NOV 1 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 330.836
                           -.00 LOL 285.17 VL 27.301 GAL -6.93 AZL 89.97 MCA 151.49 SMA 132.75 ECC .18845 INC .0232 V1 29.291 .02 LOP 76.66 VP 38.248 GAP .70 AZP 90.03 TAL 212.90 TAP 4.39 RCA 107.73 APO 157.76 V2 35.160 .23 GP -36.48 ZAL 146.20 ZAP 99.86 ETS 353.46 ZAE 143.29 ETE 241.26 ZAC 115.20 ETC .26 CLP-102.29
   RL 152.10 LAL
   RC
         93.352 GL
  PLANETOCENTRIC CONIC
   C3 15.496 VHL 3.936 DLA 15.36 RAL 141.47 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 3.841 DPA -21.12 RAP 144.33 ECC 1.2550
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     98.03 24 24 43
98.03 16 58 41
99.55 1 53 34
60.40 18 7 42
103.68 3 15 59
56.48 18 54 39
                                 2653.84
       90.00
                   23 40 30
                                                    -27.25
                                                                     71.24
                                                                                     3.69
                                                                                                                                   2053.8
                                                                                                                                                  -25.85
                                                                                                                                                                    62.85
                  15 47 0 4300.56

1 14 10 2364.43

16 59 57 4065.20

2 41 7 2092.36

17 49 29 3910.01
                                                                                                                                                                  170.96
       90.00
                                                       3.28
                                                                    177.59
                                                                                   358.22
                                                                                                                                   3700.6
                                                                                                                                                     -.51
       100.00
                                                                     49.74
                                                                                                                                   1764.4
                                                                                                                                                   -26.85
                                                                                                                                                                   41.31
                                                    -28.46
                                                                                     3.48
                                                                               357.63
       100.00
                                                       4.36
                                                                    159.70
                                                                                                                                   3465.2
                                                                                                                                                     . .38
                                                                                                                                                                   153.16
                                                    -31.64
                                                                                                                                   1492.4
                                                                                                                                                 -29.43
      110.00
                                                                     28.33
                                                                                     2.72
                                                                                                   103.68
                                                                                                                                                                   19.61
                                                                    146.22 355.92
                                                                                                                                3310.0
      110.00
                                                                                                                                                                 139.97
                                                                                                                                                    2.66
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                      SGT 1684.1 SGR 1347.2 SG3 534.4
RRT .9101 RRF .9859 RTF .9163
SGB 2156.7 R23 .2125 R13 .9638
                                                                                                                            ST 493.3 SR 147.1 S5 367.0
CRT .6010 CRS -.4634 CST -.9790
LSA 617.5 MSA 131.0 SSA 34.5
    TOE .2531 TRA -.7198 TC3-1.5660 BAU .4642
   RDE -.0074 RRA -.3131 RC3-1.6024 FAU .13242
   FOE .6452 FRA-1.2296 FC3-7.3981 BSP 6252
BOE .2532 BRA .7849 BC3 2.2406 FSP -1691
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SG1 2110.1 SG2 445.6 THA 38.06

ELI 501.6 EL2 115.7 ALF 10.74

ARRIVAL DATE NOV 3 1967

LAUNCH DATE JUL 8 1967

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DISTANCE 337.122
   HELIOCENTRIC CONIC
    PELIOCENIMIC CONTE PROPERTY OF THE PROPERTY OF
   PLANETOCENTRIC CONIC
     C3 15.233 WHL 3.903 DLA - 18.12 RAL 143.19 RAD 6567.6 VEL 11.688 PTH 2.06 VMP 4.029 DPA -23.25 RAP 141.90 ECC 1.2507
    ENCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         94.51 24 6 22
61.68 17 30 39
96.14 1 37 27
                                                                                                                                                                2153.0
                                                                                                                                                                                 -27.06
                     23 20 29 2753.04
16 20 45 4193.67
                                                                                                   6.25
                                                                -27.98
                                                                                    78.40
          90.00
                                                                                                                                                                                     -3.95
                                                                                                                                                                                                      164.99
                                                                                                                                                                3593.7
                                                                                                          .27
                                                                    -.17
                                                                                   171.63
          90.00
                                                                                                                                                                                                       47,80
                                                                                                                                                                1856.0
                                                                                                                                                                                   -28.15
                                                                -29.31
                                                                                     56.42
                                                                                                         6.11
                         0 56 31 2456.05
        100.00
                                                                                                                          60.12 18 37 26
100.47 3 4 25
56.02 19 19 50
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                                                                                                 359.62
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                      17 31 20
                                                                                   154.24
                                                                   1.00
        100.00
                                           3965.90
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                                                                                                                                                                1569.0
                                                               -32.73
                                                                                                                         100.47
        110.00
                                                                                  141.78
                                                                                    34.03
                                                                                                        5.53
                         2 28 16 2168.98
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                                                                                                                                                                3225.7
                                                                                                     357.80
                                           3825.73
                                                                  3.93
        110,00
                        18 16 4
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 1892.9 SGR 1414.2 SG3 491.4
RRT .9212 RRF .9692 RTF .9271
SGB 2362.8 R23 .2145 R13 .9665
SG1 2319.8 SG2 448.9 THA 36.10
                                                                                                                                                          ST 602.7 SR 164.4 SS 434.4
CRT .9132 CRS -.8215 CST -.9745
     TDE .3377 TRA -.7538 TC5-1.8353 BAU .5118
    RDE .0598 RRA -.2872 RC3-1.7166 FAU .12069
FDE .7825 FRA -.9939 FC3-6.8589 BSP 6948
                                                                                                                                                          LSA 753.1 MSA 103.7 SSA 33.4
EL1 621.4 EL2 65.0 ALF 14.15
     BDE .3430 BRA .7881 BC3 2.5129 FSP -1565
                                                                                                                                                                         ARRIVAL DATE NOV 5 1967
                                                                                             FLIGHT TIME 120.00
LAUNCH DATE JUL 8 1967
                                                                                             DISTANCE 343.383
    RL 152.10 LAL -.00 LOL 285.17 VL 27.252 GAL -6.68 AZL 88.94 MCA 157.94 SMA 132.39 ECC .18813 INC 1.0584 V1 29.291
RP 107.72 LAP .40 LOP 83.11 VP 38.232 GAP 1.49 AZP 90.98 TAL 211.52 TAP 9.46 RCA 107.49 APO 157.30 V2 35.180
RC 97.843 GL 7.39 GP -42.59 ZAL 144.02 ZAP 105.89 ETS 345.98 ZAE 134.88 ETE 236.03 ZAC 117.24 ETC 355.53 CLP-111.83
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 15.118 VHL 3.888 DLA 21.66 RAL 145.40 RAD 6567.6 VEL 11.683 PTH 2.05 VHP 4.286 DPA -25.91 RAP 139.45 ECC 1.2488 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 -28.31
                                                                                                         9.72
                                                                                                                         89.15 23 37 23
                      22 49 3 2900.05
                                                                                   89.14
         90.00
                                                                                                                                                                                                       156.49
                                                                                                                                                                 3443.2
                                                                                                                                                                                     -8.70
                      17 9 49
                                                                                                                            62.09
                                                                                                                                         18 17 12
                                                                  -5.00
                                                                                   163.22
                                                                                                          3,53
          90.00
                                            4043.24
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                                                                                     66.26
                                                                                                          9.72
                          0 29 25 2589.12
                                                                 -29.88
        100.00
                                                                                                                                                                                     -7.55
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                                                                                                                            60.31 19 19 53
                                                                                                          2.77
                                                                                                                                                                3229.4
                                            3829.40
                                                                 -3.62
                                                                                   146.74
        100.00
                      18 16 4
                                                                                                                                                                                                         33.24
                                                                                                                                                                                   -32.61
                                                                                                         9.45
                                                                                                                            95.69
                                                                                                                                          2 47 10
                                                                                                                                                                1676.9
                          2 9 13 2276.86
                                                                 -33.76
                                                                                     42.28
        110.00
                                                                                                                                         19 54 39
                                                                                                                                                                                     -4.80
                                                                   -.32
                                                                                   135.97
                                                                                                            .71
                                                                                                                             55.82
                                                                                                                                                                3114.4
        110.00
                       18 52 45
                                           3714.43
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 764.2 SR 249.6 SS 524.2
CRT .9939 CRS -.9678 CST -.9758
     TDE .4615 TRA -.7259 TC3-2.0811 BAU .5571
                                                                                         SGT 2099.0 SGR 1475.5 SG3 439.3
    FOE .1466 RRA -.2476 RC3-1.8078 FAU .10679
FOE .9256 FRA -.7382 FC3-6.1157 83P 7601
BDE .4842 BRA .7669 BC3 2.7566 FSP -1401
                                                                                        RRT .9279 RRF .9918 RTF .9343
SGB 2565.7 R23 .2172 R13 .9684
SG1 2524.6 SG2 457.4 THA 34.40
                                                                                                                                                           LSA 954.5 MSA 97.0 SSA 25.8
EL1 803.5 EL2 26.1 ALF 18.01
                                                                                                                                                                        ARRIVAL DATE NOV 7 1967
                                                                                             FLIGHT TIME 122.00
LAUNCH DATE JUL 8 1967
                                                                                            DISTANCE 349.620
    RL 152.10 LAL -.00 LOL 285.17 VL 27.223 GAL -6.54 AZL 88.18 MCA 161.16 SMA 132.19 ECC .18809 INC 1.8182 VI 29.291
RP 107.69 LAP .59 LOP 86.34 VP 38.220 GAP 1.87 AZP 91.72 TAL 210.73 TAP 11.89 RCA 107.32 APO 157.05 V2 35.190
RC 100.092 GL 12.67 GP -46.56 TAL 141.85 ZAP 107.77 ETS 341.53 ZAE 130.11 ETE 234.46 ZAC 117.67 ETC 352.68 CLP-116.36
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 15.305 VHL 3.912 DLA 26.31 RAL 148.34 RAD 6567.6 VEL 11.691 PTH 2.06 VHP 4.644 DPA -29.24 RAP 136.80 ECC 1.2519
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           79.66 22 37 29
64.64 19 40 41
82.38 24 21 48
61.96 20 30 18
                                                                                                                                                                2567.5
                                                                -26.51
                                                                                  108.46 14.02
          90.00 21 44 41 3167.51
                                                                                                                                                                                   -16.36
                                                                                                                                                                                                      141.07
                                                                                                                                                                3181.3
                        18 37 40 3781.31
23 34 56 2812.11
                                                               -13.05
                                                                                   148.18
                                                                                                        9.43
          90.00
                                                                                                                                                                                   -29.74
                                                                                                                                                                                                        74.02
                                                                                     82.73
                                                                                                        14.46
                                                                                                                                                                2212.1
                                                               -28.99
         100.00
                                                                                                                                                                                   -14,47
                                                                                                                                                                                                      127.72
                                                                                                         8.27
                                                                                                                                                                3011.9
                                                               -10.80
                                                                                   134.59
                                           3611.94
         100.00
                       19 30 7
                                                                                                                                                                                  -34.02
                                                                                                                                                                                                        45.84
                                                                                                                                                                1841.3
                       1 37 23 2441.26
19 48 4 3555.56
                                                                                                                            88.13
                                                                                                                                           2 18 5
                                                                                     55.09
                                                                                                       14.96
         110.00
                                                                -34.14
                                                                                                                                         20_47 20
                                                                                                                                                                2955.6
                                                                                                                                                                                  -10.75
                                                                                                         5.60
                                                                                                                            56.54
                                                                 -6.37
                                                                                   127.64
         110.00
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE .6430 TRA -.6885 TC3-2.2748 BAU .6011
RDE .2585 RRA -.1918 RC3-1.8593 FAU .09141
                                                                                                                                                           ST 1001.8 SR 392.5 55 631.2
                                                                                         SGT 2306.5 SGR 1535.6 SG3 380.4
                                                                                                                                                           CRT .9933 CRS -.9952 CST -.9812
                                                                                        RRT .9313 RRF .9937 RTF .9397
SGB 2770.9 R23 .2187 R13 .9701
SGI 2730.3 SG2 472.6 THA 32.91
     ROE .2585 RRA -.1918 RC3-1.8593 FAU .09141
FOE 1.0588 FRA -.4804 FC3-5.1707 BSP 8282
BOE .6930 BRA .7147 BC3 2.9380 FSP -1223
                                                                                                                                                         LSA 1242.9 MSA 105.4 SSA 16.5
                                                                                                                                                           ELI 1075.1 ELZ 42.3 ALF 21.30
                                                                                                                                                                         ARRIVAL DATE NOV 9 1967
                                                                                              FLIGHT TIME 124.00
LAUNCH DATE JUL 8 1967
                                                                                             DISTANCE 355.832
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 285.17 VL 27.192 GAL -6.39 AZL 87.12 MCA 164.38 SMA 131.96 ECC .18813 INC 2.8788 V1 29.291
RP 107.66 LAP .78 LOP 89.57 VP 36.206 GAP 2.24 AZP 92.77 TAL 209.88 TAP 14.26 RCA 107.13 APO 156.78 V2 35.199
RC 102.344 GL 19.74 GP -51.45 ZAL 138.32 ZAP 108.66 ETS 336.47 ZAE 124.73 ETE 233.28 ZAC 117.62 ETC 349.33 CLP-120.90
    PLANETOCENTRIC CONIC
     C3 16.156 VHL 4.019 DLA 32.48 RAL 152.51 RAD 6567.6 VEL 11.728 PTH 2.07 VHP 5.168 DPA -33.44 RAP 133.69 ECC 1.2659
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.39 18 19 34 3896.90 -23.71 161.70 18.89 67.13 19 24 31 3296.9 -26.60 153.88
                                                                                                                                                                                    -26.59
                                                                                                                                                                                                         93.01
                                                                                                                                                                 2476.4
                                                                                                                             67.12 23 27 17
                                            3076.39
                                                                 -23.70
                                                                                    100.84
                                                                                                        18.89
         106.61
                         22 36 1
                                                                                                                                                                 3296.9
                                                                                                                                                                                    -26.60
                                                                                                        18.89
                                                                                                                             67.13
                                                                                                                                          19 24 31
                                                                                    161.70
                                                                -23.71
          73.39
                         18 19 34
                                            3896.90
                                                                                                                                                                 2476.4
                                                                                                                                                                                    -26.59
                                                                                                                                                                                                         93.01
                                                                                                                             67.12 23 27 17
                                                                -23.70
                                                                                    100.84
                                                                                                        18.89
                         22 36 1
                                            3076.39
         106.61
                                                                                                                                                                                                         70.44
                                                                                                                                                                 2159.3
                                                                                                                                                                                    -32.61
                                                                                                        21.67
                                                                                                                             74.33
                                                                                                                                           1 8 44
                                                                -30.77
                                                                                      79.17
         110.00
                           0 22 45 2759.26
                                                                                                                            59.89 22 30 18
                                                                                                                                                                 2662.0
                                                                                                                                                                                   -20.88
                                                                                                                                                                                                       104.58
                                                                                                        15.33
                                                                 -17.01
                                                                                    111.57
          110.00
                         21 35 56
                                            3262.04
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SGT 2516.7 SGR 1580.9 SG3 314.1
RRT .9314 RRF .9948 RTF .9438
SGB 2972.1 R23 .2199 R13 .9714
SG1 2930.7 SG2 494.3 THA 31.32
                                                                                                                                                          ST 1352.5 SR 589.5 SS 754.2
CRT .9903 CRS -.9995 CST -.9868
      TOE .9234 TRA -.6040 TC3-2.3471 BAU .6405
      ROE .4106 RRA -.1077 RC3-1.8127 FAU .07431
                                                                                                                                                         LSA 1652.6 MSA 120.1 SSA 9.6
ELI 1473.5 EL2 75.1 ALF 23.41
      FOE 1.1803 FRA -. 2213 FC3-3.9818 85P 8919
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FLIGHT TIME 118.00

BOE 1.0105 BRA .6135 BC3 2.9656 FSP -1015

ARRIVAL CATE NOV 11 1967

EL1 2431.8 EL2 236.4 ALF 118.67

LAUNCH DATE JUL 8 1967

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HELIOCENTRIC CONIC
                                                                         DISTANCE 362.015
    RL 152.10 LAL -.00 LOL 285.17 VL 27.158 GAL -6.23 AZL 85.53 HCA 167.60 SMA 131.72 ECC .18822 INC 4.4742 V1 29.291
RP 107.63 LAP .96 LOP 92.80 VP 38.190 GAP 2.60 AZP 94.37 TAL 208.97 TAP 16.56 RCA 106.93 APO 156.51 V2 35.208
    RC 104.596 GL 29.22 GP -57.59 7AL 132.62 7AP 108.28 ETS 330.57 7AE 118.42 ETE 232.08 7AC 117.03 ETC 345.13 CLP-125.83
   PLANETOCENTRIC CONIC
     C3 18.618 VHL 4.315 OLA 40.58 RAL 158.92 RAD 6567.8 VEL 11.832 PTH
                                                                                                   2.10 VHP 5.997 OPA -38.69 RAP 129.57 ECC 1.3064
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
59.62 17 29 55 4153.58 -28.03 184.68 30.50 59.37 18 39 8 3553.6 -31.87 176.99
                                                                                  30.49
                                                                                                            1 8 49
                                                                                                                              2285.4
                                                                                                                                            -31.86
                                                                                                                                                             80.29
                     0 20 44 2885.37
                                                   -28.02
                                                                  87.97
                                                                                                  59.35
                                                                                                 18 39 8
59.35 1 8 49
59.37 18 39 8
59.35 1 8
                                                                                                          18 39 8
                                                                                                                                            -31.87
                                                                                                                                                           176.99
        59.62
                    17 29 55
                                   4153.58
                                                   -28.03
                                                                 184.68
                                                                                  30.50
                                                                                                                              3553.6
                                                                                                                                            -31.86
                                                                                                                                                             80.29
                     0 20 44 2885.37
                                                   -28.02
                                                                  87.97
                                                                                  30.49
                                                                                                                              2285.4
                                                                                  30.50
                                                                                                                              3553.6
                                                                                                                                            -31.87
                                                                                                                                                            176.99
        59.62
                   17 29 55 4153.56
                                                  -28.03
                                                                  184,68
                    0 20 44 2885.37
                                                                                                                             2285.4
                                                                                                                                           -31.86
                                                                                                                                                             80.29
                                                   -28.02
                                                                  87.97
                                                                                  30.49
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2743.5 SGR 1592.9 SG3 242.7
RRT .9270 RRF .9946 RTF .9481
SGB 3172.3 R23 .2189 R13 .9727
SGI 3128.8 SG2 523.8 THA 29.19
                                                                                                                         ST 1850.4 SR 813.9 SS 869.1
CRT .9903 CRS -.9999 CST -.9914
    TOE 1.3819 TRA -.4404 TC3-2.1884 BAU .6728
     RDE . 6121 RRA . . 0198 RC3-1.5869 FAU . 05616
    FOE 1.2622 FRA .0195 FC3-2.6113 BSP 9590
RDF 1.4114 RRA .440R RC3 2.7032 FSP -797
                                                                                                                        LSA 2196.2 MSA 135.2 SSA 5.6
                                                                                                                          EL1 2018.8 EL2 103.6 ALF 23.60
    BOE 1.5114 BRA .4408 BC3 2.7032 FSP
LAUNCH DATE JUL 8 1967
                                                                          FLIGHT TIME 128.00
                                                                                                                                     ARRIVAL DATE NOV 13 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 368.162
    RL 152.10 LAL -.00 LOL 285.17 VL 27.122 GAL -6.05 A7L 82.84 MCA 170.80 SMA 131.46 ECC .18837 INC 7.1616 V1 29.291
RP 107.61 LAP 1.14 LOP 96.04 VP 38.172 GAP 2.95 AZP 97.07 TAL 207.99 TAP 18.79 RCA 106.70 APO 156.23 V2 35.216
RC 106.849 GL 41.50 GP -65.40 ZAL 123.97 ZAP 106.31 ETS 323.08 ZAE 110.67 ETE 229.74 ZAC 115.84 ETC 339.12 CLP-132.44
   PLANETOCENTRIC CONIC
    C3 25.753 VHL 5.075 OLA 50.40 RAL 169.93 RAD 6568.0 VEL 12.130 PTH
                                                                                                    2.17 VHP 7.473 DPA -45.13 RAP 123.25 ECC 1.4238
    LNCH AZMTH LNCH TIME L-I TIME
46.39 17 23 55 4361.57
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                   -30.31
                                                                                 51.02
                                                                 205.84
                                                                                                47.59 18 36 36
                                                                                                                              3761.6
       133.61
                                                                                                  47.58
                     1 54 36
                                 2834.06
                                                   -30.30
                                                                   85.18
                                                                                  51.01
                                                                                                             2 41 50
                                                                                                                              2234.1
                                                                                                                                             -35.50
                                                                                                                                                             78.34
        46.39
                  17 23 55
                                 4361.57
                                                   -30.31
                                                                                                  47.59
                                                                                                           18 36 36
                                                                                                                                                            199.01
                                                                  205.84
                                                                                  51.02
                                                                                                                              3761.6
                                                                                                                                             -35.51
       133.61
                     1 54 36 2834.06
                                                   -50.30
                                                                   85.18
                                                                                  51.01
                                                                                                 47.58
                                                                                                             2 41 50
                                                                                                                              2234.1
                                                                                                                                            -35.50
                                                                                                                                                              78.34
                                                                                                          18 36 36
                  17 23 55 4361.57
                                                   -30.31
                                                                  205.84
                                                                                  51.02
                                                                                                  47.59
                                                                                                                              3761.6
                                                                                                                                            -35.51
                                                                                                                                                            199.01
       133.61
                     1 54 36
                                  2834.06
                                                   -30.30
                                                                   85.18
                                                                                                 47.58
                                                                                                             2 41 50
                                                                                                                              2234.1
                                                                                                                                            -35.50
                                                                                                                                                             78.34
                                                                                  51.01
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    RFT .9101 RFF .9895 RFF .9537
SGB 3360.9 R23 .2164 R13 .9740
SGI 3313.4 SG2 563.5 THA 25.14
                                                                                                                         ST 2487.7 SR 945.8 SS 930.6
CRT .9885 CRS -.9991 CST -.9940
    TOE 2.2024 TRA -.1043 TC3-1.6595 BAU .6815
    RDE .8302 RRA .2286 RC3-1.0790 FAU .03737
    FDE 1.2712 FRA .2364 FC3-1.2363 BSP 10153
BDE 2.3536 BRA .2513 BC3 1.9794 FSP -564
                                                                                                                        LSA 2815.1 MSA 155.7 SSA 3.2
EL1 2658.0 EL2 133.9 ALF 20.65
LAUNCH DATE JUL 8 1967
                                                                         FLIGHT TIME 130.00
                                                                                                                                    ARRIVAL DATE NOV 15 1967
                                                                        DISTANCE 374.247
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 27.084 GAL -5.86 A7L 77.34 MCA 173.96 SMA 131.20 ECC .18852 INC12.6548 V1 29.291
RP 107.59 LAP 1.32 LOP 99.28 VP 38.152 GAP 3.27 A7P 102.59 TAL 206.93 TAP 20.89 RCA 106.46 APO 155.93 V2 35.223
RC 109.101 GL 55.44 GP -75.24 ZAL 112.48 ZAP 102.46 ETS 309.39 ZAE 100.46 ETE 221.07 ZAC 114.15 ETC 326.26 CLP-147.92
   PLANETOCENTRIC CONTC
    C3 51.375 VML 7.168 DLA 59.18 RAL 190.07 RAD 6568.9 VEL 13.143 PTH 2.40 VMP 10.668 DPA -52.46 RAP 111.54 ECC 1.8455 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             34.33 19 30 10
34.33 4 34 44
34.33 19 30 10
                                                                                                                                        -31.21
                                                                                                                                                        220.71
                                                   -24.70
                                                                             84.16
                                                                                                                             4000.6
       35.59 18 13 29 4600.58
                                                                 225.56
                   3 45 42 2941.83
18 13 29 4600.58
                                                                                 84.14
                                                                                                                             2341.8
                                                                                                                                                            85.15
       144.41
                                                   -24.69
                                                                  90.00
                                                                                                                                            -31.20
                                                                                 84.16
                                                                                                                             4000.6
        35.59
                                                  -24.70
                                                                 225.56
                                                                                                                                           - 31 . 21
                                                                                                                                                           220.71
                                                                                                34.33 4 34 44
34.33 19 30 10
34.33 4 34
                                                                                                                             2341.8
                                                                                                                                                            85.15
       144.41
                    3 45 42 2941.83
                                                  -24.69
                                                                  90.00
                                                                                 84.14
                                                                                                                                           -31.20
                   18 13 29
        35.59
                                 4600.5A
                                                  -24.70
                                                                 225.56
                                                                                 84.16
                                                                                                                             4000.6
                                                                                                                                           -31.21
                                                                                                                                                           220.71
                                                                    MID-COURSE EXECUTION ACCURACY
                    3 45 42 2941.83
       144.41
                                                  -24.69
                                                                   90.00
                                                                                                                             2341.8
                                                                                                                                           -31.20
                                                                                                                                                            85.15
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
    TOE 3.6856 TRA .7475 TC3 -.8013 BAU .6053
                                                                                                                        ST 2967.0 SR 487.0 SS 855.5
CRT .9235 CRS -.9579 CST -.9948
                                                                     SGT 3370.4 SGR 1042.5 SG3 105.7
    RDE .5311 RRA .5089 RC3 -.3667 FAU .01939
FDE 1.1328 FRA .4339 FC3 -.3268 BSP 10515
BDE 3.7236 BRA .9043 BC3 .8812 FSP -349
                                                                     RRT .7913 RRF .9156 RTF .9687
5GB 3527.9 R23 .1999 R13 .9787
5G1 3473.3 SG2 618.6 THA 14.21
                                                                                                                        LSA 3119.7 MSA 199.9 SSA 1.7
EL1 3001.1 EL2 184.6 ALF 8.65
LAUNCH DATE JUL 8 1967
                                                                         FLIGHT TIME 132.00
                                                                                                                                    ARRIVAL DATE NOV 17 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 380.133
   RL 152.10 LAL -.00 LOL 285.17 VL 27.045 GAL -5.82 AZL 60.61 MCA 176.95 SMA 130.92 ECC .18845 INC29.3892 V1 29.291
RP 107.57 LAP 1.50 LOP 102.51 VP 38.130 GAP 3.54 AZP 119.36 TAL 205.70 TAP 22.66 RCA 106.25 APO 155.60 V2 35.230
RC 111.351 GL 64.14 GP -79.01 ZAL 100.30 ZAP 96.82 ETS 235.95 ZAE 83.76 ETE 151.78 ZAC 113.19 ETC 251.46 CLP 128.54
   PLANETOCENTRIC CONIC
   C3 215.468 VHL 14.679 DLA 58.52 RAL 214.41 RAD 6571.2 VEL 18.352 PTH 3.03 VHP 20.775 DPA -57.04 RAP 83.34 ECC 4.5461 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-7.68 235.02 119.69 31.80 21 14 9 4292.0 -14.45 231.09
                                                                             119.69
                                                                                                                                          -14.45
                  19 52 37
                                                                                                 31.80 21 14 9
       36.38
                                  4891.99
                    5 20 47
                                                    -7.67
                                                                                                            6 14 48
      143.62
                                 3241.00
                                                                                                                             2641.0
                                                                                                                                            -14.44
                                                                                                                                                             96.53
                                                                 100.45
                                                                               119.67
                                                                                                 31.80
                                                                 235.02
                   19 52 37
                                                    -7.68
                                                                                                                                            -14.45
        36.38
                                  4891.99
                                                                              119.69
                                                                                                 31.80 21 14 9
                                                                                                                              4292.0
                                                                                                                                                           231.09
                     5 20 47
       143.62
                                  3241.00
                                                   -7.67
                                                                 100.45
                                                                               119.67
                                                                                                 31.80
                                                                                                            6 14 4R
                                                                                                                             2641.0
                                                                                                                                            -14.44
                                                                                                                                                             96.53
                   19 52 37
                                  4891.99
                                                    -7.68
                                                                                                 31.80 21 14 9
       36.38
                                                                 235.02
                                                                                119.69
                                                                                                                              4292.0
                                                                                                                                            -14.45
                                                                                                                                                           231.09
                    5 20 47
                                                                                                            6 14 48
       143.62
                                  3241.00
                                                    -7.67
                                                                 100.45
                                                                                119.67
                                                                                                 31.80
                                                                                                                             2641.0
                                                                                                                                            -14.44
                                                                                                                                                             96.53
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 2190.2 SGR 2853.8 SG3 63.3
RRT -.9493 RRF -.9706 RTF .9967
SG8 3597.4 R23 -.1246 R13 -.9919
    TOE 2.6468 TRA 2.5823 TC3 -.0180 BAU .1376
                                                                                                                         ST 1185.0 SR 2136.7 SS 776.2
                                                                                                                       CRT -.9739 CRS .9868 CST -.9978
LSA 2551.4 MSA 249.9 SSA .8
    RDE-5.2586 RRA-2.6468 RC3 -.0442 FAU-.00093
   FOE 1.0004 FRA .8287 FC3 .0037 BSP 10068
BOE 5.8881 BRA 3.6978 BC3 .0478 FSP -191
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FLIGHT TIME 126.00

SG1 3554.7 SG2 552.5 THA 127.13

ARRIVAL DATE NOV 19 1967

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FLIGHT TIME 134.00
LAUNCH DATE JUL 8 1967
                                                                    DISTANCE 387.917
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 27.004 GAL -5.75 A7L 160.73 HCA 181.76 SHA 130.64 ECC .19175 INC70.7283 V1 29.291 RP 107.55 LAP 1.67 LOP 105.75 VP 38.107 GAP 4.33 A2P 19.28 TAL 205.76 TAP 27.53 RCA 105.59 APO 155.69 V2 35.236
    RC 113.598 GL -50.92 GP 59.08 ZAL 94.71 ZAP 94.17 ETS 176.74 ZAE 58.61 ETE 256.95 ZAC 91.55 ETC 152.15 CLP 98.13
   PLANETOCENTRIC CONIC
    C31067.582 VHL 32.674 DLA -48.22 RAL 159.67 RAD 6573.0 VEL 34.480 PTH 3.51 VHP 40.999 DPA 57.33 RAP 343.79 ECC18.5697
                                             INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                       138.22 5 32 30
138.22 13 16 18
                                                                            70.07
                                                                                                                     1705.7
                              2305.6A
                                                -.46
                                                              61.46
       49.19
                                                                                                                      221.9
                                                                                                                                      5.51
                                                  -.45
                                                             305.20
                                                                            70.09
      130.61
                  13 2 36
                                 821.90
                                                                                                                      1705.7
                                                                                                                                      5.50
                                                                                                      5 32 30
                                                                             70.07
                                                                                          138.22
                 4 54 4 2305.68
                                                  -.46
                                                              61.46
       49.19
                                                                                        221.9
                                                                                                                                      5.51
                  13 2 36
                                 821.90
                                                  -.45
                                                             305.20
                                                                            70.09
      130.81
                                                                                                                     1705.7
                                                                                                                                      5.50
                                                                                                                                                   56.53
                   4 54 4
                                                  -.46
                                                              61.46
                                                                            70.07
                               2305.68
       49.19
                                                                                                                                      5.51
                                                                                                                      221.9
                  13 2 36
                                                             305.20
                                                                            70.09
                                 821.90
                                                  -.45
      130.81
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 1151.5 SCR 3014.1 SC3 53.7
RRT -.8830 RRF .9990 RTF -.8662
SCB 3226.6 R23 -.0896 R13 .9956
SCI 3185.8 SC2 511.3 THA 109.15
                                                                                                                  ST 752.8 SR 2624.1 SS 1959.9
    TOE 4.1300 TRA 2.5936 TC3 -.0886 BAU 3.3007
                                                                                                                  CRT -.9769 CRS-1.0000 CST .9749
LSA 3356.8 MSA 160.0 SSA 1.7
   RO-14.9353 RRA-2.0016 RC3 .2136 FAU-.05069
FOE-3.1508 FRA -.3572 FC3 .0411 BSP 7985
BDE15.4958 BRA 3.2761 BC3 .2313 FSP -139
                                                                                                                  ELI 2725.5 EL2 154.9 ALF 105.71
    BOE15.4958 BRA 3.2761 BC3 .2313 FSP
                                                                                                                            ARRIVAL DATE NOV. 21 1967
                                                                     FLIGHT TIME 136.00
LAUNCH DATE JUL 8 1967
                                                                    DISTANCE 393.222
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 26.962 GAL -5.39 A7L 115.60 HCA 184.24 SMA 130.35 ECC .19086 INC25.6017 VI 29.291
RP 107.53 LAP 1.83 LOP 109.00 VP 38.082 GAP 4.43 A7P 64.46 TAL 204.08 TAP 28.32 RCA 105.47 APO 155.22 VZ 35.241
RC 115.842 GL -63.95 GP 78.27 ZAL 101.20 ZAP 101.70 ETS 110.56 ZAE 89.33 ETE 193.02 ZAC 86.84 ETC 87.43 CLP 176.05
  PLANETOCENTRIC CONIC
                                                                                              2.92 WHP 14.953 DPA 77.08 RAP 270.92 ECC 3.7431
    C3 166.677 VHL 12.910 DLA -52.25 RAL 134.74 RAD 6570.8 VEL 16.971 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                               2162.15
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                  11 39 34
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      135.94
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                    2 58 10
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                               2162.15
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      135.94
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                                                  9.31
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2400.6 SR 1671.8 SS 1057.2
CRT .9904 CRS -.9890 CST -.9999
                                                            9GT 2888.3 SGR 2470.3 SG3 84.0
RRT .9646 RRF .9564 RTF .9993
SG8 3800.6 R23 -.1403 R13 .9898
    TOE-5.2895 TRA-2.3096 TC3 -.0645 BAU .1442
    ROE-3.5397 RRA-2.6298 RC3 -.0051 FAU .00618
                                                                                                                  LSA 3104.3 MSA 197.4 SSA
    FOE-1.8068 FRA -. 7500 FC3 -. 0321 BSP 11405
                                                                                                                  EL1 2919.2 EL2 189.6 ALF 34.76
    BOE 6.3646 BRA 3.5002 BC3 .0647 FSP
                                                                 3G1 3767.6 SG2 499.6 THA 40.38
                                                    -259
                                                                                                                            ARRIVAL DATE NOV 23 1967
                                                                    FLIGHT TIME 138.00
LAUNCH DATE JUL # 1967
                                                                    DISTANCE 399.167
    RL 152.10 LAL -.00 LOL 285.17 VL 26.918 GAL -5.14 A7L 105.76 MCA 187.34 SMA 130.05 ECC .19122 INC15.7645 V1 29.291
RP 107.52 LAP 1.99 LOP 112.24 VP 38.056 GAP 4.71 A7P 74.36 TAL 202.82 TAP 30.16 RCA 105.18 APO 154.91 V2 35.246
RC 118.080 GL -59.86 GP 66.73 7AL 106.48 7AP 110.35 ETS 63.89 7AE 102.50 ETE 149.53 7AC 89.59 ETC 41.52 CLP-151.69
   PLANETOCENTRIC CONTC
    C3 70.940 VHL 8.423 DLA -46.69 RAL 133.72 RAO 6569.4 VEL 13.867 PTH 2.53 VHP 9.210 DPA 72.80 RAP 211.63 ECC 2.1675
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SCT 3855:1 SCR 675.9 SC3 139.5

RRY - .6406 RRF - .7886 RTF .9757

SCB 3913.9 R23 .1982 R13 - .9789

SCI 3879.7 SC2 515.7 THA 173.48
                                                                                                                 ST 2678.2 SR 653.1 S5 1027.5

CRT -.9439 CRS .9740 CST -.9942

LSA 2933.2 MSA 227.3 SSA 1.8
    TOE-3.7488 TRA-2.7486 TC3 -.5720 BAU .5505
    RDE .9997 RRA -.0574 RC3 .0983 FAU .02482
FDE-1.8592 FRA -.8724 FC3 -.3029 BSP 12098
                                                                                                                  EL1 2748.7 EL2 210.1 ALF 166.96
    BDE 3.8697 BRA 2.7492 BC3 .5804 FSP
                                                                                                                            ARRIVAL DATE NOV 25 1967
                                                                     FLIGHT TIME 140.00
LAUNCH DATE JUL 8 1967
                                                                     DISTANCE 405.186
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.874 GAL -4.91 AZL 101.80 HCA 190.53 SMA 129.74 ECC .19181 INC11.8006.V1 29.291 RP 107.50 LAP 2.14 LOP 115.48 VP 38.028 GAP 5.01 AZP 78.39 TAL 201.58 TAP 32.11 RCA 104.86 APO 154.63 V2 35.250 RC 120.312 GL -55.03 GP 55.76 ZAL 109.90 ZAP 118.28 ETS 54.29 ZAE 111.21 ETE 144.86 ZAC 92.66 ETC 32.42 CLP-147.36
   PLANETOCENTRIC CONIC
    C3 44.655 VHL 6.682 DLA -42.00 RAL 135.95 RAD 6568.7 VEL 12.885 PTH 2.35 VHP 7.147 DPA 64.10 RAP 190.48 ECC 1.7349
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.59 3 51 17 1751.10 20.45 30.90 21.46 127.51 4 20 28 1151.1 25.18 24.32
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                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2510.3 SR 812.2 SS 1086.7
CRT -. 9683 CRS .. 9937 CST -. 9902
                                                                 SCT 3874.8 SCR 899.9 SC3 198.1
RRT -.8486 RRF -.9546 RTF ..9633
SCB 3977.9 R23 ..2364 R13 -.9692
    TDE-2.7719 TRA-2.3311 TC3-1.0928 BAU .6695
    ROE .9446 RRA .1749 RC3 .2517 FAU .04011
F0E-2.0163 FRA -.9451 FC3 -.7776 BSP 12290
BOE 2.9265 BRA 2.3376 BC3 1.1214 FSP -635
                                                                                                                  LSA 2844.4 MSA 226.4 SSA 2.5
                                                                                                                  EL1 2631.3 EL2 193.7 ALF 162.51
                                                                 SG1 3950.4 SG2 467.0 THA 168.69
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ARRIVAL CATE NOV 27 1967

LAUNCH DATE JUL # 1967

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DISTANCE 411.216
  HÉLIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 26.829 GAL -4.67 A7L 99.67 MCA 193.75 SMA 129.44 ECC .19255 INC 9.6699 V1 29.291 RP 107.49 LAP 2.29 LOP 118.73 VP 37.999 GAP 5.32 A7P 80.60 TAL 200.33 TAP 34.07 RCA 104.51 APO 154.36 V2 35.253 RC 122.558 GL -50.98 GP 46.86 7AL 111.92 7AP 125.04 ETS 49.80 7AE 117.26 ETE 146.24 7AC 95.01 ETC 28.37 CLP-147.11
   PLANETOCENTRIC CONIC
                                                                                                  2.25 VHP 6.219 CPA 56.01 RAP 181.77 ECC 1.5501
    C3 33.426 VHL 5.782 DLA -38.48 RAL 138.58 RAD 6568.3 VEL 12.442 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      117.22
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2440.6 SR 748.0 SS 1125.5

CRT - 9697 CRS . 9961 CST - 9875

LSA 2780.7 MSA 225.0 SSA 3.4

EL1 2546.7 EL2 175.1 ALF 163.37
                                                                    SGT 3952.3 SGR 860.9 SG3 245.3
RRT -.8690 RRF -.9686 RTF ..9562
SGB 4045.0 R23 ..2592 R13 -.9615
SGI 4023.2 SGZ 418.5 THA 169.16
   TDE-2.3301 TRA-2.0762 TC3-1.5902 BAU .7255
   RDE .7522 RRA .1620 RC3 .3275 FAU .0516A
FDE-2.0822 FRA -.9378 FC3-1.3384 BSP 12489
    BOE 2.4485 BRA 2.0825 BC3 1.6236 FSP
                                                                                                                                    ARRIVAL DATE NOV 29 1967
                                                                         FLIGHT TIME 144.00
LAUNCH DATE JUL 8 1967
                                                                        DISTANCE 417.242
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 26.783 GAL -4.42 A7L 96.34 MCA 196.97 SMA 129.13 ECC .19340 INC 8.3361 V1 29.291
RP 107.49 LAP 2.43 LOP 121.98 VP 37.969 GAP 5.62 A7P 82.02 TAL 199.06 TAP 36.03 RCA 104.15 APO 154.10 V2 35.256
RC 124.755 GL -47.72 GP 39.79 ZAL 112.93 ZAP 130.64 ETS 46.63 ZAE 121.41 ETE 149.14 ZAC 96.52 ETC 25.65 CLP-147.96
  PLANETOCENTRIC CONIC
                        5.233 OLA -35.69 RAL 141.20 RAD 6566.1 VEL 12.197 PTH 2.19 VMP 5.765 DPA 49.19 RAP 177.55 ECC 1.4507
    C3 27.384 VHL
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                     4 57 31 1497.89
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10 31 45 5726.14
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      113.04
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 4055.5 SGR 766.6 SG3 277.9
RRT -.8681 RRF -.9671 RTF .9515
                                                                                                                         ST 2412.4 SR 658.3 SS 1140.0
CRT -.9689 CRS .9968 CST -.9856
    TOE-2.0873 TRA-1.8987 TC3-2.0581 BAU .7639
    ROE .5994 RRA .1219 RC3 .3443 FAU .05931
FDE-2.0648 FRA -.8700 FC3-1.8752 BSP 12777
BOE 2.1717 BRA 1.9026 BC3 2.0867 FSP -900
                                                                    SG8 4127.4 R23 .2699 R13 -.9557
SG1 4110.2 SG2 375.5 THA 170.60
                                                                                                                         LSA 2739.1 MSA 223.4 SSA 4.3
                                                                                                                       EL1 2495.7 EL2 157.3 ALF 165.13
                                                                                                                                   ARRIVAL DATE DEC 1 1967
                                                                         FLIGHT TIME 146.00
LAUNCH DATE JUL 8 1967
                                                                        DISTANCE 423.287
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.736 GAL -4.15 A7L 97.42 MCA 200.21 SMA 128.81 ECC .19431 INC 7.4186 V1 29.291
RP 107.48 LAP 2.56 LOP 125.22 VP 37.938 GAP 5.91 AZP 83.03 TAL 197.73 TAP 37.94 RCA 103.78 APO 153.84 V2 35.258
RC 126.964 GL -45.10 GP 34.20 ZAL 113.17 ZAP 135.24 ETS 44.02 ZAE 124.21 ETE 152.31 ZAC 97.27 ETC 23.48 CLP-149.15
   PLANETOCENTRIC CONTC
    C3 23.625 VHL 4.861 DLA -34.04 RAL 143.79 RAC 6568.0 VEL 12.042 PTH 2.15 VHP 5.539 DPA 43.54 RAP 175.47 ECC 1.3888
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 26 52 1404.10
10 23 6 5749.12
5 26 52 1404.10
10 23 6 5749.12
10 1 17 5815.62
10 47 51 5673.64
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       110.00
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      110.00
                                                   24.34
                                                                 266.49
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 3534.4 SCR 500.8 SC3 221.8
RRT -.7140 RRF -.9101 RTF ..9049
SCB 3569.7 R23 ..3680 R13_-.9086
SCI 3552.6 SC2 348.8 THA 174.17
                                                                                                                         ST 2087.5 SR 471.4 SS 913.6

CRT -.9508 CRS .9960 CST -.9746

LSA 2315.8 MSA 227.1 SSA 5.2
    TDE-1.6851 TRA-1.4976 TC3-2.0591 BAU .6527
    RDE .3999 RRA -.0036 RC3 .1737 FAU .04599
    FDE-1.6129 FRA -.3814 FC3-1.6852 BSP 6690
                                                                                                                         EL1 2135.3 EL2 142.8 ALF 167.83
                                                                         FLIGHT TIME 148.00
                                                                                                                                    ARRIVAL DATE DEC 3 1967
LAUNCH DATE JUL # 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 429.262
    RL 152.10 LAL -.00 LOL 285.17 VL 26.689 GAL -3.89 AZL 96.75 MCA 203.45 SMA 128.50 ECC .19541 INC 6.7455 V1 29.291
RP 107.48 LAP 2.68 LOP 128.47 VP 37.906 GAP 6.22 AZP 83.81 TAL 196.44 TAP 39.89 RCA 103.39 APO 153.61 V2 35.259
RC 129.165 GL -42.93 GP 29.71 ZAL 112.91 ZAP 139.12 ETS 41.84 ZAE 126.05 ETE 155.38 ZAC 97.47 ETC 21.70 CLP-150.52
   PLANETOCENTRIC CONIC
    C3 21.090 WHL 4.592 OLA -32.68 RAL 146.32 RAD 6567.9 VEL 11.936 PTH 2.12 VHP 5.445 DPA 38.84 RAP 174.49 ECC 1.3471
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                  357.46
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                    5 53 57 1324.32
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       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                     SCT 4232.5 SGR 574.7 SG3 301.4 ST 2396.1 SR 510.0 SS 1111.0 RRT -.8330 RRF -.9381 RTF ..9428 CRT -.9670 CRS ..9975 CST -.9924 LSA 2681.0 MSA 219.3 SSA 6.3 SG1 4259.6 SG2 315.9 THA 173.51 EL1 2446.5 EL2 127.3 ALF 168.34
    TOF-1.6311 TRA-1.6153 TC3-2.6729 BAU .8137
    RDE .4083 RRA .0545 RC3 .2761 FAU .06408
FDE-1.8790 FRA -.6172 FC3-2.6303 BSP 13001
                                                                     SG1 4259.6 SG2 315.9 THA 173.51
    BOE 1.8761 BRA 1.6162 BC3 2.8861 FSP -950
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FLIGHT TIME 142.00

EL1 2593.0 EL2 81.1 ALF 171.46

LAUNCH CATE JUL 8 1967 FLIGHT TIME 150.00 ARRIVAL CATE DEC 5 1967 HELIOCENTRIC CONIC **DISTANCE 435.250** RL 152.10 LAL -.00 LOL 285.17 VL 26.641 CAL -3.62 AZL 96.23 MCA 206.69 SMA 128.18 ECC .19659 INC 6.2276 V1 29.291
RP 107.48 LAP 2.79 LOP 131.72 VP 37.872 CAP 6.52 AZP 84.43 TAL 195.10 TAP 41.79 RCA 102.99 APO 153.38 V2 35.259
RC 131.355 GL -41.12 GP 26.12 TAL 112.18 ZAP 142.39 ETS 39.96 TAE 127.26 ETE 158.12 TAC 97.18 ETC 20.17 CLP-151.91 PLANETOCENTRIC CONIC C3 19.239 VHL 4.386 OLA -31.75 RAL 148.89 RAD 6567.8 VEL 11.858 PTH 2.10 VHP 5.423 DPA 34.89 RAP 174.27 ECC 1.3166 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 17 44 1260.20 10 12 53 5794.21 352.57 17,79 113.37 6 38 45 660.2 22.12 75.01 113.36 11 49 27 17.80 5194.2 267.00 274.69 104.99 22.14 17.79 113.37 6 38 45 660.2 25.09 1260.20 352.57 6 17 44 1260.20 10 12 53 5794.21 22.12 75.01 113.37 6 38 45 113.36 11 49 27 121.57 9 19 36 105.30 13 51 54 5194.2 25.11 267.00 17.80 104.99 22.14 274.69 108.6 307.73 13.27 17.92 300.98 110.00 9 7 47 708.59 13.84 32.73 4793.8 12 22 0 5393.81 247.44 21.25 110.00 30.95 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY RGT -.8096 RRF -.9126 RTF ..9410 SGB 4386.0 R23 .2506 R13 -.9427 SGI 4375.8 SGZ 299.3 THA 174.54 ST 2428.3 SR 466.2 SS 1102.5 CRT -.9683 CRS .9980 CST -.9817 TOE-1.7803 TRA-1.5045 TC3-3.2693 BAU .84 V) ROE .3566 RRA .0385 RC3 .2330 FAU .06456 LSA 2698.6 MSA 216.1 SSA 7.4 FOE-1.7915 FRA -.5006 FC3-2.9050 BSP 13482 EL1 2470.0 EL2 114.6 ALF 169.45 BOE 1.8157 BRA 1.5050 BC3 5.2776 FSP -980 ARRIVAL CATE DEC 7 1967 LAUNCH DATE JUL 8 1967 FLIGHT TIME 152.00 DISTANCE 441.224 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 285.17 VL 26.594 GAL -3.33 AZL 95.81 MCA 209.93 SMA 127.87 ECC .19788 INC 5.8147 V1 29.291 RP 107.48 LAP 2.90 LOP 134.97 VP 37.838 GAP 6.82 AZP 84.96 TAL 193.73 TAP 43.66 RCA 102.57 APO 153.17 VZ 35.259 RC 133.537 GL -39.56 GP 23.19 ZAL 111.09 ZAP 145.20 ETS 38.36 ZAE 128.05 ETE 160.51 ZAC 96.53 ETC 18.86 CLP-153.29 PLANETOCENTRIC CONIC 2.09 VHP 5.449 CPA C3 17.833 VHL 4.223 DLA -31.14 RAL 151.50 RAD 6567.7 VEL 11.799 PTH 31.52 RAP 174.54 ECC 1.2935 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 58 32 610.4 25.04 341.79 19.02 112.43 76.47 6 38 21 1210.40 22.19 348.84 112.42 11 49 56 112.43 6 58 32 275.79 5208.4 25.05 268.04 103.53 10 13 8 5808.39 22.20 19.02 610.4 25.04 341.09 76.47 6 38 21 1210,40 22.19 348.84 19.02 112.42 11 49 56 121.83 9 19 4 103.11 14 12 42 10 13 8 5808.39 275.79 19.02 520A.4 25.05 268.04 103.53 22.20 127.3 17.29 302.07 13.17 30A . 76 110.00 9 6 57 727.31 14.18 4739.5 234.55 33.33 110.00 12 43 43 5339.47 31.85 243.47 22.49 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4460.0 SGR 461.4 SG3 304.6 RRT -.7753 RRF -.8759 RTF ..9387 SGB 4483.8 R23 .2297 R13 -.9399 SGI 4474.4 SG2 290.5 THA 175.39 ST 2463.6 SR 432.6 SS 1087.4 CRT -.9705 CRS .9986 CST -.9812 TOE-1.7479 TRA-1.3892 TC3-3.6336 BAU .8674 RDE .3187 RRA .0267 RC3 .1839 FAU .06349 LSA 2719.2 MSA 212.3 SSA 8.5 EL1 2499.2 EL2 102.9 ALF 170.31 FDE-1.6964 FRA -.3759 FC3-3.0824 BSP 13808 8.5 ADE 1.7767 BRA 1.3895 BC3 3.6382 FSP -976 ARRIVAL DATE DEC 9 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 8-1967 DISTANCE 447.182 HELTOCENTRIC CONIC RL 152:10 LAL -.00 LOL 285:17 VL 26:545 GAL -3.03 AZL 95:48 HCA 213:17 SMA 127:56 ECC .19929 INC 5:4757 VI 29:291
RP 107;48 LAP 2:99 LOP 138:22 VP 37:803 GAP 7:11 AZP 85:41 TAL 192:35 TAP 45:52 RCA 102:13 APO 152:98 V2 35:257
RC 135:709 GL -38:20 GP 20:79 ZAL 109:70 ZAP 147:65 ETS 37:01 ZAE 128:54 ETE 162:56 ZAC 95:61 ETC 17:72 CLP-154:64 PLANETOCENTRIC CONIC C3 16.731 VHL 4.090 DLA -30.79 RAL 154.19 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 5.505 DPA 28.59 RAP 1.75.16 ECC 1.2754 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.77 7 15 11 111.75 11 54 13 111.77 7 15 11 6 55 36 1175.04 10 17 19 5814.28 6 55 36 1175.04 10 17 19 5814.28 20.60 7 15 11 346.24 77.38 22.33 20.60 5214.3 25.09 268.51 276.29 102.62 22.34 20.60 575.0 346.24 77.36 22.33 5214.3 25.09 268.51 20.60 102.62 276.29 22.34 132.4 17.11 302.36 15.65 110.00 9 11 37 732.36 12.99 309.04 13 0 29 5304.96 4705.0 33.63 110.00 32.36 240.90 23.98 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4561.3 SGR 425.1 SG3 300.4 RRT -.7339 RRF -.8297 RTF ..9367 SG8 4581.0 R23 .2054 R13 -.9376 SG1 4572.0 SG2 288.1 THA 176.07 ST 2509.4 SR 409.1 SS 1073.8 CRT -.9738 CRS .9991 CST -.9810 TOE-1.7341 TRA-1.2727 TC3-3.9796 BAU .8907 ROE .2920 RRA .0197 RC3 .1363 FAU .06176 FDE-1.6082 FRA -.2568 FC3-3.1958 BSP 14134 LSA 2752.1 MSA 207.8 SSA 9.6 EL1 2540.9 EL2 91.8 ALF 170.97 BDE 1.7585 BRA 1.2728 BC3 3.9819 FSP -964 ARRIVAL DATE DEC 11 1967 LAUNCH DATE JUL 8 1967 FLIGHT TIME 156,00 DISTANCE 453.124 RL 152.10 LAL -.00 LOL 285.17 VL 26.497 GAL -2.72 AZL 95.19 MCA 216.42 SMA 127.24 ECC .20083 INC 5.1909 VI 29.291 RP 107.49 LAP 3.08 LOP 141.47 VP 37.768 GAP 7.41 AZP 85.82 TAL 190.95 TAP 47.36 RCA 101.69 APO 152.80 V2 35.255 RC 137.871 GL -36.97 GP 18.78 ZAL 108.04 ZAP 149.84 ETS 35.87 ZAE 128.85 ETE 164.32 ZAC 94.46 ETC 16.72 CLP-155.96 PLANETOCENTRIC CONIC C3 15.854 VHL 3.982 DLA -30.63 RAL 156.97 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 5.584 DPA 26.00 RAP 176.04 ECC 1.2609 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMTH INJ 1111.33 7 28 55 111.31 12 2 15 111.33 7 28 55 553.2 7 9 42 1153.23 10 25 24 5811.50 22.49 22.53 344.69 5211.5 25.23 102.20 22.54 276.17 22.49 553.2 25.22 336.86 7 9 42 1155.23 22.53 344.69 22.49 111.31 12 2 15 25.23 268.35 10 25 24 5811.50 22.54 276.17 22.49 5211.5 102.20 121.85 9 32 20 100.80 14 42 9 9 32 20 17.25 302.13 17.56 128.3 9 20 12 728.34 13.13 308.82 4684.4 33.78 13 14 5 25.76 110.00 5284.38 32.63 239.36 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2364.3 SR 393.3 SS 1061.7 CRT -,9780 CRS .9995 CST -.9811 SGT 4659.6 SGR 400.8 SG3 294.4 RRT -.6873 RRF -.7761 RTF .9350 SGB 4676.8 R23 .1804 R13 -.9356 TDE-1.7346 TRA-1.1528 TC3-4.3072 BAU .9131 RDE .2732 RRA .0161 RC3 .0916 FAU .05962 LSA 2795.8 MSA 202.5 SSA 10.8 FDE-1.5275 FRA -.1446 FC3-3.2555 BSP 14460

BOE 1.7560 BRA 1.1529 BC3 4.3082 FSP -946

SCI 4667 8 SC2 290.6 THA 176.60

LAUNCH DATE JUL 8 1967

ARRIVAL DATE DEC 13 1967

EL1 2863.1 EL2 37.7 ALF 172.47

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HELIOCENTRIC CONIC
                                                                                     DISTANCE 459.050
     RL 152.10 LAL -.00 LOL 285.17 VL 26.448 GAL -2.40 AZL 94.95 MCA 219.66 SMA 126.93 ECC .20250 INC 4.9468 V1 29.291 RP 107.50 LAP 3.16 LOP 144.73 VP 37.731 GAP 7.71 AZP 86.19 TAL 189.52 TAP 49.18 RCA 101.23 APO 152.63 V2 35.253 RC 140.023 GL -35.83 GP 17.10 ZAL 106.14 ZAP 151.80 ETS 34.94 ZAE 129.02 ETE 165.83 ZAC 93.13 ETC 15.85 CLP-157.23
    PLANETOCENTRIC CONIC
     C3 15.150 VHL 3.892 DLA -30.64 RAL 159.86 RAD 6567.6 VEL 11.685 PTH
                                                                                                                    2.06 VHP 5.678 OPA 23.67 RAP 177.12 ECC 1.2493
     ENCH APMENT LINCH TIME L-I TIME. INJ. LAT. INJ. LONG. INJ. AT ASC. INJ. APMENT INJ. TIME. PO. CST. TIM. INJ. 2 LAT. INJ. 2 LONG
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    DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                SGT 4746.8 SGR 385.6 SG3 286.8
RRT -.6371 RRF -.7177 RTF .9331
                                                                                                                                              ST 2623.1 SR 382.9 SS 1048.9
CRT -.9826 CRS ..9994 CST -.9814
     TOE-1.7442 TRA-1.0253 TC3-4.6072 BAU .9332
     ROE .2600 RRA .0145 RC3 .0501 FAU .05708
                                                                                SGB 4762.5 RZ3 .1568 R13 -.9336
SG1 4753.2 SG2 296.8 THA 177.03
     FOE-1.4515 FRA -. 0363 FC3-3.2618 BSP 14711
                                                                                                                                             LSA 2844.0 MSA 196.8 SSA 11.9
     BOE 1.7635 BRA 1.0254 BC3 4.6075 FSP -918
                                                                                                                                              EL1 2650.0 EL2 70.3 ALF 171.83
                                                                                      FLIGHT TIME 160.00
                                                                                                                                                           ARRIVAL DATE DEC 15 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 464.958
     RL 152.10 LAL -.00 LOL 285.17 VL 26.400 GAL -2.06 AZL 94.73 MCA 222.90 SMA 126.62 ECC .20431 INC 4.7338 V1 29.291 RP 107.51 LAP 3.22 LOP 147.98 VP 37.694 GAP 8.01 AZP 86.53 TAL 188.09 TAP 50.99 RCA 100.75 APO 152.49 V2 35.249 RC 142.165 GL -34.75 GP 15.67 ZAL 104.04 ZAP 153.59 ETS 34.19 ZAE 129.12 ETE 167.12 ZAC 91.66 ETC 15.08 CLP-158.47
   PLANETOCENTRIC CONIC
     C3 14.589 VHL 3.820 DLA -30.77 RAL 162.87 RAD 6567.6 VEL 11.661 PTM 2.05 VMP 5.785 DPA 21.56 RAP 178.36 ECC 1.2401 LNCM AFMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                               SG1 4836.5 SGR 378.5 SG3 279.2

RRT - 5896 RRF - 6605 RTF . 9320

SG8 4851.3 R23 .1346 R13 - .9324

SG1 4841.7 SG2 305.4 TMA 177.35
                                                                                                                                            ST 2691.2 SR 377.6 SS 1039.4

CRT -.9873 CRS .9987 CST -.9819

LSA 2903.3 MSA 190.5 SSA 13.0

EL1 2717.0 EL2 59.5 ALF 172.11
     TOE-1.7651 TRA -.8941 TCS-4.8884 BAU .9534
     FOE-1.3851 FRA .0818 FC3-3.2359 88P 15015
     ROE .2517 RRA .0148 RC3 .0139 FAU .05453
LAUNCH DATE JUL 8 1967
                                                                                     FLIGHT TIME 162.00
                                                                                                                                                          ARRIVAL DATE DEC 17 1967
   HELIOCENTRIC CONTC
                                                                                    DISTANCE 470.848
    RL 152.10 LAL -.00 LOL 285.17 VL 26.351 GAL -1.72 A7L 94.55 MCA 226.15 SMA 126.31 ECC .20628 INC 4.5455 V1 29.291
RP 107.52 LAP 3.28 LOP 151.23 VP 37.656 GAP 8.31 A7P 86.85 TAL 186.64 TAP 52.78 RCA 100.25 APO 152.36 V2 35.245
RC 144.295 GL -33.70 GP 14.44 7AL 101.74 7AP 155.24 ETS 33.62 ZAE 129.15 ETE 168.22 ZAC 90.06 ETC 14.39 CLP-159.66
   PLANETOCENTRIC CONIC
    C3 14.151 VML 3.762 OLA -31.00 RAL 166.01 RAD 6567.6 VEL 11.642 PTM 2.04 VMP 5.903 OPA 19.61 RAP 179.72 ELC 1.2229 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.84 7 38 51 1149.68 23.41 344.79 29.88 110.90 12 44 27 5164.2 26.05 265.09 76.84 7 38 51 1149.68 23.41 344.79 29.88 110.90 12 44 27 5164.2 26.05 265.09 103.16 11 8 22 5764.22 23.42 272.99 29.89 110.90 12 44 27 5164.2 26.05 265.09 110.00 10 2 17 683.15 14.74 306.31 25.41 121.19 10 13 40 83.1 18.77 299.50 110.00 13 44 7 5278.75 32.70 238.93 32.85 100.56 15 12 6 4678.8 33.81 229.87
     C3 14.151 VHL 3.762 OLA -31.00 RAL 166.01 RAD 6567.6 VEL 11.642 PTH 2.04 VHP 5.903 OPA 19.61 RAP 179.72 ECC 1.2329
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SGT 4925.8 SGR 377.0 SG3 271.5
RRT -.5468 RRF -.6071 RTF .9313
SG8 4940.2 R23 .1144 R13 -.9316
SG1 4930.1 SG2 315.4 THA 177.59
                                                                                                                                            ST 2763.8 SR 375.8 SS 1030.0

CRT -.9915 CRS .9973 CST -.9826

LSA 2967.6 MSA 183.8 SSA 14.2

EL1 2788.8 EL2 48.6 ALF 172.32
     TOE-1.7935 TRA -.7564 TC3-5.1469 BAU .9737
    ROE .2467 RRA .0162 RC3 -.0170 FAU .05201
FDE-1.3240 FRA .1532 FC3-3.1822 BSP 15324
BDE 1.8104 BRA .7566 BC3 5.1470 FSP -872
LAUNCH DATE JUL 8 1967
                                                                                     FLIGHT TIME 164.00
                                                                                                                                                          ARRIVAL DATE DEC 19 1967
  HELIOCENTRIC CONIC
                                                                                     DISTANCE 476.719
    RL 152.10 LAL -.00 LOL 285.17 VL 26.303 GAL -1.36 A7L 94.38 MCA 229.39 SMA 126.00 ECC .20840 INC 4.3766 VI 29.291
RP 107.53 LAP 3.32 LOP 154.48 VP 37.617 GAP 8.61 A7P 87.15 TAL 185.17 TAP 54.56 RCA 99.74 APO 152.26 V2 35.240
RC 146.414 GL -32.66 GP 13.39 ZAL 99.27 ZAP 156.76 ETS 33.20 ZAE 129.15 ETE 169.18 ZAC 88.36 ETC 13.79 CLP-160.82
   PLANETOCENTRIC CONTC
    C3 13.824 VML 3.718 DLA -31.29 RAL 169.28 RAD 6567.5 VEL 11.628 PTH 2.04 VMP 6.029 DPA 17.80 RAP 181.19 ECC 1.2275
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG 76.10 7 46 42 1160.96 23.75 345.78 32.89 111.00 8 6 3 561.0 26.38 337.86
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   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGE 5013.9 SGE 379.7 SGS 263.6
RRT - 5096 RRF - 5599 RTF . 9309
SGB 5024.5 R23 .0969 R13 - 9312
SGI 5013.9 SG2 326.5 THA 177.7R
    TOE-1.8278 TRA -.6108 TC3-5.3716 BAU
                                                                                                                                           ST 2838.4 SR 377.1 SS 1021.0
CRT -.9949 CRS .9951 CST -.9834
LSA 3034.7 MSA 176.9 SSA 15.3
                                                                .9928
    RDE .2446 RRA .0182 RC3 -.0432 FAU .04946
FDE-1.2684 FRA .2386 FC3-3.0975 83P 15620
BDE 1.8441 BRA .6110 BC3 5.3718 FSP -849
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FLIGHT TIME 158.00

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ARRIVAL DATE DEC 21 1967
                                                                         FLIGHT TIME 166.00
LAUNCH DATE JUL 8 1967
                                                                        DISTANCE 482.571
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 26.254 GAL -.98 AZL 94.22 MCA 232.63 SHA 125.70 ECC .21070 INC 4.2234 VI 29.291
RP 107.55 LAP 3.36 LOP 157.73 VP 37.578 GAP 8.92 AZP 87.43 TAL 183.69 TAP 56.32 RCA 99.21 APO 152.18 V2 35.234
RC 148.521 GL -31.61 GP 12.47 TAL 96.64 ZAP 158.17 ETS 32.94 ZAE 129.12 ETE 170.00 ZAC 86.58 ETC 13.25 CLP-161.94
   PLANETOCENTRIC CONIC
                                                                                                   2.04 VMP 6.163 DPA 16.09 RAP 182.74 ECC 1.2239
    C3 13.603 VHL 3.688 DLA -31.62 RAL 172.69 RAD 6567.5 VEL 11.618 PTH
   ENCH AZHTH LNCH TIME LAI TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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11 45 50 5721.56
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      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5082.1 SGR 304.8 SG3 255.1
RRT -.4772 RRF -.5183 RTF .9305
SGB 5096.6 R23 .0823 R13 -.9307
SGI 5085.4 SG2 338.0 THA 177.92
                                                                                                                         ST 2907.4 SR 380.2 SS 1008.5
CRT -.9973 CRS .9918 CST -.9841
    TOE-1:8630 TRA -.4548 TC3-5.5504 BAU 1.0095
    ROE .2446 RRA .0202 RC3 -.0653 FAU .04677
FOE-1.2131 FRA .3202 FC3-2.9768 BSP 15831
BOE 1.8790 BRA .4553 BC3 5.5508 FSP -819
                                                                                                                         LSA 3096.0 MSA 170.1 SSA 16.5
EL1 2932.0 EL2 27.5 ALF 172.57
                                                                                                                                     ARRIVAL DATE DEC 23 1967
                                                                         FLIGHT TIME 168.00
                                                                        DISTANCE 488.402
   RL 152.10 LAL -.00 LOL 285.17 VL 26.206 GAL -.60 A7L 94.08 MCA 235.87 SMA 125.40 ECC .21318 INC 4.0830 VI 29.291 RP 107.57 LAP 3.38 LOP 160.98 VP 37.538 GAP 9.24 A7P 87.71 TAL 182.20 TAP 58.07 RCA 98.67 APO 152.13 V2 35.228 RC 150.615 GL -30.54 GP 11.67 TAL 93.87 TAP 159.50 ETS 32.84 TAE 129.08 ETE 170.71 TAC 84.72 ETC 12.76 CLP-163.03
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 13.484 WHL 3.672 DLA -31.98 RAL 176.23 RAD 6567.5 VEL 11.613 PTH
                                                                                                   2.03 VHP 6.305 OPA 14.48 RAP 184.37 ECC 1.2219
    LNCH AZHTH LNCH TIME, L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              111.36 8 23 5
                                                                                                                               590.5
                                                                                 39.67
                                                                 348.29
                                  1190.51
                     8 3 14
                                                    24.36
       74.48
                                                                                                                                               27.07
                                                                                                 111.35
                                                                                                            13 40 32
                                                                                                                              5102.2
                                                    24.39
                                                                  266.71
                                                                                  39.67
                   12 5 30
                                  5702.25
       105.52
                                                                                                27.06
                                                                                                                                                             340.34
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                                                                  348.29
                                                                                  39.67
                                                    24.36
                     8 3 14
                                   1190.51
                                                                                                                                               27.07
                                                                                                                                                             260.76
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                                                                                 39.67
                   12 5 30 5702.25
                                                    24.39
                                                                  268.71
       105.52
                                                                                                                                                             295.31
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102.64 15 35 12
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                                                                                                                                 12.8
                                                    17.18
                                                                  302.31
                                                                                 35.97
                   11 1 31
                                    612.78
       110.00
                                                                                                                              4728.0
                                                                                                                                               33.44
                                                                  242.61
                                                                                  42.32
                                  5327.97
                   14 6 24
                                                     32.03
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2979.1 SR 385.7 SS 997.8

CRT -.9987 CRS .9878 CST -.9849

LSA 3161.1 MSA 164.0 SSA 17.5
                                                                      SGT 5160.0 SGR 392.3 SG3 247.4
    TDE-1.9048 TRA -.2915 TC3-5.6968 BAU 1.0271
                                                                      RRT - .4529 RRF - .4859 RTF .9306
$68 5174.9 R23 .0701 R13 - .9308
$61 5165.1 $62 349.5 THA 178.02
    ROE .2471 RRA .0221 RC3 -.0817 FAU .04429
FOE-1.1647 FRA .3966 FC3-2.8434 85P 16119
BOE 1.9208 BRA .2923 BC3 5.6974 F5P -797
                                                                                                                          EL1 3003.9 EL2 19.8 ALF 172.63
                                                                                                                                    ARRIVAL DATE DEC 25 1967
                                                                         FLIGHT TIME 170.00
LAUNCH DATE JUL 8 1967
    RL 152.10 LAL -.00 LOL 285.17 VL 26.158 GAL -.19 AZL 93.95 HCA 239.11 SMA 125.10 ECC .21585 INC 3.9530 V1 29.291
RP 107.59 LAP 3.39 LOP 164.22 VP 37.498 GAP 9.55 AZP 87.97 TAL 180.70 TAP 59.81 RCA 98.10 APO 152.10 V2 35.221
RC 152.696 GL -29.43 GP 10.97 TAL 90.99 ZAP 160.76 ETS 32.89 ZAE 129.04 ETE 171.33 ZAC 82.80 ETC 12.34 CLP-164.09
                                                                        DISTANCE 494.211
   HELLOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 13.468 VML 3.670 DLA -32.33 RAL 179.88 RAD 6567.5 VEL 11.613 PTH 2.03 VMP 6.454 DPA 12.94 RAP 186.06 ECC 1.2216
    ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              43.41
                                                                                             111.62
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                    8 12 38 1206.40
12 25 16 5685.83
8 12 38 1206.40
                                                    24.64
                                                                 349.61
        73.70
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                                                                  267.57
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       106.30
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14 0 1
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        73.70
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103.63 15 42 32
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                  11 23 44 5876.17
14 13 20 5352.10
                                                                  278.79
                                                                                  40.01
       110.00
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                                                                                                                                                            235.51
                                                                  244.40
                                                                                  45.94
                                                     31.66
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 3043.3 SR 392.5 SS 983.9
CRT -.9988 CRS .9829 CST -.9857
                                                                     SGT 5235.9 SGR 400.6 SG3 239.8-
RRT -.4350 RRF -.4600 RTF ..9314
SGB 5251.3 R23 .0587 R13 -.9315
SGI 5238.9 SGZ 360.5 THA 178.08
    TDE-1.9471 TRA -.1219 TC3-5.8002 BAU 1.0445
    ROE .2513 RRA .0239 RC3 -.0928 FAU .04194
FDE-1.1172 FRA .4662 FC3-2.6962 BSP 16424
BDE 1.9632 BRA .1243 BC3 5.8010 FSP -777
                                                                                                                          LSA 3218.5 MSA 158.3 SSA 18.5
                                                                                                                          ELI 3068.5 ELZ 18.9 ALF 172.66
                                                                                                                                     ARRIVAL DATE DEC 27 1967
                                                                          FLIGHT TIME 172.00
LAUNCH DATE JUL 8 1967
                                                                        DISTANCE 499.997
    RL 152.10 LAL -.00 LOL 285.17 VL 26.110 GAL .23 A7L 93.83 MCA 242.35 SMA 124.81 ECC .21873 INC 3.8315 V1 29.291 RP 107.62 LAP 3.39 LOP 167.47 VP 37.458 GAP 9.88 A7P 88.22 TAL 179.19 TAP 61.54 RCA 97.51 APO 152.10 V2 35.214 RC 154.762 GL -28.29 GP 10.34 TAL 88.01 ZAP 161.95 ETS 33.09 ZAE 128.98 ETE 171.87 ZAC 80.82 ETC 11.96 CLP-165.12
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                     2.04 WHP 6.611 OPA 11.46 RAP 187.81 ECC 1.2231
     C3 13.556 VHL 3.682 DLA -32.66 RAL 183.64 RAD 6567.5 VEL 11.616 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                            342.95
                                                                                47.38
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                                                                                                111.92
                                                     24.85
                                                                  350.91
                    6 23 } 1222.19
12 44 53 5672.90
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                                                     24.85
                     8 23 1
                                  1222.19
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119.09 13 24 9
104.69 15 50 6
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                                    5672.90
                                                     24.86
        107.00
                                                                                                                               5252.7
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                                                                                  44.27
                                                     18.80
                                                                   277.42
                    11 46 36 5852.69
14 20 28 5378.44
        110.00
                                                                                                                               4778.4
                                                                                                                                               32.92
                                                                                                                                                             237.51
                                                                  246.32
                                                                                 49.76
                                                     31.22
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 5290.5 SGR 409.2 SG3 230.7
RRT -.4177 RRF -.4379 RTF .9306
SGB 5306.3 R23 .0520 R13 -.9307
SGI 5293.3 SG2 371.6 THA 178.14
                                                                                                                         ST 3090.8 SR 399.8 SS 963.0
CRT -.9978 CRS .9769 CST -.9862
     TOE-1.9843 TRA .0639 TC3-5.8315 BAU 1.0570
     ROE .2568 RRA .0247 RC3 -.1025 FAU .03914
FDE-1.0658 FRA .5377 FC3-2.4998 BSP 16534
                                                                                                                          LSA 3258.2 MSA 154.3 SSA 19.4
                                                                                                                         EL1 3116.4 EL2 26.1 ALF 172.64
     BOE 2.0009 BRA .0685 BC3 5.8324 FSP -738
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ARRIVAL DATE DEC 29 1967

LAUNCH DATE JUL 8 1967

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DISTANCE 505.758
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 26.062 GAL .66 A7L 93.72 MCA 245.59 SMA 124.51 ECC .22184 INC 3.7171 VI 29.291
RP 107.64 LAP 3.38 LOP 170.71 VP 37.417 GAP 10.21 A7P 88.46 TAL 177.67 TAP 63.26 RCA 96.89 APO 152.14 V2 35.205
RC 156.813 GL -27.10 GP 9.79 ZAL 84.96 ZAP 163.07 ETS 33.46 ZAE 128.93 ETE 172.34 ZAC 78.80 ETC 11.62 CLP-166.13
   PLANETOCENTRIC CONIC
     C3 13.755 VHL 3.709 DLA -32.95 RAL 187.48 RAD 6567.5 VEL 11.625 PTH 2.04 VHP 6.775 DPA 10.03 RAP 189.61 ECC 1.2264
    C3 13.755 VHL 3.709 OLA -32.95 RAL 187.48 RAO 6567.5 VEL 11.625 PTH 2.04 VMP 6.775 DPA 10.03 RAP 189.61 ECC 11.2264 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.60 13 4 4 5664.13 24.98 266.06 51.54 112.22 14 38 29 5064.1 27.77 258.10 72.40 8 34 29 1237.32 24.97 352.13 51.54 112.22 14 38 29 5064.1 27.77 258.10 107.60 13 4 4 5664.13 24.98 266.06 51.54 112.22 14 38 29 5064.1 27.77 258.10 107.60 13 4 4 5664.13 24.98 266.06 51.54 112.22 14 38 29 5064.1 27.77 258.10 110.00 12 9 35 5831.80 19.49 276.19 48.72 118.66 13 46 47 5231.8 23.16 264.98 110.00 14 28 8 5405.68 30.73 248.30 53.78 105.77 15 58 14 4805.7 32.58 239.57
                     8 34 29 1237.32
13 4 4 5664.13
12 9 35 5831.80
14 28 8 5405.68
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  RIG-COURSE EXECUTION ACCURACY
SGT 5350.6 SGR 417.7 SG3 223.2
RRT -,4085 RRF -.4217 RTF .9314
SGB 5366.9 R23 .0430 R13 -.9315
SGI 5353.3 SG2 381.1 THA 178.16
                                                                                                                                                 ST 3124.6 SR 408.1 SS 940.2
     TOE-2.0187 TRA .2592 TC3-5.8260 BAU 1.0715
                                                                                                                                                CRT -.9957 CRS .9699 CST -.9866
    ROE .2640 RRA .0248 RC3 -.1051 FAU .03691 FOE-1.0164 FRA .6049 FC3-2.3233 BSP 16765
                                                                                                                                                LSA 3284.9 MSA 151.6 SSA 20.1
                                                                                                                                                 EL1 3151.0 EL2 37.3 ALF 172.59
     BOE 2.0359 BRA .2604 BC3 5.8270 FSP -720
                                                                                                                                                              ARRIVAL DATE DEC 31 1967
                                                                                       FLIGHT TIME 176.00
LAUNCH DATE JUL 8 1967
                                                                                      DISTANCE 511.491
    RL 152.10 LAL -.00 LOL 285.17 VL 26.015 GAL 1.12 A7L 93.61 MCA 248.82 SMA 124.23 ECC .22519 INC 3.6085 V1 29.291
RP 107.67 LAP 3.36 LOP 173.96 VP 37.375 GAP 10.55 A7P 88.70 TAL 176.15 TAP 64.97 RCA 96.25 APO 152.20 V2 35.197
RC 158.850 GL -25.88 GP 9.30 TAL 81.85 TAP 164.15 ETS 34.01 TAE 128.88 ETE 172.76 TAC 76.74 ETC 11.33 CLP-167.11
   PLANETOCENTRIC CONIC
                                                                                                                                                           8.65 RAP 191.44 ECC 1.2316
     C3 14.071 VHL 3.751 OLA -33.18 RAL 191.39 RAD 6567.6 VEL 11.639 PTH 2.04 VHP 6.948 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               INJ AZMTH INJ TIME
112.56 9 7 55
112.54 14 56 58
112.56 9 7 55
112.54 14 56 58
118.30 14 8 56
106.78 16 7 24
                                                                                                                                                     651.5 27.84 345.30
                                                                                               55.86
                         8 47 3 1251.53
                                                             25.01
                                                                              353.24
         71.93
                                                                                                                                                       5059.9
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                                                                                                                                                                                           257.80
                                                                                                  55.87
                       13 22 38 5659.87
                                                              25.02
                                                                              265.75
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                         8 47 3
                                         1251.53
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          71.93
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        108.07
                      13 22 36 5659.87
                                                              25.02
                                                                              265.75
                                                                                                  55.87
                                                                                                                                                       5215.4
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                     12 32 1 5815.36
14 36 51 5432.08
        110.00.
                                                              20.02
                                                                              275.21
                                                                                                  53.29
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                                                                                                                                                      4832.1
        110.00
                                                              30.23
                                                                              250.19
                                                                                                  57.96
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 3149.0 SR 417.3 SS 917.1 CRT -.9926 CRS .9624 CST -.9871 LSA 3302.8 MSA 149.8 SSA 20.6 EL1 3176.1 EL2 50.2 ALF 172.51
                                                                                 SGT 5412.9 SGR 426.6 SG3 216.0
RRT - 4038 RRF - 4117 RTF .9330
SGB 5429.7 R23 .0361 R13 - .9331
SGI 5415.6 SG2 390.1 THA 178.17
     TOE-2.0533 TRA .4605 TC3-5.7729 BAU 1.0861
     RDE .2730 RRA .0244 RC3 -.1040 FAU .03478
FDE -.9709 FRA .6646 FC3-2.1398 BSP 16993
BDE 2.0713 BRA .4612 BC3 5.7738 FSP -699
                                                                                                                                                              ARRIVAL DATE JAN 2 1968
LAUNCH DATE JUL 8 1967
                                                                                       FLIGHT TIME 178.00
                                                                                      DISTANCE 517.196
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 25.96R GAL 1.59 A7L 93.50 MCA 252.06 SMA 123.94 ECC .22880 INC 3.5046 V1 29.291
RP 107.70 LAP 3.33 LOP 177.20 VP 37.334 GAP 10.90 AZP 88.92 TAL 174.62 TAP 66.68 RCA 95.58 APO 152.30 V2 35.187
RC 160.871 GL -24.62 GP 8.86 ZAL 78.71 ZAP 165.18 ETS 34.74 ZAE 128.83 ETE 173.12 ZAC 74.64 ETC 11.08 CLP-168.07
   PLANETOCENTRIC CONIC
     C3 14.512 VML 3.809 OLA -33.35 RAL 195.32 RAD 6567.6 VEL 11.658 PTH 2.05 VMP 7.129 OPA
                                                                                                                                                          7.31 RAP 193.32 ECC 1.2388
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 112.88 9 21 46
112,87 15 14 44
                       9 0 41 1264.71
13 40 24 5660.35
                                                                                                                                                                        27.82
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                                                              24.95
                                                                              354.23
                                                                                                 60.32
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                                         1264.71
         71.60
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        108.40
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118.09 14 29 48
107.66 16 18 9
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                       13 40 24
                                         5660.35
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        108.40
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                      12 53 2 5805.61
14 47 14 5455.49
                                                                              274.63
                                                                                                  57.94
                                                              20.33
        110.00
                                                                                                                                                                                          243.28
                                                                              251.85
                                                                                                                                                      4855.5
                                                                                                                                                                         31.88
                                                                                                  62.32
        110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 3155.6 SR 426.5 SS 890.4

CRT -.9885 CRS .9338 CST -.9875

LSA 3503.0 MSA 150.3 SSA 20.9

EL1 3183.7 EL2 64.0 ALF 172.39
    TOE-2.0823 TRA .6741 TC3-5.6642 BAU 1.0991

RDE .2834 RRA .0229 RC3 -.1003 FAU .03262

FDE -.9249 FRA .7239 FC3-1.9460 BSP 17212

BDE 2.1015 BRA .6745.BC3 5.6651 FSP -679
                                                                                  SGT 5468.6 SGR 435.0 SG3 208.7

RRT -.4015 RRF -.4055 RTF .9342

SGB 5485.9 R23 .0310 R13 -.9342

SGI 5471.4 SGZ 398.2 THA 178.16
                                                                                                                                                              ARRIVAL DATE JAN 4 1968
                                                                                        FLIGHT TIME 180.00
LAUNCH DATE JUL 8 1967
                                                                                       DISTANCE 522.869
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 285.17 VL 25.921 GAL 2.09 A7L 93.40 MCA 255.29 SMA 123.66 ECC .23269 INC 3.4045 V1 29.291 RP 107.73 LAP 3.29 LOP 180.44 VP 37.292 GAP 11.27 A7P 89.13 TAL 173.09 TAP 68.38 RCA 94.89 APO 152.44 V2 35.178 RC 162.878 GL -23.33 GP 8.46 7AL 75.57 7AP 166.16 ETS 35.69 7AE 128.78 ETE 173.44 7AC 72.51 ETC 10.87 CLP-169.01
   PLANETOCENTRIC CONIC
     C3 15.090 VHL 3.885 OLA -33.43 RAL 199.26 RAD 6567.6 VEL 11.682 PTH 2.05 VHP 7.319 OPA
                                                                                                                                                          6.01 RAP 195.23 ECC 1.2483
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.43 9 15 21 1276.65 24.78 355.07 64.89 113.20 9 36 37 676.7 27.70 347.19
                         9 15 21 1276.65
                                                                                                                   113.19 15 31 35
113.20 9 36 37
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                                                                                                  64.89
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                       13 57 9
                                         5665.83
                                                               24.79
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        108.57
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          71.43
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                      13 57 9 5665.83
13 11 45 5804.96
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118.07 14 48 30
108.33 16 31 8
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                                                              24.79
                                                                               266.10
                                                                                                  64.69
        108.57
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                                                                                                  62.59
                                                                                                                                                       5205.0
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        110.00
                                                               20.36
                                                                               274.59
                                                                                                                                                                                           244.61
                       14 59 55
        110.00
                                         5473.56
                                                              29.37
                                                                               253.12
                                                                                                  66.85
                                                                                                                                                       4873.6
                                                                                                                                                                           31.59
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5518.0 SGR 442.8 SG3 201.4
RRT -.4017 RRF -.4022 RTF ..9554
SGB 5535.8 R23 .0267 R13 -.9355
SGI 5520.9 SG2 405.3 THA 178.14
                                                                                                                                                ST 3143.4 SR 435.4 SS 860.E
CRT -.9833 CRS .9442 CST -.9877
     TOE-2.1048 TRA .8987 TC3-5.5044 BAU 1.1106
RDE .2951 RRA .0203 RC3 -.0941 FAU .03051
     FDE -.8789 FRA .7806 FC3-1.7906 BSP 17405
BOE 2.1254 BRA .8990 BC3 5.5052 FSP -658
                                                                                                                                                  LSA 3284.4 MSA 152.7 SSA 20.9
                                                                                                                                                  EL1 3172.4 EL2 78.4 ALF 172.24
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FLIGHT TIME 174.00

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FLIGHT TIME 182.00
LAUNCH DATE JUL 8 1967
                                                                                                                                     ARRIVAL DATE JAN 6 1968
   HELIOCENTRIC CONIC
                                                                         DISTANCE 528.507
    RL 152.10 LAL -.00 LOL 285.17 VL 25.874 GAL 2.60 AZL 93.31 HCA 258.52 SMA 123.38 ECC .23689 INC 3.3073 V1 29.291
RP 107.76 LAP 3.24 LOP 183.67 VP 37.250 GAP 11.64 AZP 89.34 TAL 171.55 TAP 70.07 RCA 94.15 APO 152.61 V2 35.167
RC 164.869 GL -22.02 GP 8.11 ZAL 72.45 ZAP-167.10 ETS 36.88 ZAE 128.73 ETE 173.72 ZAC 70.35 ETC 10.69 CLP-169.93
   PLANETOCENTRIC CONIC
    C3 15.818 VHL 3.977 DLA -33.44 RAL 203.17 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 7.519 DPA
                                                                                                                                 4.74 RAP 197.17 ECC 1.2603
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   9 30 53 1267.40
14 12 47 5676.31
                                                                                              113.51
                                                                                                             9 52 21
                                                                                                                              687.4
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                                                  24.49
                                                                                 69.53
       71.43
                                                                 355.77
                                                                                               113.50 15 47 23
                                                                                                                                                           258.92
                                                   24.50
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      108.57
                                                                 266.77
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113.50 15 47 23
                   9 30 53 1287.40
14 12 47 5676.31
                                                                 355.77
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        71.43
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                                                                 266.77
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      108.57
                                                   24.50
                                                                                  69.53
                  13 27 28 5815.19
15 15 23 5484.55
                                                                                               118.30 15 4 23
108.72 16 46 47
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      110.00
                                                   20.03
                                                                 275.20
                                                                                 67.18
                                                                                                                                              23.65
      110.00
                                                   29.14
                                                                 253.89
                                                                                 71.54
                                                                                                                              4884.5
                                                                                                                                              31.41
                                                                                                                                                            245.42
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 3108.3 SR 443.5 SS 826.9

CRT -.9770 CRS .9328 CST -.9876

LSA 3242.9 MSA 157.7 SSA 20.6
                                                                     SCT 5557.3 SCR 449.6 SC3 194.2
RRT -.4033 RRF -.4006 RTF .9363
SCB 5575.4 R23 .0229 R13 -.9364
    TDE-2.1166 TRA 1.1393 TC3-5.2916 BAU 1.1192
    RDE .3078 RRA .0162 RC3 -.0865 FAU .02839
FDE -.8301 FRA .8382 FC3-1.5538 BSP 17495
BDE 2.1388 BRA 1.1395 BC3 5.2923 FSP -633
                                                                     SG1 5560.2 SG2 411.2 THA 178.12
                                                                                                                          EL1 3138.4 EL2 93.6 ALF 172.06
LAUNCH DATE JUL 8 1967
                                                                         FLIGHT TIME 184.00
                                                                                                                                     ARRIVAL DATE JAN 8 1968
  HELIOGENTRIC CONIC
                                                                         DISTANCE 534.108
   RL 152.10 LAL -.00 LOL 285.17 VL 25.828 GAL 3.14 AZL 93.21 MCA 261.75 SMA 123.11 ECC .24143 INC 3.2124 VI 29.291
RP- 107.79 LAP 3.18 LOP 186.91 VP 37.208 GAP 12.04 AZP 89.54 TAL 170.02 TAP 71.77 RCA 93.39 APO 152.83 V2 35.156
RC 166.846 GL -20.70 GP 7.79 ZAL 69.37 ZAP 168.00 ETS 38.35 ZAE 128.68 ETE 173.97 ZAC 68.18 ETC 10.55 CLP-170.84
  PLANETOCENTRIC CONIC
    C3 16.712 VHL 4.088 DLA -33.36 RAL 207.01 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 7.731 DPA
                                                                                                                                  3.51 RAP 199.14 ECC 1.2750
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              74.21
                    9 47 14 1296.86
                                                                 356.31
                                                                                                                                            27.10
                 14 27 8 5691.92
9 47 14
                                                                                              113.80 10 8 51
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        71.59
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113.80 10 8 51
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      108.41
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                    9 47 14
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        71.59
                                  1296.86
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118.76 15 17 14
108.86 17 5 3
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      108.41
                   14 27 6 5691.92
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110.00 15 33 35 5488.24
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                                                                                 76.37
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                                                                 254.14
                                                                                                                              4888.2
                                                                                                                                              31.35
                                                                                                                                                            245.59
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SCT 5598.9 SGR 455.9 SG3 187.4
RRT - .4078 RRF - .4026 RTF .9378
SG8 5617.5 R23 .0198 R13 - .9379
                                                                                                                         ST 3061.7 SR 451.2 SS 793.9
CRT -.9697 CRS .9207 CST -.9877
    TOE-2.1250 TRA 1.3880 TC3-5.0509 BAU 1.1286
    RDE .3219 RRA .0111 RC3 -.0769 FAU .02646
    FOE -.7849 FRA .8915 FC3-1.3707 BSP 17677
BDE 2.1492 BRA 1.3880 BC3 5.0515 FSP -615
                                                                                                                        LSA 3190.7 MSA 164.1 SSA 20.1
ELI 3092.8 EL2 109.1 ALF 171.86
                                                                     SGI 5602.0 SG2 416.0 THA 178.09
                                                                        FLIGHT TIME 186.00
                                                                                                                                    ARRIVAL DATE JAN 10 1968
LAUNCH DATE JUL 8 1967
                                                                         DISTANCE 539.665
  HELTOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 285.17 VL 25.782 GAL 3.71 AZL 93.12 HCA 264.98 SMA 122.84 ECC .24633 INC 3.1191 VI 29.291
RP 107.83 LAP 3.11 LOP 190.14 VP 37.165 GAP 12.44 AZP 89.73 TAL 168.48 TAP 73.46 RCA 92.58 APO 153.10 VZ 35.145
RC 168.808 GL -19.39 GP 7.50 ZAL 66.35 ZAP 168.86 ETS 40.13 ZAE 128.64 ETE 174.19 ZAC 65.98 ETC 10.45 CLP-171.74
   PLANETOCENTRIC CONIC
    C3 17.789 VHL 4.218 OLA -33.19 RAL 210.77 RAD 6567.7 VEL 11.797 PTH 2.09 VHP 7.954 DPA
                                                                                                                                2.30 RAP 201.13 ECC 1.2928
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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114.06 10 26 2
114.05 16 15 18
114.06 10 26 2
114.05 16 15 18
119.39 15 27 24
108.78 17 25 22
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       71.91
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                                                                 253.99
      110.00
                                                   29.10
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5635.9 SGR 461.2 SG3 180.8
RRT -.4137 RRF -.4065 RTF .9394
SGB 5654.7 R23 .0172 R13 -.9394
SGI 5639.2 SG2 419.6 THA 178.05
                                                                                                                         ST 3000.4 SR 457.7 SS 760.3
CRT -.9612 CRS .9071 CST -.9876
    TDE-2.1262 TRA 1.6496 TC3-4.7789 BAU 1.1367
    ROE .3369 RRA .0046 RC3 -.0667 FAU .02459
FDE -.7405 FRA .9438 FC3-1.1967 BBP 17848
                                                                                                                         LSA 3124.1 MSA 172.3 SSA 19.5
                                                                                                                         EL1 3032.5 EL2 125.0 ALF 171.64
    BOE 2.1527 BRA 1.6496 BC3 4.7793 FSP
                                                     -597
                                                                                                                                    ARRIVAL DATE JAN 12 1968
                                                                         FLIGHT TIME 188.00
LAUNCH DATE JUL 8 1967
                                                                        DISTANCE 545,176
   RL 152.10 LAL -.00 LOL 285.17 VL 25.737 GAL 4.30 AZL 93.03 MCA 268.20 SMA 122.58 ECC .25162 INC 3.0268 V1 29.291
RP 107.86 LAP 3.03 LOP 193.37 VP 37.123 GAP 12.87 AZP 89.91 TAL 166.95 TAP 75.15 RCA 91.73 APO 153.42 V2 35.134
RC 170.755 GL -18.08 GP 7.23 ZAL 63.40 ZAP 169.68 ETS 42.29 ZAE 128.59 ETE 174.38 ZAC 63.77 ETC 10.39 CLP-172.63
  PLANETOCENTRIC CONIC
    C3 19.073 VHL 4.367 DLA -32.95 RAL 214.42 RAD 6567.8 VEL 11.851 PTH 2.10 VMP 8.192 DPA
                                                                                                                                 1.12 RAP 203.14 ECC 1.3139
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      107.60
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        72.40
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114.29 16 27 10
120.11 14 7 20
108.56 17 46 57
                                 5738.59
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                                                                 270.84
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       107.60
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                  13 57 2
                                  618.25
                                                   17.00
                                                                 302.63
      110.00
                  13 57 2 618.25
16 15 37 5480.06
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                                                                                 86.30
                                                   29.23
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5666.5 SGR 465.5 SG3 174.4

RRT -.4209 RRF -.4117 RTF .9408

SGB 5685.6 R23 .0149 R13 -.9408

SGT 5669.9 SG2 422.0 THA 178.01
                                                                                                                       ST 2925.8 SR 462.9 SS 726.7
CRT -.9512 CRS .8916 CST -.9874
LSA 3044.5 MSA 182.2 SSA 18.8
    TDE-2.1194 TRA 1.9255 TC3-4.4805 BAU 1.1426
    ROE .3528 RRA -.0034 RC3 -.0564 FAU .02276
FOE -.6967 FRA .9959 FC3-1.0332 BSP 17988
BOE 2.1485 BRA 1.9255 BC3 4.4809 FSP -578
                                                                                                                         ELI 2958.8 EL2 141.2 ALF 171.42
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ARRIVAL DATE JAN 14 1968

LAUNCH DATE JUL 8 1967

HELIOCENTRIC CONIC DISTANCE 550.635 RL 152:10 LAL -.00 LOL 285:17 VL 25:692 GAL 4.93 AZL 92:93 MCA 271.42 SMA 122:32 ECC .25736 INC 2.9349 V1 29:291
RP 107:90 LAP 2.93 LOP 196:60 VP 37:081 GAP 13:32 AZP 90:07 TAL 165:43 TAP 76:85 RCA 90:84 APO 153:79 V2 35:122
RC 172:686 GL -16:79 GP 7:00 ZAL 60:55 ZAP 170:47 ETS 44:90 ZAE 128:54 ETE 174:56 ZAC 61:55 ETC 10:37 CLP-173:51 PLANETOCENTRIC CONIC C3 20.590 VHL 4.538 OLA -32.64 RAL 217.94 RAO 6567.8 VEL 11.915 PTH 2.12 VHP 8.443 DPA -.03 RAP 205.18 ECC 1.3389 C3 20.590 VHL 4.538 OLA -32.64 RAL 217.94 RAD 6567.8 VEL 11.915 PTM 2.12 VMP 8.443 OPA -.05 RAP 205.18 ECC 1.5389

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

73.05 10 40 10 1316.91 22.26 356.96 88.20 114.51 11 2 7 716.9 25.37 349.32

106.95 15 1 21 5769.76 22.27 272.89 88.21 114.50 16 37 30 5169.8 25.38 265.25

75.05 10 40 10 1316.91 22.26 356.96 88.20 114.51 11 2 7 716.9 25.37 349.32

106.95 15 1 21 5769.76 22.27 272.89 88.21 114.50 16 37 30 5169.8 25.38 265.25

110.00 14 2 48 662.36 15.47 305.14 84.45 120.87 14 13 51 62.4 19.45 298.28

110.00 16 37 53 5472.32 29.40 253.03 91.31 108.28 18 9 5 4872.3 31.61 244.52 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5688.7 SGR 468.5 SG3 168.2 RRT -.4284 RRF -.4175 RTF .9419 SGB 5708.0 R23 .0129 R13 -.9420 ST 2837.8 SR 466.2 SS 592.8 CRT -,9394 CRS .8734 CST -.9870 TDE-2.1018 TRA 2.2196 TC3-4.1584 BAU 1.1447 RDE .3692 RRA -.0130 RC3 -.0467 FAU .02090 FDE -.6523 FRA 1.0493 FC3 -.8786 BSP 18023 LSA 2951.7 MSA 193.7 SSA 18.1 SG1 5692.3 SG2 423.1 THA 177.97 ELI 2871.5 EL2 157.9 ALF 171.20 BOE 2.1340 BRA 2.2196 BC3 4.1586 FSP -556 FLIGHT TIME 192.00 ARRIVAL DATE JAN 16 1968 LAUNCH DATE JUL 8 1967 DISTANCE 556.034 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 285.17 VL 25.648 GAL 5.59 A7L 92.84 MCA 274.64 SMA 122.06 ECC .26357 INC 2.8428 V1 29.291
RP 107.94 LAP 2.83 LOP 199.82 VP 37.038 GAP 13.79 AZP 90.23 TAL 163.91 TAP 78.56 RCA 89.89 APO 154.23 VZ 35.110
RC 174.603 GL -15.53 GP 6.78 ZAL 57.80 ZAP 171.20 ETS 48.03 ZAE 128.48 ETE 174.71 ZAC 59.32 ETC 10.38 CLP-174.38 PLANETOCENTRIC CONIC C3 22.370 VHL 4.730 DLA -32.26 RAL 221.30 RAD 6567.9 VEL 11.990 PTM 2.14 VMR 8.712 DPA -1.16 RAP 207.23 ECC 1.3681 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.86 10 58 52 1320.48 21.45 356.84 92.78 114.69 11 20 53 720.5 24.60 349.26 15 9 29 5806.14 21.47 275.27 92.79 114.68 16 46 16 5206.1 24.61 267.70 106.14 73.86 10 58 52 1320.48 21.45 356.84 92.78 114.69 11 20 53 720.5 349.26 106.14 114.68 16 46 16 5206.1 267.70 15 9 29 5806.14 21.47 275.27 92.79 24.61 121.60 14 19 14 14 7 23 710.36 13.78 307.82 88.48 110.4 301.09 110.00 17 0 9 107.99 18 31 13 5464.26 29.57 252.47 96.29 4864.3 31.74 243.93 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5710.7 SGR 470.7 SG3 162.3 RRT -.4378 RRF -.4255 RTF .9437 TDE-2.0827 TRA 2.5243 TC3-3.8364 BAU 1.1474 ST 2748.6 SR 468.3 SS 662.4 RDE .3865 RRA -.0238 RC3 -.0372 FAU .01922 FDE -.6125 FRA 1.1002 FC3 -.7439 BSP 18159 BDE 2.1183 BRA 2.5244 BC3 3.8366 FSP -540 CRT -.9263 CRS .8545 CST -.9869 LSA 2858.3 MSA 205.5 SSA 17.3 568 5730.1 R23 .0112 R13 -.9438 EL1 2782.7 EL2 174.3 ALF 171.00 SG1 5714.5 SG2 423.0 THA 177.92 FLIGHT TIME 194.00 ARRIVAL DATE JAN 18 1968 LAUNCH DATE JUL 8 1967 DISTANCE 561.366 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 285.17 VL 25.604 GAL 6.28 A7L 92.75 MCA 277.86 SMA 121.81 ECC .27032 JNC 2.7499 V1 29.291
RP 107.97 LAP 2.72 LOP 203.04 VP 36.996 GAP 14.29 A7P 90.38 TAL 162.41 TAP 80.27 RCA 88.88 APO 154.73 V2 35.097
RC 176.504 GL -14.30 GP 6.58 7AL 55.16 ZAP 171.89 ETS 51.81 ZAE 128.42 ETE 174.85 ZAC 57.09 ETC 10.44 CLP-175.25 PLANETOCENTRIC CONIC C3 24.449 VHL 4.945 OLA -31.83 RAL 224.51 RAD 6568.0 VEL 12.076 PTH 2.16 VHP 8.999 DPA -2.25 RAP 209.30 ECC 1.4024 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.85 11 40 8 722.1 349.01 74.82 11 18 6 1322.07 20.57 356.52 97.29 23.74 114.83 16 53 18 114.85 11 40 8 97.30 23.76 270.51 105.18 15 15 50 5847.96 20.58 278.02 5248.0 23.74 74.82 11 18 6 1322.07 20.57 356.52 97.29 722.1 349.01 114.83 16 53 18 122.27 14 23 46 107.72 18 52 57 5248.0 23.76 270.51 15 15 50 5847.96 20.58 278.02 97.30 105.16 304,00 14 11 5 761.10 11.95 310.62 92.42 161.1 16.13 110.00 17 22 1 5456.92 243.39 4856.9 31.85 251.95 101.23 110.00 29.72 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5727.3 SCR 471.8 SC3 156.7 RRT -.4478 RRF -.4544 RTF .9455 SCB 5746.7 R23 .0097 R13 -.9455 SCI 5731.2 SC2 421.6 THA 177.88 ST 2655.7 SR 468.6 SS 634.0 CRT -.9112 CRS .8336 CST -.9868 LSA 2761.6 MSA 217.9 SSA 16.6 EL1 2690.0 EL2 190.6 ALF 170.82 TDE-2.0579 TRA 2.8457 TC3-3.5106 BAU 1.1475 RDE .4042 RRA -.0362 RC3 -.0286 FAU .01758 FOE -.5741 FRA 1.1517 FC3 -.6226 BSP 18272 BOE 2.0972 BRA 2.8439 BC3 3.5107 FSP -524 ARRIVAL DATE JAN 20 1968 LAUNCH DATE JUL 8 1967 FLIGHT TIME 196.00 DISTANCE 566.622 RL 152.10 LAL -.00 LOL 285.17 VL 25.560 GAL 7.01 ATL 92.66 MCA 281.08 SMA 121.56 ECC .27765 INC 2.6556 V1 29.291
RP 108.01 LAP .2.61 LOP 206.26 VP 36.954 GAP 14.83 AZP 90.51 TAL 160.92 TAP 82.00 RCA 87.81 APO 155.31 V2 35.084
RC 178.389 GL -13.11 GP 6.40 ZAL 52.64 ZAP 172.52 ETS 56.34 ZAE 128.35 ETE 174.97 ZAC 54.86 ETC 10.54 CLP-176.13 PLANETOCENTRIC CONIC C3 26.873 VHL 5.184 DLA -31.36 RAL 227.54 RAD 6568.1 VEL 12.176 PTH 2.19 VHP 9.306 DPA -3.31 RAP 211.39 ECC 1.4423 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.97 11 59 57 22.82 101.73 721.2 348.53 75.94 11 37 56 1321.19 19.62 355.96 22.83 295.80 104.06 15 20 13 607.49 19.63 303.25 101.73 114.95 15 30 20 7.5 114.97 11 59 57 114.95 15 30 20 348.53 75.94 721.2 11 37 56 1321.19 19.62 355.96 101.73 22.62 607.49 104.06 15 20 13 19.63 303.25 101.73 7.5 22.83 295.80 122.65 14 27 41 107.49 19 14 3 213.8 306.97 110.00 14 14 7 813.78 10.02 313.48 96.25 14.28 5450.94 31.95 242.95 110.00 17 43 12 29.65 251.53 106.09 4850.9 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2561.9 SR 467.2 SS 608.3 CRT -.8942 CRS .8110 CST -.9868 LSA 2664.3 MSA 230.4 SSA 15.9 SCT 5738.7 SCR 471.8 SC3 151.3 RRT -.4585 RRF -.4440 RTF .9474 SCB 5758.0 R23 .0083 R13 -.9474 TDE-2.0280 TRA 3.1847 TC3-3.1868 BAU 1.1449 ROE .4223 RRA -.0501 RC3 -.0211 FAU .01600 FOE -.5380 FRA 1.2039 FC3 -.5155 8SP 18361 BOE 2.0715 BRA 3.1851 BC3 3.1869 FSP -508 EL1 2596.0 EL2 206.4 ALF 170.68 SG1 5742.8 SG2 419.0 THA 177.83

FLIGHT TIME 190.00

ARRIVAL DATE JAN 22 1968

LAUNCH DATE JUL 8 1967

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DISTANCE 571.791
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 285.17 VL 25.518 GAL 7.79 AZL 92.56 MCA 284.29 SMA 121.32 ECC .28564 INC 2.5593 V1 29.291
RP 108.05 LAP 2.48 LOP 209.47 VP 36.912 GAP 15.40 AZP 90.63 TAL 159.45 TAP 83.74 RCA 86.66 APO 155.97 V2 35.071
RC 180.257 GL -11.96 GP 6.23 ZAL 50.25 ZAP 173.08 ETS 61.76 ZAE 128.27 ETE 175.09 ZAC 52.63 ETC 10.69 CLP-177.00
    PLANETOCENTRIC CONIC
      C3 29.693 VHL 5.449 DLA -30.84 RAL 230.40 RAD 6568.2 VEL 12.291 PTH 2.21 VHP 9.637 DPA -4.35 RAP 213.48 ECC 1.4887
      29.693 VML 5.449 ULA -90.684 RAL 250.40 RA 0606.2 VEL 12.591 VILA 1.000 RA 0606.2 VILA 1.000 RA 0606.2 VILA 1.000 RA 1.000 
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                                                      661.35
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115.04 15 33 28
123.34 14 31 4
107.33 19 34 19
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          102.77
                             15 22 27
                                                                                                                                                                                               267.8
                                                                                                                                                                                                                        12.34
                                                                                                                                                                                                                                            309.95
                                                                                                                         100.00
                           14 16 36
                                                                                8.01
                                                                                                   316.57
                                                      867.80
                                                                                                                                                                                              4846.7
                                                                                                                                                                                                                       32.01
                                                                                                                         110.68
                             18 3 33
                                                                               29.93
                                                                                                   251.23
          110.00
                                                   5446.70
                                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                       SCT 5743.9 SCR 470.4 SC3 146.2
RRT -.4692 RRF -.4536 RTF .9493
SC8 5763.1 R23 .0069 R13 -.9493
                                                                                                                                                                                      ST 2467.0 SR 463.8 SS 584.8

CRT -.8745 CRS .7855 CST -.9867

LSA 2565.9 MSA 243.2 SSA 15.2
       TDE-1.9901 TRA 3.5471 TC3-2.8641 BAU 1.1369
      ROE .4405 RRA -.0657 RC3 -.0150 FAU .01438
FOE -.5025 FRA 1.2569 FC3 -.4191 BSP 18341
                                                                                                                                                                                        EL1 2500.3 EL2 221.9 ALF 170.59
                                                                                                         SG1 5748.2 SG2 415.1 THA 177.79
      BOE 2.0383 BRA 3.5477 BC3 2.8641 FSP -488
                                                                                                               FLIGHT TIME 200.00
                                                                                                                                                                                                         ARRIVAL DATE JAN 24 1968
LAUNCH DATE JUL 8 1967
                                                                                                              DISTANCE 576.858
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 285.17 VL 25.475 GAL 8.62 ATL 92.46 MCA 287.50 SMA 121.08 ECC .29435 INC 2.4603 V1 29.291
RP 108.09 LAP 2.35 LOP 212.69 VP 36.871 GAP 16.00 AZP 90.74 TAL 158.00 TAP 85.50 RCA 85.44 APO 156.72 V2 35.058
RC 182.108 GL -10.85 GP 6.08 ZAL 47.98 ZAP 173.56 ETS 68.15 ZAE 128.18 ETE 175.19 ZAC 50.40 ETC 10.88 CLP-177.88
    PLANETOCENTRIC CONIC
     C3 32.972 VHL 5.742 DLA -30.31 RAL 233.09 RAD 6566.3 VEL 12.424 PTH 2.24 VHP 9.994 DPA -5.35 RAP 215.59 ECC 1.5426
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
78.73 12 20 12 1308.74 17.55 354.03 110.32 115.11 12 42 1 708.7 20.79 346.70
                                                                                                                                               INJ AZMTH INJ TIME

115.11 12 42 1

115.10 15 34 15

115.10 15 34 15

123.72 14 34 2

107.25 19 53 41
                                                                                                                      110.32
                            12 20 12 1308.74
                                                                               17.55
                                                                                                                                                                                                 122.4
                                                                                                                                                                                                                        20.80
                                                                                                                                                                                                                                             303.53
                                                      722.39
                                                                               17.56
                                                                                                    310.86
                                                                                                                        110.33
                                                                                                                                                                                                  708.7
                                                                                                                                                                                                                        20.79
                                                   1308.74
                                                                               17.55
                                                                                                    354.03
                                                                                                                        110.32
             78.73
                             12 20 12
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                            15 22 13
                                                    722.39
                                                                             17.56
                                                                                                    310.86
                                                                                                                         110.33
                                                                                                                                                                                                                        10.34
                                                                                                                                                                                                 322.7
          110.00 14 18 39
110.00 18 22 56
                                                       922.75
                                                                                 5.94
                                                                                                    319.28
                                                                                                                        103.65
                                                                                                                                                                                                                        32.04
                                                   5444.42
                                                                                                    251.07
                                                                                                                          115.57
                                                                                                                                                                                              4844.4
                                                                               29.96
                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SGT 5746.0 SGR 466.0 SG3 141.3
RRT -,4808 RRF -,4649 RTF .9516
SGB 5765.1 R23 .0057 R13 -,9516
SG1 5750.5 SG2 410.0 THA 177.75
                                                                                                                                                                                        ST 2379.5 SR 458.9 SS 565.4
CRT -.8536 CRS .7604 CST -.9871
      TOE-1.9543 TRA 3.9245 TC3-2.5598 BAU 1.1284
      RDE .4590 RRA -.0825 RC3 -.0098 FAU .01290
FDE -.4714 FRA 1.3131 FC3 -.5386 BSP 18429
                                                                                                                                                                                       LSA 2475.3 MSA 254.6 SSA 14.6
EL1 2411.8 EL2 235.9 ALF 170.56
      BOE 2.0075 BRA 3.9253 BC3 2.5598 FSP
                                                                                  -474
                                                                                                                                                                                                        ARRIVAL DATE JAN 26 1968
                                                                                                              FLIGHT TIME 202.00
LAUNCH DATE JUL 8 1967
                                                                                                              DISTANCE 581.807
      RL 152.10 LAL -.00 LOL 285.17 VL 25.434 GAL 9.51 AZL 92.36 MCA 290.71 SMA 120.85 ECC .30388 INC 2.3578 V1 29.291 RP 108.13 LAP 2.21 LOP 215.90 VP 36.829 GAP 16.66 AZP 90.83 TAL 156.58 TAP 87.29 RCA 84.12 APO 157.57 V2 35.045 RC 183.942 GL -9.80 GP 5.94 TAL 45.85 ZAP 173.93 ETS 75.58 ZAE 128.07 ETE 175.28 ZAC 48.19 ETC 11.14 CLP-178.76
     PLANETOCENTRIC CONIC
       C3 36.787 VHL 6.065 DLA -29.75 RAL 235.61 RAD 6568.4 VEL 12.576 PTH 2.28 VHP 10.380 DPA -6.33 RAP 217.70 ECC 1.6054
      C3 36.787 VHL 6.065 DLA -29.75 RAL 235.61 RAD 6568.4 VEL 12.576 PTH 2.28 VHP 10.380 DPA -6.33 RAP 217.70 ECC 1.6054
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
80.49 12 43 36 1293.78 16.45 352.38 114.47 115.13 15 32 6 192.6 19.72 308.27
100.00 14 57 39 860.51 14.16 319.43 113.32 116.60 15 11 59 260.5 17.62 312.35
100.00 15 47 31 701.14 18.79 309.86 115.58 113.69 15 59 12 101.1 21.83 302.38
110.00 14 20 19 978.29 3.84 322.20 107.22 123.99 14 36 38 378.3 8.27 315.92
110.00 18 41 20 5444.16 29.98 251.00 17.24 20 12 4 4844.2 32.05 242.44
                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                        SGT 5743.7 SGR 464.4 SG3 136.7
RRT -.4927 RRF -.4764 RTF ..9540
SGB 5762.4 R23 .0046 R13 -.9541
SGI 5748.3 SG2 403.8 THA 177.71
                                                                                                                                                                                        ST 2296.9 SR 452.4 SS 549.0
CRT -.8307 CRS .7344 CST -.9876
       TOE-1.9161 TRA 4.3247 TC3-2.2686 BAU 1.1157
       RDE .4776 RRA -. 1009 RC3 -. 0057 FAU .01145
                                                                                                                                                                                        LSA 2389.9 MSA 265.0 SSA 14.0
       FOE -.4426 FRA 1.3696 FC3 -.2694 BSP 18497
                                                                                                                                                                                        EL1 2327.8 EL2 248.5 ALF 170.60
       BOE 1.9748 BRA 4.3259 BC3 2.2686 FSP
                                                                                                                                                                                                         ARRIVAL DATE JAN 28 1968
                                                                                                                FLIGHT TIME 204.00
LAUNCH DATE JUL 8 1967
                                                                                                               DISTANCE 586.619
    HELIOCENTRIC CONIC
      RL 152.10 LAL -.00 LOL 285.17 VL 25.393 GAL 10.45 AZL 92.25 MCA 293.92 SMA 120.62 ECC .31432 INC 2.2509 VI 29.291
RP 108.18 LAP 2.06 LOP 219.10 VP 36.789 GAP 17.37 AZP 90.91 TAL 155.20 TAP 89.12 RCA 82.70 APO 158.53 V2 35.032
RC 185.758 GL -8.79 GP 5.82 ZAL 43.85 ZAP 174.17 ETS 83.95 ZAE 127.94 ETE 175.37 ZAC 45.99 ETC 11.45 CLP-179.66
     PLANETOCENTRIC CONIC
       C3 41.232 VHL 6.421 DLA -29.17 RAL 237.95 RAD 6568.6 VEL 12.751 PTH 2.32 VHP 10.800 DPA -7.27 RAP 219.81 ECC 1.6786
      LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                115.12 13 31 13
115.12 15 25 40
                           13 10 6 1267.57
15 11 4 876.47
                                                                                                                                                                                                 667.6
                                                                                                                                                                                                                       18.59
                                                                                                                      118.51
                                                                               15.33
                                                                                                    349.89
             82.69
                                                                                                                                                                                                  276.5
                                                                                                                                                                                                                        18.60
                                                                                                    321.21
                                                                                                                          118.52
                                                       876.47
                                                                               15.34
             97.31
                                                                                                                                                 118.25 14 53 14
112.15 16 37 36
124.15 14 38 53
107.31 20 29 27
                                                                                                                                                                                                  386.5
                                                                                                                                                                                                                        13.90
                                                                                                                          115.88
                                                       986.48
                                                                               10.21
                                                                                                    326.69
           100.00
                             14 36 47
                                                                                                                                                                                                   32.8
                            16 27 3 632.80
14 21 39 1034.15
                                                                                                                                                                                                                        23.42
                                                                                                    305.59
                                                                                                                          120.94
                                                                             20.60
           100.00
                                                                                                                                                                                                 434.2
                                                                                                                                                                                                                          6.18
                                                                                                                                                                                                                                             318.89
                                                                                                    325.12
                                                                                                                          110.71
                                                                                 1.71
           110.00
                                                                                                                                                                                                                        32.02
                                                                                                                                                                                               4645.9
                                                    5445.93
                                                                                                    251.17
                                                                                                                          124.64
                             18 58 41
           110.00
                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                       ST 2220.4 SR 444.2 SS 535.6
CRT -.8061 CRS .7079 CST -.9883
LSA 2310.7 MSA 274.0 SSA 13.4
                                                                                                         SCT 5736.3 SCR 459.6 SC3 132.2
RRT - 5046 RRF - 4883 RTF .9567
SCB 5754.7 R23 .0035 R13 - .9567
SCI 5741.0 SC2 396.4 THA 177.67
        TOE-1.8767 TRA 4.7497 TC3-1.9918 BAU 1.0979
       ROE .4961 RRA -.1207 RC3 -.0028 FAU .01002
FOE -.4161 FRA 1.4285 FC3 -.2104 BSP 18537
                                                                                                                                                                                         EL1 2249.5 EL2 259.5 ALF 170.71
        BOE 1.9411 BRA 4.7512 BC3 1.9918 FSP -445
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FLIGHT TIME 198.00

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ARRIVAL DATE JAN 30 1968
                                                                                     FLIGHT TIME 206.00
LAUNCH DATE JUL 8 1967
                                                                                    DISTANCE 591.269
    RL 152.10 LAL -.00 LOL 285.17 VL 25.353 GAL 11.47 A7L 92.14 MCA 297.12 SMA 120.39 ECC .32579 INC 2.1387 V1 29.291 RP 108.22 LAP 1.90 LOP 222.31 VP 36.748 GAP 18.14 A7P 90.98 TAL 153.86 TAP 90.98 RCA 81.17 APO 159.62 V2 35.019 RC 187.557 GL -7.82 GP 5.70 ZAL 41.98 ZAP 174.27 ETS 93.00 ZAE 127.79 ETE 175.45 ZAC 43.82 ETC 11.82 CLP 179.42
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 46.421 VHL 6.813 DLA -28.59 RAL 240.12 RAD 6568.7 VEL 12.953 PTH 2.36 VMP 11.258 DPA -8.17 RAP 221.92 ECC 1.7640
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                      338.15
                                     1213.04
                                                                            345.33
                                                                                                               115.08
                                                                                                                             14 5 8
                                                                                                                                                    613.0
                                                                                                                                                                    17.45
                                                                                             122.45
                                                           14.19
         85.90 13 44 55
                                                                                                                                                                                      321.88
                                                                                                                115.07 15 10 5
                                                                                                                                                    390.7
                                                                                                                                                                      17.47
                                                                                             122.46
                                                             14.20
                                                                             329.05
         94.10
                      14 53 34
                                          990.68
                                                                                                                119.09 14 44 29
111.38 17 4 40
                                                                                                                                                                                      325.14
                                                                                                                                                     478.0
                                                                                                                                                                      11.04
                                                                                              118.83
                     14 26 31
                                      1077.96
                                                             7.22
                                                                             331.84
        100.00
                                                                                                                                                                                      295.83
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                                                                                                                                                                      24.12
                                                                                              125.70
                      16 54 39
                                          600.99
                                                            21.40
                                                                             303.57
        100.00
                                                                                                                124.18 14 40 49
107.44 20 45 50
                                                                                                                                                                                      321.63
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                                                                                                                                                                       4.05
                                                              -.43
                                                                             328.04
                                                                                             114.11
                      14 22 39
                                      1090.13
        110.00
                                                                                                                                                                                      242.85
                                                                                                                                                  4849.6
                                                                                                                                                                     31.97
                                                             29.87
                                                                            251.43
                                                                                             129.01
                      19 15 0
                                        5449.62
        110.00
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RET - .5169 RRF - .5006 RTF .9595
SGB 5742.0 R23 .0027 R13 -.9595
SGI 5728.9 SG2 387.9 THA 177.64
                                                                                                                                              ST 2149.3 SR 434.6 SS 525.7
CRT -. 7800 CRS .6814 CST -. 9892
     TOE-1.8350 TRA 5.2015 TC3-1.7318 BAU 1.0748
     ROE .5145 RRA -.1419 RC3 -.0008 FAU .00861
                                                                                                                                              LSA 2237.3 MSA 281.3 SSA
                                                                                                                                                                                          12.9
     FOE -. 3919 FRA 1.4906 FC3 -. 1606 88P 18558
                                                                                                                                               EL1 2176.3 EL2 268.6 ALF 170.90
     BOE 1.9058 BRA 5.2034 BC3 1.7318 FSP -431
                                                                                                                                                            ARRIVAL DATE FEB 1 1968
                                                                                      FLIGHT TIME 208.00
LAUNCH DATE JUL 6 1967
                                                                                      DISTANCE 595.727
    RL 152.10 LAL -.00 LOL 285.17 VL 25.314 GAL 12.56 A7L 92.02 MCA 300.32 8MA 120.18 ECC .33843 INC 2.0199 V1 29.291 RP 108.26 LAP 1.74 LOP 225.51 VP 36.709 GAP 18.98 A7P 91.02 TAL 152.57 TAP 92.89 RCA 79.51 APO 160.85 V2 35.005 RC 189.337 GL -6.90 GP 5.59 7AL 40.24 7AP 174.21 ETS 102.32 7AE 127.62 ETE 175.53 7AC 41.67 ETC 12.26 CLP 178.48
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 52.497 VHL 7.245 DLA -28.00 RAL 242.12 RAD 6568.9 VEL 13.186 PTH 2.41 VHP 11.760 DPA -9.04 RAP 224.03 ECC 1.8640 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 50 2 1253.41 9.57 345.99 124.56 116.78 14 10 55 653.4 13.09 339.07
                       13 50 2 1253.41
15 4 27 1011.69
                                                                                                                113.29 15 21 18
119.58 14 36 46
110.91 16 55 32
124.10 14 42 26
107.65 21 1 13
                                                                             331.70
                                                                                              127.92
                                                             16.58
          90.00
                                                                                                                                                                                       329.68
                                                                                                                                                      556.2
                                                                                                                                                                        8.44
                       14 19 28 1156.ZZ
17 17 4Z 5670.15
                                                               4.54
                                                                             336.29
                                                                                               121.85
        100.00
                                                                                                                                                                     24.51
                                                                                                                                                                                       272.47
                                                                                                                                                    5270.2
                                                                             280.27
                                                                                              130.19
                                                             21.87
        100.00
                                                                                                                                                                                       324.76
                                                                                                                                                     546.0
                                                                                                                                                                       1.92
                       14 23 20 1146.03
                                                              -2.57
                                                                             330.96
                                                                                              117.44
        110.00
                                                                                                                                                    4855.1
                                                                                                                                                                       31.88
                                                                                                                                                                                       243.25
                                                                             251.82
                                                                                              133.25
                       19 30 18
        110.00
                                         5455.11
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5708.5 SGR 446.2 SG3 124.0

RRT -.5289 RRT -.5128 RTF ..9625

SGB 5725.9 R23 .0018 R13 -.9625

SGI 5713.4 SG2 378.3 THA 177.62
                                                                                                                                               ST 2084.2 SR 423.5 SS 518.4
CRT -. 7522 CRS .6545 CST -. 9902
     TDE-1.7908 TRA 5.6866 TC3-1.4870 BAU 1.0437
     ROE .5326 RRA -.1645 RC3 .0002 FAU .00716
FOE -.3691 FRA 1.5574 FC3 -.1181 BSP 18495
                                                                                                                                              LSA 2170.1 MSA 286.9 55A 12.4
                                                                                                                                              EL1 2108.8 EL2 275.8 ALF 171.16
     BOE 1.8683 BRA 5.6889 BC3 1.4870 FSP -416
                                                                                                                                                           ARRIVAL DATE FEB 3 1968
                                                                                      FLIGHT TIME 210.00
LAUNCH DATE JUL 8 1967
                                                                                      DISTANCE 599.954
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 285.17 VL 25.275 GAL 13.75 A7L 91.89 MCA 303.52 SMA 119.97 ECC .35240 INC 1.8932 VI 29.291 RP 108.30 LAP 1.58 LOP 228.70 VP 36.670 GAP 19.90 A7P 91.05 TAL 151.34 TAP 94.85 RCA 77.69 APO 162.24 V2 34.992 RC 191.100 GL -6.03 GP 5.49 ZAL 38.64 ZAP 173.97 ETS 111.41 ZAE 127.41 ETE 175.60 ZAC 39.55 ETC 12.78 CLP 177.52
    PLANETOCENTRIC CONIC
      C3 59.636 VML 7.722 DLA -27.41 RAL 243.96 RAD 6569.1 VEL 13.453 PTH 2.46 VMP 12.312 DPA -9.87 RAP 226.12 ECC 1.9815
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                117.73 13 54 33
112.26 15 53 23
119.83 14 34 30
110.61 19 15 31
123.90 14 43 45
107.91 21 15 38
                                                                                                                                                 768.7
                                                              5.97
                                                                                             127.02
                                                                             352.55
          90.00 13 31 44 1366.75
                                                                                                                                                                                       320.96
                                                                                                                                                                       20.63
                                                                                              132.72
                                                                                                                                                     359.1
                                                              17.96
                                                                              326.46
                        15 37 24
                                          959.09
                                                                                                                                                                                       333.81
                                                                                                                                                                        5.99
                        14 13 57 1232.32
17 37 52 5858.77
14 23 43 1201.66
19 44 36 5462.20
                                                                                                                                                     632.3
                                                                             340.37
                                                                                              124.86
                                                               2.04
         100.00
                                                                                                                                                                                       271.70
                                                                                                                                                                       24.75
                                                                             279.53
                                                                                              134,47
                                                                                                                                                    5258.8
                                                             22.14
         100.00
                                                                                                                                                                                       327.66
                                                                                               120.68
                                                                                                                                                     601.7
                                                                                                                                                                        - .21
                                                                              333.67
                                                              -4.69
                                                                                                                                                    4862.2
                                                                                                                                                                                       243.78
                                                                                                                                                                      31.77
                                                                              252.32
                                                                                               137.37
                                                             29.61
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               TT 2027.2 SR 411.2 SS 514.4

CRT -.7248 CRS .6299 CST -.9914

LSA 2111.6 MSA 269.9 SSA 11.8

EL1 2049.4 EL2 280.2 ALF 171.48
     DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5687.8 SGR 437.6 SG3 120.1
      TDE-1.7516 TRA 6.2007 TC3-1.2629 BAU 1.0069
                                                                                  RRT -.5411 RRF -.5256 RTF .9656
SGB 5704.6 R23 .0011 R13 -.9656
SG1 5692.8 SG2 367.7 THA 177.61
      RDE .5505 RRA -.1880 RC3 .0006 FAU .00576
FDE -.3499 FRA 1.6273 FC3 -.0836 BSP 18512
BDE 1.8360 BRA 6.2036 BC3 1.2629 FSP -403
                                                                                                                                                             ARRIVAL DATE FEB 5 1968
                                                                                       FLIGHT TIME 212.00
 LAUNCH DATE JUL 8 1967
                                                                                       DISTANCE 603.903
     RL 152.10 LAL -.00 LOL 285.17 VL 25.238 GAL 15.04 AZL 91.76 MCA 306.71 SMA 119.76 ECC .36787 INC 1.7569 VI 29.291 RP 108.34 LAP 1.41 LOP 231.90 VP 36.831 GAP 20.91 AZP 91.05 TAL 150.18 TAP 96.89 RCA 75.71 APO 163.82 V2 34.979 RC 192.846 GL -5.20 GP 5.40 ZAL 37.18 ZAP 173.58 ETS 119.85 ZAE 127.16 ETE 175.67 ZAC 37.47 ETC 13.38 CLP 176.52
     PLANETOCENTRIC CONIC
      C3 68.061 WHL 8.250 DLA -26.82 RAL 245.64 RAD 6569.3 VEL 15.763 PTH 2.51 WHP 12.922 DPA -10.66 RAP 228.20 ECC 2.1201
     C3 68.061 VHL 8.250 DLA -26.82 RAL 245.64 RAD 6569.3 VEL 15.763 PTH 2.51 VMP 12.922 DPA -10.66 RAP 228.20 ECC 2.1201
LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 20 39 1459.44 3.07 357.64 129.71 118.16 13 44 58 659.4 6.82 350.96
90.00 16 1 51 932.04 18.65 326.77 137.05 111.70 16 17 23 332.0 21.44 319.21
100.00 14 9 18 1302.28 -.34 344.21 127.82 119.89 14 31 1 702.3 3.64 337.68
100.00 17 55 53 5852.48 22.29 279.13 138.55 110.45 19 33 25 5252.5 24.87 271.28
110.00 14 23 46 1256.86 -6.78 336.78 123.85 123.59 14 44 43 656.9 -2.31 330.54
110.00 19 57 54 470.67 29.44 252.92 141.33 108.22 21 29 5 4870.7 31.64 244.40
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ST 1976.2 SR 397.7 SS 513.4

CRT -.6972 CRS .6066 CST -.9926

LSA 2059.7 MSA 290.7 SSA 11.3

EL1 1995.9 EL2 282.3 ALF 171.85
     DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5663.2 SGR 427.9 SG3 116.5
      TOE-1.7139 TRA 6.7529 TC3-1.0559 BAU .9608
                                                                                 RRT -.5531 RRF -.5383 RTF .9689
SG8 5679.4 R23 .0004 R13 -.9689
      RDE .5682 RRA -.2126 RC3 .0003 FAU .00432
FDE -.3328 FRA 1.7027 FC3 -.0550 BSP 18507
BOE 1.8056 BRA 6.7563 BC3 1.0559 FSP -391
                                                                                 SG1 5668.2 SG2 356.2 THA 177.60
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LAUNCH DATE JUL 8 1967
                                                                                                 FLIGHT TIME 214.00
                                                                                                                                                                              ARRIVAL DATE FEB 7 1968
     HELIOCENTRIC CONIC
                                                                                                DISTANCE 607.514
      RL 152.10 LAL -.00 LOL 285.17 VL 25.202 GAL 16.45 AZL 91.61 MCA 309.91 SMA 119.57 ECC .38508 INC 1.6089 V1 29.291
RP 108.38 LAP 1.23 LOP 235.09 VP 36.594 GAP 22.04 AZP 91.03 TAL 149.11 TAP 99.02 RCA 73.52 APO 165.61 V2 34.966
RC 194.574 GL -4.41 GP 5.32 ZAL 35.86 ZAP 173.02 ETS 127.41 ZAE 126.86 ETE 175.75 ZAC 35.44 ETC 14.07 CLP 175.48
     PLANETOCENTRIC CONTC
      C3 78.054 VHL 8.835 DLA -26.24 RAL 247.15 RAD 6569.5 VEL 14.121 PTH 2.57 VHP 13.600 DPA -11.42 RAP 230.25 ECC 2.2846 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          118.31 13 37 57
111.35 16 37 32
119.79 14 27 56
110.38 19 49 37
123.16 14 45 21
108.57 21 41 35
                         13 12 17 1539.71
16 22 16 915.95
                                                                                                     132.43
            90.00
                                                                       .49
                                                                                        2.12
                                                                                                                                                                                                        355.48
                                                                                                                                                                    939.7
            90.00
                                                                    19.05
                                                                                       325.76
                                                                                                         141.09
                                                                                                                                                                       315.9
                                                                                                                                                                                          21.79
                                                                                                                                                                                                            318.16
                         14 5 7 1369.08
18 12 7 5849.86
                                                                                                       130.72
          100.00
                                                                     -2.60
                                                                                       347.87
                                                                                                                                                                       769.1
                                                                                                                                                                                           1.39
                                                                                                                                                                                                            341.35
          100.00
                                                                    22.35
                                                                                       278.96
                                                                                                         142.44
                                                                                                                                                                    5249.9
                                                                                                                                                                                          24.92
-4.39
                                                                                                                                                                                                            271.10
          110.00
                          14 23 29 1311.44
                                                                     -6.82
                                                                                       339.69
                                                                                                                                                                    4680.3
                                                                                                                                                                      711.4
                                                                                                       126.89
                                                                                                                                                                                                            333.39
                                                                     29.23
         110-00
                          20 10 15
                                              5480.26
                                                                                      253.59
                                                                                                         145.14
                                                                                                                                                                                          31.48
                                                                                                                                                                                                            245.11
    DIFFERENTIAL CORRECTIONS
                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                                              ST 1930.7 SR 383.2 SS 515.4

CRT -.6701 CRS .5850 CST -.9938

LSA 2014.1 MSA 289.1 SSA 10.8

EL1 1948.1 EL2 281.9 ALF 172,26
                                                                                           SGT 5634.3 SGR 416.9 SG3 113.0
RRT -.5649 RRF -.5510 RTF .9721
      TOE-1.6792 TRA 7.3468 TC3 -.8661 BAU .9038
      ROE .5855 RRA -.2361 RC3 -.0004 FAU .00263
FOE -.3181 FRA 1.7846 FC3 -.0313 88P 18492
80E 1.7784 BRA 7.3507 BC3 .8661 FSP -379
                                                                                           SG8 5649.7 R23 -.0003 R13 -.9721
                                                                                            SGI 5639.2 SG2 343.7 THA 177.60
LAUNCH DATE JUL 8 1967
                                                                                                 FLIGHT TIME 216,00
                                                                                                                                                                              ARRIVAL DATE FER 9 1968
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 610.710
     RL 152.10 LAL -.00 LOL 285.17 VL 25.167 GAL 18.00 A7L 91.45 MCA 313.10 SMA 119.38 ECC .40427 INC 1.4464 V1 29.291
RP 108.42 LAP 1.06 LOP 238.28 VP 36.558 GAP 23.29 AZP 90.99 TAL 148.15 TAP 101.25 RCA 71.12 APO 167.64 V2 34.953
RC 196.285 GL -3.65 GP 5.24 ZAL 34.68 ZAP 172.32 ETS 134.00 ZAE 126.51 ETE 175.82 ZAC 33.47 ETC 14.86 CLP 174.38
    PLANETOCENTRIC CONIC
      C3 89.977 VHL 9.486 DLA -25.66 RAL 248.49 RAD 6569.8 VEL 14.537 PTH
                                                                                                                                  2.64 WHP 14.356 DPA -12.12 RAP 232.26 ECC 2.4808
     LNOW AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 5 17 1613.62 -1.90 6.24 135.11 118.26 13 32 11 1013.6 1.89 359.62 90.00 16 39 59 906.28 19.29 $25.15 144.89 111.14 16 55 6 306.3 22.00 317.522 100.00 14 1 9 1433.23 -4.76 351.41 133.52 119.55 14 25 2 833.2 -.79 344.87 100.00 18 26 48 5849.94 22.35 278.96 146.13 110.38 20 4 18 5249.9 24.92 271.11 110.00 20 21 37 5490.71 29.00 254.31 148.76 108.94 21 53 8 4890.7 31.31 245.87 DIFFERENTIAL CORRECTIONS
    DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                           SGT 5602.5 SGR 404.6 SG3 109.7
RRT -.5762 RRF -.5632 RTF ..9754
SGB 5617.1 R23 -.0009 R13 -.9754
                                                                                                                                                               ST 1889.4 SR 367.6 SS 520.3
CRT -.6432 CRS .5641 CST -.9949
     TOE-1.6446 TRA 7.9921 TC3 -.6908 BAU .8309
     ROE .6022 RRA -.2643 RC3 -.0015 FAU .00118
     FOE -.3047 FRA 1.8750 FC3 -.0114 BSP 18369
BOE 1.7514 BRA 7.9964 BC3 .6908 FSP -366
                                                                                                                                                               LSA 1973.4 MSA 285.4 SSA 10.3
                                                                                           SG1 5607.4 SG2 330.4 THA 177.61
                                                                                                                                                               ELI 1904.5 ELZ 279.3 ALF 172.71
LAUNCH DATE JUL 8 1967
                                                                                               FLIGHT TIME 214.00
                                                                                                                                                                            ARRIVAL DATE FEB 11 1968
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 613.393
     RL 152.10 LAL -.00 LOL 285.17 VL 25.134 GAL 19.71 AZL 91.27 MCA 316.29 SMA 119.20 ECC .42575 INC 1.2663 V1 29.291
RP 108.46 LAP .87 LOP 241.46 VP 36.523 GAP 24.70 AZP 90.92 TAL 147.32 TAP 103.61 RCA 68.45 APO 169.95 V2 34.941
RC 197.979 GL -2.94 GP 5.16 ZAL 33.65 ZAP 171.49 ETS 139.66 ZAE 126.09 ETE 175.90 ZAC 31.58 ETC 15.74 CLP 173.23
    PLANETOCENTRIC CONIC
     C3 104.296 VHL 10.213 DLA -25.09 RAL 249.66 RAD 6570.0 VEL 15.021 PTH 2.70 VHP 15.204 DPA -12.79 RAP 234.22 ECC 2.7165
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 59 0 1682.92 -4.13 10.12 137.70 118.04 13 27 3 1082.9 -.34 3.48 90.00 16 55 37 900.78 19.43 324.81 148.43 111.01 17 10 38 300.8 22.11 317.16 100.00 13 57 13 1495.00 -6.82 354.83 136.22 119.17 14 22 8 895.0 -2.88 348.26 100.00 18 40 6 5851.97 22.30 279.09 149.60 110.44 20 17 38 5252.0 24.88 271.25 110.00 14 21 45 1418.03 -12.73 345.46 132.68 121.99 14 45 23 818.0 -8.41 339.03 110.00 20 32 3 5501.71 28.75 255.08 152.18 109.33 22 3 45 4901.7 31.12 246.67
   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5565.2 SGR 391.1 SG3 106.6
RRT -.5871 RRF -.5753 RTF .9786
SG8 5578.9 R23 -.0014 R13 -.9786
                                                                                                                                                             ST 1853.0 SR 351.3 SS 528.6

CRT -.6187 CRS .5467 CST -.9959

L9A 1938.7 MSA 279.3 SSA 9.8
     TOE-1.6205 TRA 8.6864 TC3 -.5337 BAU .7441
     RDE .6188 RRA - ,2905 RC3 - .0028 FAU- .00054
    FDE -.2952 FRA 1.9734 FC3 .0045 BSP 18348
BDE 1.7346 BRA 8.6912 BC3 .5337 FSP -356
                                                                                          5G1 5569.9 SG2 316.3 THA 177.63
                                                                                                                                                              EL1 1866.0 EL2 274.1 ALF 173.16
LAUNCH DATE JUL 8 1967
                                                                                                FLIGHT TIME 220.00
                                                                                                                                                                            ARRIVAL DATE FEB 13 1968
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 615.433
    RL 152.10 LAL -.00 LOL 285.17 VL 25.103 GAL 21.61 AZL 91.06 MCA 319.47 SMA 119.03 ECC .44987 INC 1.0640 V1 29.291
RP 108.50 LAP .69 LOP 244.65 VP 36.490 GAP 26.28 AZP 90.81 TAL 146.65 TAP 106.12 RCA 65.48 APO 172.58 V2 34.929
RC 199.655 GL -2.25 GP 5.09 ZAL 32.79 ZAP 170.52 ETS 144.52 ZAE 125.59 ETE 175.98 ZAC 29.76 ETC 16.73 CLP 171.99
   PLANETOCENTRIC CONIC
    C3 121.620 VHL 11.028 DLA -24.52 RAL 250.65 RAD 6570.3 VEL 15.587 PTH
                                                                                                                                2.78 WHP 16.161 OPA -13.40 RAP 236.12 ECC 3.0016
    C5 121.020 WHL 11.020 DLA -24.72 RAL 200.03 RAD 0510.5 VEL 15.381 FIN 2.10 VEN 10.101 DFA -15.40 RAT 250.12 ECC 5.0010 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 53 3 1748.50 -6.21 13.81 140.17 117.68 13 22 11 1148.5 -2.46 7.14 90.00 17 9 29 898.05 19.49 324.63 151.73 110.95 17 24 27 298.0 22.17 316.98 100.00 13 53 8 1554.52 -8.78 358.16 138.78 118.69 14 19 3 954.5 -4.89 351.54
                        13 53 8 1554.52
18 52 5 5855 T
        100.00
                                                                 22.22
                                                                                    279.31
                                                                                                       152.63
                                                                                                                            110.52 20 29 40
                                                                                                                                                                   5255.3
                                                                                                                                                                                        24.82
                                                                                                                                                                                                          271.47
                         14 20 11 1469.67
20 41 31 5512.92
                                                                                                                            121.27 14 44 41
        110.00
                                                                 -14.50
                                                                                     348.33
                                                                                                                                                                    869.7
                                                                                                                                                                                      -10.33
                                                                                                                                                                                                          341.80
                                                                                                                            109.73 22 13 24
        110.00
                                                                 28.50
                                                                                    255.85
                                                                                                       155.37
                                                                                                                                                                   4912.9
                                                                                                                                                                                        30.92
   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5523.7 SGR 376.3 SG3 103.6
RRT -.5972 RRF -.5866 RTF .9817
                                                                                                                                                            ST 1819.7 SR 334.3 SS 540.3

CRT -.5960 CRS .5313 CST -.9968

LSA 1908.2 MSA 271.3 SSA 9.2
     TOE-1.6036 TRA 9.4418 TC3 -.3914 BAU .6365
    RDE .6350 RRA -.3165 RC3 -.0042 FAU-.00247
FDE -.2881 FRA 2.0826 FC3 .0176 BSP 18298
BDE 1.7248 BRA 9.4471 BC3 .3914 FSP -346
                                                                                         SGB 5536.5 R23 -.0019 R13 -.9817
                                                                                         SG1 5528.3 SG2 301.5 THA 177.66
                                                                                                                                                             ELI 1830.8 ELZ 266.8 ALF 173.62
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LAUNCH CATE JUL 9 1967
                                                                            FLIGHT TIME 70.00
                                                                                                                                        ARRIVAL DATE SEP 17 1967
    HELIOCENTRIC CONIC
                                                                           DISTANCE 180.464
     RL 152.10 LAL -.00 LOL 286.12 VL 25.942 GAL -8.19 A7L 93.29 MCA 78.49 SMA 123.78 ECC .26751 INC 3.2906 V1 29.292
RP 108.64 LAP -3.22 LOP 4.60 VP 37.026 GAP -13.87 A7P 90.66 TAL 203.98 TAP 282.48 RCA 90.67 APO 156.89 V2 34.881
RC 49.103 GL -15.89 GP -7.02 ZAL 132.89 ZAP 9.83 ETS 44.62 ZAE 150.19 ETE 7.95 ZAC 89.53 ETC 13.73 CLP -6.90
    PLANETOCENTRIC CONIC
     C3 28.961 VHL 5.382 DLA -3.80 RAL 147.53 RAD 6568.2 VEL 12.261 PTH
                                                                                                      2.21 VHP 8.814 DPA
     LNCH ATMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 111.49 3 11 38
74.53 15 1 12
112.66 4 26 55
73.38 16 19 51
115.92 5 27 44
70.13 17 28 24
                   2 35 10 2187.11
13 36 45 5066.91
         90.00
                                                     -18.89
                                                                    39.75
                                                                                   14.04
                                                                                                                                 1587.1
         90.00
                                                     24.02
                                                                    224.08
                                                                                    16.24
                                                                                                                                  4466.9
                                                                                                                                                 21.66
                  3 54 44 1930, 45
14 59 53 4798,81
4 58 54 1729.56
16 12 12 4572.45
        100.00
                                                     -20.04
                                                                     20.36
                                                                                    13.54
                                                                                                                                  1330.4
                                                                                                                                                                 13.09
                                                                                                                                                 -16.80
        100.00
                                                     25.21
                                                                    203.98
                                                                                    15.67
                                                                                                                                  4198.8
                                                                                                                                                22.69
        110.00
                                                    -23.11
                                                                      3.65
                                                                                    12.06
                                                                                                                                  1129.6
                                                                                                                                                                356.44
                                                                                                                                                -19.43
        110.00
                                                                    185.62
                                                                                    14.69
                                                                                                                                 3972.5
                                                                                                                                                  25.43
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
     TOE .2010 TRA -.3561 TC3 .4405 BAU .1710
RDE -.3703 RRA -.1421 RC3 .0330 FAU .03543
                                                                       SGT 677.2 SGR 423.9 SG3 102.9
RRT -.1515 RRF .1857 RTF -.6462
                                                                                                                            ST 320.4 SR 396.8 SS 197.7

CRT -.8865 CRS -.9760 CST .7925

LSA 529.7 MSA 134.4 SSA 24.7
     FDE -.2316 FRA -.2289 FC3-1.0590 BSP 1816
BDE .4648 BRA .3834 BC3 .4418 FSP -252
                                                                       SG8 798.9 R23 -. 0287 R13 .6516
                                                                       SG1 682.1 SG2 416.0 THA 171.34
                                                                                                                            EL1 496.1 EL2 118.6 ALF 128.17
 LAUNCH DATE JUL 9 1967
                                                                            FLIGHT TIME 72.00
                                                                                                                                         ARRIVAL DATE SEP 19 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 187.257
    RL 152.10 LAL -.00 LOL 286.12 VL 26.145 GAL -8.14 A7L 93.19 MCA 81.67 SMA 125.02 ECC .25700 INC 3.1944 VI 29.292
RP 108.61 LAP -3.16 LOP 7.78 VP 37.179 GAP -12.88 A7P 90.46 TAL 205.30 TAP 286.97 RCA 92.89 APO 157.14 V2 34.891
RC 50.476 GL -15.98 GP -7.47 7AL 134.46 7AP 11.98 ETS 37.49 7AE 149.41 ETE 6.37 7AC 88.98 ETC 13.78 CLP -9.39
   PLANETOCENTRIC CONIC
    C3 27.459 VHL 5.240 DLA -3.30 RAL 145.95 RAD 6568.1 VEL 12.200 PTH
                                                                                                      2.19 VHP 8.269 DPA
                                                                                                                                    -3.13 RAP 176.78 ECC 1.4519
    LNCH AZMTH LNCH TIME L-I TIME
90.00 2 25 8 2189.34
90.00 13 34 10 5038.10
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -18.95 39.89 11.67 111.44 3 1 37 1589.3 -15.87 32.57
                                                                                 11.67
                                                                                                    73.70 14 58 8
112.62 4 17 8
                                                     23.48
                                                                    222.14
                                                                                                                                  4438.1
                                                                                    13.53
                                                                                                                                                 21.02
                                                                                                                                                                214.33
                   3 44 56 1931.92
14 57 3 4770.76
                                                     -20.08
                                                                    20.48
                                                                                                   112.62
                                                                                                                                  1331.9
                                                                                    11.18
                                                                                                                                                 -16.84
                                                                                                                                                                 13.18
                                                                                                    72.53 16 16 33
115.93 5 18 28
69.23 17 24 36
       100.00
                                                     24.65
                                                                    202.09
                                                                                    13.14
                                                                                                                                  4170.A
                                                                                                                                                22.02
                                                                                                                                                                194.27
                     4 49 36
                                 1729.34
                                                    -23.10
                                                                      3.63
                                                                                     9.72
                                                                                                   115.93
                                                                                                                                 1129.3
                                                                                                                                                -19.42
                                                                                                                                                                356.43
                    16 8 49
                                    4546.10
                                                      27.7A
                                                                    183.62
                                                                                                                                                  24.70
                                                                                    11.93
                                                                                                                                  3946.1
                                                                                                                                                                176.01
   DIFFERENTIAL CORRECTIONS
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 693.9 SGR 427.5 SG3 116.3
RRT -.1733 RRF .2147 RTF -.6593
SGB 815.0 R23 -.0361 R13 .6662
SG1 700.0 SG2 417.3 TMA 170.50
    TDE .2756 TRA -.3324 TC3 .4847 BAU .1781
RDE -.3637 RRA -.1415 RC3 .0225 FAU .03678
                                                                                                                            ST 320.9 SR 400.4 SS 202.1
CRT -.8931 CRS -.9648 CST .7683
    FOE -.2412 FRA -.2879 FC3-1.2228 BSP 1887
BOE .4563 BRA .3613 BC3 .4853 FSP -290
                                                                                                                            LSA 533.6 MSA 136.6 SSA 25.8
                                                                                                                             FL1 499.9 FL2 115.6 ALF 127.98
LAUNCH DATE JUL 9 1967
                                                                            FLIGHT TIME 74.00
                                                                                                                                       ARRIVAL DATE SEP 21 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 194.044
    RL 152.10 LAL -.00 LOL 286.12 VL 26.327 GAL -8.11 AZL 93.10 MCA 84.85 SMA 126.15 ECC .24769 INC 3.0996 V1 29.292
RP 108.58 LAP -3.09 LOP 10.97 VP 37.318 GAP -11.94 AZP 90.28 TAL 206.61 TAP 291.46 RCA 94.91 APO 157.40 V2 34.903
RC 51.950 GL -15.98 GP -7.98 ZAL 135.98 ZAP 14.36 ETS 32.46 ZAE 148.87 ETE 4.78 ZAC 88.54 ETC 13.84 CLP -11.98
   PLANETOCENTRIC CONIC
    C3 26.202 VHL 5.119 DLA -2.77 RAL 144.45 RAD 6568.1 VEL 12.148 PTH 2.18 VHP 7.754 DPA -3.83 RAP 177.11 ECC 1.4312
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 15 10 2194.32
13 32 10 5009.85
3 35 13 1936.09
14 54 48 4743.32
4 40 30 1731.71
16 6 0 4520.46
                                                                                                90.00
                                                    -19.07
                                                                   40.20
                                                                                    9.50
                                                                                                                              1594.3
                                                                                                                                                                32.87
                                                                                                                                                               212.51
        90.00
                                                    22.93
                                                                   220.25
                                                                                   11.03
                                                                                                                                 4409.9
                                                                                                                                                 20.37
       100.00
                                                    -20.19
                                                                    20.74
                                                                                    9.03
                                                                                                                                 1336.1
                                                                                                                                               -16.96
                                                                                                                                                                13.43
                                                                                                   71.72 16 13 51
       100.00
                                                    24.07
                                                                   200.25
                                                                                   10.63
                                                                                                                                 4143.3
                                                                                                                                                21.35
                                                                                                                                                               192.51
                                                                                                   115.87 5 9 22
68.38 17 21 21
       110.00
                                                    -23.17
                                                                     3.78
                                                                                    7.59
                                                                                                                                 1131.7
                                                                                                                                              -19.50
23.97
                                                                                                                                                                356.57
       110.00
                                                    27.15
                                                                   182.10
                                                                                     9.39
                                                                                                                                 3920.5
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    TOE .2695 TRA -.3099 TC3 .5260 BAU .1843 RDE -.3578 RRA -.1422 RC3 .0088 FAU .04260
                                                                       SCT 708.2 SCR 431.1 SC3 131.4

RRT -.1985 RRF .2483 RTF -.6705

SCB 829.1 R23 -.0448 R13 .6793

SCI 716.1 SC2 417.9 TMA 169.50
                                                                                                                             ST 319.5 SR 403.3 SS 206.5
                                                                                                                           CRT -.8987 CRS -.9505 CST .7407
LSA 535.9 MSA 139.7 SSA 26.8
    FOE -.2508 FRA -.3553 FC3-1.4075 BSP 1949
ANF .4470 BRA .3409 BC3 .5260 FSP -334
                                                                                                                            EL1 502.1 EL2 112.6 ALF 127.67
LAUNCH DATE JUL 9 1967
                                                                            FLIGHT TIME 76.00
                                                                                                                                        ARRIVAL DATE SEP 23 1967
   HELIOCENTRIC CONIC
                                                                           01STANCE 200.821
    RL 152.10 LAL -.00 LOL 286.12 VL 26.490 GAL -8.09 AZL 93.01 MCA 88.03 SMA 127.19 ECC .23949 INC 3.0057 V1 29.292
RP 108.54 LAP -3.00 LOP 14.16 VP 37.444 GAP -11.03 AZP 90.10 TAL 207.88 TAP 295.91 RCA 96.73 APO 157.66 V2 34.914
RC 53.515 GL -15.92 GP -8.54 ZAL 137.43 ZAP 16.94 ETS 28.77 ZAE 148.58 ETE 3.14 ZAC 88.23 ETC 13.90 CLP -14.68
   PLANETOCENTRIC CONIC
    C3 25.146 VML 5.015 DLA -2.20 RAL 143.05 RAO 6568.0 VEL 12.105 PTH 2.17 VMP 7.270 DPA -4.54 RAP 177.31 ECC 1.4138
    LNCH AZMTH LNCH TIME L-I TIME
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 111.17 2 42 6
72.16 14 53 49
                     2 5 24 2201.64
13 30 47 4962.21
                                                                               7.55
        90.00
                                                    -19.25
                                                                    40.66
                                                                                                                2 42 6
                                                                                                                                 1601.6
                                                                                                                                             -16.20
                                                                                                                                                                 33.31
                   13 30 47
        90.00
                                                     22.36
                                                                   218.42
                                                                                     8.73
                                                                                                                                 4382.2
                                                                                                                                                 19.72
                                                                                                                                                                210.75
                                                                                                  112.38 3 58 6
70.96 16 11 45
115.75 5 0 33
67.59 17 18 40
       100.00
                     3 25 43 1942.55
                                                   -20.35
                                                                    21.14
                                                                                     7.08
                                                                                                                                 1342.6
                                                                                                                                                -17.14
                                                                                                                                                                 13.82
       100.00
                   14 53 9
                                  4716.53
                                                     23.49
                                                                   198.47
                                                                                     8.33
                                                                                                                                 4116.5
                                                                                                                                                 20.68
                                                                                                                                                                190.81
       110.00
                     4 31 37
                                   1736.29
                                                   -23.30
                                                                    4.07
                                                                                     5.66
                                                                                                                                 1136.3
                                                                                                                                                -19.65
                                                                                                                                                                356.84
                                  4495.56
       110.00
                   16 3 45
                                                     26.51
                                                                   180,44
                                                                                     7.07
                                                                                                                                 3895.6
                                                                                                                                                 23.24
                                                                                                                                                                172.81
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
    TDE .2623 TRA - .2892 TC3 .5628 BAU
                                                                      SGT 719.6 SGR 435.1 SG3 148.6
RRT -.2264 RRF .2868 RTF -.6791
SGB 840.9 R23 -.0558 R13 .6904
                                                                                                                           ST 316.2 SR 405.6 SS 210.8
CRT -.9027 CRS -.9328 CST .7088
LSA 536.1 MSA 144.1 SSA 27.7
                                                         .1892
    RDE -.3524 RRA -.1442 RC3 -.0083 FAU .04692
    FOE -.2601 FRA -.4319 FC3-1.6155 BSP 2005
BOE .4393 BRA .3231 BC3 .5629 FSP -365
                                                                                                                     EL1 502.4 EL2 109.8 ALF 127.21
                                                                       561 729.7 562 418.0 THA 168.33
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ARRIVAL DATE SEP 25 1967
                                                                              FLIGHT TIME 78.00
LAUNCH DATE JUL 9 1967
                                                                             DISTANCE 207.585
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.636 GAL -8.07 A7L 92.91 MCA 91.22 SMA 128.14 ECC .23229 INC 2.9122 V1 29.292 RP 108.50 LAP -2.91 LOP 17.34 VP 37.558 GAP -10.17 A7P 89.94 TAL 209.11 TAP 300.33 RCA 98.38 APO 157.91 V2 34.926 RC 55.163 GL -15.79 GP -9.16 ZAL 138.81 ZAP 19.71 ETS 25.97 ZAE 148.54 ETE 1.41 ZAC 88.06 ETC 13.96 CLP -17.52
   PLANETOCENTRIC CONIC
    C3 24.255 VHL 4.925 DLA -1.62 RAL 141.76 RAD 6568.0 VEL 12.068 PTH 2.16 VHP 6.816 DPA -5.25 RAP 177.36 ECC 1.3992
LNCH AZMTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    110.97
                                                                                   5.80
                                                                                                                    2 32 47
                                                                                                                                      1610.9
                      1 55 56 2210.89
                                                      -19.48
                                                                       41.25
        90.00
                                                                                                                   14 52 34
                                                                                                                                       4355.2
                                                                                                                                                        19.06
                                                                                                                                                                       209.04
                                                                      216.65
                                                                                         6.65
                                                                                                        71.46
                    13 29 59
                                     4955.22
                                                       21.79
        90.00
                                                                                                                     3 49 3
                                                                                                                                       1350.9
                                                                                                                                                                        14.33
                                                                                                       112.18
                                   1950.92
                                                      -20.57
                                                                       21.67
                                                                                         5.34
                      3 16 32
       100.00
                                                                                                        70.24 16 10 15
                                                                                                                                       4090.4
                                                                                                                                                       20.00
                                                                                                                                                                       189.16
                    14 52 5
4 23 3
                                                       22.90
                                                                      196.76
                                                                                         6.24
                                     4690.41
       100.00
                                                                                                        115.57 4 52 6
66.84 17 16 35
                                                                                                                                                       -19.86
                                                                                                                                                                       357.22
                                                                                                                                       1142.7
                                                                         4.47
                                                                                         3.94
                                                                                                       115.57
                                   1742.70
                                                       -23.49
       110.00
                                                                                                                                       3871.4
                                                                                                                                                       22.51
                                    4471.40
                                                                      178.85
                                                                                         4.95
                                                        25.87
                    16 2 3
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 311.1 SR 407.3 SS 215.2

CRT -.9051 CRS -.9120 CST .6720

LSA 534.5 MSA 149.7 SSA 28.3
                                                                          SGT 727.3 SGR 439.9 SG3 168.0
RRT -.2574 RRF .3305 RTF -.6847
SGB 850.0 R23 -.0693 R13 .6996
    TOE .2543 TRA - .2707 TC3 .5938 BAU .1928
    FOE -.2689 FRA -.3181 FC3-1.8500 BSP 2046
BOE .4304 BRA .5083 BC3 .5945 FSP -443
                                                                                                                                   EL1 501.0 EL2 107.5 ALF 126.61
                                                                           SGI 740.3 SG2 417.6 THA 166.92
                                                                                                                                               ARRIVAL DATE SEP 27 1967
                                                                               FLIGHT TIME 80.00
LAUNCH DATE JUL 9 1967
                                                                               DISTANCE 214.334
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.764 GAL -8.06 AZL 92.82 HCA 94.41 SMA 129.00 ECC .22599 INC 2.8183 V1 29.292 RP 108.46 LAP -2.81 LOP 20.54 VP 37.661 GAP -9.35 AZP 89.78 TAL 210.27 TAP 304.68 RCA 99.85 APO 158.15 V2 34.938 RC 58.885 GL -15.59 GP -9.86 ZAL 140.10 ZAP 22.67 ETS 23.78 ZAE 148.76 ETE 359.53 ZAC 88.04 ETC 14.00 CLP -20.52
   PLANETOCENTRIC CONIC
    C3 23.497 VML 4.847 DLA -1.02 RAL 140.60 RAD 6568.0 VEL 12.036 PTH 2.15 VMP 6.391 DPA -5.96 RAP 177.25 ECC 1.3867 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      110.72 2 23 52
70.79 14 51 56
                                                                                    4.25
                                                                                                                                                                         34.54
                      1 46 51 2221.71
13 29 47 4928.85
                                                                                                                                       1621.7
                                                       -19.74
                                                                        41.93
        90.00
                                                                                                                                                        18.39
                                                                                                                                        4326.6
                                                                                                                                                                        207.39
                                                                                         4.78
                                                       21.21
                                                                       214.93
                     13 29 47
        90.00
                                   1960.85
                                                                                                                    3 40 24
                                                                                                                                       1360.9
                                                                                                                                                        -17.66
                                                       -20.82
                                                                        22.30
                                                                                         3.80
                                                                                                        111.94
                      3 7 43
       100.00
                                                                                                        69.56 16 9 21
                                                                                                                                        4064.9
                                                                                                                                                         19.32
                                                                                                                                                                        187.58
                    14 51 36
                                                                       195,10
                                                                                         4.35
                                                       22.30
       100.00
                                                                                                                                       1150.6
                                                                                                                     4 44 3
                                                                                                                                                                        357.69
                      4 14 52 1750.63
                                                                                         2.43
                                                                                                        115.36
                                                      -23.73
                                                                          4.97
       110.00
                                                                                                                   17 15 4
                                                                                                                                                         21.80
                                                                                                                                        3647.9
                                                                                         3.05
                                                                                                        66.14
                                                                       177.32
                     16 () 56
                                     4447.93
                                                       25.24
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 304.3 SR 408.2 SS 219.9

CRT -.9055 CRS -.8883 CST .6302

LSA 531.2 MSA 156.6 SSA 28.7

EL1 498.0 EL2 105.8 ALF 125.89
                                                                          SCT 730.6 SCR 446.1 SC3 190.0
RRT -.2911 RRF .3798 RTF -.6870
SCB 856.0 R23 -.0859 R13 .7071
    TOE .2453 TRA -.2548 TC3 .6180 BAU .1949
    RDE -. 3423 RRA -. 1525 RC3 -. 0549 FAU . 05737
    FOE -. 2771 FRA -. 6149 FC3-2.1139 BSP 2075
                                                                           SG1 747.5 SGZ 417.1 THA 165.23
     BOE .4211 BRA .2970 BC3 .6204 FSP
                                                          - 509
                                                                                                                                              ARRIVAL DATE SEP 29 1967
                                                                               FLIGHT TIME 82.00
LAUNCH DATE JUL 9 1967
                                                                              DISTANCE 221.065
    RL 152.10 LAL -.00 LOL 286.12 VL 26.878 GAL -8.05 AZL 92.72 HCA 97.39 SMA 129.77 ECC .22051 INC 2.7255 V1 29.292
RP 108.43 LAP -2.70 LOP 23.73 VP 37.753 GAP -8.56 AZP 89.64 TAL 211.36 TAP 308.95 RCA 101.15 APO 158.38 V2 34.951
RC 58.673 GL -15.34 GP -10.63 7AL 141.29 ZAP 25.83 ETS 22.01 ZAE 149.24 ETE 357.45 ZAC 88.21 ETC 14.03 CLP -23.67
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                            -.41 RAL 139.56 RAD 6567.9 VEL 12.009 PTH 2.14 VHP 5.994 DPA -6.67 RAP 176.96 ECC 1.3760
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 30 11 4903.05 20.62 213.27 3.10 70.15 14 51 54 4303.0 17.73 205.79 100.00 2 59 19 1972.04 -21.11 23.01 2.45 111.67 3 32 11 1372.0 -17.98 15.61
     C3 22.846 VHL 4.780 OLA
                                                                                                                                                        18.64
                                                                                                                                                                        186.04
                                                                                                         68.92 16 9 3
                                                                                                                                       4040.1
                                                       21.70
                                                                       193.50
                                                                                         2.67
                     14 51 43 4640.05
        100.00
                                                                                                         115.11 4 36 28
65.48 17 14 8
                                                                                                                                                        -20.41
                                                                                                                                       1159.8
                                                                                                                                                                       358.24
                                                                          5.55
                                                                                         1.10
                                                                                                        115.11
                       4 7 8 1759.78
                                                       -23.99
                                                                                                                                                        21.08
                                                                                                                                                                        168.47
                                                                       175.85
                                                                                                                                       3825.1
                                                                                          1.35
                     16 0 23 4425.08
                                                       24.60
        110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ST 297.5 SR 408.5 SS 225.7

CRT -.9048 CRS -.8628 CST .5859

LSA 527.6 MSA 164.8 SSA 29.0

EL1 494.4 EL2 104.7 ALF 125.20
    DIFFERENTIAL CORRECTIONS
                                                                          SCT 730.7 SCR 454.7 SC3 215.0
RRT -.3294 RRF .4355 RTF -.6871
SCB 880.6 R23 -.1047 R15 .7143
     TOE .2370 TRA - .2409 TC5 .6362 BAU .1960
    ROE -.3374 RRA -.1593 RC3 -.0854 FAU .06367
FOE -.2857 FRA -.7245 FC3-2.4128 BSP 2130
BOE .4123 BRA .2888 BC3 .6419 FSP -589
                                                                           SG1 753.1 SG2 416.5 THA 163.11
                                                                                                                                                ARRIVAL DATE OCT 1 1967
                                                                               FLIGHT TIME 84.00
LAUNCH DATE JUL 9 1967
                                                                               DISTANCE 227.775
    RL 152.10 LAL -.00 LOL 286.12 VL 26.977 GAL -8.04 AZL 92.63 MCA 100.79 SMA 130.45 ECC .21575 INC 2.6273 VI 29.292
RP 108.39 LAP -2.58 LOP 26.92 VP 37.836 GAP -7.81 AZP 89.51 TAL 212.36 TAP 313.14 RCA 102.30 APO 158.59 V2 34.964
RC 60.521 GL -15.04 GP -11.49 ZAL 142.39 ZAP 29.19 ETS 20.53 ZAE 149.98 ETE 355.06 ZAC 88.58 ETC 14.03 CLP -27.02
    PLANETOCENTRIC CONIC
                                               .21 RAL 138.65 RAD 6567.9 VEL 11.986 PTH 2.14 WHP 5.627 OPA -7.39 RAP 176.47 ECC 1.3667
     UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 57 2246.92 -20.34 45.54 1.73 110.14 2 7 24 1646.9 -17.41 36.09
     C3 22.279 VHL 4.720 DLA
                                                                                                                                                       -17.41
17.07
                                                                                                      110.14 2 7 24
69.55 14 52 26
                     1 29 57 2246.92
13 31 9 4877.74
2 51 24 1984.22
14 52 23 4615.67
3 59 52 1769.89
16 0 24 4402.77
                                                                                                                                        4277.7
                                                                       211.65
                                                                                          1.62
                                                        20.03
                                                                                                        111.37 3 24 28
68.32 16 9 19
114.83 4 29 22
64.86 17 13 47
                                                                                                                                                        -18.32
                                                                                                                                        1384.2
                                                                         23.79
                                                                                         1.29
                                                        -21.41
                                                                                                                                        4015.7
                                                                                                                                                        17.97
                                                                       191.94
                                                                                          1.18
                                                        21.10
                                                                                                                                                        -20.73
                                                                                                                                                                        358.85
                                                                                                                                        1169.9
                                                                          6.19
                                                                                       359.96
        110.00
                                                        -24.28
                                                                                                                                                        20.37
                                                                                                                                        3602.8
                                                                       174.43
                                                                                       359.84
                                                        23.96
        110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ST 287.6 SR 407.8 SS 230.3
CRT -.8992 CRS -.8338 CST .5289
LSA 520.5 MSA 174.3 SSA 29.1
    DIFFERENTIAL CORRECTIONS
     TDE .2259 TRA -.2325 TC3 .6416 BAU .1945
                                                                           SGT 722.3 SGR 465.9 SG3 242.6
                                                                          RRT - .3637 RRF .4944 RTF - .6789
SGB 859.5 R23 - .1305 R13 .7173
     RDE -.3322 RRA -.1877 RC3 -.1212 FAU .07061
     FOE -.2903 FRA -.8431 FC3-2.7459 BSP 2123
BOE .4017 BRA .2867 BC3 .6529 FSP -673
                                                                          SG1 751.5 SG2 417.1 THA 160.60 ELI 487.8 EL2 105.2 ALF 124.19
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FLIGHT TIME 86.00
                                                                                                                                      ARRIVAL CATE OCT 3 1967
LAUNCH DATE JUL 9 1967
                                                                         CISTANCE 234.463
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 27.063 CAL -8.03 AZL 92.53 MCA 103.98 SMA 131.05 ECC .21163 INC 2.5289 V1 29.292
RP 108.35 LAP -2.45 LOP 30.12 VP 37.909 CAP -7.09 AZP 89.39 TAL 213.25 TAP 317.23 RCA 103.31 APO 158.78 V2 34.977
RC 62.420 GL -14.68 CP -12.43 ZAL 143.39 ZAP 32.77 ETS 19.24 ZAE 150.97 ETE 352.28 ZAC 89.15 ETC 13.99 CLP -30.57
   PLANETOCENTRIC CONIC
    C3 21.778 VHL 4.667 CLA
                                           .84 RAL 137.87 RAD 6567.9 VEL 11.965 PTH 2.13 VHP 5.288 DPA -8.11 RAP 175.75 ECC 1.3584
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               109.80 1 59 53
68.98 14 53 34
                                                                                                                                           -17.78
                   1 22 12 2260.84
13 32 41 4852.80
                                                                             .73
                                                                                                                           1660.8
        90.00
                                                    -20.66
                                                                  44.43
                                                                                                             1 59 53
                                                                                                                                                              36.95
        90.00
                                                    19.43
                                                                  210.07
                                                                                     . 32
                                                                                                                               4252.A
                                                                                                                                              16.40
                                                                                                                                                             202,70
                  2 43 56 1997.20
14 53 38 4591.68
3 53 4 1780.79
16 0 59 4380.86
                                                                                                 111.05 3 17 13
67,74 16 10 10
114.53 4 22 45
64.27 17 14 0
       100.00
                                                    -21.73
                                                                   24.62
                                                                                     . 31
                                                                                                                               1397.2
                                                                                                                                              -18.68
                                                                                                                                                              17.16
       100,00
                                                    20.49
                                                                  190.42
                                                                                359.87
                                                                                                                               3991.7
                                                                                                                                               17.29
                                                                                                                                                             183.08
                                                                             359.00
       110.00
                                                  -24.59
                                                                   6.88
                                                                                                                               1180.8
                                                                                                                                              -21.07
                                                                                                                                                             359.50
                                                                                                                                                             165.82
                                                                  173.06
                                                                                358.51
                                                                                                                              3780.9
       110.00
                                                    23.32
                                                                                                                                              19.67
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                      SGT 707.1 SGR 481.3 SG3 273.1
RRT -.3944 RRF .5565 RTF -.6633
SGB 855.4 R23 -.1619 R13 .7188
                                                                                                                          ST 276.5 SR 406.3 SS 235.0
CRT -.8892 CRS -.8027 CST .4616
LSA 511.6 MSA 185.0 SSA 29.0
    TOE .2140 TRA -.2288 TC3 .6357 BAU .1911
    RDE -.3266 RRA -.1780 RC3 -.1630 FAU .07830
    FOE -.2924 FRA -.9722 FC3-3.1128 BSP 2101
BOE .3904 BRA .2899 BC3 .6563 FSP -769
                                                                      SG1 745.4 SG2 419.6 THA 157.49
                                                                                                                          EL1 479.6 EL2 107.1 ALF 123.03
                                                                          FLIGHT TIME 88.00
                                                                                                                                       ARRIVAL DATE OCT 5 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 241.127
    RL 152.10 LAL -.00 LOL 286.12 VL 27.137 GAL -8.01 A7L 92.43 MCA 107.17 SNA 131.57 ECC .20807 INC 2.4277 V1 29.292
RP 108.31 LAP -2.32 LOP _33.31 VP 37.974 GAP -6.40 AZP 89.28 TAL 214.04 TAP 321.22 RCA 104.19 APO 158.95 V2 34.990
         64.367 CL -14.27 CP -13.47 ZAL 144.29 ZAP 36.59 ETS 18.08 ZAE 152.18 ETE 348.97 ZAC 89.96 ETC 13.90 CLP -34.35
   PLANETOCENTRIC CONIC
    C3 21.326 VHL 4.618 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 I 14 54 2275.45 -21.00 45.37 359.91 109.45 1 52 50 1675.5 -18.15 37.85 90.00 13 34 48 4828.09 18.82 208.51 359.19 68.44 14 55 16 4228.1 15.72 201.20
                                          1.47 RAL 137.22 RAD 6567.9 VEL 11.946 PTH
                                                                                                     2.13 VHP 4.977 DPA
                                                                                                                                  -8.82 RAP 174.79 ECC 1.3510
                  2 36 56 2010.87
14 55 27 4567.91
       100.00
                                                   -22.06
                                                                   25.50
                                                                                 359.49
                                                                                                 110.70
                                                                                                               3 10 27
                                                                                                                               1410.9
                                                                                                                                              -19.05
                                                                                                                                                               18.00
                                                                                                 67.19 16 11 35
114.20 4 16 38
63.71 17 14 47
       100.00
                                                   19.67
                                                                  188.93
                                                                                 358.74
                                                                                                                               3967.9
                                                                                                                                                              181.65
                                                                                                                                              16.61
                  3 46 45 1792.33
16 2 7 4359.21
      110,00
                                                  -24.92
                                                                    7.62
                                                                                 358.21
                                                                                                                               1192.3
                                                                                                                                                                 .20
                                                                                                                                              -21.44
                                                                                                                                             18.96
      110.00
                                                   22.67
                                                                  171.71
                                                                                357.36
                                                                                                                               3759.2
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SCT 686.5 SGR 502.5 SG3 307.1
RRT -.4200 RRF .6207 RTF -.6395
SGB 850.8 R23 -.1967 R13 .7217
                                                                                                                          ST 266.1 SR 404.1 SS 240.7
CRT -.8749 CRS -.7715 CST .3874
LSA 502.5 MSA 196.9 SSA 28.9
    TOE .2027 TRA -.2292 TC3 .6194 BAU .1867
    RDE -.3207 RRA -.1904 RC3 -. 2121 FAU .08682
    FOE -.2929 FRA-1.1130 FC3-5.5242 BSP 2094
BOE .3793 BRA .2979 BC3 .6547 FSP -879
                                                                      SG1 737.2 SG2 424.7 THA 153.53
                                                                                                                          EL1 471.1 EL2 110.5 ALF 121.91
LAUNCH DATE JUL 9 1967
                                                                          FLIGHT TIME 90.00
                                                                                                                                      ARRIVAL DATE OCT 7 1967
                                                                          DISTANCE 247.765
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 27.200 GAL -7.99 AZL 92.32 MCA 110.37 SMA 132.02 ECC .20501 INC 2.3229 V1 29.292 RP 108.27 LAP -2.18 LOP 36.51 VP 38.031 GAP -5.73 AZP 89.19 TAL 214.72 TAP 325.10 RCA 104.95 APO 159.08 V2 35.003
         66.356 CL -13.81 CP -14.62 ZAL 145.10 ZAP 40.65 ETS 16.98 ZAE 153.59 ETE 344.93 ZAC 91.02 ETC 13.74 CLP -38.36
   PLANETOCENTRIC CONIC
    C3 20.911 VHL 4.573 CLA 2.12 RAL 136.70 RAC 6567.8 VEL 11.929 PTH 2.12 VHP 4.696 CPA -9.54 RAP 173.59 ECC 1.3441
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 8 4 2290.66
13 37 29 4803.42
                                                                               359.24
                                                                                               109.07
                                                                                                                                           -18.54
        90.00
                                                                                                              1 46 14
                                                                                                                              1690.7
                                                   -21.34
                                                                  46.36
                                                                                                                                                               38.80
                                                                                                 109.07 1 46 14
67.92 14 57 35
110.33 3 4 8
66.67 16 13 35
                                                                  206.97
                                                                                 35A.22
                                                                                                                               4203.4
                                                                                                                                              15.04
                                                    18.19
                  2 30 23 2025.11
14 57 51 4544.21
       100.00
                                                  -22.40
                                                                   26.42
                                                                                 358.83
                                                                                                                               1425.1
                                                                                                                                             -19.43
                                                                                                                                                              18.88
      100.00
                                                   19.23
                                                                  187.45
                                                                                 357.76
                                                                                                                               3944.2
                                                                                                                                                             180.23
                                                                                                                                              15.91
                 3 40 54 1804.43
16 3 50 4337.66
      110.00
                                                    -25.25
                                                                                 357.57
                                                                                                 113.84 4 10 58
63.17 17 16 8
                                                                    8.40
                                                                                                                               1204.4
                                                                                                                                             -21.81
                                                                                                                                                                 .94
                                                                                                                               3737.7
                                                                                 356.37
      110.00
                                                   22.02
                                                                  170.38
                                                                                                                                               18.24
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
    TOE .1891 TRA -.2371 TC3 .380 UP ......
ROE -.3137 RRA -.2046 RC3 -.2683 FAU .09585
FOE -.2858 FRA-1.2579 FC3-3.9682 BSP 2041
                                                                     SCT 656.4 SCR 529.7 SC3 343.3
RRT -.4262 RRF .6823 RTF -.5973
SCB 843.4 R23 -.2361 R13 .7243
                                                                                                                          ST 253.7 SR 400.6 SS 244.8

CRT -.8501 CRS -.7364 CST .2901

LSA 489.8 MSA 209.8 SSA 28.8
                                                                      SG1 722.4 SG2 435.4 THA 148.44
                                                                                                                          EL1 459.7 EL2 116.4 ALF 120.45
LAUNCH DATE JUL 9 1967
                                                                          FLIGHT TIME 92.00
                                                                                                                                      ARRIVAL DATE OCT 9 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 254.378
   RL 152.10 LAL -.00 LOL 286.12 VL 27.253 GAL -7.97 A7L 92.21 MCA 113.57 SMA 132.39 ECC .20238 INC 2.2135 V1 29.292
RP 108.22 LAP -2.03 LOP 39.71 VP 38.081 GAP -5.10 A7P 89.11 TAL 215.29 TAP 328.86 RCA 105.60 APO 159.19 V2 35.016
RC 68.382 GL -13.30 GP -15.86 7AL 145.81 7AP 44.95 ETS 15.90 7AE 155.13 ETE 339.95 7AC 92.32 ETC 13.49 CLP -42.63
  PLANETOCENTRIC CONIC
    C3 20.520 VHL 4.530 DLA
                                        2.77 RAL 136.31 RAO 6567.8 VEL 11.912 PTH 2.12 VHP 4.445 OPA -10.25 RAP 172.12 ECC 1.3377
    UNCH AZHTH UNCH TIME U-I TIME 90.00 1 1 37 2306.48
                                                 INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -21.69 47.39 358.72 108.67 1 40 4 1706.5 -18.94 39.79
                                                                  47.39
                                                                              358.72
                                                                                                                                          -18.94
                   13 40 48 4778.57
2 24 15 2039.94
                                                                                                 67.41 15 0 26
109.93 2 58 15
        90.00
                                                                  205.43
                                                                                 357.40
                                                                                                                               4178.6
                                                    17.55
                                                                                                                                                             198.23
                                                                                                                                               14.34
      100.00
                                                   -22.75
                                                                   27.36
                                                                                                                               1439.9
                                                                                358.32
                                                                                                                                             -19.83
                                                                                                                                                              19.81
                                                                                                  66.16 16 16 11
113.47 4 5 45
62.65 17 18 3
                   15 0 51 4520.35
3 35 28 1817.05
16 6 7 4315.99
      100.00
                                                   18.58
                                                                  145.94
                                                                                                                               3920.3
                                                                                                                                              15.20
                                                                                 356.94
                                                                                                                                                             178.81
      110.00
                                                   -25.60
                                                                    9.22
                                                                                357.06
                                                                                                 115.47
                                                                                                                               1217.1
                                                                                                                                              -22.20
                                                                                                                                                                1.72
      110.00
                                                                                                                                             17.51
                                                                                                                               3716.0
                                                   21.35
                                                                  169.06
                                                                                 355.53
                                                                                                                                                             162.03
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    SGT 620.2 SGR 564.3 SG3 341.5
RRT -.4165 RRF .739R RTF -.5315
SG8 636.5 R23 -.2691 R13 .7339
SG1 705.4 SG2 453.3 THA 141.55
                                                                                                                         ST 241.7 SR 395.8 SS 248.1

CRT -.8128 CRS -.6984 CST .1709

LSA 475.1 MSA 223.9 SSA 28.6

ELI 446.7 EL2 124.8 ALF 118.86
    TOE .1751 TRA -.2519 TC3 .5338 BAU .1725
    RDE -.3057 RRA -.2206 RC3 -.3326 FAU .10535
   FOE -.2714 FRA-1.4051 FC3-4.4446 BSP 1941
BOE .3523 BRA .3349 BC3 .6289 FSP -1117
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ARRIVAL DATE OCT 11 1967
                                                                        FLIGHT TIME 94.00
LAUNCH DATE JUL 9 1967
                                                                        DISTANCE 260.965
   RL 152.10 LAL -.00 LOL 286.12 VL 27.296 GAL -7.94 AZL 92.10 MCA 116.78 SMA 132.70 ECC .20012 INC 2.0985 VI 29.292 RP 108.18 LAP -1.87 LOP 42.92 VP 38.124 GAP -4.49 AZP 89.05 TAL 215.73 TAP 332.51 RCA 106.15 APO 159.26 V2 35.029 RC 70.443 GL -12:74 GP -17.21 ZAL 146.43 ZAP 49.48 ETS 14.78 ZAE 156.71 ETE 333.73 ZAC 93.87 ETC 13.14 CLP -47.15
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                        3.44 RAL 136.04 RAD 6567.8 VEL 11.896 PTH 2.11 WHP 4.224 DPA -10.95 RAP 170.38 ECC 1.3315
    C3 20.146 WHL 4.488 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PÓ EST TIM INJ E LAT INJ E LONG
90.00 0 55 33 2322.97 -22.04 48.47 358.35 108.24 1 34 16 1723.0 -19.35 40.83
                     0 55 33 2322.97
                                                                                                66.92
                                                                                                          15 3 57
                                                                                                                            4153.3
                                                                                                                                            13.61
                                                                                                                                                          196.72
                    13 44 44 4753.28
2 18 30 -2055.41
                                                  16.88
                                                                 203.07
                                                                               356.73
        90.00
                                                                 20 , 40
                                                                               357.95
                                                                                               109.51
                                                                                                          2 52 45
                                                                                                                            1455.4
                                                                                                                                           -20.23
                                                                                                                                                           20.78
                    2 18 30
15 4 28 4490.00
3 30 26 1830.26
4 1 4293.99
       100.00
                                                  -23.11
                                                                                               65.66 16 19 24
113.07 4 0 56
                                                                               356.26
                                                                                                                            3696.1
                                                                                                                                            14.47
                                                                                                                                                          177.38
                                                                 184.49
       100.00
                  15 4 28
                                                  17.91
                                                                                                                           1230.3
                                                                                                                                           -22.60
                                                                                                                                                           2.55
                                                                               354.73
                                                                  10.06
       110.00
                                                  -25.95
                                                                                                          17 20 35
                                                                                                                                            16.76
                                                                                                                                                          160.76
                                                                               354.83
                                                                                                 62.14
                                                                                                                            3694.0
                                                                 167.73
       110.00
                  16 9 1
                                                   20.65
                                                                    NID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 582.7 SGR 608.2 SG3 421.7
RRT -.3523 RRF .7919 RTF -.4342
                                                                                                                       ST 232.6 SR 390.1 SS 252.2

CRT -,7623 CRS -,6618 CST .0390

LSA 460.4 MSA 239.0 SSA 28.4
    TOE .1624 TRA -.2725 TC3 .4662 BAU .1666
    ROE -. 2969 RRA -. 2367 RC3 -. 4063 FAU .11526
                                                                    SG8 842.3 R23 - 2718 R13 .7621
.861 693.2 SG2 478.5 THA 131.54
    FOE -.2529 FRA-1.5542 FC3-4.9531 BBP 1968
BOE .3344 BRA .3623 BC3 .6184 FBP -1254
                                                                                                                        EL1 433.5 ELE 135.4 ALF 117.33
                                                                                                                                   ARRIVAL DATE OCT 13 1967
                                                                        FLIGHT TIME 94.00
                                                                        DISTANCE 267.524
  HELIOCENTRIC CONIC
   PL 152.10 LAL -.00 LOL 286.12 VL 27.330 GAL -7.91 AZL 91.96 MCA 119.96 3MA 132.95 ECC .10019 INC 1.9768 V1 29.292 RF 100.14 LAP -1.71 LOP 46.12 VP 30.100 GAP -3.90 AZP 80.01 TAL 216.06 TAP 336.04 RCA 106.60 APO 159.30 VZ 35.042 RC 72.534 GL -12.12 GP -18.66 ZAL 146.96 ZAP 54.24 ETS 13.60 ZAE 150.20 ETE 325.40 ZAC 95.65 ETC 12.66 CLP -51.92
   PLANETOCENTRIC CONIC
    CS 19.779.WHL 4.447 DLA 4.14 RAL 135.80 RAD 6567.8 VEL 11.881 PTH 2.11 WHP 4.034 OPA -11.65 RAP 168.39 ECC 1.3255 LNOH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                  49.60
                                                                             356.11
                                                                                                                           1740.3
                                                                                                                                          -19.77
                                                                                                                                                           41.93
                   0 49 46 2540.26
13 49 21 4727.26
                                                                                               107.76
                                                                                                            1 20 46
                                                  -22.41
        90.00
                                                                                356.19
                                                                                                          15 8 8
                                                                                                                             4127.3
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                                                                 202.29
                                                                                                 66.44
        90.00
                                                    16.10
                                                                                                            2 47 34
                                                 -23.47
17.20
                                                                                                                                            -20.65
                                                                                                                                                           21.80
                                                                                357.72
                                                                                               109.06
                                                                                                                             1471.6
                                                                  29.46
       100.00
                     2 13 3
                                  2071.64
                                                                                                 65.17 16 23 16
                                                                                355.71
                                                                                                                             3671 .1
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                                                                                                                                                          175.92
                                                                 102.97
                   15 8 45
                                  4471.11
       100.00
                                                                                               112.64 3 56 28
61.63 17 23 45
                                                                                                                             1244.1
                                                                                                                                           -23.02
                                                                                                                                                            3.39
       110.00
                    3 25 44 1844.12
                                                 -26.32
                                                                  11.00
                                                                                356.53
                                                                                                                            3671.4
                                                                                                                                                          159.47
                                                                                                                                            15.98
                                                                 166.37
                                                                                354.27
                    16 12 33
                                  4271.39
                                                   19.93
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 548.1 SGR 650.5 SG3 461.1
RRT -.2374 RRF .8356 RTF -.2825
    TOE .1487 TRA -.3021 TC3 .3754 BAU .1628
                                                                                                                        ST 224.8 SR 382.0 SS 253.7
                                                                                                                        CRT -.6879 CRS -.6168 CST -.1279
    ROE -. 2860 RRA -. 2574 RC3 -. 4881 FAU .12488
                                                                     SGB 857.5 RE3 -. 2007 R13 .8158
                                                                                                                        LSA 441.4 MSA 255.2 SSA 28.3
    FOE -. 2197 FRA-1.6666 FC3-5.4662 88P 1963
                                                                     $61 690.4 $62 508.6 THA 115.97
                                                                                                                        EL1 417.3 EL2 149.3 ALF 115.54
    BOE .3224 BRA .3960 BC3 .6158 FBP -1363
                                                                                                                                   ARRIVAL DATE OCT 15 1967 -
                                                                         FLIGHT TIME 98.00
LAUNCH DATE JUL 9 1967
                                                                        DISTANCE 274.056
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 27.356 GAL -7.87 AZL 91.85 MCA 123.19 SMA 133.14 ECC .19654 INC 1.8469 VI 29.292 RP 108.10 LAP -1.55 LOP 49.33 VP 36.191 GAP -3.33 AZP 88.99 TAL 216.28 TAP 339.47 RCA 106.97 APO 159.31 V2 35.056 RC 74.652 GL -11.43 GP -20.19 TAL 147.40 ZAP 59.20 ETS 12.30 ZAE 159.41 ETE 316.50 ZAC 97.65 ETC 12.03 CLP -56.93
   PLANETOCENTRIC CONIC
     C3 19.415 WHL 4.406 DLA 4.86 RAL 135.87 RAD 6567.8 VEL 11.866 PTH 2.10 VMP 3.876 DPA -12.36 RAP 166.16 ECC 1.3195 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -20.20
                                                                                                                         1758.6
                                                                                            107.29
                                                                                                           1 23 31
                                                                  50.82
                                                                              356.00
                   0 44 12 2358.58
13 54 44 4700.12
                                                 -22.78
         90.00
                                                                                               65.96 15 13 4
108.58 2 42 39
64.69 16 27 52
                                                                                                                                                          193.59
                                                                                355.78
                                                                                                                            4100.1
                                                                                                                                           12.06
                                                                 200.64
                                                   15.43
         90.00
                                                                                                                            1488.8
                                                                                                                                           -21.09
                                                                                                                                                           22.89
                   2 7 50 2088.83
15 13 47 4445.10
                                                                  30.40
                                                                                357.63
                                                 -23.85
                                                                                355.30
                                                                                                                            3645.1
                                                                                                                                           12.91
                                                                                                                                                         174.41
                                                                 181.40
                                                  16.45
       100.00
                                                                                               112.18 3 52 19
61.14 17 27 35
                                                                                                                                                            4.31
                                                                  11.97
                                                                                                                             1258.8
                                                                                                                                           -23.45
                   3 21 20 1858.85
16 16 47 4247.86
                                                                                356.45
                                                  -26.70
                                                                                                                            3647.9
                                                                                                                                           15.16
                                                                                                                                                          158.14
                                                                 144.98
                                                                                353.44
                                                   19.16
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT $29.5 SGR 718.6 SG3 498.6
RRT -. 0552 RRF .8715 RTF -. 0702
                                                                                                                        ST 221.4 SR 371.6 85 254.2
     TOE .1362 TRA -.3366 TC3 .2623 BAU .1648
                                                                                                                        CRT -.5910 CRS -.5651 CST -.3133
LSA 420.1 MSA 272.7 SSA 28.2
EL1 399.4 EL2 166.2 ALF 113.75
    ROE -.2731 RRA -.2768 RC3 -.5784 FAU .13302
FDE -.1740 FRA-1.8060 FC3-5.0719 88P 2032
80E .3092 BRA .4379 BC3 .6351 FSP -1506
                                                                     SG8 892.6 R23 -.0342 R13 .8711
                                                                     SG1 719.9 SG2 527.7 THE 95.05
                                                                         FLIGHT FINE 100.00
                                                                                                                                    ARRIVAL DATE OCT 17 1967
LAUNCH DATE JUL 9 1967
                                                                         DISTANCE 200.500
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 27.374 GAL -7.82 AZL 91.71 MCA 126.40 SMA 133.28 ECC .19513 INC 1.7069 V1 29.292 RP 108.06 LAP -1.37 LOP 52.54 VP 36.217 GAP -2.79 AZP 88.99 TAL 216.38 TAP 342.78 RCA 107.27 APO 159.28 V2 35:069 RC 76.795 GL -10.67 GP -21.80 ZAL 147.76 ZAP 64.30 ETS 10.65 ZAE 160.10 ETE 305.37 ZAC 99.82 ETC 11.25 CLP -62.16
    PLANETOCENTRIC CONIC
                                        5.63 RAL 135.97 RAD 6567.8 VEL 11.850 PTH 2.10 VMP 3.749 DPA -13.06 RAP 163.72 ECC 1.3135
     C3 19.048 WHL 4.364 DLA
    LNOI AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 38 46 2378.28 -23.17 52.13 358.03 106.74 1 18 25 1778.3 -20.66 44.35
                                                                                              106.74 1 18 25
65.48 15 18 49
108.04 2 37 54
64.20 16 35 16
                                                                                355.50
357.67
                                                                                                                             4071.4
                                                                                                                                            11.20
                    14 0 56 4671.42
                                                    14.63
                                                                 196.92
         90,00
                   2 2 47 2107.52
15 19 39 4417.61
3 17 7 1874.64
16 21 47 4223.05
                                                                                                                             1507.3
                                                                                                                                           -21.55
                                                                                                                                                           24.07
                                                   -24.24
                                                                   31.83
        100.00
                                                                                                                             3617.6
                                                                                                                                            12.05
                                                                                                                                                          172.82
                                                                                355.01
                                                    15.64
                                                                 179.76
        100,00
                                                                                                                             1274.6
                                                                                                                                           -23.92
                                                                                                                                                            5.31
                                                                                                111.66
                                                                                                             3 48 22
        110.00
                                                   -27.10
                                                                   13.02
                                                                                354.52
                                                                                                 60.63 17 32 10
                                                                                                                             3623.1
                                                                                                                                           14.29
                                                                                                                                                           156.75
                                                   18.34
                                                                 163.53
                                                                                353.54
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
     IFFERENTIAL CORRECTIONS
                                                                                                                      ST 224.5 SR 359.2 SS 254.9
CRT -.4796 CRS -.5118 CST -.4913
                                                                     SGT 541.7 SGR 785.9 SG3 533.4
     TOE .1865 TRA -.3615 TC5 .1263 BAU .1756
                                                                     ROE -. 2563 RRA -. 2963 RC3 -. 6777 FAU .14214
     FOE -.1202 FRA-1.9008 FC3-6.4601 BSP 2221
     BOE .2876 BRA .4830 BC3 .6897 FSP -1630
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ARRIVAL DATE OCT 19 1967

LAUNCH DATE JUL 9 1967

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DISTANCE 287.037
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 27.386 GAL -7.76 AZL 91.55 NCA 129.61 SMA 133.36 ECC .19394 INC 1.5548 VI 29.292
RP 108.02 LAP -1.20 LOP 55.75 VP 38.237 GAP -2.26 AZP 89.01 TAL 216.38 TAP 345.99 RCA 107.50 APO 159.23 V2 35.082
RC 78.958 GL -9.81 GP -23.48 ZAL 148.03 ZAP 69.50 ETS 9.24 ZAE 160.07 ETE 293.20 ZAC 102.12 ETC 10.30 CLP -67.55
   PLANETOCENTRIC CONIC
     C3 18.676 VHL 4.322 DLA
                                              6.46 RAL 136.20 RAD 6567.8 VEL 11.835 PTH 2.10 VHP 3.655 DPA -13.78 RAP 161.13 ECC 1.3074
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
                     0 33 21 2300.79
14 8 11 4640.82
1 57 46 2127.52
15 26 27 4368.13
                                                                                                                                                            -21.15
                                                         -23.59
                                                                           55.57
                                                                                         358.20
                                                                                                           106.14
                                                                                                                           1 13 20
                                                                                                                                             1799.8
                                                                                                                                                                               45.74
         90.00
                                                                                                                                              4040.6
                                                                                                                                                              10.27
                                                                                                                                                                               190.14
                                                          13.75
                                                                          197.06
                                                                                          355.35
                                                                                                              65.00
                                                                                                                        15 25 32
         90.00
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                                                                           33.19
                                                                                          357.85
                                                                                                            107.45
                                                                                                                          2 33 13
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                                                         -24.66
       100.00
                                                                                                             63.71 16 39 35
                                                         14.76
                                                                                                                                             3766.1
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                                                                                          354.65
       100.00
                                                                          178.02
                                                                                                            111.11 3 44 34
60.13 17 37 36
                                    1891.92
                                                                           14.18
                                                                                          356.73
                                                                                                                                             1291.9
                                                                                                                                                              -24.41
       110.00
                     3 13 £
16 27 40
                                                         -27.53
                                                                                                                                                                               155.26
                                                                                          353.34
                                                                                                                                             3596.5
                                                                                                                                                              13.34
                                                                          161.90
       110.00
                                                          17.44
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             SCT 596.7 SCR 856.7 SC3 561.5

RET .4083 RRF .9228 RTF .4255

SC8 1044.0 R23 .1724 R13 .9081

SC1 909.1 SC2 513.3 THA 66.08
                                                                                                                                         ST 233.7 SR 342.7 SS 254.8
    TOE .1189 TRA -.4306 TC3 -.0311 BAU .1955
    RDE -. 2400 RRA -. 3138 RC3 -. 7824 FAU .14851
                                                                                                                                         CRT -.3558 CRS -.4423 CST -.6651
                                                                                                                                         LSA 372.2 MSA 312.0 SSA 28.3
    FOE -.0477 FRA-1.9551 FC3-6.8639 BSP 2506
    BOE .2679 BRA .5330 BC3 .7830 FSP -1724
                                                                                                                                         EL1 358.4 EL2 208.8 ALF 111.10
                                                                                                                                                      ARRIVAL DATE OCT 21 1967
                                                                                   FLIGHT TIME 104.00
LAUNCH DATE JUL 9 1967
   MELIOCENTRIC CONIC
                                                                                  DISTANCE 293.467
    RL 152.10 LAL -.00 LOL 284.12 VL 27.302 GAL -7.70 AZL 91.30 MCA 132.82 MAA 133.40 ECC .19293 INC 1.3877 V1 29.292 RP 107.90 LAP -1.02 LOP 58.96 VP 38.253 GAP -1.76 AZP 80.06 TAL 216.27 TAP 349.00 RCA 107.67 APO 159.14 V2 35.094 RC 81.130 GL -8.84 GP -25.21 ZAL 148.22 ZAP 74.72 ETS 7.42 ZAE 150.18 ETE 281.06 ZAC 104.47 ETC 9.18 CLP -73.06
    C3 18.297 WHL 4.278 DLA 7.37 RAL 136.55 RAD 6567.7 VEL 11.819 PTH 2.09 WHP 5.594 DPA -14.53 RAP 158.44 ECC 1.5011 LNCH AZHTH LNCH TIME L-F TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 27 46 2423.78 -24.03 55.18 356.52 105.44 1 A 4 488 A
   PLANETOCENTRIC CONIC
                                                                                                            64.51
106,77
                                                                                                                         15 33 21
                                                                                                                                              4007.0
                                                                                                                                                                 9.24
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         90.00
                     14 16 34 4607.01
                                                          12.78
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                                                                                          355.33
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                       1 52 36 2150.03
                                                                                                                          2 28 28
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       100.00
                                                         -25.11
                                                                           34.71
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                     15 34 23 4356.00
                                                                          176.13
                                                                                          354.82
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       100.00
                                                         13.79
                                                                                                                           3 40 49
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                                                         -20.00
                                                                                          357.09
       110.00
                       3 4 57
                                     1911.19
                                                                           15.49
                                                                                                              59.61 17 44 1
                                                                                                                                                                12.30
                                                                                                                                                                                153.69
                                     4167.60
                                                          16.44
                                                                                                                                              3567.6
       110.00
                     14 34 35
                                                                          160.33
                                                                                          353.31
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 695.6 SCR 932.4 SC3 582.9
RRT .5915 RRT .9402 RTF .6116
SCB 1163.3 R23 .1971 R13 .9219
SCI 1051.7 SC2 497.3 THA 58.34
                                                                                                                                         ST 250.4 SR 323.3 SS 255.3
CRT -.2398 CRS -.3709 CST -.7985
    TOE .1163 TRA -.4837 TC3 -.2116 BAU .2247
    RDE -. 2192 RRA -. 3297 RC3 -. 8940 FAU .15310
    FDE .0318 FRA-1.9740 FC3-7.2430 BSP 2914
BOE .2481 BRA .5854 BC3 .9187 FSP -1808
                                                                                                                                        LSA 351.8 HSA 328.4 SSA 28.5
ELI 334.9 EL2 234.7 ALF 111.43
                                                                                                                                                    ARRIVAL DATE OCT 23 1967
                                                                                  FLIGHT TIME 106.00
LAUNCH DATE JUL 9 1967
                                                                                  DISTANCE 299.910
   MELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 266.12 VL 27.391 GAL -7.62 AZL 91.20 MCA 136.04 SMA 133.40 ECC .19208 INC 1.2022 V1 29.292 RP 107.94 LAP -.83 LOP 62.17 VP 38.264 GAP -1.27 AZP 89.13 TAL 216.06 TAP 352.10 RCA 107.78 APO 159.03 V2 35.107 RC 83.335 GL -7.74 GP -27.00 ZAL 148.32 ZAP 79.88 ETS 5.40 ZAE 157.47 ETE 270.00 ZAC 106.82 ETC 7.89 CLP -78.63
   PLANETOCENTRIC CONIC
                                             8.38 RAL 137.04 RAD 6567.7 VEL 11.802 PTH 2.09 WHP 3.565 DPA -15.34 RAP 155.71 ECC 1.2948
    C3 17.910 VML 4.232 DLA
   CS 17.910 VML 4.232 OLA 8.38 RAL 137.04 RAD 6567.7 VEL 11.802 PTM 2.09 VMP 3.555 UPA -13.54 RAP 155.71 ECC 12.245 LNCH AZNTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 21 50 2451.10 -24.52 57.04 359.00 104.65 1 2 41 1851.1 -22.27 49.09 90.00 14 26 23 4569.71 11.67 192.91 355.44 64.02 15 42 33 3969.7 8.09 186.07 100.00 1 47 14 2175.66 -25.61 36.45 359.67 105.98 2 23 30 1575.7 -23.17 28.50 100.00 15 43 40 4320.38 12.68 174.06 354.93 62.70 16 55 41 3720.4 8.93 167.29 110.00 3 4 44 1933.13 -28.51 16.99 357.62 109.71 3 36 57 1333.1 -25.56 9.06 110.00 16 42 40 4135.66 15.35 158.52 353.40 59.08 17 51 35 355.7 11.14 151.95
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             RET .7178 RRF .9532 RTF .7559
868 1306.5 R23 .2068 R13 .9335
561 1214.9 862 480.6 TMA 52.40
                                                                                                                                         ST 273.9 SR 298.0 SS 257.9
    TOE .1187 TRA -.5395 TC3 -.4152 BAU .2608
    RDE -.1934 RRA -.3410 RC3-1.0069 FAU .15490
FDE .1315 FRA-1.9367 FC3-7.4874 BSP 3396
                                                                                                                                         CRT -.1325 CRS -.2792 CST -.9021
                                                                                                                                        LSA 368.4 MSA 306.3 85A 28.9
EL1 307.8 EL2 262.8 ALF 118.73
    BOE .2269 BRA .6362 BC3 1.0891 FSP -1846
LAUNCH DATE JUL 9 1967
                                                                                   FLIGHT TIME 108.00
                                                                                                                                                     ARRIVAL DATE OCT 25 1967
                                                                                  DISTANCE 306.307
   HELIOCENTRIC CONIC
   RL 15Z.10 LAL -.00 LOL 286.12 VL 27.386 GAL -7.54 AZL 90.99 MCA 139.26 SMA 133.36 ECC .19137 INC .9934 V1 29.292
RP 107.91 LAP -.65 LOP 65.39 VP 38.271 GAP -.80 AZP 89.25 TAL 215.76 TAP 355.02 RCA 107.84 APO 158.88 VZ 35.119
RC 85.546 GL -6.46 GP -28.85 ZAL 148.33 ZAP 84.90 ETS 3.16 ZAE 155.06 ETE 260.64 ZAC 109.08 ETC 6.45 CLP -84.17
   PLANETOCENTRIC CONIC
                                              9.52 RAL 137.67 RAD 6567.7 VEL 11.786 PTH 2.08 WHP 3.569 DPA -16.24 RAP 153.00 ECC 1.2863
    C3 17.517 WHL 4.185 DLA
    C3 17.317 WHL 4.185 DLA 9.32

LNOA AZMTH LNCH TIME L-I TIME

90.00 0 15 16 2482.99

90.00 14 37 59 4527.50

100.00 1 41 17 2205.57

100.00 15 54 39 4280.16
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   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SGT 908.1 SGR [081.5 SG3 596.0
RRT .7973 RRF .9635 RTF .8125
SG8 1471.7 R23 .2087 R13 .9434
                                                                                                                                       ST 304.6 SR 269.3 SS 265.5
CRT -. 0412 CRS -. 1998 CST -. 9596
    TOE .1291 TRA -.5946 TC3 -.6364 BAU .3024
    RDE -1844 RRA -3466 RC3-1.1237 FAU .15436
FDE .2330 FRA-1.8643 FC3-7.6300 BSP 3965
                                                                                                                                         LSA 400.7 MSA 272.7 SSA 29.4
    BOE .2091 BRA .6893 BC3 1.2914 FSP -1868
                                                                             SG1 1395.7 SG2 466.8 THA 47.88
                                                                                                                                         EL1 305.5 EL2 268.3 ALF 170.77
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FLIGHT TIME 102.00

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ARRIVAL DATE OCT 27 1967
                                                                                                                        FLIGHT TIME 110.00
LAUNCH DATE JUL 9 1967
     HELIOCENTRIC CONIC
                                                                                                                        DISTANCE 312.678
      #L 152.10 LAL -.00 LOL 286.12 VL 27.376 GAL -7.45 ATL 90.76 HCA 142.48 SHA 133.29 ECC .19079 INC ..7555 V1 29.292

RP 107.87 LAP -,46 LOP 68.61 VP 36.278 GAP -.34 ATP 89.40 TAL 215.37 TAP 357.85 RCA 107.86 APO 158.72 V2 35.131

RC 87.787 GL -4.98 GP -30.77 TAL 148.22 TAP 89.69 ETS .68 ZAE 152.13 ETE 253.07 TAC 111.19 ETC 4.85 CLP -89.64
     PLANETOCENTRIC CONIC
       C5 17.121 VHL 4.138 DLA 10.84 RAL 138.46 RAD 6967.7 VEL 11.769 PTH 2.08 VHP 3.607 DPA -17.27 RAP 150.35 ECC 1.2818
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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           110.00
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                                                         4058.60
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           110.00
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                                                                                                                 HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                  SCT 1182.6 SCR 1191.3 SC3 566.6
RRT .8480 RRF .9712 RTF .8598
SC8 1850.5 R23 .2100 R13 .9507
SG1 1586.5 SG2 454.9 THA 44.09
                                                                                                                                                                                                        ST 343.3 SR 234.1 SS 280.7
CRT .0532 CRS -.1311 CST -.9871
       TOE .1489 TRA -.6471 TC3 -.8744 BAU .3470
      RDE -.1291 RRA -.3496 RC3-1.2366 FAU .15087
FDE .3507 FRA-1.7374 FC3-7.6288 BBP 4566
BDE .1971 BRA .7355 BC3 1.5161 FSP -1843
                                                                                                                                                                                                         LSA 442.8 MSA 233.5 SSA 30.3
EL1 343.8 EL2 233.4 ALF 3.86
                                                                                                                                                                                                                           ARRIVAL DATE OCT 29 1967
LAUNCH DATE JUL 9 1967
                                                                                                                         DISTANCE 319.023
     HELIOCENTRIC CONIC
      RL 152.10 LAL -.00 LOL 286.12 VL 27.361 GAL -7.35 AZL 90.48 MCA 145.70 SMA 133.18 ECC .19032 INC .4799 V1 29.292
RF 107.83 LAP -.27 LOP 71.83 VP 38.275 GAP .09 AZP 89.60 TRL 214.89 TAP .59 RCA 107.83 APO 158.52 V2 35.143
RC 89.996 GL -3.18 GP -32.82 ZAL 147.98 ZAP 94.17 ETS 357.95 ZAE 148.81 ETE 247.12 ZAC 113.10 ETC 3.10 CLP -94.96
      RC 89.996 GL -3.18 WF -3.18 WF
     PLANETOCENTRIC CONIC
                               23 54 37 2560.24
15 6 50 4421.06
1 26 16 2205.37
16 23 46 4179.17
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           110.00
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                                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                  RCT 1378.1 96R 1217.0 863 566.9
RRT .8802 RRF .9773 RTF .8894
868 1836.6 R23 .2115 R13 .9561
861 1783.6 862 446.5 TMA 40.97
                                                                                                                                                                                                         ST 392.7 SR 195.1 SS 307.0
CRT .1816 CRS -.1296 CST -.9901
       TOE .1812 TRA -.6934 TC3-1.1242 BAU .3933
       ROE -.0876 RRA -.3438 RC5-1.3518 FAU .14474
FOE .4747 FRA-1.5808 FC3-7.4898 BSP 5191
                                                                                                                                                                                                         LSA 498.4 MSA 192.4 55A 31.6
EL1 394.7 EL2 190.8 ALF 6.74
       BOE .2012 BRA .7740 BC3 1.7582 FSP -1783
                                                                                                                                                                                                                          ARRIVAL DATE OCT 31 1967
                                                                                                                         FLIGHT TIME 114.00
LAUNCH DATE JUL 9 1967
                                                                                                                        DISTANCE 325.343
       RL 152.10 LAL -.00 LOL 286.12 VL 27.342 GAL -7.24 AZL 90.15 MCA 148.92 SMA 133.04 ECC .18995 INC .1531 VI 29.292 RP 107.80 LAP -.08 LOP 75.05 VP 38.272 GAP .52 AZP 89.87 TAL 214.34 TAP 3.26 RCA 107.77 APO 158.31 VZ 35.154 RC 92.232 GL -1.03 GP -35.06 ZAL 147.57 ZAP 98.26 ETS 354.95 ZAE 145.23 ETE 242.52 ZAC 114.74 ETC 1.20 CLP-100.11
      PLANETOCENTRIC CONIC
       C3 16.361 VHL 4.045 DLA 14.29 RAL 140.64 RAD 6567.7 VEL 11.736 PTH 2.07 VMP 3.791 DPA -19.97 RAP 145.35 ECC 1.2693
       C3 18.381 VHL 4.045 DLA 14.29 RAL 140.84 RAD 5567.7 VEL 11.736 PTM 2.07 VHP 3.791 DPA 19.97 RAP 145.35 ECC 1.2693 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 25 43 0 2628.13 -26.99 69.40 3.36 98.92 24 26 48 2028.1 -25.48 61.06 90.00 15 30 2 4350.93 4.89 180.42 357.99 62.07 16 42 33 3750.9 1.12 173.77 100.00 1 15 53 2341.23 -28.19 48.07 3.13 100.39 1 54 54 1741.2 -26.46 39.69 100.00 16 43 46 4113.05 5.96 162.34 357.41 60.65 17 52 19 3513.1 2.00 155.79 110.00 2 41 11 2074.34 -31.34 27.01 2.33 104.41 3 15 45 1474 3 -90 MA
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            110.00
                                                         3952.71
                                                                                                                   NID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                  RET 19011 RRF .9824 963 539.2
RRT .9011 RRF .9825 RTF .9087
S68 2034.8 R25 .2131 R13 .9604
S61 1986.1 862 442.4 THA 38.44
                                                                                                                                                                                                      ST 457.5 SR 160.0 SS 345.2

CRT .4048 CRS -.2767 CST -.9832

LSA 574.0 MSA 153.4 SSA 32.9

EL1 462.6 EL2 144.7 ALF 8.94
       TOE .2293 TRA -.7307 TC3-1.3617 BAU .4406
       FOE -.0396 RRA -.3321 RC3-1.4657 FAU .13658
FOE .5974 FRA-1.3761 FC3-7.2273 BBP 5855
BOE .2327 BRA .8026 BC3 2.0143 FSP -1707
                                                                                                                                                                                                                           ARRIVAL DATE NOV 2 1967
                                                                                                                          FLIGHT TIME 116.00
 LAUNCH DATE JUL 9 1967
                                                                                                                          DISTANCE 331.639
     HELIOCENTRIC CONIC
       RL 152.10 LAL -.00 LOL 286.12 VL 27.320 GAL -7.12 AZL 89.76 MCA 152.15 SMA 132.88 ECC .18967 INC .2390 V1 29.292
RP 107.77 LAP .11 LOP 78.27 VP 38.266 GAP .93 AZP 90.21 TAL 213.71 TAP 5.85 RCA 107.68 APO 158.08 V2 35.165
RC 94.474 GL 1.62 GP -37.56 ZAL 146.92 ZAP 101.87 ETS 351.63 ZAE 141.41 ETE 239.04 ZAC 116.08 ETC 359.14 CLP-105.04
      PLANETOCENTRIC CONIC
       C3 18.036 VML 4.004 DLA 16.61 RAL 142.12 RAD 6567.6 VEL 11.723 PTH 2.07 VMP 3.945 DPA -21.76 RAP 142.99 ECC 1.2639 LNON AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 27 20 2707.39 -27.70 75.10 5.45 96.15 24 12 27 2107.4 -26.55 66.61 90.00 15 57 32 4262.53 2.06 175.47 359.57 61.75 17. 8 34 3662.5 -1.74 168.84
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61.75 17.8 34
97.69 1 42 15
60.26 18 16 39
101.86 3 6 37
56.29 19 1 39
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17 9 29 4030.36
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            110.00
                                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                       ST 546.3 SR 146.9 SS 399.9
CRT .7522 CRS -.6191 CST -.9761
                                                                                                                 8CT 1783,4 SCR 1342,4 SC3 502.0
RRT .9147 RRF .9062 RTF .9215
SC8 2232.1 R23 .2160 R13 .9634
        TOE .2965 TRA -.7552 TC3-1.6406 BAU
       ROE .0192 RRA -.5109 RC3-1.5723 FAU .12808
FOE .7274 FRA-1.1516 FC3-6.8070 BSP 6507
BOE .2992 BRA .8167 BC3 E.2724 FSP -1592
                                                                                                                                                                                                        LSA 661.5 MSA 119.6 SSA 35.6
                                                                                                                                                                                                      EL1 557.7 EL2 94.8 ALF 11.78
                                                                                                                  SG1 2187.9 SG2 442.1 THA 36.26
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ARRIVAL DATE NOV 4 1967

LAUNCH DATE JUL 9 1967

DISTANCE 337.911 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 27.294 GAL -7.00 AZL 89.27 MCA 155.37 SMA 132.69 ECC .18948 INC .7258 VI 29.292 RP 107.73 LAP .30 LOP 81.50 VP 38.297 GAP 1.33 AZP 90.66 TAL Z13.00 TAP 8.37 RCA 107.55 APO 157.83 VZ 35.175 RC 96.719 GL 4.95 GP -40.43 ZAL 145.89 ZAP 104.92 ETS 347.96 ZAE 137.36 ETE 236.45 ZAC 117.09 ETC 356.88 CLP-109.77 PLANETOCENTRIC CONIC C3 15.805 WHL 3.976 DLA 19.54 RAL 143.98 RAD 6567.6 VEL 11.713 PTH 2.06 WHP 4.156 DPA -24.02 RAP 140.67 ECC 1.2601 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG ø.26 92.15 23 51 31 61.73 17 44 14 23 4 32 2010.21 16 35 9 4145.13 0 42 4 2516,39 17 44 14 3022.17 2218.2 -27.65 74.54 -28.24 43.15 90.00 -5.50 162.26 1.96 3545.1 144.92 90.00 -1.73 60.67 93.62 1 24 0 1916.4 -28.62 52.16 8.18 -29.47 100.00 60.11 18 49 36 145.30 3322.2 -4.46 1.26 100.00 -.46 151.84 -33.30 37.93 2 55 44 29.02 96.23 1620.3 -31.80 110.00 2 16 43 2220.25 7.75 98.23 2 53 44 55.90 19 29 15 139.97 3191.1 -1.88 133.76 110.00 350.33 18 26 4 3791.00 2.61 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 1987.3 SGR 1402.7 SG3 458.1 RRT .9234 RRF .9893 RTF .9300 SGB 232.5 R23 .2188 R13 .9858 SG1 2391.0 SG2 447.5 TNA 541.47 ST 671.8 SR 187.6 SS 470.0 CRT .9637 CRS -.8981 CST -.9748 TOE ,3967 TRA -.7629 TC3-1.8914 BAU .5333 RDE .0905 RRA -.2808 RC3-1.6715 FAU .11397 FDE .8542 FRA -.9138 FC3-6.2429 88P 7182 LSA 834.6 MSA 99.8 SSA 30.6 ELI 695.9 ELZ 48.4 ALF 15.14 BOE .4040 BRA .8129 BC3 2.5241 FSP -1463 ARRIVAL DATE NOV 6 1967 FLICHT TIME 120.00 DISTANCE 344.156 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 27.265 GAL -6.86 A7L 88.65 MCA 158.60 SMA 132.49 ECC .18936 INC 1.3499 V1 29.292
RP 107.70 LAP .49 LOP 84.73 VP 38.246 GAP 1.72 A7P 91.26 TAL 212.23 TAP 10.83 RCA 107.40 APO 157.57 V2 35.185
RC 98.967 GL 9.24 GP -43.84 ZAL 144.27 ZAP 107.27 ETS 343.86 ZAE 132.99 ETE 234.58 ZAC 117.73 ETC 354.34 CLP-114.31 PLANETOCENTRIC CONIC 2.06 WHP 4.441 DPA -26.83 RAP 138.28 ECC 1.2594 C3 15.762 WHL 3.970 DLA 23.31 RAL 146.30 RAD 6567.6 VEL 11.711 PTH LNOW AFMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMITH INJ TIME PO CST TIM INJ E LAT INJ E LONG 90.00 22 26 41 2909.21 -28.04 95.65 11.98 85.90 23 16 30 2369.2 -26.32 86.99 22 26 41 2966.21 17 32 7 3972.90 0 10 5 2666.50 16 39 20 3766.84 1 54 54 2340.55 62.55 16 36 20 3372.9 -10.85 152.44 90.00 -7.23 150.25 5.64 0 54 33 -29.80 2066.5 -29.82 72.16 12.09 87.89 100.00 60.60 19 36 9 92.78 2 33 55 3168.8 -9.53 136.75 100.00 -5.66 143.40 4.99 1740.5 -33.32 34.07 -34.06 47.22 12.06 110.00 55.87 20 8 10 3069.6 -6.50 127.39 19 7 0 3669.55 -2.04 133.43 2.74 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2189.0 SCR 1457.2 SG3 406.1 RRT .9253 RRT .9918 RTF .9360 SCB 2629.7 R23 .2221 R13 .9675 SG1 2589.5 SG2 457.9 THA 32.87 ST 854.2 SR 288.7 SS 560.2 CRT .9960 CRS -.9818 CST -.9778 TOE .5388 TRA -.7464 TCS-E.1181 BAU .5771 RDE .1823 RRA -.2380 RCS-1.7436 FAU .09995 LSA 1056.6 MSA 98.9 SSA 22.3 ELI 901.3 EL2 24.3 ALF 18.62 FOE .9841 FRA -.6604 FC3-5.4896 BOP 7820 .5463 BRA .7828 BC3 2.7368 FSP -1300 ARRIVAL DATE NOV 8 1967 FLIGHT TIME 122.00 LAUNCH DATE JUL 9 1967 DISTANCE 350.381 HELIOCENTRIC CONICT RL 152.10 LAL -.00 LOL 286.12 VL 27.234 GAL -6.71 AZL 87.82 MCA 161.82 SMA 132.26 ECC .18932 INC 2.1836 V1 29.292
RP 107.67 LAP .68 LOP 87.96 VP 38.232 GAP 2.09 AZP 92.07 TAL 211.40 TAP 13.22 RCA 107.22 APO 157.50 V2 35.195
RC 101.218 GL 14.88 GP -47.96 ZAL 141.70 ZAP 108.78 ETS 339.24 ZAE 128.18 ETE 233.24 ZAC 117.95 ETC 351.44 CLP-118.74 PLANETOCENTRIC CONIC C3 16.107 VHL 4.013 DLA 28.24 RAL 149.60 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 4.842 DPA -30.34 RAP 135.64 ECC 1.2651 C3 16.107 VHL 4.013 DLA 28.24 RAL 149.60 RAD 6567.6 VEL 11.726 PTM 2.07 VHP 4.842 DPA -30.34 RAP 135.64 ECC 1.2651
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 20 30 4 3428.19 -22.09 126.25 15.18 71.83 21 27 13 2828.2 -24.37 118.32
90.00 19 54 26 3543.75 -19.45 133.69 14.18 69.01 20 53 30 2943.8 -22.14 126.05
100.00 22 56 47 2935.12 -27.26 93.02 16.75 77.24 23 46 2 2355.1 -28.75 84.53
100.00 20 10 25 3492.05 -14.54 127.65 11.92 63.59 21 -8.37 2892.1 -17.97 120.54
110.00 1 16 16 2530.85 -33.72 62.05 17.99 84.03 1 58.27 1950.9 -34.18 52.83
110.00 20 11 21 3489.08 -8.86 124.11 8.61 56.85 21 9.30 2889.1 -13.16 117.66 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2391.6 SCR 1508.2 SC3 348.1 RRT .9302 RRT .9935 RTF .9406 SCB 2827.5 R23 .2240 R13 .9690 SC1 2787.3 SC2 475.1 THA 31.41 ST 1119.3 SR 439.9 SS 665.6 CRT .9924 CRS -.9973 CST -.9832 TDE .7463 TRA -.6964 TC3-2.2669 BAU .6189 RDE .3010 RRA -.1753 RC3-1.7668 FAU .08458 LSA 1370.2 MSA 108.8 SSA 14.1 EL1 1201.6 EL2 50.5 ALF 21.35 FOE 1.1032 FRA -.4074 FC3-4.5462 BBP 8477 BOE .8047 BRA .7177 BC3 2.8741 FSP -1124 ARRIVAL DATE NOV 10 1967 LAUNCH DATE JUL 9 1967 FLIGHT TIME 124.00 DISTANCE 356.577 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 288.12 VL 27.200 GAL -6.55 AZL 86.64 MCA 165.04 SMA 132.02 ECC .18935 INC 3.3632 V1 29.292
RP 107.65 LAP .87 LOP 91.19 VP 38.216 GAP 2.46 AZP 93.25 TAL 210.51 TAP 15.54 RCA 107.02 APO 157.01 V2 35.204
RC 103.470 GL 22.40 GP -53.06 ZAL 137.58 ZAP 109.24 ETS 333.99 ZAE 122.71 ETE 232.18 ZAC 117.71 ETC 347.98 CLP-123.27 PLANETOCENTRIC CONIC C3 17.307 VHL 4.160 DLA 34.77 RAL 154.22 RAD 6567.7 VEL 11.777 PTH 2.08 VMP 5.433 DPA -34.74 RAP 132.42 ECC 1.2848 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.93 17 54 51 3997.46 -24.83 170.05 22.45 64.84 19 1 29 3397.5 -28.00 162.26 111.07 23 6 33 3007.45 -24.82 96.04 22.44 64.83 23 56 40 2407.5 -27.99 88.26 64.84 19 1 29 64.83 23 56 40 3397.5 -28.00 162.26 17 54 51 3997.46 -24.83 170.05 22.45 66.93 3007.45 -24.82 96.04 22.44 2407.5 -27.99 86.26 111.07 23 6 33 64.84 19 1 29 64.83 23 56 40 3397.5 -28.00 162.26 17 54 51 3997.46 -24.83 170.05 22.45 68.93 2407.5 -27.99 88.26 111.07 23 6 33 3007.45 -24.82 96.04 22.44 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2600.2 SGR 1541.1 SG3 283.8 RRT .9287 RRF .9944 RTF .9444 SG8 3022.6 R23 .2251 R13 .9702 ST 1502.6 SR 636.4 SS 781.5 TOE 1.0665 TRA -.5934 TC3-2.2822 BAU CRT .9903 CRS -.9998 CST -.9884 ROE .4402 RRA -.0800 RC3-1.6806 FAU .06778 FOE 1.2058 FRA -.1584 FC3-3.3907 88P 9112 BOE 1.1634 BRA .5988 BC3 2.8342 FSP -924 LSA 1805.1 MSA 123.1 SSA 8.3 SG1 2961.2 SG2 498.6 THA 29.74 EL1 1629.8 EL2 81.5 ALF 22.82

FLIGHT TIME 118.00

ARRIVAL DATE NOV 12 1967

EL1 2269.4 EL2 239.1 ALF 94.09

FLIGHT TIME 126.00

SG1 3474.5 SG2 543.9 THA 102.83

ARRIVAL DATE NOV 20 1967

LAUNCH DATE JUL 9 1967

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DISTANCE 388.310
   RL 152.10 LAL -.00 LOL 286.12 VL 27.003 GAL -5.83 A7L 144.47 MCA 182.15 SMA 130.65 ECC .19247 INC54.4666 y1 29.292 RP 107.54 LAP 1.75 LOP 107.37 VP 38.108 GAP 4.44 A7P 35.55 TAL 206.01 TAP 28.16 RCA 105.48 APO 155.77 V2 35.239 RC 114.720 GL -57.47 GP 68.03 ZAL 96.00 ZAP 95.45 ET8 172.20 ZAE 68.18 ETE 252.75 ZAC 89.37 ETC 146.87 CLP 104.70
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 672.353 VHL 25.930 OLA -52.36 RAL 151.32 RAD 6572.7 VEL 28.172 PTH 3.42 VHP 32.079 OPA 65.40 RAP 332.62 ECC12.0652
   LNCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      136.07
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                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 553.1 SR 2940.5 SS 1654.6

CRT -.9563 CRS -.9998 CST .9510

LSA 3415.2 MSA 164.0 SSA 1.4
                                                                   SCT 966.5 SCR 3330.9 SC3 56.7
RRT -.8513 RRF .9981 RTF -.8206
SC8 3468.3 R23 -.0915 R13 .9954
   TOE 2.2838 TRA 2.0826 TC3 -.0644 BAU 1.9066
   RO-13.2035 RRA-3.3679 RC3 .2021 FAU-.02751
FDE-2.6865 FRA -.3860 FC3 .0354 BSP 10425
BDE13.3996 BRA 3.9598 BC3 .2121 FSP -175
                                                                                                                      EL1 2987.8 ELZ 159.1 ALF 100.23
                                                                   SG1 3433.2 SG2 491.9 THA 104.17
                                                                                                                                  ARRIVAL DATE NOV 22 1967
                                                                        FLIGHT TIME 136.00
LAUNCH DATE JUL 9 1967
                                                                       DISTANCE 393.873
   RL 152.10 LAL -.00 LOL 286.12 VL 26.959 GAL -5.51 AZL 113.07 MCA 184.88 SMA 130.32 ECC .19203 INC23.0715 V1 29.292 RP 107.52 LAF 1.91 LOP 110.62 VP 38.082 GAP 4.61 AZP 67.00 TAL 204.49 TAP 29.37 RCA 105.30 APO 155.35 V2 35.244 RC 116.961 GL -63.40 GP 76.40 ZAL 102.55 ZAP 103.49 ETS 95.63 ZAE 92.18 ETE 178.14 ZAC 87.36 ETC 71.62 CLP-173.07
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 136.307 WHL 11.760 OLA -51.31 RAL 134.28 RAD 6570.5 VEL 16.113 PTH 2.83 VMP 13.479 DPA 77.44 RAP 255.98 ECC 3.2762
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2717.5 SR 896.4 SS 1016.7
CRT .9709 CRS -.9606 CST -.9992
                                                                    SGT 3471.4 SGR 1616.6 SG3 91.3
RRT .9357 RRF .8985 RTF .9952
    TOE-5.4051 TRA-2.8696 TC3 -.1436 BAU .2688
    ROE-1.6224 RRA-1.8080 RC3 -.0227 FAU .01009
                                                                                                                      LSA 3029.3 MSA 213.0 SSA 1.0
EL1 2854.2 EL2 204.2 ALF 17.85
    FOE-1.7829 FRA -,7760 FC3 -.0632 BSP 11876
BDE 5.6433 BRA 3.3917 BC3 .1454 FSP -290
                                                                   SGB 3829.3 R23 -.1537 R13 .9877
SG1 3793.6 SG2 521.8 THA 24.03
                                                                                                                                 ARRIVAL DATE NOV 24 1967
                                                                        FLIGHT TIME 138.00
LAUNCH DATE JUL 9 1967
                                                                       DISTANCE 399.831
    RL 152.10 LAL -.00 LOL 286.12 VL 26.914 GAL -5.26 AZL 105.01 MCA 188.01 SMA 130.01 ECC .19241 INC15.0052 V1 29.292 RP 107.51 LAP 2.07 LOP 113.86 VP 38.054 GAP 4.89 AZP 75.13 TAL 203.21 TAP 31.22 RCA 105.00 APO 155.03 V2 35.248 RC 119.197 GL -58.89 GP 64.69 ZAL 107.50 ZAP 112.03 ETS 62.43 ZAE 104.06 ETE 148.41 ZAC 90.14 ETC 39.05 CLP-151.31
   PLANETOCENTRIC CONIC
    C3 65.678 VML 8.104 DLA -45.81 RAL 134.34 RAD 6569.2 VEL 13.676 PTH 2.50 VMP 8.843 DPA 71.34 RAP 206.27 ECC 2.0809
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
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                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 3850.2 SGR 698.9 SG3 145.2
RRT -.6870 RRF -.8321 RTF .9726
                                                                                                                       ST 2614.3 SR 672.4 SS 1013.7

CRT -,9479 CRS .9786 CST -.9931

LSA 2874.5 MSA 220.0 SSA 1.9
    TOE-3.5086 TRA-2.7114 TC3 -.6492 BAU .5793
    RDE .9110 RRA -.0071 RC3 .1175 FAU .02713
FDE-1.8376 FRA -.8825 FC3 -.3576 BSP 12030
                                                                    8G8 3913.1 R23 .2096 R13 -.9762
SG1 3880.5 SG2 503.9 THA 172.77
                                                                                                                       EL1 2691.4 EL2 208.1 ALF 166.22
    BOE 3.6352 BRA 2.7115 BC3 .6597 FSP
                                                     -462
                                                                                                                                  ARRIVAL DATE NOV 26 1967
LAUNCH DATE JUL 9 1967
                                                                        FLIGHT TIME 140.00
                                                                        DISTANCE 405.844
   HELIOCENTRIC CONIC
    RL 192.10 LAL -.00 LOL 286.12 VL 26.866 GAL -5.02 A7L 101.48 MCA 191.20 SNA 129.70 ECC .19301 INC11.4806 V1 29.292
RP 107.50 LAP 2.22 LOP 117.11 VP 36.025 GAP 5.19 A7P 78.73 TAL 201.95 TAP 33.15 RCA 104.67 APO 154.73 V2 35.252
RC 121.426 GL -54.20 GP 54.24 ZAL 110.68 ZAP 119.72 ETS 54.32 ZAE 112.12 ETE 145.35 ZAC 92.95 ETC 31.38 CLP-148.04
   PLANETOCENTRIC CONIC
    C3 43.136 VHL 6.568 DLA -41.35 RAL 136.66 RAD 6568.6 VEL 12.826 PTH 2.33 VMP 7.055 DPA 62.66 RAP 188.86 ECC 1.7099
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2473.7 SR 770.2 SS 1065.8
CRT -.9657 CRS .9933 CST -.9892
                                                                    SGT 3888.7 SGR 856.6 SG3 199.4
RRT -.8406 RRF -.9519 RTF .9611
SGB 3981.9 R23 .2449 R13 -.9667
     TOE-2.6774 TRA-2.3331 TC3-1.1582 BAU
                                                       .6835
    RDE .8805 RRA .1597 RC3 .2516 FAU .04134
FDE-1.9665 FRA -.9380 FC3 -.8297 BSP 12277
BDE 2.8185 BRA 2.3385 BC3 1.1852 FSP -639
                                                                                                                       LSA 2792.3 MSA 227.3 SSA
                                                                                                                                                              2.7
                                                                    SG1 3955.7 SG2 456.1 THA 169.37
                                                                                                                        EL1 2583.8 EL2 191.6 ALF 163.17
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FLIGHT TIME 134.00

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LAUNCH DATE JUL 9 1967
                                                                                 FLIGHT TIME 142.00
                                                                                                                                                 ARRIVAL DATE NOV 28 1967
    HELIOCENTRIC CONIC
                                                                                DISTANCE 411.865
     RL 152:10 LAL -.00 LOL 286:12 VL 26.822 GAL .78 AZL 99.51 MCA 194.42 SMA 129.36 ECC .19373 INC 9.5096 V1 29.292
RP 107.49 LAP 2.36 LOP 120.35 VP 37.995 GAP 5.49 AZP 80.78 TAL 200.67 TAP 35.09 RCA 104.32 APO 154.45 VZ 35.255
RC 123.648 GL -50.31 GP 45.78 ZAL 112.55 ZAP 126.25 ETS 50.13 ZAE 117.75 ETE 146.98 ZAC 95.03 ETC 27.62 CLP-147.97
    PLANETOCENTRIC CONIC
      C3 32.930 VHL 5.738 DLA -38.02 RAL 139.28 RAD 6568.3 VEL 12.422 PTH
                                                                                                             2.24 WHP 6.224 DPA 54.83 RAP 181.37 ECC 1.5419
     LNCM APATH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC IMJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 63.50 4 27 46 1597.54 21.61 18.77 18.82 122.07 4 54 24 997.5 25.68 11.67 116.50 10 38 19 5720.99 21.62 268.66 18.83 122.06 12 13 40 5121.0 25.69 261.56
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122.07 4 54 24
122.06 12 13 40
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    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           867 3972.4 86R 812.0 863 241.9

RRT -.8589 RRT -.9644 RTF .9542

868 4054.6 RZ3 .2655 R13 -.9591

861 4033.9 862 409.5 THA 169.94
     TOE-2.2800 TRA-2.0938 TC3-1.6433 BAU
                                                             .7365
                                                                                                                                     ST 2412.3 SR 706.2 SS 1096.9
CRT -.9666 CRS .9956 CST -.9865
     ROE .7031 RRA .1452 RC3 .3141 FAU .05185
FOE-2.0124 FRA -.9184 FC3-1.3632 BSP 12517
BOE 2.3865 BRA 2.0988 BC3 1.6730 FSP -779
                                                                                                                                    LSA 2733.1 MSA 226.1 SSA 3.6
                                                                                                                                     EL1 2507.5 EL2 173.5 ALF 164.12
LAUNCH DATE JUL 9 1967
                                                                                FLIGHT TIME 144,00
                                                                                                                                                 ARRIVAL DATE NOV 30 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 417.881
    RL 152.10 LAL -.00 LOL 286.12 VL 26.774 GAL -4.52 AZL 96.25 MCA 197.65 SMA 129.07 ECC .19458 INC 8.2468 V1 29.292
RP 107.48 LAP 2.49 LOP 123.60 VP 37.964 GAP 5.79 AZP 82.14 TAL 199.38 TAP 37.03 RCA 103.95 APO 154.18 V2 35.257
RC 125.861 GL -47.17 GP 39.03 ZAL 113.46 ZAP 131.66 ETS 47.08 ZAE 121.62 ETE 149.85 ZAC 96.31 ETC 25.00 CLP-148.83
   PLANETOCENTRIC CONIC
     C3 27.251 WHL 5.220 DLA -35.56 RAL 141.87 RAD 6568.1 VEL 12.191 PTH
                                                                                                             2.19 WHP 5.809 DPA 48.24 RAP 177.69 ECC 1.4485
    LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.53 4 59 25 1487.33 21.93 10.07 17.59 118.73 5 24 12 887.3 25.58 2.71
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   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           9GT 4078.2 SGR 724.3 SG3 271.0
RRT -.8571 RRF -.9619 RTF ..9495
     TOE-2.0558 TRA-1.9224 TC3-2.1012 BAU .7746
                                                                                                                                    ST 2387.7 SR 624.5 SS 1107.0

CRT -.9860 CRS ..9963 CST -.9845

LSA 2695.6 MSA 224.6 SSA 4.5

EL1 2463.1 EL2 156.4 ALF 165.76
    ROE .5673 RRA .1093 RC3 .3248 FAU .05870
FOE-1.9845 FRA -.8452 FC3-1.8647 BSP 12835
BOE 2.1327 BRA 1.9256 BC3 2.1262 FSP -879
                                                                           SG8 4142.0 R23 .2744 R13 -.9534
SG1 4125.6 SG2 366.9 THA 171.27
LAUNCH DATE JUL 9 1967
                                                                               FLIGHT TIME 146.00
                                                                                                                                                ARRIVAL DATE DEC Z 1967
                                                                               DISTANCE 423.896
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.726 GAL -4.26 AZL 97.36 MCA 200.88 SMA 128.75 ECC .19551 INC 7.3646 VI 29.292
RP 107.48 LAP 2.62 LOP 126.85 VP 37.931 GAP 6.09 AZP 83.11 TAL 198.05 TAP 38.93 RCA 103.57 APO 153.92 V2 35.258
RC 128.086 GL -44.63 GP 33.67 ZAL 113.65 ZAP 136.12 ETS 44.56 ZAE 124.24 ETE 152.92 ZAC 96.89 ETC 22.90 CLP-150.01
   PLANETOCENTRIC CONIC
    C3 23.649 VHL 4.863 OLA -33.79 RAL 144.44 RAD 6568.0 VEL 12.043 PTH 2.15 VHP 5.604 OPA 42.78 RAP 175.87 ECC 1.3892
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 28 29 1395.39
10 18 50 5758.33
5 28 29 1395.39
10 18 50 5758.33
9 44 6 5864.47
11 2 23 5625.28
                                                                                   17.30
                                                                                                     116.33 5 51 44
116.31 11 54 49
116.33 5 51 44
                                                                         2.88
                                                                                                                                                     25.35
                                                                                                                                                                     355.37
264.35
        70.74
                                                                                                                      5 51 44
                                                                                                                                         795.4
                                                       21.99
                                                                       271.87
                                                                                       17.31
       109.26
                                                                                                                                        5158.3
                                                        22.01
                                                                                                                                                          25.36
                                                                                       17,30
        70.74
                                                                                                                                         795.4
                                                                                                                                                         25.35
                                                                                                                                                                       355.37
                                                       21.99
                                                                        2.88
                                                                                                        116.31 11 54 49
119.32 11 21 51
113.37 12 36 8
                                                                       271.67
                                                                                       17.31
       109.26
                                                        22.81
                                                                                                                                        5158.3
                                                                                                                                                         25.36
                                                                                                                                                                        264.35
       110.00
                                                        18.41
                                                                       278.11
                                                                                       15.29
                                                                                                                                        5264.5
                                                                                                                                                         22.17
                                                                                                                                                                        271.00
       110.00
                                                    25.68
                                                                       263.37
                                                                                       19.17
                                                                                                                                        5025.3
                                                                                                                                                         28.62
                                                                                                                                                                        255.42
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SCT 3968.0 SGR 576.5 SG3 262.2
RRT -.8065 RRF -.9374 RTF ..9346
SGB 4009.7 R23 .3014 R13 -.9376
SGI 3995.4 SGZ 338.5 THA 173.27
                                                                                                                                  ST 2272.5 SR 517.3 SS 1026.1

CRT - .9600 CRS .9964 CST - .9802

LSA 2536.6 MSA 224.3 SSA 5.5

EL1 2326.4 EL2 141.4 ALF 167.63
    TOE-1.8286 TRA-1.6920 TC3-2.3780 BAU .7561
    ROE .4387 RRA .0476 RC3 .2532 FAU .05647
FOE-1.7844 FRA -.6101 FC3-2.0671 BSP 10922
BOE 1.8805 BRA 1.6927 BC3 2.3915 FSP -679
                                                                                                                                                ARRIVAL DATE DEC 4 1967
                                                                               FLIGHT TIME 148.00
LAUNCH DATE JUL 9 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 429.880
    RL 152.10 LAL -.00 LOL 288.12 VL 26.678 GAL -3.98 AZL 96.71 MCA 204.12 SMA 128.42 ECC .19658 INC 6.7101 V1 29.292 RP 107.48 LAP 2.74 LOP 130.10 VP 37.898 GAP 6.38 AZP 83.87 TAL 196.72 TAP 40.84 RCA 103.18 APO 153.67 VZ 35.259 RC 130.261 GL -42.52 GP 29.37 ZAL 113.32 ZAP 139.87 ETS 42.43 ZAE 125.99 ETE 155.85 ZAC 96.92 ETC 21.17 CLP-151.33
   PLANETOCENTRIC CONIC
    C3 21.168 VML 4.601 DLA -32.51 RAL 146.99 RAD 6567.9 VEL 11.939 PTH 2.12 VMP 5.517 DPA 38.21 RAP 175.09 ECC 1.3484
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   5 54 56 1316,25
10 12 42 5781,71
5 54 56 1316,25
10 12 42 5781,71
                                                                                   17.66
                                                                                                      114.57
                                                                       356.93
                                                                                                                      6 16 54
                                                                                                                                         716.2
        73.31
                                                       21.99
                                                                                                                                                     25.12 349.31
                                                                                                        114.56 11 49 3
                                                                       273.67
                                                                                       17.67
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       104.64
                                                        22.00
                                                                                                                                        5181.7
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                                                                                                                      6 16 54
                                                                                                        114.57
        75.31
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                                                                       356.93
                                                                                       17.66
                                                                                                                                         718.2
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                                                                                                       114.56 11 49 3 5181.7
121.13 9 24 8 78.6
108.17 13 25 8 4869.3
       106.60
                                                       22.00
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                      9 12 49
       110.00
                                      678.63
                                                        14.90
                                                                       306.05
                                                                                       13.72
                                                                                                                                                         14.62
                                                                                                                                                                        299.24
       110.00
                    11 53 59
                                     5469.32
                                                       29.46
                                                                       252.82
                                                                                        20.91
                                                                                                                                                          31.66
                                                                                                                                                                        244.30
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4251.7 SGR 549.4 SG3 291.2
RRT -.8188 RRF -.9290 RTF .9407
                                                                                                                                  ST 2372.7 SR 491.4 SS 1076.4

CRT -.9644 CRS .9972 CST -.9812

LSA 2642.2 MSA 220.5 SSA 6.5
    TOE-1.8127 TRA-1.6395 TC3-2.8997 BAU .8238
    ROE .3942 RRA .0490 RC3 .2564 FAU .06268
    FOE-1.8001 FRA -.5948 FC3-2.5637 89P 13049
BOE 1.8550 BRA 1.6402 BC3 2.9110 FSP -917
                                                                          SGB 4287.1 R23 .2692 R13 -.9428
                                                                           SGI 4275.6 SG2 313.6 THA 173.93
                                                                                                                                  EL1 2419.7 ELZ 127.5 ALF 168.67
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ARRIVAL DATE DEC 6 1967

EL1 2568.8 EL2 82.1 ALF 171.49

LAUNCH CATE JUL 9 1967

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DISTANCE 435.858
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 26.630 GAL -3.70 A7L 96.20 MCA 207.36 SMA 128.10 ECC .19775 INC 6.2025 V1 29.292
RP 107.48 LAP 2.85 LOP 133.35 VP 37.864 GAP 6.68 AZP 84.49 TAL 195.35 TAP 42.71 RCA 102.77 APO 153.44 V2 35.259
RC 132.447 GL -40.75 GP 25.90 ZAL 112.55 ZAP 143.05 ETS 40.60 ZAE 127.15 ETE 158.48 ZAC 96.52 ETC 19.68 CLP-152.68
  PLANETOCENTRIC CONIC
                                                                                               2.10 VHP 5.500 CPA 34.35 RAP 174.99 ECC 1.3183
   C3 19.343 VHL 4.398 OLA -31.64 RAL 149.57 RAC 6567.8 VEL 11.863 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG
                  6 18 19 1255.83
10 9 51 5801.12
                                                  22.02
                                                              352.19
                                                                             18.53
                                                                                           113.31
                                                                                                         6 39 15
                                                                                                                         655.R
                                                                                                                                        24.98
                                                                                                                                                     344.50
       75.27
                                                                                            113.30 11 46 32
                                                                                                                         5201.1
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                                                                                                                                                      267.47
                                                              275.16
                                                                              18.53
                                                  22.03
      104.73
                                                               352.19
                                                                              18.53
                                                                                            113.31
                                                                                                         6 39 15
                                                                                                                          655.A
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                                1255.43
                                                  22.02
                    6 18 19
       75.27
                                                                                            113.30 11 46 32
121.69 9 16 20
105.08 13 52 46
                 10 9 51 5801.12
                                                                                                                         5201.1
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                                                                              18.53
                                                               275.16
      104.73
                                                  22.03
                                                                                                                                        17.64
                                                                                                                                                      301.47
                   9 4 23
                                  716.90
                                                  13.54
                                                               308.19
                                                                              13.90
                                                                                                                          116.9
      110.00
                                                                                                                         4788.1
                                                                                                                                        32.80
                                                                                                                                                     238.24
                                                                              22.03
                                                              247.02
      110.00
                  12 22 58
                                 5388.05
                                                  31.05
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 4373.6 SGR 493.1 SG3 295.5
RRT -.7938 RRF -.9012 RTF ..9388
SGB 4401.3 R23 .2508 R13 -.9404
SGI 4391.1 SG2 298.7 THA 174.86
                                                                                                                     ST 2405.1 SR 452.6 SS 1068.2
CRT -.9660 CRS .9978 CST -.9806
    TOE-1.7648 TRA-1.5272 TC3-3.2914 BAU .8530
   ROE .3472 RRA .0348 RC3 .2151 FAU .06302
FOE-1.7165 FRA -.4806 FC3-2.8204 BSP 13545
                                                                                                                     LSA 2661.4 MSA 217.2 SSA 7.6
                                                                                                                     EL1 2444.6 EL2 115.2 ALF 169.67
   BOE 1.7986 BRA 1.5275 BC3 3.2985 FSP -947
                                                                                                                                ARRIVAL DATE DEC 8 1967
                                                                       FLIGHT TIME 152.00
LAUNCH DATE JUL 9 1967
                                                                      DISTANCE 441.821
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 26.581 GAL -3.41 AZL 95.80 HCA 210.60 SMA 127.78 ECC .19904 INC 5.7950 V1 29.292 RP 107.48 LAP 2.95 LOP 136.60 VP 37.828 GAP 6.97 AZP 85.01 TAL 193.97 TAP 44.57 RCA 102.35 APO 153.22 V2 35.258 RC 134.624 GL -39.23 GP 23.07 ZAL 111.43 ZAP 145.80 ETS 39.04 ZAE 127.92 ETE 160.76 ZAC 95.79 ETC 18.41 CLP-154.01
  PLANETOCENTRIC CONIC
   C3 17.946 VHL 4.236 OLA -31.07 RAL 152.20 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 5.527 DPA 31.04 RAP 175.35 ECC 1.2953
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          607.9
                                                                                                                                         24.95
                                                                                                                                                     340.87
                                                                             19.79
                                                                                                         6 5A 36
                                                                                           112.41
      76.65
                   6 38 28 1207.85
                                                  22.11
                                                              348.61
                                                               276.17
                                                                              19.80
                                                                                            112.39
                                                                                                        11 47 35
                                                                                                                          5213.9
                                                                                                                                         24.96
                                                                                                                                                      26A.42
      103.35
                  10 10 41
                                 5813.88
                                                  22.12
                                                                                                                          607.9
                                                                                                                                         24.95
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                                                                              19.79
                                                                                            112.41
                                                                                                         6 58 36
                    6 38 28
                                 1207.85
                                                  22.11
                                                               348.61
       76.65
                                                                                            112.39 11 47 35
                                                               276.17
                                                                              19.80
                                                                                                                          5213.9
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                                                                                                                                                      268.42
      103.35
                  10 10 41 5813.88
                                                  22.12
                                                                                                        9 16 44
                                                                                                                          132.9
                                                                                                                                        17.10
                                                                                                                                                      302.39
                                                               309.07
                                                                                            121.91
      110.00
                   9 4 31
                                  732.88
                                                  12.97
                                                                              14.89
                                                                                                      14 12 45
                                                                                                                         4736.8
                                                                                                                                         33.35
                                                                                                                                                      234.35
      110.00
                 12 43 48
                                5336.84
                                                               243.27
                                                  31.89
                                                                              23.29
                                                                                            103.01
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2440.8 SR 423.0 35 1054.6
CRT -.9686 CRS .9985 CST -.9801
LSA 2683.9 MSA 213.3 SSA 8.7
EL1 2475.1 EL2 103.8 ALF 170.45
                                                                  SCT 4476.3 SCR 448.0 SC3 293.9
RRT -.7582 RRF -.8623 RTF .9365
    TDE-1.7344 TRA-1.4100 TC3-3.6526 BAU .8772
    RDE .3126 RRA .0246 RC3 .1686 FAU .06193
                                                                  SGB 4498.6 R23 .2289 R13 -.9376
SG1 4489.2 SG2 291.3 THA 175.64
    FOE-1.6271 FRA -.3597 FC3-2.9876 BSP 13868
    BOE 1 7624 BRA 1.4102 BC3 3.6565 FSP -943
                                                                                                                                ARRIVAL DATE DEC 10 1967
                                                                      FLIGHT TIME 154.00
LAUNCH CATE JUL 9 1-967
                                                                     DISTANCE 447.769
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 26.531 GAL -3.10 AZL 95.46 MCA 213.84 SMA 127.46 ECC .20045 INC 5.4589 VI 29.292
RP 107.48 LAP 3.04 LOP 139.85 VP 37.792 GAP 7.27 AZP 85.46 TAL 192.57 TAP 46.41 RCA 101.91 APO 153.01 V2 35.256
RC 136.791 GL -37.88 GP 20.73 ZAL 110.00 ZAP 148.20 ETS 37.73 ZAE 128.41 ETE 162.74 ZAC 94.79 ETC 17.30 CLP-155.33
   PLANETOCENTRIC CONIC
    C3 16.844 VHL 4.104 CLA -30.75 RAL 154.90 RAD 6567.7 VEL 11.757 PTH 2.08 VHP 5.584 CPA 28.15 RAP 176.03 ECC 1.2772
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                         25.02
                                                                                                                                                   338.36
                                                                            21.40
                                                                                                                         574.1
                    6 55 18 1174.14
                                                  22.26
                                                               346.14
       77,49
                                                                                                                                                      268.78
                                                                                                                                         25.03
                  10 15 28
                                 5818.26
                                                  22.27
                                                               276.56
                                                                              21.41
                                                                                                                         5218.3
      102.51
                                                                                                                                         25.02
                                                                                                                                                      338.36
                                                               346.14
                                                                              21.40
                                                                                                                          574.1
       77.49
                    6 55 IA
                                 1174.14
                                                  22.26
                                                                                           111.76 11 52 26
121.95 9 22 9
101.65 14 28 28
                                                                                                                                         25.03
                                                                                                                                                      268.78
      102.51
                  10 15 28
                                5818.26
                                                  22.27
                                                               276.56
                                                                              21.41
                                                                                                                         5218.3
                                                                                                                                                      302.57
                 9 9 52
13 0 3
                                   736.07
                                                  12.86
                                                               309.25
                                                                              16.42
                                                                                                                          136.1
                                                                                                                                         16.99
      110.00
                               5304.33
                                                                              24.81
                                                                                                                         4704.3
                                                                                                                                         33.63
                                                                                                                                                      231.85
                                                  32.37
                                                               240.85
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2486.9 SR 402.4 SS 1042.0

CRT -.9724 CRS .9991 CST -.9799

LSA 2718.2 MSA 208.6 SSA 9.9

EL1 2517.5 EL2 92.8 ALF 171.05
                                                                  SGT 4576.0 SGR 415.9 SG3 289.8

RRT -.7157 RRF -.8142 RTF .9344

SGB 4594.9 R23 .2044 R13 -.9353

SG1 4585.7 SG2 289.9 THA 176.26
    TOE-1.7220 TRA-1.2913 TC3-3.9964 BAU .9004
   ROE .2882 RRA .0185 RC3 .1233 FAU .06021
FDE-1.5439 FRA -.2438 FC3-3.0944 BSP 14195
    BOE 1.7459 BRA 1.2915 BC3 3.9983 FSP
                                                                                                                                ARRIVAL DATE DEC 12 1967
LAUNCH DATE JUL 9 1967
                                                                       FLIGHT TIME 156.00
                                                                      DISTANCE 453.701
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 26.482 GAL -2.79 A7L 95.18 MCA 217.09 SMA 127.14 ECC .20199 INC 5.1750 V1 29.292
RP 107.49 LAP 3.12 LOP 143.10 VP 37.755 GAP 7.56 AZP 85.87 TAL 191.14 TAP 48.23 RCA 101.46 APO 152.82 V2 35.254
RC 138.949 GL -36.67 GP 18.77 ZAL 108.31 ZAP 150.34 ETS 36.63 ZAE 128.72 ETE 164.43 ZAC 93.58 ETC 16.33 CLP-156.61
  PLANETOCENTRIC CONIC
   C3 15.962 VHL 3.995 CLA -30.62 RAL 157.71 RAO 6567.6 VEL 11.719 PTH 2.06 VMP 5.662 OPA 25.59 RAP 176.96 ECC 1.2627
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.83 7 9 0 1153.90 22.48 344.72 23.33 111.36 7 28 13 553.9 25.18 336.90
                                                                                            111.34 12 1 2
111.36 7 28 13
                                                                                                                                                       268.51
      102.17
                  10 24 8
                                 5813.93
                                                  22.49
                                                               276.33
                                                                               23.33
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                                                                                                                                                       336.90
                    7 9 0 1153.90
                                                               344.72
                                                                               23.33
                                                                                            111.36
                                                                                                                           553.9
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        77.83
                                                  22.48
                                                                                             111.34 12 1 2
121.88 9 31 10
100.83 14 41 24
                                5813.93
                                                               276.33
                                                                               23.33
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      102.17
                  10 24 8
                                                  22.49
                    9 18 59
                                                                                                                                                       302.26
                                                  13.05
                                                                              18.38
                                                                                                                          130.6
                                                                                                                                         17.17
                                   730.63
                                                               308.95
                                                                                                                                         33.77
                                                                                                                                                       230.37
                  13 13 19
                                 5285.19
                                                  32.62
                                                               239.42
                                                                               26.62
                                                                                                                          4685.2
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 2540.5 SR 388.7 SS 1030.6
CRT -.9770 CRS .9995 CST -.9800
                                                                   SGT 4670.3 SGR 394.8 SG3 284.1
RRT -.6691 RRF -.7597 RTF .9327
    TOE-1.7226 TRA-1.1684 TC3-4.3205 BAU .9222
    ROE .2710 RRA .0156 RC3 .0809 FAU .05808
    FOE-1.4673 FRA -.1344 FC3-3.1503 BSP 14491
BCE 1.7438 BRA 1.1685 BC3 4.3213 FSP -913
                                                                                                                    LSA 2761.5 MSA 203.2 SSA 11.0
                                                                  SGB 4687.0 R23 .1792 R13 -.9333
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FLIGHT TIME 150.00

SG1 4677.8 SG2 293.0 THA 176.75

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ARRIVAL DATE DEC 14 1967
LAUNCH DATE JUL 9 1967
                                                                                FLIGHT TIME 158.00
                                                                                DISTANCE 459.617
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.433 GAL -2.46 A7L 94.93 MCA 220.33 SH2 126.82 ECC .20366 INC 4.9309 VI 29.292 RP 107.50 LAP 3.19 LOP 146.33 VP 37.718 GAP 7.86 A2P 86.24 TAL 189.70 TAP 50.04 RCA 100.99 APO 152.65 V2 35.251 RC 141.095 GL -35.54 GP 17.12 ZAL 106.39 ZAP 152.27 ETS 35.74 ZAE 128.91 ETE 165.89 ZAC 92.20 ETC 15.48 CLP-157.85
   PLANETOCENTRIC CONIC
    C3 15.253 VHL 3.905 DLA -30.65 RAL 160.63 RAD 6567.6 VEL 11.689 PTH 2.06 VHP 5.756 DPA 23.28 RAP 178.08 ECC 1.2510
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
77.76 7 20 5 1145.37 22.75 344.19 25.55 111.11 7 39 10 545.4 25.42 536.34
                     7 20 5 1145.37
10 36 20 5801.91
                                                                                                         111.09 12 13 1
                                                                                                                                          5201.9
                                                                                                                                                            25.43
                                                                                                                                                                           267.70
                                                         22.76
                                                                        275.55
                                                                                          25.55
       102.24
                       7 20 5
                                                         22.75
                                                                        344.19
                                                                                          25.55
                                                                                                         111.11
                                                                                                                        7 39 10
                                                                                                                                           545.4
                                                                                                                                                            25.42
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                                     1145.37
        77.76
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121.72 9 43 3
100.46 14 52 27
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                                                         22.76
                                                                        275.55
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                   10 36 20
                                      5601.91
       102.24
                    9 31 4
13 24 31
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                                                                                                                                                                           301.58
                                       718.89
                                                         13.47
                                                                        306.30
                                                                                         20.71
                                                                                                                                           118.9
       110.00
                                                                        236.76
                                                                                         28.73
                                                                                                                                                          33.63
                                                                                                                                                                           229.69
                                      5276.39
                                                         32.73
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4756.6 SGR 362.3 SG3 277.0
RRT -.6201 RRF -.7017 RTF .9306
SG8 4771.9 R23 .1957 R15 -.9313
SG1 4762.5 SG2 299.5 THA 177.14
                                                                                                                                      ST 2599.7 SR 360.2 SS 1019.3
CRT -.9819 CRS .9994 CST -.9803
    TOE-1.7351 TRA-1.0365 TC3-4.6203 BAU .9422
    RDE .2591 RRA .0144 RC3 .0417 FAU .05563
FDE-1.3960 FRA -.0291 FC3-3.1577 BSP 14746
BDE 1.7523 BRA 1.0366 BC3 4.6205 FSP -887
                                                                                                                                     LSA 2811.2 MSA 197.3 SSA 12.2
                                                                                                                                      EL1 2626.4 EL2 71.3 ALF 171.82
                                                                                 FLIGHT TIME 160.00
                                                                                                                                                  ARRIVAL DATE DEC 16 1967
LAUNCH DATE JUL 9 1967
                                                                                DISTANCE 465.515
   HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 26.383 GAL -2.12 ATL 94.72 MCA 223.57 8MA 126.51 ECC .20548 INC 4.7174 V1 29.292 RP 107.51 LAP 3.25 LOP 149.60 VP 37.680 GAP 8.16 ATP 86.58 TAL 188.25 TAP 51.82 RCA 100.51 APO 152.50 V2 35.247 RC 143.232 GL -34.46 GP 15.72 ZAL 104.25 ZAP 154.02 ETS 35.02 ZAE 129.01 ETE 167.14 ZAC 90.68 ETC 14.73 CLP-159.05
   PLANETOCENTRIC CONIC
    C3 14.885 WHL 3.832 DLA -30.80 RAL 163.67 RAD 6567.6 VEL 11.665 PTH 2.05 VMP 5.863 DPA 21.18 RAP 179.35 ECC 1.2417 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.36 7 29 19 1146.08 23.07 344.38 28.05 110.99 7 48 25 546.1 25.71 336.50
                                                                                                              2.05 WHP 5.863 DPA 21.18 RAP 179.35 ECC 1.2417
                       7 29 19 1146.06
                                                         23.04
                                                                        274:35
                                                                                          28.06
                                                                                                          110.96
                                                                                                                       12 27 46
                                                                                                                                           5184.3
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       102.64
                     10 51 22 5784.25
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                      7 29 19
                                                         23.07
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                                                                                                          110.99
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                                                                        344.36
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                    10 51 22 5764.25
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100.44 15 2 9
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                                       702.39
       110.00
                                                         32.74
                                                                        236.72
                                                                                          31.12
                                                                                                                                           4675.9
                                                                                                                                                            33.83
                                                                                                                                                                           229.66
                    13 34 13
                                     5275.93
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2668.7 SR 376.3 SS 1010.9
CRT -.9868 CRS .9986 CST -.9810
                                                                           SGT 4848.3 SGR 377.2 SG3 270.2
MRT -.5753 MRF -.6461 RTF .9299
    TOE-1.7551 TRA -.9056 TC3-4.9054 BAU .9631
    ROE .2518 RRA .0192 RC3 .0001 FAU .05325
FOE-1.3357 FRA .0658 FC3-3.1391 BBP 15070
BOE 1.7730 BRA .9057 BC3 4.9054 FBP -868
                                                                            SG8 4862.9 R23 .1332 R13 -.9303
SG1 4863.1 SG2 308.2 THA 177.43
                                                                                                                                      LSA 2872.1 MSA 190.7 SSA 13.3
                                                                                                                                      ELI 2694.5 EL2 60.4 ALF 172.07
                                                                                FLIGHT TIME 162.00
                                                                                                                                                 ARRIVAL DATE DEC 18 1967
LAUNCH DATE JUL 9 1967
                                                                                DISTANCE 471.395
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.334 GAL -1.77 AZL 94.53 HCA 226.82 SMA 126.20 ECC .20745 INC 4.5279 V1 29.292 RP 107.53 LAP 3.30 LOP 152.85 VP 37.641 GAP 8.46 AZP 86.90 TAL 186.78 TAP 53.60 RCA 100.02 APO 152.38 V2 35.243 RC 145.356 GL -33.41 GP 14.52 ZAL 101.92 ZAP 155.64 ETS 34.48 ZAE 129.06 ETE 168.21 ZAC 89.04 ETC 14.06 CLP-160.22
   PLANETOCENTRIC CONIC
     C3 14.242 VML 3.774 DLA -51.04 RAL 166.84 RAD 6567.6 VEL 11.646 PTH 2.04 VMP 5.980 DPA 19.24 RAP 180.74 ECC 1.2344
    LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.73 7 37 29 1153.48 23.40 345.07 30.83 110.99 7 56 43 553.5 26.04 337.17
                                                                                                      110.99 7 56 43
110.97 12 44 35
                       7 37 29 1153.48
                                                                        272.92
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                   11 6 31
                                    5763.26
                                                         23.42
       103.27
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110.97 12 44 35
121.18 10 13 45
100.72 15 10 51
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                       7 37 29
                                     1153.48
                                                       23.40
        76.73
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       103.27
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                                                       23.42
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                                                                        306.26
        110.00
                     10 2 22
                                      662.28
                                                         14.77
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                                                                                          33.80
                    13 42 49 5282.45
                                                         32.66
                                                                        239.21
        110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RIT-COURSE EXECUTION ACCURACY

RET -4933.2 SGR 577.1 SG3 262.7

RET -,5343 RRF -,5947 RTF ,9291

SGB 4947.6 RZ3 ,1137 R13 -,9294

SG1 4937.3 SG2 318.5 THA 177.65
                                                                                                                                    ST 2741.5 SR 375.7 SS 1002.9

CRT - 9912 CRS .9971 CST - 9817

LSA 2937.5 MSA 183.8 SSA 14.5

EL1 2766.7 EL2 49.3 ALF 172.26
     TOE-1.7841 TRA -.7646 TC3-5.1593 BAU .9824
    ROE .2474 RRA .0167 RC3 -.0216 FAU .05072
FOE-1.2766 FRA .T555 FC3-3.0853 83P 15363
BOE 1.8012 BRA .7648 BC3 5.1594 FSP -846
                                                                                                                                                  ARRIVAL DATE DEC 20 1967
                                                                                 FLIGHT TIME 164,00
LAUNCH DATE JUL 9 1967
                                                                                DISTANCE 477.257
    RL 152.10 LAL -.00 LOL 286.72 VL 26.285 GAL -1.40 AZL 94.36 MCA 230.06 SMA 125.89 ECC .20959 INC 4.3575 V1 29.292 RP 107.54 LAP 3.34 LOP 158.10 VP 37.602 GAP 8.76 AZP 87.20 TAL 185.30 TAP 55.36 RCA 99.50 APO 152.27 V2 35.237 RC 147.489 GL -32.36 GP 13.48 ZAL 99.42 ZAP 157.13 ETS 34.11 ZAE 129.07 ETE 169.14 ZAC 87.31 ETC 13.47 CLP-161.35
   PLANETOCENTRIC CONIC
                                                                                                             2.04 WHP 6.105 DPA 17.43 RAP 182.24 ECC 1.2289
     C3 13.911 WHL 3.730 DLA -31.34 RAL 170.16 RAD 6567.5 VEL 11.632 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.97 7 45 20 1165.21 23.75 346.10 33.87 111.08 8 4 45 565.2 26.40 338.18
                                                         23.76
                                                                                                          111.06 13 2 47
                                                                                                                                                            26.41
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                                                                        271.40
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        104.03
                      11 27 6
                                     5741.18
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                       7 45 20
                                     1165.21
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                      11 27 6
                                     5741.18
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        104.03
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36.74
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101.25 15 18 52
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                      10 20 59
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                                       659.51
        110.00
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                                                                                                                                                           33.70
                                     5294.87
                                                                        240.15
        110.00
                      13 50 37
                                                         32.49
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            NID-COURSE EXECUTION ACCUMACY
SGT 5017.1 SGR 360.8 SG3 255.5
RRT -.5000 RRF -.5500 RTF .9289
SGB 5031.6 R23 .0965 R13 -.9291
SGI 5020.7 SG2 329.6 THA 177.82
                                                                                                                                   ST 2816.5 SR 377.9 SS 995.1
CRT -.9948 CRS .9947 CST -.9826
LSA 3005.7 MSA 176.8 SSA 15.6
     TOE-1.8189 TRA -.6165 TC3-5.3848 BAU 1.0015
     RDE .2459 RRA .0187 RC3 -.0459 FAU .04827
FDE-1.2244 FRA .2368 FC3-3.0040 BSP 15656
BDE 1.6355 BRA .6166 BC3 5.3649 FSP -824
                                                                                                                                    ELI 2841.5 ELZ 38.3 ALF 172.40
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ARRIVAL DATE DEC 22 1967

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LAUNCH DATE JUL 9 1967
                                                                                    DISTANCE 483.099
  HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.236 GAL -1.02 AZL 94.20 HCA 233,30 SHA 125.58 ECC .21190 INC 4.2027 V1 29.292 RP 107.56 LAP 3.37 LOP 159.35 VP 37.562 GAP 9.07 AZP 87.49 TAL 183.81 TAP 57.11 RCA 98.97 APO 152.19 V2 35.231 RC 149.570 GL -31.31 GP 12.57 ZAL 96.76 ZAP 158.53 ETS 33.89 ZAE 129.06 ETE 169.94 ZAC 85.49 ETC 12.95 CLP-162.45
   PLANETOCENTRIC CONIC
                                                                                                                  2.04 WHP 6.239 DPA 15.72 RAP 183.81 ECC 1.2252
    C3 13.667 VHL 3.700 DLA -31.69 RAL 173.60 RAD 6567.5 VEL 11.622 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               26.75
                      7 53 24 1179.52
11 46 33 5719.75
                                                           24.09
                                                                           347.33
                                                                                            37.18
                                                                                                           111.24
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         74.15
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        104.65
                                                           24.10
                     7 53 24 1179.52
11 46 33 5719.75
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24.10
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120.41 10 51 49
101.98 15 26 26
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                                                                                             37.18
                                                                           269.92
        104.85
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32.26
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                                                                                             33.23
        110.00
                      10 41 14
                                        634.96
                                                           16.42
                                      5312.30
                                                                                                                                                4712.3
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                                                                                                                                                                                  232.46
                                                                           241.45
                                                                                             39.94
        110.00
                      13 57 54
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               RGT -,4709 RRF -,5112 RTF ...9286
SGB 5107.7 R23 ...0816 R13 -..9288
SGI 5096.3 SGZ 340.8 THA 177.94
                                                                                                                                           ST 2887.4 SR 381.8 SS 984.1
-CRT -.9973 CRS .9914 CST -.9834
     TDE-1.8556 TRA -.4584 TC3-5.5699 BAU 1.0192
    ROE .2464 RRA .0206 RC3 -.0659 FAU .04578
FDE-1.1726 FRA .3192 FC3-2.8957 BSP 15915
BOE 1.8719 BRA .4568 BC3 5.5702 FSP -799
                                                                                                                                         LBA 3069.5 MSA 170.1 SSA 16.7
EL1 2912.4 EL2 28.0 ALF 172.49
                                                                                                                                                        ARRIVAL DATE DEC 24 1967
                                                                                    FLIGHT TIME 168.00
LAUNCH DATE JUL 9 1967
                                                                                    DISTANCE 488.920
   MELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.187 GAL -.63 AZL 94.06 MCA 236.54 SMA 125.27 ECC .21439 INC 4.0604 VI 29.292 RP 107.58 LAP 3.39 LOP 162.60 VP 37.521 GAP 9.36 AZP 87.76 TAL 182.30 TAP 58.84 RCA 98.42 APO 152.13 V2 35.225 RC 151.657 GL -30.22 GP 11.78 ZAL 93.96 ZAP 159.83 ETS 33.83 ZAE 129.04 ETE 170.63 ZAC 83.61 ETC 12.48 CLP-163.52
   PLANETOCENTRIC CONIC
    C3 13.566 WHL 3.663 OLA -32.05 RAL 177.18 RAO 6967.5 VEL 11.617 PTH 2.04 VMP 6.360 OPA 14.11 RAP 185.46 ECC 1.2233 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.75 8 2 6 1195.05 24.40 348.64 40.74 111.45 8 22 1 595.0 27.09 340.69
                                                                                                                  2.04 WHP. 6.360 OPA 14.11 RAP 185.46 ECC 1.2233
        74/33
                        8 2 6 1195.05
                      12 6 25 5700.36
8 2 6 1195.05
12 6 25 5700.36
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119.96 11 12 59
102.68 15 33 45
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        105.67
                                                            24.41
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                                                                           302.13
                                                                                             37.04
        110.00
                      11 2 50
                                        609.53
                                                           17.29
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       110.00
                                                                                             43.34
                       14 4 51
                                       5333.87
                                                            31.94
                                                                           243.05
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 2953.4 SR 387.5 SS 971.3
CRT -. 9986 CRS .9871 CST -. 9841
                                                                               SGT 5161.5 SGR 394.0 SG3 259.9
RRT -.4473 RRF -.4794 RTF .9284
     TOE-1.8941 TRA -.2905 TC3-5.7072 BAU 1.0352
     RDE .2489 RRA .0223 RC3 -.0817 FAU .04325
                                                                               8G8 5176.5 R23 .0695 R13 -.9285
8G1 5164.5 8G2 35g.2 THA 178.04
                                                                                                                                            LSA 3128.8 MSA 163.9 SSA 17.8
     FOE-1.1232 FRA .3096 FC3-2.7990 BBP 16134
BOE 1.9104 BRA .2914 BC3 5.7077 FBP -774
                                                                                                                                            EL1 2978.7 EL2 20.1 ALF 172.54
                                                                                                                                                        ARRIVAL DATE DEC 26 1967
                                                                                    FLIGHT TIME 170.00
LAUNCH DATE JUL 9 1967
                                                                                   DISTANCE 494.718
    HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.138 GAL -.22 ATL 93.93 MCA 239.78 SMA 124.97 ECC .21708 INC 3.9285 VI 29.292 RP 107.60 LAP 3.39 LOP 165.85 VP 37.480 GAP 9.69 ATP 88.02 TAL 180.79 TAP 60.57 RCA 97.84 APO 152.10 V2 35.217 RC 153.750 GL -29.11 GP 11.08 TAL 91.04 TAP 161.07 ETS 33.92 TAE 129.01 ETE 171.24 TAC 81.67 ETC 12.07 CLP-164.55
    PLANETOCENTRIC CONIC
     C3 13.550 WHL 3.681 DLA -32.40 RAL 180.88 RAD 6567.5 VEL 11.616 PTH 2.04 WHP 6.529 DPA 12.56 RAP 187.17 ECC 1.2230
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ 2 LONG 75.55 8 11 40 1210.93 24.66 349.97 44.53 111.72 8 31 51 610.9 27.39 342.01 108.45 12 26 21 5863.96 24.67 267.44 44.54 111.70 14 1 5 5084.0 27.40 259.48
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12 26 21 5683.96
11 25 26 5872.31
14 11 46 5358.62
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119.48 13 3 19
103.90 15 41 4
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        106.45
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                                                            18.15
                                                                            278.57
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        110.00
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                                                                           244.88
                                                                                             47.04
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                                                            31.55
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               RET -14345 RRF -14366 RTF ...9309

RGB 5267.9 RZ3 ...0557 R13 -..9311

861 5255.4 862 362.6 THA 178.08
                                                                                                                                           ST 3021.0 SR 395.1 SS 960.0
CRT -.9988 CRS .9824 CST -.9852
     TOE-1.9367 TRA -.1216 TC3-5.8317 BAU 1.0566
     ROE .2537 RRA .0244 RC3 -.0893 FAU .04137
FOE-1.0805 FRA .4591 FC3-2.6433 BBP 16501
BOE 1.9552 BRA .1241 BC3 5.8324 FBP -760
                                                                                                                                          LSA 3190.5 MSA 157.3 SSA 18.8
EL1 3046.7 EL2 19.2 ALF 172.56
                                                                                                                                                         ARRIVAL DATE DEC 28 1967
LAUNCH DATE JUL 9 1967
                                                                                     FLIGHT TIME 172.00
                                                                                    DISTANCE 500.494
    HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 26.089 GAL .21 AZL 93.80 MCA 243.02 SMA 124.67 ECC .21998 INC 3.8050 V1 29.292
RP 107.63 LAP 3.39 LOP 169.09 VP 37.439 GAP 10.02 AZP 88.27 TAL 179.25 TAP 62.28 RCA 97.25 APO 152.10 V2 35.210
RC 155.789 GL -27.95 GP 10.46 ZAL 88.03 ZAP 162.24 ETS 34.18 ZAE 128.97 ETE 171.77 ZAC 79.67 ETC 11.70 CLP-165.56
    PLANETOCENTRIC CONIC
    C3 13.642 VHL 3.693 DLA -32.73 RAL 184.69 RAD 6967.5 VEL 11.620 PTH 2.04 VHP 6.666 DPA 11.08 RAP 188.93 ECC 1.2245 LNOA AZMTH LNOY TIME L-I TIME INU LAT INU LONG INU RT ASC INU AZMTH INU TIME PO CST TIM INU 2 LAT INU 2 LONG 72.65 8 22 17 1226.61 24.86 351.26 48.55 112.01 8 42 43 626.6 27.62 343.30 107.15 12 46 7 5671.21 24.88 266.55 48.55 112.00 14 20 36 5071.2 27.64 258.59
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        107.15
                       12 46 7
                                         5671.21
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104.96 15 48 39
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                      11 48 41
                                         5848.30
                                                            18.95
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                                         5365.57
                       14 18 53
                                                            31.09
                                                                            246.84
                                                                                              50.90
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 3053.3 SR 401.4 SS 931.5

CRT -.9978 CRS .9755 CST -.9853

LSA 3213.6 MSA 154.4 SSA 19.7

EL1 3079.4 EL2 26.7 ALF 172.53
     TOE-1.9663 TRA .0732 TC3-5.8347 BAU 1.0643
                                                                                 SGT 5282.0 SGR 410.4 SG3 223.6
                                                                               RRT -.4140 RRF -.4313 RTF .9282
SGB 5297.9 R23 .0494 R13 -.9284
SGI 5284.7 SG2 373.4 THA 178.15
     ROE .2586 RRA .0244 RC3 -.1009 FAU .03622
FDE-1.0212 FRA .5359 FC3-2.4259 BSP 16532
BOE 1.9832 BRA .0771 BC3 5.8356 FSP -721
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FLIGHT TIME 166.00

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FLIGHT TIME 174.00
                                                                                                                                                                                             ARRIVAL DATE DEC 30 1967
 LAUNCH DATE JUL 9 1967
                                                                                                        DISTANCE 506.244
     HELIOCENTRIC CONIC
      RL 152.10 LAL -.00 LOL 286.12 VL 26.041 GAL .65 A7L 93.69 MCA 246.25 SMA 124.38 ECC .22311 INC 3.6885 V1 29.292
RP 107.65 LAP 3.38 LOP 172.33 VP 37.397 GAP 10.35 AZP 88.51 TAL 177.73 TAP 63.99 RCA 96.63 APO 152.13 VZ 35.201
RC 157.834 GL -26.76 GP 9.92 ZAL 84.94 ZAP 163.34 ETS 34.61 ZAE 128.93 ETE 172.23 ZAC 77.63 ETC 11.38 CLP-166.55
      PLANETOCENTRIC CONIC
                                                                                                                                                                                       9.65 RAP 190.74 ECC 1.2279
       C3 13.846 VHL 3.721 QLA -33.02 RAL 188.58 RAD 6567.5 VEL 11.629 PTH 2.04 VHP 6.850 DPA
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                              52.75 112.32 8 54 43

52.75 112.32 14 39 47

52.75 112.32 8 54 43

52.75 112.32 8 54 43

52.76 112.31 14 39 47

50.01 118.56 13 49 5

54.96 106.06 15 56 51
                           8 34 2 1241.51
13 5 24 5662.81
8 34 2 1241.51
13 5 24 5662.81
            72.26
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           107.74
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            72.26
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           107.74
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          110.00
                                                  5827.14
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                                                                                              248.84
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           110.00
                                                  5413.21
                                                                          30.59
     DIFFERENTIAL CORRECTIONS
                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                   SCT 5349.9 SCR 420.2 SC3 217.3
RRT -.4084 RRF -.4206 RTF .9296
SCB 5366.3 R23 .0427 R13 -.9297
SCI 5352.6 SC2 383.3 TMA 178.15
                                                                                                                                                                           ST 3096.1 SR 411.1 SS 916.7
CRT -.9956 CRS .9687 CST -.9860
       TDE-2.0066 TRA .2695 TC3-5.8308 BAU 1.0795
      RDE .2658 RRA .0244 RC3 -.1020 FAU .03611
      FOE - 9821 FRA .6007 FC3-2.2376 BSP 16748
BOE 2.0243 BRA .2706 BC3 5.8317 FSP -699
                                                                                                                                                                           LSA 3251.4 MSA 151.5 SSA 20.4
ELI 3123.0 EL2 38.1 ALF 172.47
                                                                                                         FLIGHT TIME 176.00
                                                                                                                                                                                              ARRIVAL DATE JAN 1 1968
     HELIOCENTRIC CONIC
                                                                                                         DISTANCE 511.967
      RL 152.10 LAL -.00 LOL 286.12 VL 25.993 GAL 1.11 A7L 93.58 MCA 249.49 SMA 124.09 ECC .22649 INC 3.5777 V1 29.292
RP 107.68 LAP 3.35 LOP 175.58 VP 37.356 GAP 10.69 AZP 88.75 TAL 176.20 TAP 65.68 RCA 95.98 APO 152.20 V2 35.192
RC 159.863 GL -25.52 GP 9.43 ZAL 81.80 ZAP 164.40 ETS 35.22 ZAE 128.89 ETE 172.64 ZAC 75.54 ETC 11.10 CLP-167.52
      RC 159.863 GL -25.52 GP
     PLANETOCENTRIC CONIC
      C3 14.169 VHL 3.764 DLA -33.25 RAL 192.53 RAD 6567.6 VEL 11.643 PTH
                                                                                                                                               2.04 WHP 7.022 OPA
     C3 14,169 WHL 3,784 OLA -33.25 RAL 192.53 RAO 6567,6 VEL 11.643 PTH 2.04 WHP 7.022 OPA 8.27 RAP 192.59 ECC 1.2332 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.80 8 46 54 1255.44 25.02 353.55 57.15 112.65 9 7 50 655.4 27.86 345.61 108.20 13 24 1 5659.04 25.03 265.68 57.13 112.65 9 7 50 655.4 27.86 345.61 108.20 13 24 1 5659.04 25.03 265.68 57.13 112.65 9 7 50 655.4 27.86 345.61 108.20 13 24 1 5659.04 25.03 265.68 57.13 112.65 9 7 50 655.4 27.86 345.61 108.20 13 24 1 5659.04 25.03 265.68 57.13 112.65 9 7 50 655.4 27.86 345.61 108.20 13 24 1 5659.04 25.03 265.68 57.13 112.64 14 58 20 5059.0 27.87 257.75 110.00 12 34 35 5810.78 20.17 274.94 54.63 118.20 14 11 26 5210.8 23.78 267.66 110.00 14 35 30 5459.74 30.07 250.73 59.19 107.07 16 6 10 4839.7 32.11 242.12 DIFFERENTIAL CORRECTIONS
     DIFFERENTIAL CORRECTIONS
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                   SGE 5410.1 SGR 429.1 SG3 210.3
RRT -.4045 RRF -.4118 RTF .9311
SGB 5427.1 R23 .0362 R13 -.9312
SGI 3412.9 SGZ 392.2 THA 178.15
      TDE-2.0400 TRA .4743 TC3-5.7720 BAU 1.0936
RDE .2760 RRA .0236 RC3 -.1004 FAU .03398
                                                                                                                                                                            ST 3118.6 SR 420.4 SS 893.9
CRT -.9924 CRS .9609 CST -.9865
                                                                                                                                                                           LSA 3267.8 MSA 150.0 SSA 20.9
ELI 3146.4 EL2 51.2 ALF 172.31
      FDE -.9380 FRA .6605 FC3-2.0761 8SP 16976
8DE 2.0586 8RA .4749 8C5 5.7728 FSP -680
                                                                                                        FLIGHT TIME 178.00
                                                                                                                                                                                            ARRIVAL DATE JAN 3 1958
LAUNCH DATE JUL 9 1967
                                                                                                        01STANCE 517.660
     HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.945 GAL 1.59 AZL 93.47 MCA 252.72 SMA 123.80 ECC .23013 INC 3.4715 V1 29.292 RP 107.71 LAP 3.31 LOP 178.82 VP 37.313 GAP 11.04 AZP 88.97 TAL 174.66 TAP 67.38 RCA 95.31 APO 152.29 V2 35.183 RC 161.876 GL -24.25 GP 8.99 ZAL 78.63 ZAP 165.41 ETS 36.03 ZAE 128.85 ETE 172.99 ZAC 73.43 ETC 10.86 CLP-168.46
     PLANETOCENTRIC CONIC
      C3 14.622 VML 3.824 DLA -33.40 RAL 196.50 RAD 6567.6 VEL 11.662 PTH 2.05 VMP 7.204 DPA
                                                                                                                                                                                       6.93 RAP 194.48 ECC 1.2406
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM TNJ Z LAT INJ Z LONG
                          9 0 51 1268.30
13 41 48 5660.09
9 0 51 1268.30
13 41 48 5660.09
12 55 39 5801.61
14 46 11 5462.82
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112.96 15 16 8
112.97 9 21 59
112.96 15 16 8
112.96 15 16 8
118.00 14 32 20
107.93 16 17 14
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          110.00
                                                                                                  HID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5484.1 SGR 437.4 SG3 203.3
RRT -,4052 RRF -,4061 RTF .9326
SGB 5481.6 R23 .0307 R13 -,9326
SGI 5467.0 SG2 400.1 THA 178.14
                                                                                                                                                                           ST 3122.0 SR 429.6 SS 867.1

CRT -.9882 CRS .9521 CST -.9869

LSA 3265.0 MSA 150.6 SSA 21.1

EL1 3150.8 EL2 65.2 ALF 172.25
      TOE-2.0670 TRA .6897 TC3-5.6593 BAU 1.1064

ROE .2866 RRA .0218 RC3 -.0961 FAU .03190

FOE -.8928 FRA .7180 FC3-1.8886 BSP 17200

BOE 2.0868 BRA .6901 BC3 5.6601 FSP -661
LAUNCH DATE JUL 9 1967
                                                                                                        FLIGHT TIME 180.00
                                                                                                                                                                                             ARRIVAL DATE JAN 5 1968
                                                                                                        01STANCE 523.322
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.898 GAL 2.09 AZL 93.37 MCA 255.95 SMA 123.52 ECC .23407 INC 3.3691 VI 29.292
RP 107.74 LAP 3.27 LOP 182.05 VP 37.271 GAP 11.41 AZP 89.18 TAL 173.11 TAP 69.07 RCA 94.61 APO 152.43 V2 35.172
RC 163.875 GL -22.95 GP 8.60 ZAL 79.46 ZAP 166.37 ETS 37.06 ZAE 128.81 ETE 173.31 ZAC 71.29 ETC 10.66 CLP-169.39
    PLANETOCENTRIC CONIC
     CJ 17,Z14 VML 3,900 DLA -33,48 RAL 200.48 RAD 6567,6 VEL 11.688 PTH 2.06 VMP 7.394 DPA 5.63 RAP 196.40 ECC 1.2504 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.35 9 15 46 1280.04 24.75 355.33 66.25 113.29 9 37 6 680.0 27.69 347.44 108.65 13 58 36 5666.10 24.77 266.11 66.25 113.27 15 33 2 5066.1 27.70 258.22 108.65 13 58 36 5666.10 24.77 266.11 66.25 113.27 15 33 2 5066.1 27.70 258.22 110.00 13 14 10 5802.21 20.44 274.43 64.01 118.01 14 50 52 5202.2 24.02 267.12 110.00 14 59 22 5479.96 29.24 253.57 66.17 108.56 16 30 42 4880.0 31.49 245.08
                                                                                                                                                                                       5.63 RAP 196.40 ECC 1.2504
                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 3106.2 SR 438.4 SS 837.3

CRT - .9829 CRS .9420 CST - .9870

LSA 3243.1 MSA 153.4 SSA 21.0

EL1 3136.0 EL2 80.0 ALF 172.10
                                                                                                 SGT 5512.1 SGR 445.0 SG3 196.4
RRT -.4040 RRF -.4053 RTF .9359
SGB 5530.1 R23 .0262 R13 -.9340
      TOE-2.0868 TRA .9184 TC3-5.4944 BAU 1.1177
      RDE 12983 RRA . .0187 RC3 -.0895 FAU .02985 FDE -.8472 FRA .7750 FC3-1.6984 BSP 17385 BDE 2.1080 BRA .9186 BC3 5.4951 FSP -642
                                                                                                  SG1 5515.1 SG2 406.9 THA 178.12
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ARRIVAL DATE JAN 7 1968

LAUNCH DATE JUL 9 1967

DISTANCE 528.948 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 25.851 GAL 2.62 AZL 93.27 MCA 259.18 SMA 123.24 ECC .23831 INC 3.2696 V1 29.292
RP 107.78 LAP 3.21 LOP 185.29 VP 37.228 GAP 11.78 AZP 89.39 TAL 171.57 TAP 70.75 RCA 93.87 APO 152.61 V2 35.162
RC 165.860 GL -21.63 GP 8.24 ZAL 72.32 ZAP 167.30 ETS 38.34 ZAE 128.77 ETE 173.58 ZAC 69.12 ETC 10.50 CLP-170.30 PLANETOCENTRIC CONIC 2.06 VHP 7.595 DPA 4.36 RAP 198.35 ECC 1.2627 C3 15.960 VHL 3.995 DLA -33.46 RAL 204.42 RAD 6567.6 VEL 11.719 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.59 27.43 9 31 39 1290.35 14 14 9 5677.40 24.46 355.98 70.93 9 53 10 690.3 348.14 71.37 113.58 15 48 47 5077.4 27.44 258.99 24.47 70.93 266.84 108.63 14 14 9 1290.35 5677.40 355.96 70.93 113.59 9 53 10 690.3 27.43 34A . 14 9 31 39 24.46 71.37 113.58 15 46 47 118.28 15 6 23 108.90 16 47 0 5077.4 27.44 258.99 266.84 70.93 24.47 104.63 14 [4 9 5214.3 23.67 267.88 13 29 29 5814.29 20.06 275.15 66.62 110.00 4889.5 72.92 31.33 245.78 15 15 30 29.03 254.23 110.00 5489.50 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 3068.5 SR 446.4 SS 804.4 CRT -.9763 CRS .9303 CST -.9870 SGT 5550.4 SGR 451.7 SG3 189.5 RRT -.4061 RRF -.4024 RTF ..9349 SG8 5568.7 R23 ..0226 R13 -.9350 TDE-2.0964 TRA 1.1620 TC3-5.2768 BAU 1.1260 ROE .3112 RRA .0142 RC3 -.0816 FAU .02777 FOE -.8002 FRA .8319 FC3-1.5065 8SP 17478 BOE 2.1194 BRA 1.1621 BC3 5.2774 FSP -618 LSA 3199.4 MSA 158.7 SSA 20.7 SG1 5553.4 SGZ 412.6 THA 178.10 EL1 3099.3 EL2 95.6 ALF 171.91 ARRIVAL DATE JAN 9 1968 FLIGHT TIME 184.00 LAUNCH DATE JUL 9 1967 DISTANCE 534.536 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 25.804 GAL 3.17 AZL 93.17 HCA 262.41 SMA 122.97 ECC .24289 INC 3.1722 V1 29.292
RP 107.81 LAP 3.14 LOP 188.52 VP 37.186 GAP 12.17 AZP 89.58 TAL 170.02 TAP 72.43 RCA 93.10 APO 152.84 VZ 35.151
RC 167.829 GL -20.31 GP 7.92 ZAL 69.21 ZAP 168.18 ETS 39.91 ZAE 128.73 ETE 173.83 ZAC 66.93 ETC 10.37 CLP-171.20 PLANETOCENTRIC CONIC 2.08 WHP 7.808 OPA 3.12 RAP 200.33 ECC 1.2777 C3 16.875 VHL 4.108 DLA -33.57 RAL 208.30 RAD 6967.7 VEL 11.758 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.57 9 48 19 1299.42 24.04 356.48 75.65 113.87 10 9 59 699.4 27.05 348.69 9 48 19 1299.42 14 28 25 5693.84 9 48 19 1299.42 14 28 25 5693.84 13 41 29 5637.80 15 34 26 5491.49 260.11 113.66 16 3 19 5093.8 27.06 106.43 24.05 267.91 75.65 113.87 10 9 59 699.4 27.05 348.69 356.48 75.65 71.57 24.04 113.86 16 3 19 118.78 15 18 46 108.97 17 5 58 260.11 24.05 267.91 75.65 5093.8 27.06 108.43 5237.8 22.98 269.35 19.29 276.55 73.12 110.00 4891.5 31.29 245.93 254.37 110.00 28.96 77.81 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5590.9 SGR 457.7 SG3 183.0 RRT -.4108 RRF -.4046 RTF .9364 ST 3018.8 SR 453.7 SS 771.7 CRT -.9688 CRS .9175 CST -.9870 TOE-2.1021 TRA 1.4139 TC3-5.0312 BAU 1.1352 ROE .3253 RRA .0006 RC3 -.0720 FAU .02587 SGB 5609.6 RZ3 .0194 R13 -.9365 SG1 5594.1 SGZ 417.1 THA 178.06 LSA 3144.3 MSA 165.7 SSA 20.2 FOE -.7556 FRA .8853 FC3-1.3274 BSP 17660 ELI 3050.7 ELZ 111.3 ALF 171.71 BOE 2.1271 BRA 1.4139 BC3 5.0318 FSP -601 ARRIVAL DATE JAN 11 1968 FLIGHT TIME 186.00 LAUNCH DATE JUL 9 1967 DISTANCE 540.080 HELIOCENTRIC CONIC #L 152.10 LAL -.00 LOL 286.12 VL 25.758 GAL 3.74 AZL 93.08 MCA 265.64 SMA 122.70 ECC .24785 INC 3.0764 V1 29.292 RP 107.84 LAP 3.07 LOP 191.75 VP 37.143 GAP 12.58 AZP 89.77 TAL 168.48 TAP 74.11 RCA 92.29 APO 153.11 V2 35.139 RC 169.783 GL -18.98 GP 7.63 ZAL 66.17 ZAP 169.02 ETS 41.82 ZAE 128.69 ETE 174.05 ZAC 64.72 ETC 10.28 CLP-172.09 PLANETOCENTRIC CONIC 1.91 RAP 202.33 ECC 1.2959 C3 17.980 VHL 4.240 OLA -33.18 RAL Z1Z.08 RAD 6567.7 VEL 11.805 PTH 2.09 VHP 8.033 OPA LNCH APRITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LAT INJ 2 LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT IN 114.11 16 16 30 119.45 15 28 29 108.84 17 26 55 21.97 271.40 5270.9 110.00 13 50 36 5670.93 15 55 28 5487.73 18.19 278.49 77.50 4887.7 31.36 29.07 254.11 82.80 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5625.5 SGR 462.8 SG3 176.6 RRT -.4169 RRT -.4085 RTF ..9380 SGB 5644.5 RZ3 .0168 R13 -.9380 SGI 5628.8 SGZ 420.4 THA 178.02 ST 2953.8 SR 459.8 SS 736.3 CRT -.9598 CRS .9030 CST -.9868 LSA 3074.2 MSA 174.4 SSA 19.5 EL1 2986.6 EL2 127.6 ALF 171.49 TOE-2.0996 TRA 1.6791 TC3-4.7531 BAU 1.1426 RDE .5403 RRA .0017 RC3 -.0619 FAU .02403 FDE -.7116 FRA .9378 FC3-1.1570 BBP 17818 BOE 2.1270 BRA 1.6791 BC3 4.7535 FSP -583 ARRIVAL DATE JAN 13 1968 FLIGHT TIME 188.00 LAUNCH DATE JUL 9 1967 DISTANCE 545.577 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 25.713 GAL 4.34 ATL 92.98 MCA 268.86 SMA 122.43 ECC .25321 INC 2.9815 V1 29.292
RP 107.68 LAP 2.98 LOP 194.98 VP 37.100 GAP 13.01 AZP 89.94 TAL 166.94 TAP 75.80 RCA 91.43 APO 153.43 V2 35.128
RC 171.722 GL -17.67 GP 7.37 ZAL 63.21 ZAP 169.82 ETS 44.11 ZAE 128.65 ETE 174.24 ZAC 62.51 ETC 10.23 CLP-172.96 PLANETOCENTRIC CONIC C3 19.297 WIL 4.393 OLA -32.92 RAL 215.75 RAD 6567.8 VEL 11.861 PTH 2.10 WMP 8.271 DPA .74 RAP 204.36 ECC 1.3176 LO 18.287 WH. 4.383 DLA -38.98 MAL 219.79 MAD 8967.8 VEL 11.881 PTH 2.10 VMP 8.271 DPA .74 MAP 204.36 ECC 1.3176 LNON AZHTH LNCH TING L-1 TING INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TING PO CST TIN INJ 2 LAT INJ 2 LONG 107.54 14 52 31 5742.45 22.89 271.09 85.06 114.34 16 28 13 5142.5 25.97 263.40 127.54 14 52 31 5742.45 22.88 356.99 85.07 114.35 10 45 33 713.4 25.97 349.30 107.54 14 52 31 5742.45 22.88 356.99 85.07 114.35 10 45 33 713.4 25.97 349.30 107.54 14 52 31 5742.45 22.89 271.09 85.08 114.34 16 28 13 5142.5 25.97 263.40 114.34 16 28 13 120.20 14 8 2 108.58 17 49 2 295.95 23.3 20.71 13 57 30 623,30 16.82 302.92 81.75 110,00 4880.5 31.48 5480.52 110.00 16 17 42 29.22 253.00 87.85 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2876.9 SR 464.6 SS 705.5 CRT -.9494 CRS .8868 CST -.9866 96T 9699.5 SGR 466.9 863 170.5 RRT -.4242 RRF -.4140 RTF .9395 968 5674.7 R23 .0146 R13 -.9396 TOE-2.0898 TRA 1.9582 TC3-4.4517 BAU 1.1485 FDE .3562 MRA -.0067 RC3 -.0518 FAU .02224 FDE -.6689 FRA .9896 FC3 -.9979 BSP 17959 LSA 2992.6 MSA 184.7 SSA 18.8 EL1 2910.6 EL2 144.2 ALF 171.26 BOE 2.1199 BRA 1.9562 BC3 4.4520 FSP -566

FLIGHT TIME 182.00

SG1 5658.9 SGE 422.6 THA 177.96

ARRIVAL DATE JAN 15 1968

LSA 2608.2 MSA 234.6 SSA 15.8 ELI 2542.6 EL2 210.8 ALF 170.54

LAUNCH DATE JUL 9 1967

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DISTANCE 551.020
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 25.667 GAL 4.98 AZL 92.89 MCA 272.08 SMA 122.17 ECC .25901 INC 2.8868 V1 29.292 RP 107.92 LAP 2.88 LOP 198.21 VP 37.057 GAP 13.46 AZP 90.11 TAL 165.41 TAP 77.49 RCA 90.53 APO 153.81 V2 35.116 RC 173.647 GL -18.38 GP 7.13 ZAL 60.34 ZAP 170.58 ETS 46.87 ZAE 128.60 ETE 174.41 ZAC 60.28 ETC 10.22 CLP-173.84
    PLANETOCENTRIC CONIC
     C3 20.852 VHL 4.566 DLA -32.59 RAL 219.27 RAD 6567.8 VEL 11.926 PTH 2.12 VMP 8.525 DPA -.41 RAP 206.40 ECC 1.3432 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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114.54 16 38 24

114.55 11 4 7

114.54 16 38 24

120.97 14 14 15

108.26 18 11 35
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106.86 15 2 10 5774.62
73.14 10 42 9 1318.12
106.86 15 2 10 5774.62
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         110.00
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                                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                             SGT 5677.1 SGR 469.7 SG3 164.6
RRT -.4319 RRF -.4199 RTF .9409
SGB 5696.5 R23 .0125 R13 -.9409
SGI 5680.7 SGZ 423.4 THA 177.94
                                                                                                                                                                   ST 2787.0 SR 467.5 SS 672.5

CRT -.9370 CRS .8676 CST -.9862

LSA 2898.1 MSA 196.7 SSA 18.0
     TOE-2.0689 TRA 2.2558 TC3-4.1267 BAU 1.1505
     RDE .3726 RRA -.0168 RC3 -.0423 FAU .02044
FDE -.6255 FRA 1.0432 FC3 -.8484 BBP 17997
BDE 2.1022 BRA 2.2559 BC3 4.1269 FBP -545
                                                                                                                                                                    EL1 2821.3 EL2 161.3 ALF 171.04
                                                                                                    FLIGHT TIME 192.00
                                                                                                                                                                                     ARRIVAL DATE JAN 17 1968
   HELIOCENTRIC CONIC
                                                                                                   DISTANCE $56.403
     RL 152.10 LAL -.00 LOL 286.12 VL 25.823 GAL 5.64 AZL 92.79 MCA 275.30 SMA 121.91 ECC .26531 INC 2.7918 V1 29.292
RP 107.96 LAP 2.78 LOP 201.43 VP 37.015 GAP 13.94 AZP 90.26 TAL 163.88 TAP 79.18 RCA 89.57 APO 154.26 V2 35.103
RC 175.555 GL -19.12 GP 6.92 ZAL 57.58 ZAP 171.30 ETS 50.18 ZAE 128.55 ETE 174.57 ZAC 58.04 ETC 10.25 CLP-174.70
   PLANETOCENTRIC CONIC
     C3 22.678 WHL 4.762 DLA -32.20 RAL 222.65 RAD 6967.9 VEL 12.002 PTH
                                                                                                                                       2.14 WHP 8.795 DPA
                                                                                                                                                                               -1.53 RAP 208.47 ECC 1.3732
     LNOW AZMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           196.81 94.33 114.72 11 23 14

175.66 94.34 114.71 16 46 53

156.81 94.33 114.72 11 23 14

175.66 94.34 114.71 16 46 53

106.25 89.94 121.71 14 19 24

192.39 97.91 107.95 18 34 1

HID-COURSE EXECUTION ACCURACY
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          73.99
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                        17 2 50 5463.18
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        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                            SGT 5897.6 SGR 471.7 SG3 159.0
RRT -.4413 RRF -.4279 RTF .9427
SG8 5717.1 R23 .0107 R13 -.9428
SG1 5701.4 SG2 425.0 THA 177.90
                                                                                                                                                                   ST 2696.1 SR 469.1 SS 643.0
CRT -.9231 CRS .8475 CST -.9861
     TOE-2.0462 TRA 2.5643 TC3-3.8015 BAU 1.1526
     RDE .3898 RRA -.0281 RC3 -.0331 FAU .01879
                                                                                                                                                                   LSA 2803.3 MSA 208.9 SSA 17.3
ELI 2730.9 EL2 178.1 ALF 170.84
     FDE -.5863 FRA 1.0944 FC3 -.7173 88P 18124
     BOE 2.0830 BRA 2.5644 BC3 3.8016 FSP -529
                                                                                                                                                                                    ARRIVAL DATE JAN 19 1968
                                                                                                   FLIGHT TIME 194.00
LAUNCH DATE JUL 9 1967
                                                                                                   DISTANCE 561.717
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.578 GAL 6.35 AZL 92.70 MCA 278.52 SMA 121.66 ECC .27215 INC 2.6959 VI 29.292 RP 107.99 LAP 2.67 LOP 204.65 VP 36.972 GAP 14.45 AZP 90.40 TAL 162.37 TAP 80.89 RCA 88.55 APO 154.77 V2 35.091 RC 177.448 GL -13.89 GP 6.72 ZAL 54.94 ZAP 171.96 ETS 54.13 ZAE 128.50 ETE 174.70 ZAC 55.80 ETC 10.33 CLP-175.57
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 24.813 VHL 4.981 OLA -31.75 RAL 225.85 RAO 6568.0 VEL 12.091 PTH 2.16 VMP 9.085 DPA -2.62 RAP 210.54 ECC 1.4084
LNCH ATMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.00 11 20 47 1321.78 20.42 356.42 98.86 114.86 11 42 49 721.8 23.60 348.92
105.00 15 16 1 5855.50 20.43 278.52 98.87 114.85 16 53 37 5255.5 23.61 271.02
75.00 11 20 47 1321.78 20.42 356.42 98.86 114.86 11 42 49 721.8 23.60 348.92
105.00 15 16 1 5855.50 20.43 278.52 98.87 114.85 16 53 37 5255.5 23.61 271.02
110.00 14 10 57 789.84 11.63 311.10 93.88 122.37 14 23 46 169.8 15.82 304.50
110.00 17 25 2 5455.44 29.75 251.85 102.86 107.66 18 55 58 4855.4 31.88 243.28
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5712.9 SGR 472.5 SG3 153.6
RRT -.4512 RRF -.4368 RTF ..9446
SGB 5732.5 R23 .0092 R13 -.9446
SG1 5716.9 SG2 421.4 THA 177.85
                                                                                                                                                                    ST 2602.4 SR 468.9 SS 615.6
CRT -.9072 CRS .8253 CST -.9859
     TOE-2.0178 TRA 2.8894 TC3-3.4736 BAU 1.1523
      RDE .4074 RRA -.0409 RC3 -.0249 FAU .01718
                                                                                                                                                                    LSA 2705.9 MSA 221.7 SSA 16.5
     FOE -.5488 FRA 1.1462 FC3 -.5995 BSP 18235
                                                                                                                                                                    EL1 2637.1 EL2 194.7 ALF 170.67
     BOE 2.0585 BRA 2.8897 BC3 3.4737 FSP -513
                                                                                                                                                                                     ARRIVAL DATE JAN 21 1968
LAUNCH DATE JUL 9 1967
                                                                                                   FLICHT TIME 196.00
                                                                                                   DISTANCE 566.953
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.535 GAL 7.10 AZL 92.60 MCA 281.73 SMA 121.41 ECC .27958 INC 2.5984 V1 29.292
RP 108.03 LAP 2.54 LOP 207.87 VP 36.930 GAP 14.98 AZP 90.53 TAL 160.88 TAP 82.61 RCA 87.47 APO 155.35 V2 35.078
RC 179.325 GL -12.70 GP 6.54 ZAL 52.42 ZAP 172.56 ETS 58.85 ZAE 128.43 ETE 174.83 ZAC 53.57 ETC 10.45 CLP-176.43
    PLANETOCENTRIC CONIC
                                                                                                                                                                               -3.68 RAP 212.64 ECC 1.4493
     C3 27.302 VHL 5.225 DLA -31.26 RAL 228.89 RAD 6568.1 VEL 12.193 PTH 2.19 VMP 9.396 DPA
     C3 27.302 VHL 5.225 OLA -31.26 RAL 228.89 RAO 6568.1 VEL 12.193 PTH 2.19 VHP 9.396 OPA -3.68 RAP 212.44 ECC 1.4493 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.17 11 41 2 1319.90 19.45 355.80 103.30 114.97 12 3 1 719.9 22.65 348.36 103.83 15 19 59 616.65 19.46 303.86 103.31 114.96 15 30 16 16.6 22.66 296.42 103.83 15 19 59 616.65 19.46 305.86 103.31 114.97 12 3 1 719.9 22.65 348.36 103.83 15 19 59 616.65 19.46 305.86 103.31 114.96 15 30 16 16.6 22.66 296.42 110.00 14 13 49 823.35 9.67 313.99 97.72 122.95 14 27 32 223.4 13.94 307.50 110.00 17.46 22 5449.23 29.88 251.41 107.75 107.45 19 17 12 4849.2 31.97 242.82
                          17, 46 22
                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                   ST 2508.2 SR 466.9 SS 590.9
CRT -.8891 CRS .8013 CST -.9859
                                                                                            SGT 5722.9 SGR 472.1 SG3 148.4
RRT -.4617 RRF -.4463 RTF .9466
SG8 5742.3 R23 .0078 R13 -.9467
      TOE-1.9842 TRA 3.2325 TC3-3.1482 BAU 1.1491
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FLIGHT TIME 190.00

SG1 5727.1 SG2 418.5 THA 177.81

RDE .4253 RRA -.0553 RC3 -.0179 FAU .01562 FDE -.5133 FRA 1.1988 FC3 -.4953 8SP 18327 80E 2.0293 BRA 3.2329 BC3 3.1483 FSP -496

LAUNCH DATE JUL 9 1967

ARRIVAL DATE JAN 23 1968

DISTANCE 572.099 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 25.492 GAL 7.89 ATL 92.50 MCA 284.94 SMA 121.17 ECC .28769 INC 2.4987 V1 29.292
RP 108.07 LAP 2.41 LOP 211.08 VP 36.888 GAP 15.56 ATP 90.64 TAL 159.40 TAP 84.34 RCA 86.31 APO 156.02 V2 35.065
RC 181.185 GL -11.56 GP 6.37 ZAL 50.03 ZAP 173.08 ETS 64.44 ZAE 126.35 ETE 174.94 ZAC 51.35 ETC 10.62 CLP-177.30 PLANETOCENTRIC CONIC C3 30.199 VHL 5.495 DLA -30.73 RAL 231.75 RAD 6568.2 VEL 12.311 PTH 2.22 VHP 9.750 DPA -4.71 RAP 214.74 ECC 1.4970 LNCH AZMTH LNCH TIME -L-I TIME INJ LAT. INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 6 1314.58 15 21 43 470 115.04 12 24 0 115.04 15 32 56 115.04 12 24 0 115.04 12 24 0 115.04 15 32 56 123.42 14 30 49 107.27 19 37 33 21.64 714.6 12 2 6 107.66 18.42 354.90 347.52 77.52 18.43 307.54 107.66 72.4 21.66 300.16 77.52 12 2 6 1314.58 18.42 354.90 107.66 714.6 21.64 347.52 672.37 102.48 15 21 43 18.43 307.54 107.66 72.4 21.66 300.16 14 16 11 278.1 310.52 878.08 7.63 316.92 101.47 11.97 18 6 48 5444.90 4844.9 32.04 242.50 29.97 251.10 112.54 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5727.3 SGR 470.4 SG3 143.5 RRT -.4722 RRF -.4559 RTF .9487 SG8 5746.6 RZ3 .0064 R13 -.9487 SG1 5731.6 SG2 414.4 THA 177.77 ST 2413.5 SR 462.9 SS 568.4 CRT -.8682 CRS .7742 CST -.9859 TOE-1.9424 TRA 3.5968 TC3-2.8256 BAU 1.1408 ROE .4433 RRA -.0713 RC3 -.0122 FAU .01403 FOE -.4783 FRA 1.2542 FC3 -.4023 89P 18305 BOE 1.9923 BRA 3.5995 BC3 2.8256 FSP -479 LSA 2510.2 MSA 247.6 SSA 15.2 EL1 2447.1 EL2 226.6 ALF 170.46 FLIGHT TIME 200.00 ARRIVAL DATE JAN 25 1968 HELIOCENTRIC CONIC DISTANCE 577.141 RL 152.10 LAL -.00 LOL 286.12 VL 25.449 GAL 8.73 AZL 92.40 MCA 288.15 SMA 120.93 ECC .29653 INC 2.3961 V1 29.292
RP 108.11 LAP 2.28 LOP 214.29 VP 36.846 GAP 16.17 AZP 90.75 TAL 157.95 TAP 86.10 RCA 85.07 APO 156.79 V2 35.052
RC 183.028 GL -10.46 GP 6.22 ZAL 47.77 ZAP 173.52 ETS 70.97 ZAE 128.26 ETE 175.04 ZAC 49.11 ETC 10.84 CLP-178.17 RC 183.028 GL -10.46 GP PLANETOCENTRIC CONIC C3 33.570 WHL 5.794 DLA -30.18 RAL 234.43 RAD 6568.3 VEL 12.448 PTH 2.25 VHP 10.091 DPA -5.70 RAP 216.85 ECC 1.5525 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.91 115.09 17.35 79.10 12 24 21 1304.51 353.62 12 46 5 704.5 115.06 15 33 7 100.90 15 20 51 735.69 17.36 311.75 111.92 135.7 20.60 115.09 12 46 5 115.08 15 33 7 79.10 12 24 21 1304.51 17.35 704.5 20.59 346.30 353.62 111.91 735.69 15 20 51 100.90 311.75 111.92 135.7 20.60 17.36 123.79 14 33 42 107.10 19 56 56 110.00 14 18 8 933.61 5.53 319.86 105.13 333.6 9.93 313.53 32.07 18 26 14 5442.62 110.00 30.02 250.94 117.24 4842.6 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5728.4 SGR 467.7 SG3 138.8 RRT -.4836 RRF -.4669 RTF .9511 SG8 5747.5 R23 .0053 R13 -.9511 SG1 5732.9 SG2 409.1 THA 177.75 ST 2327.0 SR 457.5 SS 550.1 CRT -.8458 CRS .7477 CST -.9863 TOE-1.9028 TRA 3.9809 TC3-2.5212 BAU 1.1315 RDE .4617 RRA -.0886 RC3 -.0074 FAU .01258 FDE -.4479 FRA 1.3091 FC3 -.3244 BBP 18387 BDE 1.9580 BRA 3.9819 BC3 2.5212 FSP -466 LSA 2420.6 MSA 259.2 SSA 14.5 EL1 2359.3 EL2 240.7 ALF 170.46 FLIGHT TIME 202.00 ARRIVAL DATE JAN 27 1968 LAUNCH DATE JUL 9 1967 DISTANCE 582.062 HELIOCENTRIC CONIC RL 152.10 LAL -.00 LOL 286.12 VL 25.407 GAL 9.63 AZL 92.29 MCA 291.36 SMA 120.69 ECC .30622 INC 2.2896 V1 29.292
RP 108.16 LAP 2.13 LOP 217.50 VP 36.804 GAP 16.84 AZP 90.83 TAL 156.53 TAP 87.89 RCA 83.74 APO 157.65 V2 35.039
RC 184.853 GL -9.41 GP 6.08 ZAL 45.64 ZAP 173.85 ETS 78.45 ZAE 128.16 ETE 175.14 ZAC 46.89 ETC 11.11 CLP-179.06 PLANETOCENTRIC CONIC C3 37.495 VHL 6.123 DLA -29.61 RAL 236.93 RAD 6568.5 VEL 12.604 PTH 2.29 VHP 10.483 DPA -6.67 RAP 218.97 ECC 1.6171 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 12 48 36 1286.87 116.07 115.10 13 10 3 115.09 15 30 3 19.49 80.97 16.24 351.76 686.9 344.50 209.2 19.50 309.41 99.03 15 16 33 809.18 16.26 316.67 116.07 117.13 15 4 17 113.12 16 9 45 124.03 14 36 13 107.17 20 15 19 14 49 21 314.51 296.2 100.00 896.22 13.06 321.51 114.45 16.60 75.I 300.70 100.00 15 58 30 675.06 19.49 306.24 117.59 22.45 14 19 43 18 44 37 316.53 110.00 989.64 3.41 322.80 108.70 349.6 7.85 5442.44 110.00 30.02 250.93 121.64 4842.4 32.07 242.32 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS 8GT 5724.7 8GR 463.8 SG3 134.3 RRT -.4951 RRF -.4782 RTF .9537 8G8 5743.4 RZ3 .0043 R13 -.9537 SG1 5729.3 SG2 402.6 TMA 177.69 ST 2245.4 SR 450.5 SS 534.9 CRT -.8214 CRS .7201 CST -.9869 LSA 2336.2 MSA 269.8 SSA 14.0 TOE-1.8601 TRA 4.3865 TC3-2.2296 BAU 1.1176 RDE .4800 RRA -.1074 RC3 -.0038 FAU .01114 FDE -.4195 FRA 1.3664 FC3 -.2572 BSP 18440 BDE 1.9210 BRA 4.3878 BC3 2.2296 FSP -451 EL1 2276.1 EL2 253.5 ALF 170.52 LAUNCH DATE JUL 9 1967 FLIGHT TIME 204.00 ARRIVAL DATE JAN 29 1968 HELIOCENTRIC CONIC DISTANCE 586.842 RL 152.10 LAL -.00 LOL 286.12 VL 25.366 GAL 10.99 AZL 92.18 MCA 294.56 SMA 120.47 ECC .31683 INC 2.1785 V1 29.292
RP 108.20 LAP 1.98 LOP 220.70 VP 36.763 GAP 17.55 AZP 90.91 TAL 155.14 TAP 89.70 RCA 82.30 APO 158.63 V2 35.025
RC 186.660 GL -8.40 GP 5.95 ZAL 43.64 ZAP 174.05 ETS 86.76 ZAE 128.03 ETE 175.23 ZAC 44.69 ETC 11.45 CLP-179.95 PLANETOCENTRIC CONIC C3 42.071 VML 6.486 OLA -29.02 RAL 239.26 RAD 6568.6 VEL 12.784 PTH 2.33 VMP 10.908 OPA -7.60 RAP 221.09 ECC 1.6924 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.08 13 37 37 115.07 15 22 1 118.48 14 49 34 111.86 16 44 0 124.16 14 36 24 107.25 20 32 41 655.6 45.35 13 16 42 1255.55 15.11 348.90 120.11 14.37 341.68 15 7 2 322.74 96.65 898.66 15.15 120.12 298.7 18.38 315.52 14 32 45 100.00 1004.82 9.48 327.96 117.21 408.8 13.22 321.16 16 33 40 620.62 14 20 58 1045.92 19 1 56 5444.33 620.62 100.00 20.91 304.82 122.76 20.6 23.69 297.13 110.00 1.26 325.74 112.19 445.9 5.73 319.51 110.00 29.96 251.06 126.32 4644.3 32.05 242.46 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5715.1 SGR 456.6 SG3 130.0 RRT --5066 RRF --4900 RTF -9565 SGB 5733.4 R23 .0033 R13 --9566 SG1 5719.8 SG2 395.0 THA 177.66 ST 2169.9 SR 441.8 SS 522.6 CRT -.7951 CRS .6923 CST -.9878 LSA 2258.1 MSA 278.8 SSA 13.4 EL1 2198.6 EL2 264.5 ALF 170.67 TDE-1.8156 TRA 4.8162 TC3-1.9529 BAU 1.0984 RDE -4983 RRA --1275 RC3 --0012 FAU -00974 FDE --3934 FRA 1-4262 FC3 --2004 88P 18475 80E 1-8827 8RA 4-8178 8C3 1-9529 FSP --438

FLIGHT TIME 198.00

ARRIVAL DATE JAN 31 1968

ELI 1955.4 ELZ 285.8 ALF 171.95

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FLIGHT TIME 206.00
LAUNCH DATE JUL 9 1967
                                                                                                      DISTANCE 591.454
   HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.326 GAL 11.62 ATL 92.06 MCA 297.77 SMA 120.24 ECC .32850 INC 2.0617 V1 29.292
RP 108.24 LAP 1.82 LOP 223.91 VP 36.723 GAP 18.33 AZP 90.96 TAL 153.80 TAP 91.56 RCA 80.74 APO 159.74 V2 35.012
RC 188.449 GL -7.45 GP 5.84 ZAL 41.78 ZAP 174.10 ETS 95.60 ZAE 127.88 ETE 175.31 ZAC 42.52 ETC 11.86 CLP 179.13
    PLANETOCENTRIC CONIC
      C3 47.418 VML 6.886 DLA -28.43 RAL 241.41 RAO 6568.8 VEL 12.992 PTH 2.37 VMP 11.374 DPA -8.49 RAP 223.21 ECC 1.7804
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
87,35 13 58 0 1179.99 13.96 342.80 124.05 115.02 14 17 40 580.0 17.22 335.63
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115.01 15 0 10
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111.17 18 38 9
124.17 14 40 17
107.39 20 49 0
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                                                                                                MID-COURSE EXECUTION ACCURACY
SGT 5704.1 SGR 452.1 SG3 126.0
RRT -.5184 RRF -.5016 RTF ..9593
SGB 5722.0 R23 .0023 R13 -.9594
SGI 5709.0 SGZ 386.3 THA 177.64
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 2100.4 SR 431.6 SS 513.4 CRT -.7666 CRS .6631 CST -.9887 LSA 2186.2 MSA 286.3 89A 12.8
      TDE-1.7672 TRA 5.2783 TC3-1.6924 BAU 1.0728
     RDE .5162 RRA -.1491 RC3 .0002 FAU .00828
FDE -.3683 FRA 1.4905 FC3 -.1512 BSP 18410
                                                                                                                                                                          EL1 2126.8 EL2 273.7 ALF 170.90
      BOE 1.8410 BRA 5.2805 BC3 1.6924 FSP
                                                                           -421
                                                                                                                                                                                          ARRIVAL DATE FEB 2 1968
                                                                                                       FLIGHT TIME 208.00
   HELIOCENTRIC CONIC
                                                                                                      DISTANCE 595.867
    RL 152.10 LAL -.00 LOL 286.12 VL 25.287 GAL 12.74 AZL 91.94 HCA 300.97 SHA 120.03 ECC .34137 INC 1.9379 VI 29.292 RP 108.28 LAP 1.66 LOP 227.10 VP 36.683 GAP 19.18 AZP 91.00 TAL 152.51 TAP 93.47 RCA 79.05 APO 161.00 V2 34.999 RC 190.221 GL -6.54 GP 5.73 ZAL 40.06 ZAP 173.99 ETS 104.56 ZAE 127.70 ETE 175.39 ZAC 40.37 ETC 12.33 CLP 178.20
   PLANETOCENTRIC CONIC
     C3 53.663 WHL 7.327 DLA -27.64 RAL 243.40 RAD 6568.9 VEL I3.230 PTH 2.42 VHP 11.884 OPA -9.35 RAP 225.32 ECC 1.8835 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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124.06 14 41 51
107.60 21 4 19
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                                                                                                                                                                                                                         243.16
                                                                                                               134.93
         110.00
                          19 33 25
                                                5453.83
                                                                        29.79
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                NID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5686.6 SGR 444.5 SG3 122.1
RRT -.5303 RRF -.5139 RTF .9625
SGB 5703.9 R23 .0015 R13 -.9625
SGI 5691.5 SG2 376.5 THA 177.62
                                                                                                                                                                          ST 2039.4 SR 420.2 SS 507.5
CRT -. 7382 CRS .6365 CST -. 9899
      TOE-1.7233 TRA 5.7649 TC3-1.4527 BAU 1.0426
     ROE .5342 RRA -.1717 RC3 .0011 FAU .00691
FOE -.3471 FRA 1.5571 FC3 -.1114 BBP 18439
BOE 1.8042 BRA 5.7874 BC3 1.4327 FBP -409
                                                                                                                                                                          LSA 2123.3 MSA 291.1 SSA 12.3
                                                                                                                                                                          EL1 2063.3 EL2 280.2 ALF 171.19
                                                                                                                                                                                         ARRIVAL DATE FEB 4 1968
                                                                                                      FLIGHT TIME 210.00
LAUNCH DATE JUL 9 1967
                                                                                                      DISTANCE 600.042
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.248 GAL 13.95 AZL 91.81 MCA 304.16 SNA 119.82 ECC .35560 INC 1.8056 VI 29.292
RP 108.32 LAP 1.49 LOP 230.30 VP 36.644 GAP 20.12 AZP 91.01 TAL 151.28 TAP 95.44 RCA 77.21 APO 162.42 V2 34.986
RC 191.975 GL -5.67 GP 5.63 ZAL 38.47 ZAP 173.73 ETS 113.26 ZAE 127.49 ETE 175.47 ZAC 38.26 ETC 12.89 CLP 177.23
    PLANETOCENTRIC CONIC
      C3 61.053 VML 7.814 DLA -27.24 RAL 245.22 RAD 6569.1 VEL 13.506 PTH 2.47 VMP 12.445 DPA -10.17 RAP 227.42 ECC 2.0048
      C3 61.033 WRL 7.814 DLA -27.22 RAL 243.22 RAU 243.22 RA
                                                                                                                                     119.66 14 32 28
110.47 19 19 54
123.84 14 43 6
107.87 21 18 38
                                                                                                                                                                                  649.4
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                                               1249.41
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                            17 42 21
                                               5853.10
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          100.00
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                         14 22 52 1214.19
19 47 37 5461.09
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          110.00
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                                                                                                                                                                              4861.1
                                                                                                                139.03
                                                                        29.64
                                                                                            252.24
          110.00
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 5665.1 SGR 435.6 SG3 118.3
RRT -.5421 RRF -.5264 RTF ..9657
SGB 5681.8 R25 .0008 R13 -.9657
SGI 5670.0 SG2 365.7 THA 177.60
                                                                                                                                                                        ST 1985.0 SR 407.5 SS 504.7
CRT -. 7092 CRS .6111 CST -. 9912
      TOE-1.6802 TRA 6.2858 TC3-1.2306 BAU 1.0044
      ROE .5518 RRA -.1954 RC3 .0012 FAU .00552
FOE -.3283 FRA 1.6282 FC3 -.0782 BSP 18461
                                                                                                                                                                        LSA 2067.5 MSA 293.7 SSA 11.8
EL1 2006.4 EL2 284.2 ALF 171.54
      BOE 1.7685 BRA 6.2888 BC3 1.2306 FSP -397
                                                                                                                                                                                          ARRIVAL DATE FEB 6 1968
LAUNCH DATE JUL 9 1967
                                                                                                       FLIGHT TIME 212.00
                                                                                                      DISTANCE 603.928
    HELIOCENTRIC CONIC
     RL 152.10 LAL -.00 LOL 286.12 VL 25.211 GAL 15.26 A7L 91.66 MCA 307.36 SMA 119.61 ECC .37138 INC 1.6629 VI 29.292 RP 108.36 LAP 1.32 LOP 233.49 VP 36.606 GAP 21.15 A7P 91.01 TAL 150.13 TAP 97.49 RCA 75.19 APO 164.03 V2 34.973 RC 193.712 GL -4.85 GP 5.54 ZAL 37.03 ZAP 173.30 ETS 121.28 ZAE 127.24 ETE 175.54 ZAC 36.19 ETC 13.54 CLP 176.23
    PLANETOCENTRIC CONIC
      C3 69.759 VHL 8.352 DLA -26.65 RAL 246.87 RAD 6569.3 VEL 13.824 PTH 2.52 VMP 13.067 OPA -10.94 RAP 229.50 ECC 2.1481
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 17 6 1480.49 2.40 358.82 131.07 118.22 13 41 46 880.5 6.15 352.15
                                                                                                                                       111.50
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                                                                                                                                                                                  322.7
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                                                                                            326.19
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                            16 7 25
                                                   922.69
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            90.00
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          100.00
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                                               5847.67
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          100.00
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                            14 22 52 1269.49
20 0 49 5469.73
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          110.00
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          110.00
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                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 5639.5 SGR 425.4 SG3 114.8
RRT -.5536 RRF -.5387 RTF .9690
                                                                                                                                                                          ST 1936.6 SR 393.7 SS 504.7

CRT -.6803 CRS .5870 CST -.9925

LSA 2018.3 MSA 294.0 SSA 11.2
       TOE-1.6383 TRA 6.8454 TC3-1.0256 BAU .9565
      RDE .5692 RRA -.2200 RC3 .0007 FAU .00409
FDE -.3115 FRA 1.7052 FC3 -.0507 BSP 18457
BOE 1.7344 BRA 6.8490 BC3 1.0256 FSP -385
                                                                                                 SGB 5655.6 R23 .0002 R13 -.9690
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\$61 5644.5 \$62 353.9 THA 177.60

ARRIVAL DATE FEB 8 1968

LAUNCH DATE JUL 9 1967

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DISTANCE 607.463
   HELIOCENTRIC CONIC
    RL 152.10 LAL -.00 LOL 286.12 VL 25.175 GAL 16.70 AZL 91.51 MCA 310.55 SMA 119.42 ECC .38894 INC 1.5077 V1 29.292
RP 108.40 LAP 1.15 LOP 236.68 VP 36.569 GAP 22.30 AZP 90.98 TAL 149.07 TAP 99.62 RCA 72.97 APO 165.86 V2 34.960
RC 195.431 GL -4.07 GP 5.45 ZAL 35.72 ZAP 172.73 ETS 128.46 ZAE 126.94 ETE 175.62 ZAC 34.17 ETC 14.28 CLP 175.18
   PLANETOCENTRIC CONIC
    C3 80.099 VHL 8.950 OLA -26.06 RAL 248.36 RAD 6569.6 VEL 14.193 PTH 2.59 VMP 13.758 OPA -11.68 RAP 231.55 ECC 2.3182
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                 1559.03
900
                                                                                               118.32 13 35 13
                   13 9 14
                                                      -.14
                                                                     3.20
                                                                                 133.81
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119.74 14 26 10
110.27 19 53 24
123.04 14 44 35
108.54 21 44 21
                                                                   325.30
                                                                                                                                   308.5
                                                                                                                                                  21.95
                                                                                                                                                                317.67
        90.00
                   16 27 9
                                                     19.24
                                                                                  142.80
                   14 3 5 1385.09
18 15 59 5845.72
       100.00
                                                     -3.14
                                                                   348.75
                                                                                  132.14
                                                                                                                                  785.1
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       100.00
                                                     22.45
                                                                   278.69
                                                                                  144.10
                    14 22 31 1324.10
                                                                                                                                                  -4.88
                                                                                                                                                                334.06
       110.00
                                                     -9.29
                                                                   340.36
                                                                                  128.37
                                                                                                                                  724.1
                                                     29.25
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                    20 13 2
                                                                   253.53
                                                                                  146.76
                                                                                                                                                              245.05
       110.00
                                   5479.47
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                       $67 5609.8 $6R 414.0 $63 111.4

RRT -.5648 RRF -.5509 RTF .9724

$68 5625.1 R23 -.0004 R13 -.9724
                                                                                                                             ST 1893.6 SR 378.9 SS 507.6
CRT -.6518 CRS .5646 CST -.9937
    TOE-1.5989 TRA 7.4482 TC3 -.8375 BAU .8968
    RDE .5861 RRA -.2453 RC3 -.0002 FAU .00258
FOE -.2968 FRA 1.7888 FC3 -.0279 BSP 18428
                                                                                                                             LSA 1975.2 MSA 291.8 SSA 10.7
                                                                                                                             EL1 1910.0 EL2 284.9 ALF 172.40
    BOE 1.7030 BRA 7.4522 BC3 .8375 FSP -374
                                                                       8G1 5614.7 SG2 341.3 THA 177.60
                                                                                                                                        ARRIVAL DATE FEB 10 1968
                                                                           FLIGHT TIME 216.00
LAUNCH DATE JUL 9 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 610.567
   RL 152.10 LAL -.00 LOL 286.12 VL 25.140 GAL 18.28 ATL 91.34 MCA 313.74 SMA 119.23 ECC .40853 INC 1.3370 V1 29.292
RP 108.44 LAP .97 LOP 239.87 VP 36.533 GAP 23.58 AZP 90.92 TAL 148.13 TAP 101.86 RCA 70.52 APO 167.94 V2 34.947
RC 197.134 GL -3.32 GP 5.37 ZAL 34.57 ZAP 172.01 ETS 134.74 ZAE 126.58 ETE 175.70 ZAC 32.21 ETC 15.13 CLP 174.08
  PLANETOCENTRIC CONIC
                                                                                                      2.65 WHP 14.530 DPA -12.37 RAP 233.56 ECC 2.5215
    C3 92.453 VHL 9.615 DLA -25.48 RAL 249.68 RAD 6569.8 VEL 14.622 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                     -2.48
                                                                     7.25
                                                                                 136.49
                                                                                                 118.22 13 29 43
       90.00 13 2 32 1631.75
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        90'.00
                    16 44 22
                                    900.11
                                                     19.44
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                                                                                  146.56
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                    13 59 11 1448.80
18 30 24 5846.33
                                                                                                   119.46 14 23 20
       100.00
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                                                     -5.28
                                                                   352.27
                                                                                  134.94
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       100.00
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                                                                   278.73
                                                                                  147.76
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                                                                                                  122.49 14 44 46
      110.00
                    14 21 48
                                  1377.84
                                                    -11.27
                                                                   343.27
                                                                                  131.31
                                                                                                                                  777.8
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                                                                                                                                                                336.89
                   20 24 16
                                                                   254.27
                                                                                                  108.92 21 55 46
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       110.00
                                   5490.05
                                                                                  150.36
                                                     29.01
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SGT 5577.2 SGR 401.2 SG3 108.3
RRT -.5756 RRF -.5627 RTF .9757
SGB 5591.6 R23 -.0010 R13 -.9757
                                                                                                                             ST 1854.8 SR 363.0 SS 513.5
CRT -.6237 CRS .5433 CST -.9949
    TDE-1.5601 TRA 8.1026 TC3 -.6646 BAU .8215
   RDE .6025 RRA -.2713 RC3 -.0015 FAU .00093
FDE -.2835 FRA 1.8812 FC3 -.0088 83P 16307
BDE 1.6725 BRA 8.1071 BC3 .6646 FSP -361
                                                                                                                            LSA 1937.3 MSA 287.6 SSA
                                                                                                                                                                    10.2
                                                                       SG1 5582.0 SG2 327.8 THA 177.62
                                                                                                                            EL1 1868.9 EL2 281.6 ALF 172.88
                                                                           FLIGHT TIME 218.00
                                                                                                                                       ARRIVAL DATE FEB 12 1968
LAUNCH DATE JUL 9 1967
                                                                          DISTANCE 613.134
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 25.107 GAL 20.03 AZL 91.15 MCA 316.93 SMA 119.05 ECC .43049 INC 1.1473 V1 29.292
RP 108.48 LAP .78 LOP 243.06 VP 36.498 GAP 25.02 AZP 90.84 TAL 147.32 TAP 104.24 RCA 67.80 APO 170.30 V2 34.935
RC 198.819 GL -2.61 GP 5.30 ZAL 33.57 ZAP 171.16 ETS 140.18 ZAE 126.15 ETE 175.78 ZAC 30.32 ETC 16.08 CLP 172.92
  PLANETOCENTRIC CONIC
    C3 107.311 VHL 10.359 OLA -24.91 RAL 250.82 RAO 6570.1 VEL 15.121 PTH 2.72 VHP 15.397 OPA -13.02 RAP 235.52 ECC 2.7661
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 56 27 1700.11 -4.67 11.08 139.08 117.96 13 24 47 1100.1 -.90 4.44 90.00 16 59 35 895.52 19.56 324.47 150.06 110.90 17 14 31 295.5 22.22 316.82 100.00 13 55 17 1510.12 -7.32 355.68 137.63 119.06 14 20 27 910.1 -3.39 349.10
                                                                                              117.96 13 24 47
110.90 17 14 31
119.06 14 20 27
110.35 20 20 54
121.83 14 44 30
109.31 22 6 14
       100.00
                    18 43 25 5848.79
                                                   22.38
                                                                  278.89
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      110.00 14 20 40 1430.53
110.00 20 34 32 5501.14
                                                    -13.18
                                                                   346.15
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                                                                             153.75
                                                    28.77
                                                                   255.04
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                                                                                                                                                31.13
                                                                                                                                                               246.63
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                           ST 1820.6 SR 346.5 SS 522.7

CRT -.5982 CRS .5254 CST -.9959

LSA 1905.0 MSA 280.9 SSA 9.7

EL1 1832.7 EL2 275.9 ALF 173.35
                                                                       SGT 5539.0 SGR 387.3 SG3 105.2
RRT -.5858 RRF -.5741 RTF .9790
SGB 5552.6 R23 -.0015 R13 -.9790
    TOE-1.5312 TRA 8.8076 TC3 -.5096 BAU .7311
    RDE .6188 RRA -.2970 RC3 -.0028 FAU-.00081
   FOE -.2738 FRA 1.9819 FC3 .0066 BSP 18278
BOE 1.6515 BRA 8.8126 BC3 .5096 FSP -351
                                                        -351
                                                                       SG1 5543.7 SG2 313.6 THA 177.65
LAUNCH DATE JUL 9 1967
                                                                           FLIGHT TIME 220.00
                                                                                                                                        ARRIVAL DATE FEB 14 1968
                                                                          DISTANCE 615.031
  HELIOCENTRIC CONIC
   RL 152.10 LAL -.00 LOL 286.12 VL 25.076 GAL 21.98 ATL 90.93 MCA 320.11 SMA 118.88 ECC .45516 INC .9337 V1 29.292
RP 108.51 LAP .60 LOP 246.24 VP 36.465 GAP 26.64 ATP 90.72 TAL 146.67 TAP 106.78 RCA 64.77 APO 173.00 V2 34.923
RC 200.487 GL -1.94 GP 5.23 ZAL 32.73 ZAP 170.17 ETS 144.87 ZAE 125.63 ETE 175.87 ZAC 28.53 ETC 17.15 CLP 171.67
  PLANETOCENTRIC CONIC
   C3 125.315 VHL 11.194 DLA -24.34 RAL 251.79 RAD 6570.3 VEL 15.705 PTH 2.79 VHP 16.377 DPA -13.62 RAP 237.40 ECC 3.0624
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              141.54
                                                                                                                                              -2.98
                                                                                               117.57 13 20 1
110.85 17 27 58
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       90.00 12 50 37 1764.67
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                                                                    14.73
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                                                                                                  118.55 14 17 23
110.45 20 32 41
121.08 14 43 44
109.71 22 15 42
      100.00
                  13 51 14
                                  1569.16
                                                    -9.26
                                                                   358.99
                                                                                  140.17
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      100.00
                    18 55 9
                                  5852.46
                                                    22.29
                                                                   279.12
                                                                                  154.39
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                  14 19 2 1481.96
20 43 50 5512.42
      110.00
                                                   -15.01
                                                                   349.02
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      110.00
                                                    28.51
                                                                  255.61
                                                                                  156.90
                                                                                                                                 4912.4
                                                                                                                                                30.93
                                                                                                                                                               247.45
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5496.6 SGR 372.0 SG3 102.4
RRT -.5951 RRF -.5847 RTF .9821
SGB 5509.2 R23 -.0019 R13 -.9821
                                                                                                                          ST 1789.2 SR 329.3 SS 535.3
CRT -.5746 CRS .5096 CST -.9969
LSA 1876.8 MSA 272.2 SSA 9.1
   TDE-1.5095 TRA 9.5748 TC3 -.3695 BAU
                                                        .6190
   RDE .6347 RRA -.3223 RC3 -.0043 FAU-.00278
FDE -.2667 FRA 2.0938 FC3 .0192 BSP 18222
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FLIGHT TIME 214.00

SG1 5501.1 SG2 298.7 THA 177.69

EL1 1799.4 EL2 268.0 ALF 173.82

BOE 1.6375 BRA 9.5802 BC3 .3695 FSP -341

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FLIGHT TIME TO:00
                                                                                                                                                  ARRIVAL DATE SEP 18 1967
LAUNCH DATE JUL 17 1967
                                                                                DISTANCE 181.484
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 26.085 GAL -8.54 A7L 93.25 HCA 79.13 SHA 124.65 ECC .26360 INC 3.2522 VI 29.292 RP 108.63 LAP -3.19 LOP 6.19 VP 37.132 GAP -13.42 A7P 90.61 TAL 205.76 TAP 284.89 RCA 91.79 APO 157.50 V2 34.886 RC 49.776 GL -15.67 GP -7.44 7AL 135.04 7AP 11.06 ETS 41.21 7AE 149.88 ETE 6.83 7AC 89.37 ETC 13.75 CLP -8.21
   PLANETOCENTRIC CONIC
    C3 29.361 VHL 5.419 DLA -3.15 RAL 146.43 RAD 6568.2 VEL 12.277 PTH 2.21 VHP 8.582 DPA -2.93 RAP 176.42 ECC 1.4832
    2 22 0 2210.73
13 33 17 5050.16
3 41 53 1953.07
14 56 5 4783.05
4 46 45 1749.99
16 7 42 4558.89
                                                                                                         112.13 4 14 26
72.90 16 15 48
115.36 5 15 55
69.66 17 23 41
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                                                       24.90
                                                                        202.92
                                                                                          14.77
       100.00
                                                                                                                                                         -20.09
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                                                                                          11.36
                                                       -23.71
                                                                           4.93
       110.00
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                                                                                         13.56
                                                                                                                                           3958.9
                                                         28.08
                                                                        184.69
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 308.6 SR 397.1 SS 185.8
CRT -,8864 CRS -,9619 CST .7523
    TOE .2726 TRA -.3442 TC3 .4409 BAU .1733

ROE -.3730 RRA -.1452 RC3 .0247 FAU .03684

FDE -.2201 FRA -.2707 FC3-1.0862 BSP 1757

BOE .4620 BRA .3736 BC3 .4415 FSP -261
                                                                           SCT 666.5 SGR 424.2 SG3 106.6
RRT -.1585 RRF .1993 RTF -.6385
SGB 790.0 R23 -.0340 R13 .6453
                                                                                                                                     LSA 518.4 MSA 134.6 SSA
                                                                                                                                     EL1 489.4 EL2 115.9 ALF 126.98
    BOE .4620 BRA .3736 BC3 .4415 FSP
                                                                            SG1 672.0 SG2 415.4 THA 170.63
                                                                                                                                                   ARRIVAL DATE SEP 20 1967
                                                                                 FLIGHT TIME 72.00
LAUNCH DATE JUL 10 1967
                                                                                DISTANCE 188.280
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 26.279 GAL -8.49 AZL 93.15 MCA 82.31 SMA 125.85 ECC .25367 INC 3.1535 V1 29.292
RP 108.59 LAP -3.13 LOP 9.38 VP 37.279 GAP -12.44 AZP 90.42 TAL 207.10 TAP 289.41 RCA 93.92 APO 157.77 V2 34.897
RC 51.201 GL -15.69 GP -7.93 ZAL 136.58 ZAP 13.34 ETS 35.22 ZAE 149.23 ETE 5.24 ZAC 88.90 ETC 13.81 CLP -10.77
   PLANETOCENTRIC CONIC
    C3 27.941 VHL 5.286 DLA -2.62 RAL 144.91 RAD 6568.1 VEL 12.220 PTH 2.20 VHP 8.047 DPA -3.63 RAP 176.78 ECC 1.4598 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          -16.56
                                                                                                                        2 48 56
                                                                                                                                          1614.7
                    2 12 1 2214.69
13 31 7 5021.43
                                                                                       11.07
                                                                                                        110.88
                                                        -19.57
                                                                         41.49
         90.00
                                                                                                          73.23 14 54 49
112.05 4 4 45
                                                                                                                                           4421.4
                                                                                                                                                            20.64
                                                                                          12.57
                                                        23.16
                                                                        221.02
         90.00
                   3 32 8 1956.24
14 53 41 4755.12
4 37 35 1751.39
16 4 44 4532.73
                                                                                                                                                            -17.53
                                                                                                                                           1356.2
                                                                                          10.60
                                                        -20.71
                                                                          22.01
                                                                                                         72.07 16 12 56
115.34 5 6 46
68.78 17 20 17
       100.00
                                                                                                                                          4155.1
                                                                                                                                                             21.64
                                                                         201.04
                                                                                          12.17
                                                        24.32
       100.00
                                                                                                                                                         -20.14
                                                                                                                                          1151.4
                                                        -23.75
                                                                          5.02
                                                                                            9.15
       110.00
                                                                                                                                           3932.7
                                                                                                                                                             24.32
                                                                                         10.94
                                                        27.45
                                                                         182.92
                                      4532.73
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 308.0 SR 400.5 SS 189.9

CRT -.8924 CRS -.9461 CST .7221

LSA 521.3 MSA 137.6 SSA 26.2

EL1 492.4 EL2 113.0 ALF 126.71
                                                                           SCT 681.4 SCR 428.2 SC3 120.5
RRT -.1818 RRF .2306 RTF -.6509
SG8 804.7 R23 -.0420 R13 .6595
     TDE .2669 TRA -.3214 TC3 .4814 BAU .1799
RDE -.3669 RRA -.1456 RC3 .0129 FAU .04041
     FOE -.2282 FRA -.3347 FC3-1.2521 BSP 1825
BOE .4537 BRA .3528 BC3 .4816 FSP -302
                                                                             SG1 688.5 SG2 416.7 THA 169.66
                                                                                                                                                  ARRIVAL DATE SEP 22 1967
                                                                                 FLIGHT TIME 74.00
LAUNCH DATE JUL 10 1967
                                                                                DISTANCE 195.068
    RL 152.09 LAL -.00 LOL 287.08 VL 26.453 GAL -8.45 A7L 93.06 MCA 85.49 SMA 126.95 ECC .24491 INC 3.0562 V1 29.292
RP 108.56 LAP -3.05 LOP 12.56 VP 37.412 GAP -11.51 A7P 90.24 TAL 208.42 TAP 293.91 RCA 95,86 APO 158.04 V2 34.908
RC 52.722 GL -15.65 GP -8.47 ZAL 138.05 ZAP 15.84 ETS 30.89 ZAE 148.83 ETE 3.62 ZAC 88.54 ETC 13.87 CLP -13.44
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 26.752 VHL 5.172 DLA -2.07 RAL 143.48 RAD 6568.1 VEL 12.171 PTH 2.18 VHP 7.544 DPA -4.33 RAP 177.02 ECC 1.4403
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 2 11 2221.13 -19.73 41.90 9.04 110.74 2 39 13 1621.1 -16.75 34.50
                                                                                                      110.74 2 39 13
72.46 14 52 47
111.92 3 55 16
71.28 16 10 40
115.24 4 57 51
67.96 17 17 27
                                                                                                                                           4393.3
                                                        22.59
                                                                         219.16
                                                                                          10.20
                      13 29 34
                                      4993.34
          90.00
                                                                                                                                          1361.8
                                                                                                                                                           -17.69
                                                                                                                                                                             14.99
                                                                         22.36
                                                                                          8.58
                       3 22 34
                                      1961.85
                                                        -20.85
        100.00
                                                                                                                                                                            191.53
                                                                                                                                          4127.9
                                                                                                                                                             20.96
                      14 51 52 4727.86
                                                        23.74
                                                                         199.22
                                                                                            9.79
        100.00
                                                                                                                                                                            357.96
                                                                                                                                          1155.1
                    4 28 36 1755.13
16 2 19 4507.34
                                                         -23.86
                                                                           5.25
                                                                                            7.16
        110.00
                                                                                                                                                                            173.55
                                                                                                                                           3907.3
                                                                                                                                                             23.59
                                                                                            8.53
                                                          26.82
                                                                         181.22
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 695.5 SGR 432.4 SG3 136.5

RRT -.2105 RRF .2673 RTF -.6654

SGB 819.0 R23 -.0500 R13 .6742

SGI 704.8 SG2 417.2 THA 168.45
                                                                                                                                     ST 306.9 SR 403.4 SS 194.8
CRT -.8984 CRS -.9268 CST .6903
LSA 523.6 MSA 141.4 SSA 27.1
      TOE .2617 TRA -.2987 TC3 .5206 BAU .1862
     FDE -.2369 FRA -.4085 FC3-1.0023 FAU .04452
FDE -.2369 FRA -.4085 FC3-1.4406 BSP 1917
BDE .4462 BRA .3331 BC3 .5206 FSP -350
                                                                                                                                       EL1 494.8 EL2 109.9 ALF 126.43
                                                                                                                                                   ARRIVAL DATE SEP 24 1967
                                                                                  FLIGHT TIME 76.00
 LAUNCH DATE JUL 10 1967
                                                                                 DISTANCE 201.844
     RL 152.09 LAL -.00 LOL 287.08 VL 26.808 GAL -8.42 ATL 92.96 MCA 88.67 SMA 127.95 ECC .23721 INC 2.9596 V1 29.292 RP 108.52 LAP -2.96 LOP 15.75 VP 37.532 GAP -10.82 AZP 90.07 TAL 209.70 TAP 298.37 RCA 97.60 APO 158.31 V2 34.920 RC 54.330 GL -15.53 GP -9.07 ZAL 139.44 ZAP 18.54 ETS 27.65 ZAE 148.68 ETE 1.92 ZAC 88.32 ETC 13.92 CLP -16.24
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 25.750 VHL 5.074 DLA -1.49 RAL 142.16 RAD 6568.0 VEL 12.130 PTH 2.17 VMP 7.072 DPA -5.04 RAP 177.12 ECC 1.4238
     UNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 52 38 2229.64 -19.93 42.44 7.22 110.54 2 29 48 1629.6 -16.96 34.09
                                                                                                                        14 51 22
                                                                                                            71.73
                      13 28 36
                                      4965.93
                                                         22.02
                                                                         217.35
                                                                                            8.04
          90.00
                                                                                                                         3 46 7
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                                                                                                           111.73
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                                                         -21.04
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                                      1969.48
         100.00
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                     14 50 30
                                       4701.32
         100.00
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67.19 17 15 11
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                                                         -24.02
                                                                           5.61
                                     1760.82
4482.74
         110.00
                        4 19 56
                                                                                                                                            3882.7
                                                                                                                                                             22.86
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                                                                         179.59
                                                                                             6.33
                                                          26.18
         110.00
                     16 0 28
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 302.7 SR 405.5 SS 199.1
CRT -.9013 CRS -.9037 CST .6509
LSA 522.8 MSA 146.7 SSA 27.8
      TOE .2541 TRA -.2797 TC3 .5525 BAU .1903

ROE -.3563 RRA -.1503 RC3 -.0210 FAU .04912

FOE -.2441 FRA -.4906 FC3-1.6514 BSP 1962

BOE .4376 BRA .3175 BC3 .5529 FSP -403
                                                                            SGT 774.7 SGR 437.1 SG3 154.4
RRT - 2394 RRF .3081 RTF - 6702
SG8 829.3 R23 - 0623 R13 .6844
                                                                             SG1 716.6 SG2 417.4 THA 167.12 EL1 494.4 EL2 107.5 ALF 125.89
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BOE .4376 BRA .3175 BC3 .5529 FSP

ARRIVAL DATE SEP 26 1967

LAUNCH DATE JUL 10 1967

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DISTANCE 208.606
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 26.745 GAL -8.40 AZL 92.86 MCA 91.86 SMA 128.87 ECC .23048 INC 2.8633 VI 29.292
RP 108.48 LAP -2.86 LOP 18.94 VP 37.641 GAP -9.78 AZP 89.91 TAL 210.92 TAP 302.78 RCA 99.16 APO 158.57 V2 34.932
RC 56.016 GL -15.36 GP -9.74 ZAL 140.76 ZAP 21.42 ETS 25.15 ZAE 148.79 ETE ..09 ZAC 88.26 ETC 13.97 CLP -19.18
   PLANETOCENTRIC CONIC
                                                                                                  2.16 VHP 6.629 DPA -5.75 RAP 177.07 ECC 1.4098
    C3 24.901 VHL 4.990 DLA
                                        -.89 RAL 140.96 RAD 6568.0 VEL 12.095 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -17.23
                     1 43 26 2239.83
13 28 14 4939.20
                                                                                             110.30
                                                  -20.17
                                                                  43.09
                                                                                  5.61
                                                                                                           2 20 45
                                                                                                                           1639.8
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        90.00
                                                                                                71.05 14 50 33
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                                                                 215.61
                                                                                  6.09
        90.00
                    13 28 14
                                                                                              111.51 3 37 20
69.84 16 7 54
114.88 4 41 7
66.46 17 13 30
                                                                  23.44
                                                                                  5.16
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                                                                                                                                           -18.17
                                                                                                                                                           16.02
                                                  -21.28
       100.00
                     3 4 21
                                 1978.78
                                                                                                                             4075.5
                                                                 195.79
                                                                                                                                           19.60
                                                                                                                                                          188.23
                                                                                  5.66
      100.00
                  14 49 59
                                 4675.49
                                                  22.55
                                                                                                                             1168.1
                                                                                                                                           -20.67
                                                                                                                                                          358.74
                    4 11 39 1768.14
15 59 11 4458.89
                                                 -24.23
                                                                   6.08
                                                                                  3.78
      110.00
                                                                                                                                           22.13
                                                                                                                                                          170.53
                                                                                  4.35
                                                                                                                             3858.9
                   15 59 11
                                                  25.54
                                                                 178.03
      110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 709.8 SCR 442.9 SC3 174.6
RRT - 2708 RRF .3544 RTF - .6737
SCB 836.6 R23 - .0777 R13 .6926
                                                                                                                        ST 296.7 SR 406.8 SS 203.6

CRT -.9023 CRS -.8770 CST .6058

LSA 520.2 MSA 153.3 SSA 28.3
    TOE .2456 TRA -.2631 TC3 .5782 BAU .1930
    RDE -.3513 RRA -.1549 RC3 -.0437 FAU .05432
FDE -.2505 FRA -.5833 FC3-1.8885 BSP 1998
BDE .4286 BRA .3053 BC3 .5798 FSP -464
                                                                     SG1 725.1 SG2 417.4 THA 165.52
                                                                                                                         EL1 492.3 EL2 105.7 ALF 125.21
                                                                         FLIGHT TIME 80.00
                                                                                                                                    ARRIVAL DATE SEP 28 1967
LAUNCH DATE JUL 10 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 215.351
    RL 152.09 LAL -.00 LOL 287.08 VL 26.866 GAL -8.38 AZL 92.77 MCA 95.05 SMA 129.68 ECC .22462 INC 2.7666 V1 29.292
RP 108.45 LAP -2.76 LOP 22.13 VP 37.739 GAP -8.96 AZP 89.76 TAL 212.06 TAP 307.11 RCA 100.56 APO 158.81 V2 34.945
RC 57.772 GL -15.13 GP -10.48 ZAL 141.98 ZAP 24.50 ETS 23.15 ZAE 149.16 ETE 358.08 ZAC 88.36 ETC 14.00 CLP -22.27
   PLANETOCENTRIC CONIC
                                                                                                  2.16 VHP 6.216 OPA
                                                                                                                               -6.46 RAP 176.85 ECC 1.3979
                                         -.29 RAL 139.88 RAD 6568.0 VEL 12.065 PTH
    C3 24.176 VHL 4.917 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           36.36
                                                                              4.19
                                                                                              110.03
                                                                                                            2 12 9
                                                                                                                           1651.4
        90.00
                    1 34 36 2251.39
                                                  -20.44
                                                                 43.63
                                                                                                 70.40
                                                                                                          14 50 19
                                                                                                                             4313.1
                                                                                                                                                           206.41
        90.00
                   13 28 26
                                 4913.11
                                                   20.85
                                                                 213.92
                                                                                  4.34
                                                                                                            3 29 0
                                                                                                                             1389.4
                  2 55 50 1969.43
14 49 54 4650.30
4 3 47 1776.76
                                                                                  3.75
                                                                                               111.24
      100.00
                                                  -21.54
                                                                  24.12
                                                                                                 69.19 16 7 25
                                                  21.95
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                                                                                                                                            18.92
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      100.00
                                                                 194.16
                                                                                                           4 33 23
                                                                                               114.64
                                                                                                                             1176.8
                                                                                                                                                           359.26
                                                                   6.63
                                                                                  2.40
      110.00
                                                  -24.48
                                                                                                 65.79 17 12 23
                                                                                                                             3835.7
                                                                                                                                             21.42
                   15 5A 27
                                                                                  2.57
      110.00
                                 4435.73
                                                  24.90
                                                                 176.54
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 710.3 SGR 450.4 SG3 197.4
RRT -.3039 RRF .4059 RTF -.6730
                                                                                                                         ST 289.3 SR 407.4 SS 208.2
CRT -.9008 CRS -.8470 CST .5537
    TOE .2362 TRA - .2498 TC3 .5965 BAU .1941
    ROE -.3462 RRA -.1610 RC3 -.0708 FAU .06018
                                                                     SGB 841.1 R23 -.0968 R13 .6987
                                                                                                                         LSA 515.9 MSA 161.3 SSA
    FOE -.2554 FRA -.6865 FC3-2.1551 BSP 2018
BDE .4191 BRA .2972 BC3 .6007 FSP -553
                                                                                                                         EL1 488.5 EL2 104.7 ALF 124.41
                                                                     SG1 730.2 SGZ 417.4 THA 163.60
                                                                                                                                   ARRIVAL DATE SEP 30 1967
                                                                         FLIGHT TIME 82.00
LAUNCH DATE JUL 10 1967
                                                                        DISTANCE 222.075
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 26.973 GAL -8.36 AZL 92.67 MCA 98.24 SMA 130.41 ECC .21952 INC 2.6688 VI 29.292 RP 108.41 LAP -2.64 LOP 25.32 VP 37.826 GAP -8.19 AZP 89.62 TAL 213.12 TAP 311.35 RCA 101.79 APO 159.04 V2 34.957 RC 59.590 GL -14.84 GP -11.30 7AL 143.10 ZAP 27.78 ETS 21.50 ZAE 149.79 ETE 355.81 ZAC 88.65 ETC 14.01 CLP -25.55
   PLANETOCENTRIC CONIC
                                           .33 RAL 138.93 RAD 6568.0 VEL 12.039 PTH 2.15 VHP 5.832 OPA -7.17 RAP 176.43 ECC 1.3875
    C3 23.548 VHL 4.853 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                     1 26 17 2264.02
13 29 12 4887.59
                                                                                                                          1664.0
                                                                                                                                         -17.86
                                                                                                                                                           37.14
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                                                  -20.74
                                                                  44.64
                                                                                             109.73
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        90.00
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                                 2001.15
                                                   -21.83
                                                                  24.87
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                     2 47 46
                                                                                                                             4025.7
                                                                                                                                           18.25
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                  14 50 23
                                4625.70
                                                  21.35
                                                                 192.58
                                                                                  2.35
                                                                                                                                          -21.25
                                                                                                                                                          359.84
       110.00
                  3 56 22 1786.43
15 58 17 4413.18
                                                   -24.75
                                                                   7.24
                                                                                  1.20
                                                                                                                             1186.4
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                                                                 175.10
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       110.00
                                                  24.26
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ST 280.5 SR 407.1 SS 213.1
CRT -.8964 CRS -.8141 CST .4939
LSA 509.8 MSA 170.6 SSA 28.8
                                                                    SGT 705.2 SGR 460.3 SG3 222.9
RRT -.3374 RRF .4624 RTF -.6671
SGB 842.2 R23 -.1204 R13 .7029
SG1 731.1 SG2 418.0 THA 161.25
    TDE .2259 TRA -.2401 TC3 .6060 BAU .1935
    RDE -.3410 RRA -.1690 RC3 -.1028 FAU .06674
    FOE -.2586 FRA -.8009 FC3-2.4537 BSP 2026
                                                                                                                         EL1 483.1 EL2 104.8 ALF 123.48
    BDE .4091 BRA .2936 BC3 .6146 FSP
                                                     -611
                                                                                                                                    ARRIVAL DATE OCT 2 1967
LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 84.00
   HELIOCENTRIC CONIC
                                                                         DISTANCE 228.778
    RL 152.09 LAL -.00 LOL 287.08 VL 27.065 GAL -8.34 AZL 92.57 MCA 101.43 SMA 131.06 ECC .21511 INC 2.5694 V1 29.292 RP 108.37 LAP -2.52 LOP 28.52 VP 37.904 GAP -7.45 AZP 89.49 TAL 214.07 TAP 315.50 RCA 102.87 APO 159.25 V2 34.970 RC 61.464 GL -14.50 GP -12.21 ZAL 144.13 ZAP 31.28 ETS 20.09 ZAE 150.67 ETE 353.18 ZAC 89.15 ETC 13.98 CLP -29.03
   PLANETOCENTRIC CONIC
                                           .95 RAL 138.11 RAD 6567.9 VEL 12.016 PTH 2.14 VMP 5.477 DPA -7.89 RAP 175.79 ECC 1.3785
    C3 22.997 VHL 4.795 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 18 23 2277.53 -21.04 45.51 1.91 109.39 1 56 21 1677.5 -18.21 37.98 90.00 13 30 32 4862.53 19.66 210.68 1.42 69.20 14 51 35 4262.5 16.66 203.30
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                     2 40 11 2013.73
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                   14 51 26
                                 4601.57
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4 19 23
17 11 51
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       100.00
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173.70
                                1796.93
4391.12
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                     3 49 26
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       110.00
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                                                                                                64.54
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       110.00
                   15 58 40
                                                   23.62
                                                                               359.60
                                                                                                                             3791.1
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 271.9 SR 406.2 SS 219.1

CRT -.8894 CRS -.7804 CST .4296

LSA 503.3 MSA 181.0 SSA 28.8

EL1 477.2 ELZ 105.8 ALF 122.57
                                                                     SGT 695.5 SGR 474.1 SG3 251.7
RRT -.3715 RRF .5237 RTF -.6563
SGB 841.7 R23 -.1475 R13 .7070
     TOE .2160 TRA -.2335 TC3 .6073 BAU
                                                       .1917
    RDE -.3357 RRA -.1789 RC3 -.1407 FAU .07411
FDE -.2611 FRA -.9278 FC3-2.7898 BSP .2043
BDE .3992 BRA .2941 BC3 .6234 FSP -703
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FLIGHT TIME 78.00

SG1 729.7 SG2 419.5 THA 158.29

ARRIVAL DATE OCT 4 1967

EL1 434.4 EL2 130.9 ALF 117.20

LAUNCH DATE JUL 10 1967

16

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OISTANCE 235.458
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.145 GAL -8.32 ATL 92.47 MCA 104.62 SMA 131.62 ECC .21130 INC 2.4676 VI 29.292 RP 108.33 LAP -2.39 LOP 31.72 VP 37.973 GAP -6.74 AZP 89.38 TAL 214.92 TAP 319.55 RCA 103.81 APO 159.43 V2 34.983 RC 63.388 GL -14.11 GP -13.21 ZAL 145.07 ZAP 35.01 ETS 18.84 ZAE 151.78 ETE 350.07 ZAC 89.87 ETC 13.90 CLP -32.72
   PLANETOCENTRIC CONIC
                                      1.58 RAL 137.42 RAD 6567.9 VEL 11.995 PTH 2.14 VHP 5.151 DPA -8.60 RAP 174.93 ECC 1.3704
    C3 22.504 VHL 4.744 DLA
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                           1.03
                                                                                         109.04
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       90.00
                   1 10 59 2291.73
                                                -21.36
                                                                                            68.65 14 53 4
                                                                               .23
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       90.00
                   13 32 26
                               4837.80
                                                 19.06
                                                              209.12
                                                                                .61
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                                                                                           110.28
                                                                                                                                     -19.48
                   2 33 3
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      100.00
                                 2026.98
                                                -22.45
                                                                                            67.42 16 9 20
                                                              189.54
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      100,00
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                                 4577.78
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                                                                            359.76
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                                                                                                                        1208.1
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      110.00
                   3 42 59
                                1808.09
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      110.00
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                  15 59 36
                                 4369.43
                                                 22.98
                                                              172.34
                                                                            35A.39
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 677.1 SCR 492.2 SC3 283.0
RRT -.3959 RRF .5662 RTF -.6337
SCB 837.1 R23 -.1820 R13 .7084
SCI 721.8 SC2 424.0 THA 154.67
                                                                                                                   ST 261.1 SR 404.1 SS 224.3

CRT -.8753 CRS -.7432 CST .3484

LSA 493.7 MSA 192.8 SSA 28.8
    TOE .2041 TRA -.2334 TC3 .5946 BAU
                                                    .1873
    RDE -.3296 RRA -.1907 RC3 -.1846 FAU .08212
   FDE -.2583 FRA-1.0629 FC3-3.1591 BSP 2016
                                                                                                                   EL1 468.6 EL2 108.9 ALF 121.38
    BOE .3877 BRA .3014 BC3 .6226 FSP
                                                   -802
                                                                                                                              ARRIVAL DATE OCT 6 1967
                                                                      FLIGHT TIME 88.00
LAUNCH DATE JUL 10 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 242.112
   RL 152.09 LAL -.00 LOL 287.08 VL 27.213 GAL -8.30 AZL 92.36 MCA 107.82 SMA 132.10 ECC .20801 INC 2.3628 VI 29.292
RP 108.29 LAP -2.25 LOP 34.91 VP 36.034 GAP -6.05 AZP 89.28 TAL 215.66 TAP 323.48 RCA 104.63 APO 159.58 VZ 34.996
RC 65.357 GL -13.67 GP -14.31 ZAL 145.90 ZAP 36.97 ETS 17.68 ZAE 153.10 ETE 346.33 ZAC 90.82 ETC 13.77 CLP -36.64
  PLANETOCENTRIC CONIC
   C3 22.055 VHL 4.696 DLA
                                       2.22 RAL 136.86 RAD 6567.9 VEL 11.976 PTH
                                                                                               2.13 VHP 4.855 DPA
                                                                                                                          -9.31 RAP 173.82 ECC 1.3630
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                              47.39
                                                                                                                       1706.5
                    1 4 1 2306.52
                                                -21.69
                                                                               : 31
                                                                                          108.66
                                                                                                       1 42 28
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       90.00
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       90.00
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      100,00
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                                                               27.44
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      100.00
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                               4554.16
                                                19.50
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      110.00
                   3 37 0 1819.81
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                 16 1 5 4347.94
                                                 22.33
                                                              171.01
                                                                           357.34
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 651.4 SCR 515.8 SC3 316.9
RRT -.4071 RRF .6482 RTF -.5968
SC8 830.9 R23 -.2205 R13 .7102
SC1 709.4 SC2 432.7 THA 150.02
                                                                                                                   ST 249.8 SR 400.8 SS 229.0

CRT -.8532 CRS -.7031 CST .2502

LSA 482.1 MSA 205.7 SSA 28.7

EL1 458.3 EL2 114.0 ALF 120.04
    TOE .1913 TRA -.2393 TC3 .5679 BAU .1812
    ROE -.3227 RRA -.2044 RC3 -.2352 FAU .09076
   FOE -.2501 FRA-1.2053 FC3-3.5627 89P 1969
BOE .3751 BRA .3147 BC3 .6146 FSP -909
    BOE .3751 BRA .3147 BC3 .6146 FSP
                                                                                                                              ARRIVAL DATE OCT 8 1967
                                                                     FLIGHT TIME 90.00
LAUNCH DATE JUE-10 1967
                                                                     DISTANCE 248.741
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.270 GAL -8.28 A7L 92.25 MCA 111.02 SMA 132.52 ECC .20519 INC 2.2540 V1 29.292
RP 108.25 LAP -2.10 LOP 38.11 VP 38.087 GAP -5.40 A7P 89.19 TAL 216.28 TAP 327.30 RCA 105.32 APO 159.71 V2 35.009
RC 67.365 GL -13.19 GP -15.51 7AL 146.64 ZAP 43.17 ETS 16.56 7AE 154.58 ETE 341.73 7AC 92.03 ETC 13.55 CLP -40.80
   PLANETOCENTRIC CONIC
    C3 21.637 VHL 4.652 DLA 2.86 RAL 136.42 RAO 6567.9 VEL 11.959 PTH 2.13 VHP 4.589 DPA -10.01 RAP 172.46 ECC 1.3561
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         100.27 1 36 11
67.62 14 57 45
109.52 2 54 25
66.37 16 13 27
113.02 4 2 0
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       90.00
                    0 57 29 2321.89
                                                -22.02
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       90.00
                   13 37 56 4788.62
                                                17.81
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      100.00
                   2 20 9
                                2055.22
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                                                              186.60
      100.00
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                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 621.4 SCR 547.1 SC3 353.8
RRT -.4012 RRF .7085 RTF -.5429
SCB 827.9 R23 -.2547 R13 .7189
SCI 697.0 SC2 446.7 THA 143.83
                                                                                                                 ST 240.2 SR 396.8 SS 234.9
CRT -.8228 CRS -.6645 CST .1429
LSA 470.3 MSA 219.8 SSA 28.5
    TDE .1795 TRA -.2504 TC3 .5286 BAU .1749
    RDE -.3152 RRA -.2203 RC3 -.2939 FAU .10011
   FDE -.2392 FRA-1.3556 FC3-4.0057 BSP 1948
BDE .3627 BRA .3335 BC3 .6048 FSP -1031
                                                                                                                   EL1 447.8 EL2 121.0 ALF 118.77
                                                                                                                              ARRIVAL DATE OCT 10 1967
                                                                     FLIGHT TIME 92.00
LAUNCH DATE JUL 10 1967
                                                                     01STANCE 255.343
   RL 152.09 LAL -.00 LOL 287.08 VL 27.317 GAL -8.25 ATL 92.14 MCA 114.22 SMA 132.86 ECC .20276 INC 2.1403 VI 29.292
RP 108.20 LAP -1.95 LOP 41.31 VP 38.133 GAP -4.77 ATP 89.12 TAL 216.78 TAP 331.00 RCA 105.92 APO 159.79 V2 35.023
RC 69.409 GL -12.66 GP -16.81 TAL 147.29 TAP 47.61 ETS 15.43 TAE 156.14 ETE 336.02 TAC 93.47 ETC 13.23 CLP -45.22
   PLANETOCENTRIC CONIC
   C3 21.239 VHL 4.609 DLA 3.51 RAL 136.11 RAD 6567.9 VEL 11.942 PTH 2.13 VHP 4.353 DPA -10.71 RAP 170.83 ECC 1.3495
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH "LNCH TIME L-I TIME
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17 17 30
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                    3 26 20
                                1844.77
                                               -26,34
                                                               11.04
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                                                                                            62.38
                  16 5 45
                                 4304.79
                                                 21.00
                                                              168.36
                                                                            355.70
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 585.6 SGR 585.2 SG3 391.6
RRT -.3575 RRF .7527 RTF -.4552
SGB 827.9 R23 -.2719 R13 .7388
SGI 682.1 SG2 469.3 THA 135.05
                                                                                                                  ST 230.2 SR 391.0 SS 238.6
CRT -.7751 CRS -.6194 CST .0045
LSA 454.8 MSA 234.9 SSA 28.3
    TOE .1660 TRA - .2701 TC3 .4693 BAU
                                                    .1679
    RDE -. 3062 RRA -. 2376 RC3 -. 3599 FAU .10964
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FLIGHT TIME 86.00

FOE -.2171 FRA-1.5024 FC3-4.4692 BSP 1899 BDE .3483 BRA .3597 BC3 .5914 FSP -1153

JPL TM 33-99

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LAUNCH DATE JUL 10 1967
                                                                   FLIGHT TIME 94.00
                                                                                                                         ARRIVAL DATE OCT 12 1967
  HELIOCENTRIC CONIC
                                                                  DISTANCE 261.917
   RL 152.09 LAL -.00 LOL 287.08 VL 27.355 GAL -8.21 ATL 92.02 MCA 117.43 SMA 133.13 ECC .20068 INC 2.0207 V1 29.292 RP 104.16 LAP -1.79 LOP 44.52 VP 38.172 GAP -4.17 AZP 89.07 TAL 217.16 TAP 334.59 RCA 106.41 APO 159.85 V2 35.036 RC 71.485 GL -12.07 GP -18.21 ZAL 147.85 ZAP 52.27 ETS 14.24 ZAE 157.67 ETE 328.92 ZAC 95.16 ETC 12.80 CLP -49.90
   PLANETOCENTRIC CONIC
   C3 20.853 VHL 4.567 OLA 4.19 RAL 135.91 RAD 6567.8 VEL 11.926 PTM 2.12 VMP 4.148 OPA -11.41 RAP 168.94 ECC 1.3432
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                              -22.70
                                                            50.54
                                                                         359.03
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                                                                                                                  1754.5
                   0 45 31 2354.45
       90.00
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       90.00
                 13 45 52
                              4736.31
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                2 8 50 2085.75
15 5 15 4482.24
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      100.00
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112.21 3 % ...
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      110.00
                  3 21 35
                               1858.07
                                             -26.6A
                                                            11.92
                                                                                                                                 16.37
                                                           167.05
                                                                         355.09
                                                                                                                  3682.7
      110.00
                 16 8 59
                               4282.69
                                               20.29
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                              SCT 551.8 SCR 631.5 SC3 430.0

RRT -.2657 RRF .8101 RTF -.3237

SCB 838.6 R23 -.2312 R13 .7845

SCI 674.9 SC2 497.7 THA 121.51
                                                                                                               ST 222.8 SR 383.5 SS 242.4
CRT -.7090 CRS -.5715 CST -.1538
   TOE .1532 TRA -.2971 TC3 .3914 BAU .1630
   RDE -.2956 RRA -.2562 RC3 -.4342 FAU .11924
                                                                                                              LSA 437.6 MSA 251.3 SSA 28.2
   FDE -.1862 FRA-1.6428 FC3-4.9502 BSP 1885
BDE .3329 BRA .3923 BC3 .5846 FSP -1278
                                                                                                               EL1 419.6 EL2 143.6 ALF 115.59
LAUNCH DATE JUL 10 1967
                                                                   FLIGHT TIME 96.00
                                                                                                                         ARRIVAL DATE OCT 14 1967
                                                                  DISTANCE 268.463
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.385 GAL -8.17 AZL 91.89 MCA 120.63 SMA 133.35 ECC .19890 INC 1.8939 V1 29.292
RP 108.12 LAP -1.63 LOP 47.72 VP 38.205 GAP -3.59 AZP 89.03 TAL 217.43 TAP 338.06 RCA 106.82 APO 159.87 V2 35.049
RC 73.590 GL -11.42 GP -19.69 ZAL 148.33 ZAP 57.15 ETS 12.96 ZAE 158.99 ETE 320.15 ZAC 97.07 ETC 12.23 CLP -54.82
  PLANETOCENTRIC CONIC
   C3 20.473 VHL 4.525 DLA
                                     4.89 RAL 135.84 RAD 6567.8 VEL 11.910 PTH
                                                                                           2.12 WHP 3.974 DPA -12.09 RAP 166.82 ECC 1.3369
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        358.87
                                                                                       106.92
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      90.00
                  0 39 56 2371.95
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                                                            51.70
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      100.00
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                 15 9 53 4457.03
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61.39 17 23 52
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                 16 12 52 4259.88
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                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 529.2 SGR 686.5 SG3 468.1
RRT -.1157 RRF .8505 RTF -.1395
   TOE .1420 TRA -.3306 TC3 .2948 BAU ,1630
                                                                                                              ST 219.8 SR 374.5 SS 246.3
CRT -.6249 CRS -.5239 CST -.3190
   ROE -. 2836 RRA -. 2761 RC3 -. 5173 FAU .12864
                                                                                                              LSA 419.6 MSA 268.9 SSA 28.1
EL1 404.0 EL2 159.0 ALF 114.11
                                                              SGB 866.8 R23 -.0917 R13 .8466
   FOE -.1483 FRA-1.7735 FC3-5.4396 BSP 1948
BOE .3172 BRA .4307 BC3 .5954 FSP -1410
                                                               SG1 692.9 SG2 520.6 THA 101.86
                                                                                                                         ARRIVAL DATE OCT 16 1967
                                                                   FLIGHT TIME 98.00
LAUNCH DATE JUL 10 1967
  HELIOCENTRIC CONIC
                                                                  DISTANCE 274.982
   RL 152.09 LAL -.00 LOL 287.08 VL 27.406 GAL -8.12 AZL 91.76 MCA 123.84 SMA 133.50 ECC .1973A INC 1.7582 V1 29.292
RP 108.08 LAP -1.46 LOP 50.93 VP 38.233 GAP -3.03 AZP 89.02 TAL 217.58 TAP 341.42 RCA 107.15 APO 159.85 V2 35.062
RC 75.721 GL -10.70 GP -21.25 ZAL 148.71 ZAP 62.18 ETS 11.55 ZAE 159.90 ETE 309.69 ZAC 99.17 ETC 11.51 CLP -59.96
   PLANETOCENTRIC CONIC
                                    5.62 RAL 135.89 RAD 6567.8 VEL 11.894 PTH 2.11 VHP 3.833 DPA -12.78 RAP 164.48 ECC 1.3307
   C3 20.093 VHL 4.483 DLA
   LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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65.70 15 14 41
107.68 2 33 56
64.43 16 29 8
                   0 34 36 2390.55
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                15 15 18 4430.62
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16 17 27 4236.02
      110.00
                                              -27.41
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                                              18.77
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                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 530.5 SGR 747.4 SG3 502.6
RRT .0972 RRF .8828 RTF .0985
SG8 916.5 R23 .0712 R13 .8800
SG1 750.9 SG2 525.5 TMA 82.23
   TOE .1315 TRA -.3723 TC3 .1746 BAU .1697
                                                                                                               ST 221.1 SR 362.4 SS 248.4
   RDE -.2689 RRA -.2956 RC3 -.6073 FAU .13704
                                                                                                               CRT -.5182 CRS -.4648 CST -.4990
   FOE -.0942 FRA-1.8770 FC3-5.9044 8SP 2079
BOE .2993 BRA .4754 BC3 .6319 FSP -1525
                                                                                                              LSA 397.7 MSA 288.1 SSA 28.0
                                                                                                               EL1 385.5 EL2 177.7 ALF 112.60
LAUNCH DATE JUL 10 1967
                                                                   FLIGHT TIME 100.00
                                                                                                                         ARRIVAL DATE OCT 18 1967
  HELIOCENTRIC CONIC
                                                                  DISTANCE 281.473
   RL 152.09 LAL -.00 LOL 287.08 VL 27.420 GAL -8.06 AZL 91.61 MCA 127.05 SMA 133.61 ECC .19607 INC 1.6118 V1 29.292
RP 108.04 LAP -1.29 LOP 54.14 VP 38.255 GAP -2.50 AZP 89.03 TAL 217.62 TAP 344.67 RCA 107.41 APO 159.81 V2 35.075
RC 77.874 GL -9.91 GP -22.87 ZAL 149.02 ZAP 67.34 ETS 9.99 ZAE 160.18 ETE 297.90 ZAC 101.41 ETC 10.62 CLP -65.28
  PLANETOCENTRIC CONIC
   C3 19.709 VHL 4.439 DLA 6.40 RAL 136.06 RAD 6567.8 VEL 11.878 PTH 2.11 VHP 3.724 DPA -13.46 RAP 161.96 ECC 1.3244
   LNCH AZMTH LNCH TIME L-I TIME
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             2410.66
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      100.00
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      110.00
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                              1903.09
                                                                         357.48
                                                                                       110.74
                                                                                                   3 40 37
                                                                                                                   1303.1
                                                                                                                                -24.73
                                                                                                                                                7.12
                                              -27.60
                                                             14.94
                                                                                        60.40
      110.00
                 16 22 50
                              4210.73
                                               17.93
                                                           162.81
                                                                         354.02
                                                                                                  17 33 0
                                                                                                                   3610.7
                                                                                                                                 13.65
                                                                                                                                              156.07
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                             ST 229.2 SR 348.1 SS 251.3
CRT -.4042 CRS -.4051 CST -.6566
   TOE .1245 TRA -.4195 TC3 .0341 BAU .1859
                                                               SGT 568.8 SGR 815.1 SG3 533.5
                                                              RRT .3266 RRF .9086 RTF .3433
SGB 994.0 RZ3 .1563 R13 .8965
SG1 849.7 SG2 515.7 THA 69.19
   RDE -.2520 RRA -.3147 RC3 -.7048 FAU .14431
                                                                                                              LSA 375.0 MSA 309.0 SSA 28.0
   FOE -.0325 FRA-1.9542 FC3-6.3390 BSP 2332
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BOE .2811 BRA .5244 BC3 .7056 FSP -1636

EL1 366.0 EL2 199.4 ALF 111.61

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- - -
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FLIGHT TIME 102.00
                                                                                                                                    ARRIVAL DATE OCT 20 1967
LAUNCH DATE JUL 10 1967
  HELIOCENTRIC CÒNIC OISTANCE 287.936

RL 152.09 LAL -.00 LOL 287.08 VL 27.428 GAL -8.00 AZL 91.45 HCA 130.26 SMA 133.67 ECC .19497 INC 1.4523 V1 29.292

RP 108.00 LAP -1.11 LOP 57.35 VP 38.272 GAP -1.98 AZP 89.06 TAL 217.55 TAP 347.82 RCA 107.61 APO 159.73 V2 35.088

RC 80.046 GL -9.01 GP -24.54 ZAL 149.24 ZAP 72.54 ETS 8.24 ZAE 159.66 ETE 285.69 ZAC 103.73 ETC 9.58 CLP -70.75
                                                                         DISTANCE 287.936
   PLANETOCENTRIC CONIC
    C3 19.317 VHL 4.395 DLA 7.25 RAL 136.35 RAD 6567.8 VEL 11.862 PTH 2.10 VHP 3.647 DPA -14.17 RAP 159.33 ECC 1.3179 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
                                                                             359.20
                                                                                              105.18
                                                                                                                             1832.8
                                                                                                                                           -21.88
                                                                                                             1 4 30
                     0 23 57 2432.78
                                                   -24.20
                                                                  55.79
                                                                                                 64.75 15 27 59
                                                                                                                              4023.5
                                                                                355,94
                                  4623.55
                                                    13.26
                                                                 196.07
                   14 10 56
                                                                  35.33
                                                                                               106.49 2 24 45
63.46 16 41 40
110.14 3 36 58
59.89 17 38 50
                                                                                                                                            -22.79
                                                                                                                              1559.2
                                                                                358.85
                    1 48 46 2159.22
                                                   -25.29
                                                                                                                                             10.61
                                                                                                                             3772.3
       100.00
                   15 28 48
                                  4372.34
                                                    14.29
                                                                 177.09
                                                                                355.43
                                                                                                                             1320.8
                                                                                                                                            -25.22
                                                                                                                                                             8.26
                    3 4 57 1920.81
                                                   -26.22
                                                                  16.14
                                                                                357.77
                                                                 161.24
                                                                                                                             3563.5
                                                                                                                                             12.87
                                                    17.00
                                                                                353.91
       110.00
                   16 29 7
                                  4183.51
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 243.6 SR 329.6 SS 253.8
CRT -. 2860 CRS -. 3311 CST -. 7952
                                                                     SCT 650.7 SCR 884.8 SC3 556.8
RRT .5279 RRF .9285 RTF .5498
SCB 1098.3 R23 .1926 R13 .9110
SC1 977.9 SC2 500.0 THA 60.30
    TOE .1203 TRA -.4726 TC3 -.1301 BAU .2109
ROE -.2316 RRA -.3311 RC3 -.8064 FAU .14953
                                                                                                                         LSA 349.2 MSA 331.0 SSA 28.2
    FOE .0461 FRA-1.9875 FC3-6.7013 8SP 2677
                                                                                                                          ELI 343.0 ELZ 224.3 ALF 111.49
    BOE .2610 BRA .5770 BC3 .8168 FSP -1716
                                                                         FLIGHT TIME 104.00
                                                                                                                                     ARRIVAL DATE OCT 22 1967
LAUNCH DATE JUL 10 1967
                                                                         DISTANCE 294.372
  HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 27.429 GAL -7.93 AZL 91.28 MCA 133.48 SMA 133.68 ECC .19402 INC 1.2769 V1 29.292
RP 107.96 LAP -.93 LOP 60.56 VP 38.285 GAP -1.48 AZP 89.12 TAL 217.58 TAP 350.86 RCA 107.74 APO 159.61 VZ 35.101
RC 82.236 GL -8.00 GP -26.26 ZAL 149.37 ZAP 77.73 ETS 6.30 ZAE 158.30 ETE 274.14 ZAC 106.07 ETC 8.36 CLP -76.29
   PLANETOCENTRIC CONIC
                                         8.18 RAL 136.77 RAD 6567.8 VEL 11.845 PTH
    C5 18.919 VHL 4.350 DLA
                                                                                                    2.10 VHP 3.603 DPA -14.91 RAP 156.63 ECC 1.3114
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 18 23 2457.61 -24.63 57.48 359.59 104.44 0 59 20 1857.6 -22.40 49.52
                                                                                                                              3988.9
                                                                                                                                               8.68
                                                                                                                                                            187.16
                                  4588.86
                                                   12.24
                                                                 194,03
                                                                                355.99
                                                                                                 64.27
                                                                                                            15 36 20
                   14 19 51
                                                                                                105.76
                                                                                                             2 20 3
                                                                                                                              1582.5
                                                                                                                                             -23.32
                                                                                                                                                             28.95
                     1 43 40
                                  2182.50
                                                   -25.73
                                                                   36.92
                                                                                359.27
       100.00
                                                                                                 62.97 16 49 33
                                                                                355.47
                                                                                                                              3739.2
                                                                                                                                               9.54
                                                                                                                                                            168.35
                   15 37 14
                                                   13.27
                                                                  175.15
                                 4339.21
                                                                                                                              1340.7
                                                                                                                                             -25.76
                                                                                                                                                              9.55
                                                                                                             3 33 17
                                                   -28.68
                                                                   17.51
                                                                                358.21
                                                                                                109.45
       110.00
                     3 0 57
                                  1940.70
                                                                                                 59.37 17 45 41
                                                                                                                                                            152.93
                                                                                                                                              11.80
                  16 36 27 4153.77
                                                                  159.54
                                                                               353.93
                                                                                                                              3553.8
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 771.2 SGR 957.6 SG3 573.0
RRT .6713 RRF .9440 RTF .6928
SGB 1229.5 R23 .2045 R13 .9250
SG1 1130.1 SG2 484.3 THA 54.00
                                                                                                                          ST 265.1 SR 308.0 SS 258.4
CRT -.1804 CRS -.2593 CST -.8906
    TOE .1217 TRA -.5284 TC3 -.3138 BAU .2442
    RDE -. 2084 RRA -. 3450 RC3 -. 9129 FAU .15278
                                                                                                                         LSA 360.6 MSA 317.9 SSA 28.4
ELI 319.0 EL2 251.7 ALF 115.06
    FOE .1302 FRA-1.9825 FC3-6.9912 85P 3132
    BOE .2413 BRA .6311 BC3 .9654 FSP -1782
                                                                                                                                    ARRIVAL DATE OCT 24 1967
                                                                         FLIGHT TIME 106.00
LAUNCH DATE JUL 10 1967
                                                                        DISTANCE 300.781
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 27.425 GAL -7.85 AZL 91.08 MCA 136.70 SMA 133.65 ECC .19323 INC 1.0815 VI 29.292 RP 107.92 LAP -.74 LOP 63.78 VP 38.293 GAP -1.00 AZP 89.21 TAL 217.11 TAP 353.81 RCA 107.82 APO 159.47 V2 35.113 RC 84.440 GL -6.84 GP -28.02 ZAL 149.41 ZAP 82.80 ETS 4.15 ZAE 156.20 ETE 264.08 ZAC 108.35 ETC 6.99 CLP -81.84
   PLANETOCENTRIC CONIC
                                        9.22 RAL 137.32 RAD 6567.7 VEL 11.828 PTH 2.09 VHP 3.591 CPA -15.72 RAP 153.94 ECC 1.3047
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 18.512 VHL 4.303 DLA
                                                                                              1886.1 -22.98
                   0 12 22 2486.13
14 30 17 4550.14
                                                   -25.10
                                                                 59.44
                                                                                   .16
        90.00
                                                                                356.19
                                                                                                                              3950.1
                                                   11.09
                                                                 191.77
        90.00
                                                                                                                             1609.2
                                                                                                                                            -23.91
                                                                                                                                                            30.72
                                                                  38.76
                                                                                359.85
       100.00
                    1 38 13 2209.23
                                                   -26.21
                                                                                                62.46 16 58 49
108.63 3 29 27
58.84 17 53 46
                                                                                                                             3702.3
                                                                                                                                              8.33
       100.00
                   15 47 7
                                 4302.27
                                                   12.12
                                                                 173.02
                                                                                355.65
                                                                                                                             1363.5
                                                                                                                                             -26.37
                     2 56 44 1963.53
                                                   -29.19
                                                                  19.09
                                                                                358.84
       110.00
                                                                                                                             3520.7
                                                                                                                                              10.59
                 16 45 5 4120.74
                                                                 157.68
                                                                                354.09
                                                   14.82
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 923.3 SGR 1027.2 SG3 578.6
RRT .7662 RRF .9557 RTF .7845
SGB 1381.1 R23 .2091 R13 .9361
SG1 1299.0 SG2 469.1 THA 48.97
                                                                                                                         ST 293.2 SR 280.8 SS 266.0
CRT -.0851 CRS -.1772 CST -.9544
    TOE .1292 TRA -.5858 TC3 -.5176 BAU .2830
    ROE -.1803 RRA -.3536 RC3-1.0194 FAU .15321
                                                                                                                         LSA 391.6 MSA 285.2 SSA 28.9
ELI 300.5 EL2 273.0 ALF 148.49
    FOE .2306 FRA-1.9243 FC3-7.1650 BSP 3645
    BDE .2218 BRA .6843 BC3 1.1433 FSP -1804
                                                                                                                                    ARRIVAL DATE OCT 26 1967
LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 108.00
                                                                         01STANCE 307.164
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 27.416 GAL -7.76 A7L 90.86 MCA 139.91 SMA 133.58 ECC .19256 INC .8611 V1 29.292
RP 107.89 LAP -.55 LOP 67.00 VP 38.298 GAP -.54 A7P 89.34 TAL 216.75 TAP 356.67 RCA 107.86 APO 159.30 V2 35.125
RC 86.655 GL -5.51 GP -29.84 ZAL 149.35 ZAP 87.69 ETS 1.77 ZAE 153.52 ETE 255.78 ZAC 110.52 ETC 5.48 CLP -87.33
   PLANETOCENTRIC CONIC
    C3 18.101 VHL 4.255 DLA 10.41 RAL 138.03 RAD 6567.7 VEL 11.810 PTH 2.09 VMP 3.612 DPA -16.64 RAP 151.30 ECC 1.2979
                                                INJ LAT: INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    UNCH AZMTH LNCH TIME E-I TIME
90.00 0 5 36 2519.69
                                                                                              102.51
                                                                                                             0 47 35
                                                                                                                              1919.7
                                                                                                                                            -23.63
                                                   -25.61
                                                                  61.76
                                                                                   .93
                                                                                                            15 57 44
                                                                                                                                               6.09
                                                                                                                              3906.1
                   14 42 36
                                   4506.07
                                                     9.75
                                                                 189.23
                                                                                356.55
        90.00
                                                                                                 103.87 2 9 27
61.95 17 9 49
                                                                                                                                             -24.57
                                                                                                                              1640.7
                                                                   40.95
                                                                                   .63
                                                                                                103.87
                    1 32 7
                                  2240.67
                                                   -26.75
       100.00
                                                                                                                                               6.95
                   15 56 48
2 52 - 6
                                                    10.78
                                                                 170.62
                                                                                356.01
                                                                                                                              3660.3
                                   4260.33
       100.00
                                                                                                107.65 3 25 16
58.29 18 3 22
                                                                                                                                            -27.06
                                                   -29.76
                                                                                                                              1390.4
                                                                   20.98
                                                                                359.67
                                  1990.37
       110.00
                                                                                                                                               9.21
                                                                                                                              3483.4
                                                                 155.60
                                   4083.39
                                                   13.50
                                                                                354.41
                   16 55 19
       110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 328.6 SR 248.9 SS 279.3
CRT .0038 CRS -.1098 CST -.9847
LSA 429.9 MSA 249.5 SSA 29.5
                                                                    SCT 1096.6 SCR 1094.1 SC3 574.5
RRT .8265 RRF .9649 RTF .8412
SCB 1549.1 R25 .2106 R13 .9448
     TDE .1452 TRA -.6413 TC3 -.7371 BAU .5257
    ROE -.1477 RRA -.3574 RC3-1.1260 FAU .15105
FOE .3384 FRA-1.8212 FC3-7.2242 BSP 4211
BOE .2071 BRA .7342 BC3 1.3458 FSP -1796
                                                                    SG1 1480.4 SG2 456.2 THA 44.92
                                                                                                                       EL1 328.6 EL2 248.9 ALF
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ARRIVAL DATE OCT 28 1967

JPL TM 33-99

LAUNCH DATE JUL 10 1967

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DISTANCE 313.521
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.403 GAL -7.66 AZL 90.61 MCA 143.14 SMA 133.48 ECC .19201 INC '.6089 VI 29.292 RP 107.85 LAP -..37 LOP 70.22 VP 38.299 GAP -.09 AZP 89.51 TAL 216.31 TAP 359.44 RCA 107.85 APO 159.11 V2 35.137 RC 88.880 GL -3.94 GP -31.75 ZAL 149.18 ZAP 92.30 ETS 359.17 ZAE 150.42 ETE 249.16 ZAC 112.50 ETC 3.83 CLP -92.71
   PLANETOCENTRIC CONIC
                                                                                                  2.09 VMP 3.666 DPA -17.70 RAP 148.75 ECC 1.2912
    C3 17.691 VHL 4.206 DLA 11.79 RAL 138.89 RAD 6567.7 VEL 11.793 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1960.3
                                                                                                                                                            56.40
                                                                                 1.94
                                                                                              101.19 24 36 23
                                                                                                                                          -24.37
       90.00
                   23 53 43 2560.26
                                                  -26.18
                                                                 64.60
                                                                                                62.79 16 11 44
102.59 2 2 57
                                                                                                                              3854.8
                                                                                                                                              4.46
                                                                                                                                                           179.58
        90.00
                   14 57 29
                                 4454.82
                                                    8.17
                                                                 186.29
                                                                                357.13
                 1 24 59 2278.62
16 12 51 4211.70
                                                                                                                             1678.6
                                                                                                                                             -25.33
                                                                                                                                                            35.39
       100.00
                                                  -27.34
                                                                  43.61
                                                                                 1.67
                                                                                                                             3611.7
                                                                                               61.44 17 23 2
106.43 3 20 28
57.73 18 14 54
                                                                                356.57
                                                                                                                                                           161.23
       100.00
                                                    9.21
                                                                 167.86
                                                                                                                                              5.33
                 2 46 45 2022.73
17 7 33 4040.35
                                                                                                                             1422.7
                                                                                                                                            -27.85
      110.00
                                                  -30.40
                                                                  23.28
                                                                                   .76
                                                                                                                                                            15.01
                                                                                                                                               7.60
                                                                                                                                                           146.63
      110.00
                                                  11.95
                                                                 153.23
                                                                               354.94
                                                                                                                             3440.3
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                    SCT 1284.0 SCR 1160.7 SC3 562.1
RRT .6651 RRF .9722 RTF .8769
SCB 1750.9 R23 .2112 R13 .9517
SCI 1672.1 SC2 447.0 THA 41.67
                                                                                                                         ST 372.7 SR 214.6 SS 299.5
CRT .1040 CRS -.0911 CST -.9915
    TDE .1717 TRA -.6925 TC3 -.9696 BAU .3713
    ROE -.1112 RRA -.3563 RC3-1.2345 FAU .14670
                                                                                                                         LSA 477.7 MSA 213.3 SSA 30.3
EL1 373.7 EL2 212.9 ALF 5.08
    FDE .4445 FRA-1.6843 FC3-7.1790 8SP 4836
    BDE .2046 BRA .7788 BC3 1.5698 FSP -1771
LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 112.00
                                                                                                                                    ARRIVAL DATE OCT 30 1967
                                                                         DISTANCE 319.851
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.385 GAL -7.55 AZL 90.32 MCA 146.36 SMA 133.35 ECC .19157 INC .3158 V1 29.292
RP 107.82 LAP -.17 LOP 73.44 VP 38.297 GAP .34 AZP 89.74 TAL 215.78 TAP 2.13 RCA 107.80 APO 158.89 V2 35.149
RC 91.113 GL -2.06 GP -33.80 ZAL 148.86 ZAP 96.57 ETB 356.32 ZAE 147.02 ETE 244.00 ZAC 114.25 ETC 2.05 CLP -97.92
  PLANETOCENTRIC CONIC
    C3 17.291 VHL 4.158 DLA 13.43 RAL 139.95 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 3.755 DPA -18.97 RAP 146.31 ECC 1.2846
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                  23 43 57 2610.70
15 15 42 4393.78
                                                                                              99.51 24 27 27
                                                                                                                             2010.7
                                                                                                                                           -25.21
                                                  -26.80
                                                                 66.16
                                                                                 3.27
                                                                                                                                                            59.86
                                                     6.25
                                                                 182.83
                                                                                357.98
                                                                                                 62.33
                                                                                                           16 28 56
                                                                                                                              3793.8
                                                                                                                                               2.50
                                                                                                                                                            176.16
        90.00
                    1 16 15 2325.71
16 30 1 4154.00
                                                                                                            1 55 O
                                                  -27.99
                                                                                 3.02
                                                                                                100.94
                                                                                                                              1725.7
                                                                                                                                             -26.20
                                                                                                                                                            38.62
      100.00
                                                                  46.98
                   16 30 1
                                                    7.32
                                                                 164.62
                                                                                357.40
                                                                                                 60.94 17 39 15
                                                                                                                             3554.0
                                                                                                                                              3.39
                                                                                                                                                           158.04
      100.00
                   2 40 17 2062.77
17 22 29 3969.71
                                                                                                 104.87 3 14 39
57.17 18 28 58
                                                  -31.14
                                                                  26.16
                                                                                 2.20
                                                                                                104.87
                                                                                                                             1462.8
3389.7
                                                                                                                                            -28.79
                                                                                                                                                            17.75
       110.00
                                                   10.09
                                                                 150.48
                                                                                355.72
                                                                                                                                               5.69
                                                                                                                                                           144.15
  DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                         ST 429.0 SR 177.1 SS 331.0
CRT .2659 CRS -.1569 CST -.9864
    TOE .2118 TRA -.7363 TC3-1.2114 BAU .4172
                                                                     SGT 1479.2 SGR 1219.6 SG3 539.0
   RDE -.0670 RRA -.3469 RC3-1.3376 FAU .13958
FDE .5633 FRA-1.5028 FC3-6.9886 83P 5452
BDE .2222 BRA .8139 BC3 1.8046 FSP -1699
                                                                     RRT .8904 RRF .9779 RTF .8997
SGB 1917.2 R23 .2136 R13 .9564
SG1 1866.0 SG2 440.1 THA 38.85
                                                                                                                         LSA 541.8 MSA 174.5 SSA 31.5
                                                                                                                         EL1 432.0 EL2 169.5 ALF
                                                                         FLIGHT TIME 114.00
                                                                                                                                    ARRIVAL DATE NOV 1 1967
LAUNCH DATE JUL 10 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 326.157
   RL 152.09 LAL -.00 LOL 287.08 VL 27.363 GAL -7.44 AZL 89.97 MCA 149.58 SMA 133.19 ECC .19121 INC .0210 V1 29.292
RP 107.78 LAP .02 LOP 76.66 VP 38.291 GAP .76 AZP 90.03 TAL 215.17 TAP 4.75 RCA 107.72 APO 158.66 V2 35.160
RC 93.352 GL .21 GP -36.04 ZAL 148.33 ZAP 100.42 ETS 353.19 ZAE 143.41 ETE 240.03 ZAC 115.72 ETC .13 CLP-102.93
  PLANETOCENTRIC CONIC
    C3 16.920 VHL 4.113 OLA 15.41 RAL 141.24 RAD 6567.7 VEL 11.760 PTH 2.08 VHP 3.884 OPA -20.52 RAP 143.99 ECC 1.2785
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 72.80 5.00 97.27 24 15.52 178.62 359.21 61.93 16 50 40 51.31 4.80 98.76 1 44 45 160.71 358.60 60.49 17 59 39 29.91 4.08 102.80 3 7 15 147.21 356.85 56.62 18 46 32
                                                                                                                         2075.6 -26.15 64.37
3718.9 .08 171.98
       90.00
                   23 31 17 2675.61
                                                  -27.44
                                 4318.87
                                                    3.87
                                                                 178.62
        90.00
                   15 38 41
                    1 4 59
                                2366.09
                                                  -28.69
                                                                                                                             1786.1
                                                                                                                                            -27.19
                                                                                                                                                           42.83
      100.00
                                                                                                                             3483.6
                                                                                                                                                           154.17
      100,00
                  16 51 35
                                 4083.63
                                                    4.98
                                                                 160.71
                                                                                                                                              1.01
                   2 32 1
17 41 3
                                2113.80
      110.00
                                                  -31.97
                                                                                                                             1513.8
                                                                                                                                            -29.88
                                                                                                                                                            21.32
                                                                                                                             3328.7
                                                                                                                                             3,38
                                                    7.82
                                                                 147.21
                                                                                                                                                           140.94
      110.00
                                  3928.68
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 503.0 SR 149.7 SS 373.3
CRT .5417 CRS -.3937 CST -.9793
                                                                     SGT 1678.2 SGR 1278.3 SG3 508.8
    TOE .2690 TRA -.7698 TC3-1.4581 BAU .4636
   RDE -.0161 RRA -.3314 RC3-1.4404 FAU .1306A
FDE .6783 FRA-1.2999 FC3-6.6864 BSP 6102
BOE .2695 BRA .8381 BC3 2.0496 FSP -1613
                                                                    RRT .9069 RRF .9826 RTF .9149
SG8 2109.6 R23 .2163 R13 .9601
SG1 2063.6 SG2 437.9 THA 36.55
                                                                                                                        LSA 627.9 MSA 139.3 SSA 32.5
EL1 509.9 EL2 124.1 ALF 9.74
                                                                         FLIGHT TIME 116.00
                                                                                                                                    ARRIVAL DATE NOV 3 1967
LAUNCH DATE JUL 10 1967
                                                                         DISTANCE 332.439
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.338 GAL -7.31 AZL 89.55 MCA 152.80 SMA 133.01 ECC .19094 INC .4531 VI 29.292
RP 107.75 LAP .21 LOP 79.88 VP 38.283 GAP 1.17 AZP 90.40 TAL 214.49 TAP 7.29 RCA 107.61 APO 158.40 V2 35.170
RC 95.596 GL 3.02 GP -38.58 ZAL 147.53 ZAP 103.76 ETS 349.75 ZAE 139.59 ETE 237.04 ZAC 116.87 ETC 358.05 CLP-107.71
   RC 95.596 GL
  PLANETOCENTRIC CONIC
   C3 16.610 VHL 4.076 DLA 17.86 RAL 142.83 RAD 656T.7 VEL 11.747 PTH 2.07 VHP 4.058 DPA -22.43 RAP 141.75 ECC 1.2734
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM. INJ 2 LAT INJ 2 LONG
                   23 13 50 2762.74
16 8 51 4223.24
                                                                                                 94.16 23 59 53
                                                                                                                                                            70.55
       90.00
                                                  -28.03
                                                                  79.11
                                                                                  7.30
                                                                                                                             2162.7
                                                                                                                                             -27.16
                                                                                                 61.69 17 19 14
                                                                                                                                             -3.00
                 16 8 51
                                                     . 79
                                                                 175.28
                                                                                   1.03
                                                                                                                              3623.2
                                                                                                                                                           166.65
        90.00
                                                  -29.39
      100.00
                     0 49 37
                                 2466.54
                                                                  57.19
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                                                                                                 95.74
                                                                                                                              1866.5
                                                                                                                                             -28.28
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                                                                                                 60.17 18 26 15
                   17 19 40
                                 3994.67
                                                    1.98
                                                                                    .37
                                                                                                                              3394.7
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                                                                                                                                                           149.29
      100.00
                                                                 155.82
                   2 20 53 2181.00
18 4 54 3852.98
                                                                 34.94
143.21
                                                                                                 99.95 2 57 14
56.14 19 9 7
                                                                                                                                                            26.14
      110.00
                                                  -32.87
                                                                                   6.61
                                                                                                                             1581.0
                                                                                                                                            -31.15
                                                                                                                           3253.0
      110.00
                                                   4.97
                                                                                358.51
                                                                                                                                                          136.99
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
   TOE .3494 TRA -.7889 TC3-1.7025 BAU .5090 ROE .0460 RRA -.3061 RC3-1.5347 FAU .11971
                                                                    SGT 1877.4 SGR 1331.7 SG3 470.3
RRT .9178 RRF .9863 RTF .9250
SGB 2301.6 R23 .2202 R13 .9627
                                                                                                                         ST 604.4 SR 154.9 SS 431.1
CRT .8628 CRS -.7500 CST -.9748
    FOE .7995 FRA-1.0708 FC3-6.2395 BSP 6733
                                                                                                                         LSA 749.4 MSA 111.5 SSA 32.1
    BOE .3525 BRA .8462 BC3 2.2921 FSP -1494
                                                                     5G1 2259.4 SG2 439.5 THA 34.56
                                                                                                                         EL1 619.2 EL2 76.4 ALF 12.67
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FLIGHT TIME 110.00

ARRIVAL DATE NOV 5 1967

LAUNCH DATE JUL 17 1967

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DISTANCE 338.696
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.310 GAL -7.18 AZL 89.02 MCA 156.03 SMA 132.80 ECC .19075 INC .9789 VI 29.292
RP 107.72 LAP .40 LOP 83.11 VP 38.272 GAP 1.56 AZP 90.89 TAL 213.74 TAP 9.77 RCA 107.47 APO 158.13 V2 35.180
RC 97.843 GL 6.96 GP -41.54 ZAL 146.29 ZAP 106.50 ETS 345.95 ZAE 135.54 ETE 234.83 ZAC 117.69 ETC 355.76 CLP-112.30
  PLANETOCENTRIC CONIC
                                                                                                           2.07 VMP 4.291 CPA -24.80 RAP 139.52 ECC 1.2702
    C3 16.421 VHL 4.052 DLA 20.96 RAL 144.84 RAD 6567.7 VEL 11.739 PTH
    LNCH A7MTM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 47 35 2687.44 -28.51 88.22 10.35 89.61 23 35 42 2287.4 -28.07 79.56 90.00 16 51 5 4093.29 -3.40 166.02 3.82 61.87 17 59 18 3493.3 -7.14 159.34
                  22 47 35 2887.44
16 51 5 4093.29
                                                                                        10.33
                                                                                                         91.35
                                                                                                                      1 9 54
                                                                                                                                        1979.8
                                                                                                                                                         -29.36
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                      0 26 54 2579.84
17 58 22 3876.13
                                                                        65.57
                                                      -29.86
      100,00
                                                                                                         60.17 19 2 58
95.85 2 42 46
55.84 19 39 28
                                                                                                                                        3276.1
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      100.00
                    17 58 22
                                                       -2.04
                                                                      149.31
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                                                                        42.00
                                                                                       10,04
                      2 4 53 2273.29
18 36 52 3755.44
                                                     -33.74
      110.00
                                                                                                                                        3155.4
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                                                                                                                                                                         131.90
                                                                                         1.01
                    18 36 52
                                                        1.25
                                                                      136.11
      110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          SGY 2076.2 SGR 1385.4 SG3 425.9

RRT .9244 RRF .9894 RTF .9321

SG8 2496.0 R23 .2238 R13 .9648

SG1 2455.7 SG2 446.6 THA 32.89
                                                                                                                                    ST 746.5 SR 214.9 S5 502.9
CRT .9855 CRS -.9409 CST -.9758
   TOE .4618 TRA -.7894 TC3-1.9335 BAU .5536
RDE .1213 RRA -.2715 RC3-1.6186 FAU .10733
                                                                                                                                    LSA 919.7 MSA 98.4 SSA 27.5
EL1 776.0 EL2 35.1 ALF 15.87
   FOE .9160 FRA -.8327 FC3-5.6586 BSP 7387
BDE .4775 BRA .8348 BC3 2.5216 FSP -1362
                                                                                                                                                ARRIVAL DATE NOV 7 1967
                                                                               FLIGHT TIME 120.00
                                                                               DISTANCE 344.929
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.278 GAL -7.03 AZL 88.34 MCA 159.25 SMA 132.57 ECC .19064 INC 1.6575 V1 29.292 RP 107.69 LAP .59 LOP 86.34 VP 38.259 GAP 1.94 AZP 91.55 TAL 212.92 TAP 12.18 RCA 107.30 APO 157.85 V2 35.190 RC 100.092 GL 11.13 GP -45.06 ZAL 144.37 ZAP 108.51 ETS 341.70 ZAE 131.16 ETE 233.25 ZAC 118.13 ETC 353.19 CLP-116.71
  PLANETOCENTRIC CONIC
   C3 16.471 VHL 4.056 DLA 24.96 RAL 147.43 RAD 6567.7 VEL 11.741 PTH 2.07 VMP 4.608 DPA -27.75 RAP 137.18 ECC 1.2711
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       82.24 22 51 55
63.30 19 3 51
84.48 24 30 19
61.08 19 59 22
89.66 2 19 47
56.01 20 23 12
                                                                                                                                                                          94.49
                                                                                                                                                       -28.11
                                                                                      14.21
                                                                                                                                        2491.9
                                                                      103.07
                   22 0 22 3091.86
                                                      -27.32
        90.00
                                                                                                                                                         -13.30
                                                                                                                                                                          147.60
                   17 59 1 3890.26
23 44 22 2756.52
                                                                                                                                         3290.3
                                                       -9.79
                                                                      154.53
                                                                                         8.51
                                                                                                                                                         -29.88
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                                                                                                                                         2156.5
                                                                        78.67
                                                                                        14.49
                                                       -29.43
      100.00
                                                                                                                                         3100.6
                                                                                                                                                         -11.71
                                                                                                                                                                          132.88
                   18 57 41 3700.83
1 39 39 2408.15
19 22 50 3621.96
                                                                      139.61
                                                                                          7.51
                                                       -7.91
      100.00
                                                                                                                                         1808.2
                                                                                                                                                         -33.85
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                                                                                        14.78
                                                                        52.50
                                                       -34.16
      110.00
                                                                                          5.01
                                                                                                                                        3022.0
                                                                                                                                                          -8.29
                                                                                                                                                                          124.86
                                                        -3.85
                                                                      131.14
      110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                           SGT 2278.2 SGR 1432.7 SG3 374.4
RRT .9278 RRF .9917 RTF .9370
SGB 2686.1 R23 .2276 R13 .9663
SG1 2646.6 SG2 459.0 THA 31.38
                                                                                                                                    ST 951.0 SR 327.6 SS 593.2
CRT .9957 CRS -.9894 CST -.9797
    TDE .6234 TRA -.7629 TC3-2.1256 BAU .5953
RDE .2183 RRA -.2212 RC3-1.6707 FAU .09325
                                                                                                                                    LSA 1163.2 MSA 101.3 SSA 19.3
    FDE 1.0341 FRA -.5824 FC3-4.9014 BSP 7994
BOE .6606 BRA .7943 BC3 2.7036 FSP -1200
                                                                                                                                    EL1 1005.4 EL2 28.7 ALF 18.95
                                                                                                                                                ARRIVAL DATE NOV 9 1967
                                                                               FLIGHT TIME 122.00
LAUNCH DATE JUL 10 1967
                                                                               DISTANCE 351.137
   HELTOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.245 GAL -6.88 AZL 87.43 MCA 162.48 SHA 132.33 ECC .19059 INC 2.5741 VI 29.292 RP 107.66 LAP .78 LOP 89.57 VP 38.243 GAP 2.31 AZP 92.45 TAL 212.05 TAP 14.52 RCA 107.11 APO 157.55 V2 35.199 RC 102.344 GL 17.13 GP -49.35 ZAL 141.36 ZAP 109.65 ETS 336.93 ZAE 126.30 ETE 232.10 ZAC 118.16 ETC 350.23 CLP-121.07
   PLANETOCENTRIC CONIC
    C3 17.013 VML 4.125 DLA 30.19 RAL 150.97 RAD 6567,7 VEL 11.764 PTH 2.08 VMP 5.055 DPA -31.45 RAP 134.52 ECC 1.2800
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.05 18 45 22 3783.39 -21.84 152.31 17.46 68.61 19 48 25 3183.4 -24.55 144.54
                                                                                                     68.61 19 48 25
68.60 22 35 44
68.61 19 48 25
68.60 22 35 44
79.49 1 35 1
57.66 21 36 22
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                                                                       110.36
                                                                                        17.46
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                                                      -21.82
       100.95
                    21 42 10
                                     3213.61
                                                                       152.31
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                                                      -21.84
                      18 45 22
                                     3783.39
        79.05
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       100.95
                    21 42 10 3213.61
                                                      -21.82
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       110.00
                      0 51 8 2633.68
                                                      - 32 . 72
                                                                                                                                        2811.3
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                                                                                        12.13
                                                                       119.91
                   20 39 31
                                     3411.32
                                                      -11.73
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 2472.0 SCR 1475.3 SC3 317.8
RRT .9282 RRF .9933 RTF .9410
SCB 2878.8 R23 .2297 R13 .9677
SCI 2838.9 SC2 477.9 THA 29.92
                                                                                                                                    ST 1242.5 SR #483.3 SS 695.1
CRT .9917 CRS -.9985 CST -.9850
    TOE .8600 TRA -.6998 TC3-2.2414 BAU .6353
           .3426 RRA -.1519 RC3-1.6668 FAU .07807
                                                                                                                                    LSA 1499.3 MSA 111.9 SSA 12.1
    FOE 1.1376 FRA -.3373 FC3-3.9729 BSP 8649
BDE .9257 BRA .7161 BC3 2.7932 FSP -1030
                                                                                                                                    ELI 1332.0 ELZ 58.0 ALF 21.13
                                                                                                                                                 ARRIVAL DATE NOV 11 1967
                                                                                FLIGHT TIME 124.00
LAUNCH DATE JUL 10 1967
                                                                               DISTANCE 357.318
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 27.209 GAL -6.71 AZL 86.11 MCA 165.69 SMA 132.07 ECC .19061 INC 3.8884 V1 29.292
RP 107.63 LAP .96 LOP 92.80 VP 38.225 GAP 2.67 AZP 93.77 TAL 211.11 TAP 16.81 RCA 106.90 APO 157.25 V2 35.208
RC 104.596 GL 25.10 GP -54.68 ZAL 136.63 ZAP 109.67 ETS 331.48 ZAE 120.72 ETE 231.10 ZAC 117.72 ETC 346.63 CLP-125.62
   PLANETOCENTRIC CONIC
                                                                                                            2.10 WHP 5.723 DPA -36.06 RAP 131.16 ECC 1.3070
    C3 18.656 VHL 4.319 DLA 37.06 RAL 156.11 RAD 6567.8 VEL 11.834 PTH
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.03 17 36 59 4079.02 -25.80 177.09 26.33 62.42 18 44 58 3479.0 -29.27 169.38
        65.03 17 36 59
                                                                                                                                                                           85.14
                                                                                                           62.41 24 20 58
                                                                                                                                         2360.9
                                                                                                                                                         -29.26
                                                                                         26.32
                                                       -24.78
                                                                         92.65
       114.97
                    23 31 37
                                     2960.67
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62.41 24 20 58
62.42 18 44 58
62.41 24 20 58
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                                                                       177.09
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                    17 36 59
                                     4079.02
                                                      -25.80
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                                                                                         26.32
                      23 31 37
                                     2960.87
                                                      -25.78
                                                                         92.85
        114.97
                                                                                                                                         3479.0
                                                                                                                                                         -29.27
                                                                                                                                                                          169.38
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                    17 36 59
                                                       -25.80
                                                                       177.09
                                     4079.0Z
         65.03
                                                                                         26.32
                                                                                                                                        2360.9
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                                                                                                                                                                           85.14
                                                                         92.85
        114.97
                    23 3: 37
                                     2960.87
                                                       -25.78
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 2677.5 SGR 1492.6 SG3 255.5
RRT .9247 RRF .9937 RTF .9446
SGB 3065.5 R23 .2308 R13 .9688
SGI 3023.9 SG2 503.1 THA 28.12
                                                                                                                                    ST 1659.7 SR 675.9 SS 804.2
CRT .9902 CRS -.9999 CST -.9897
     TOE 1.2317 TRA -.5739 TC3-2.1933 BAU .6682
     RDE .5083 RRA -.0476 RC3-1.5388 FAU .06153
                                                                                                                                  LSA 1960.1 M5A 126.1 SSA 7.3
EL1 1789.9 EL2 87.6 ALF 22.02
    FOE 1.2242 FRA -. 0969 FC3-2.8555 BSP 9237
BDE 1.3325 BRA .5759 BC3 2.6792 FSP -834
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 13 1967

ELI 2080.7 EL2 241.7 ALF 78,47

LAUNCH DATE JUL 10 1967

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HELIOCENTRIC CONIC
                                                                        DISTANCE 363.467
    RL 152.09 LAL -.00 LOL 287.08 VL 27.170 GAL -6.54 AZL 84.05 MCA 168.90 SMA 131.80 ECC .19068 INC 5.9456 V1 29.292
RP 107.61 LAP 1.14 LOP 96.04 VP 38.206 GAP 3.01 AZP 95.84 TAL 210.12 TAP 19.02 RCA 106.67 APO 156.93 V2 35.216
RC 106.849 GL 35.57 GP -61.39 ZAL 129.42 ZAP 108.33 ETS 324.96 ZAE 114.04 ETE 229.59 ZAC 116.77 ETC 341.86 CLP-131.04
   PLANETOCENTRIC CONIC
    C3 23.105 VHL 4.807 DLA 45.71 RAL 164.35 RAD 6567.9 VEL 12.020 PTH 2.15 VHP .6.823 DPA -41.74 RAP 126.34 ECC 1.3802
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 52.49 17 14 43 4283.33 -29.06 197.01 41.53 53.03 18 26 6 3683.3 -33.66 189.75
                                                                                                                            2259.0
                                                                                                                                                            79.16
                                                                 86.41
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                                 2859.02
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                                  4283.33
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53.03 18 26 6
       127.51
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                                                                  86.41
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1 3 31 2859.02
        52.49
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                                                                 86.41
                                                                                 41.52
      127.51
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 2907.3 SCR 1449.4 SC3 190.6
RRT .9131 RRF .9911 RTF .9492
SCB 3248.6 R23 .2293 R13 .9703
SCI 3204.0 SC2 536.3 TMA 25.23
                                                                                                                         ST 2217.3 SR 843.7 SS 887.7
CRT .9894 CRS -.9996 CST -.9930
    TDE 1.8540 TRA -.3547 TC3-1.8729 BAU .6891
    RDE .7055 RRA .1114 RC3-1.2118 FAU .04442
    FOE 1.2617 FRA .1208 FC3-1.6644 BSP 9853
BOE 1.9837 BRA .3528 BC3 2.2308 FSP -634
                                                                                                                        LSA 2529.0 MSA 141.9 SSA
                                                                                                                                                               4.3
                                                                                                                         EL1 2369.6 EL2 114.9 ALF 20.68
                                                                                                                                    ARRIVAL DATE NOV 15 1967
LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 128.00
                                                                        DISTANCE 369.570
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 27.130 GAL -6.35 A7L 80.36 MCA 172.09 SMA 131.52 ECC .19078 INC 9.6408 V1 29.292
RP 107.59 LAP 1.32 LOP 99.28 VP 38.184 GAP 3.34 AZP 99.55 TAL 209.06 TAP 21.14 RCA 106.43 APO 156.61 V2 35.223
RC 109.101 GL 48.39 GP -69.87 ZAL 119.32 ZAP 105.30 ETS 315.62 ZAE 105.61 ETE 225.40 ZAC 115.32 ETC 333.88 CLP-140.10
  PLANETOCENTRIC CONIC
    C3 36.478 VHL 6.040 OLA 55.07 RAL 178.89 RAD 6568.4 VEL 12.564 PTH
                                                                                                   2.28 VHP 8.910 DPA -48.48 RAP 118.28 ECC 1.6003
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 40.58 17 34 23 4487.68 -28.03 216.76 67.07 40.45 18 49 11 3887.7 -33.98 210.93
                                                                                                             3 27 53
                                                                                                                             2282.5
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                                 2882.51
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                  17 34 23 4487.68
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        40.58
                                 2882.51
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                   17 34 23 4487.68
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        40.58
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                                  2882.51
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                    2 39 51
      139.42
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SCT 3189.3 SCR 1223.7 SC3 128.4
RRT .8648 RRF .9669 RTF .9580
SC8 3416.0 R23 .2224 R13 .9729
SC1 3366.0 SC2 582.2 THA 18.95
                                                                                                                         ST 2823.9 SR 750.1 SS 892.6
CRT .9783 CRS -.9945 CST -.9946
    TOE 2.9749 TRA .1847 TC3-1.2036 BAU .6666
    ROE .7676 RRA .3595 RC3 -.6480 FAU .02729
FDE 1.2106 FRA .3172 FC3 -.6477 B3P 10289
BDE 3.0723 BRA .4041 BC3 1.3670 FSP -429
                                                                                                                        LSA 3050.5 MSA 169.0 SSA
                                                                                                                         EL1 2918.0 EL2 150.3 ALF 14.61
                                                                                                                                   ARRIVAL DATE NOV 17 1967
                                                                         FLIGHT TIME 130.00
LAUNCH DATE JUL 10 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 375.576
    RL 152.09 LAL -.00 LOL 287.08 VL 27.089 GAL -6.13 AZL 71.83 MCA 175.20 SMA 131.22 ECC .19081 INC18.1651 V1 29.292 RP 107.57 LAP 1.50 LOP 102.51 VP 38.161 GAP 3.64 AZP 108.11 TAL 207.90 TAP 23.09 RCA 106.18 APO 156.26 V2 35.230 RC 111.351 GL 60.91 GP -79.47 TAL 107.26 ZAP 100.46 ETS 289.71 TAE 93.78 ETE 204.11 ZAC 113.82 ETC 308.26 CLP-173.53
   PLANETOCENTRIC CONIC
    C3 92.333 VML 9.609 DLA 60.41 RAL 202.78 RAD 6569.8 VEL 14.618 PTH 2.65 VMP 13.978 DPA -55.18 RAP 101.72 ECC 2.5196 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             102.77
                                                 -17.04
                                                                                             31.10 20 11 40
                                                                                                                          4146.0 -23.83 227.70
                 18 52 34 4746.00
                                                                 231.79
       34.12
                   4 32 17 3073.34
18 52 34 4746.00
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                                                  -17.03
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       145.68
                                                                 231.79
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                                                 -17.04
        34.12
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                             2473.3
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                                                  -17.03
                                                                  94.42
       145.88
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 3474.5 SGR 661.6 SG3 79.2
RRT -.3483 RRF -.1846 RTF .9850
                                                                                                                         ST 2798.3 SR 572.6 SS 778.4
CRT -.9253 CRS .8878 CST -.9960
    TOE 4.5811 TRA 1.6762 TC3 -.3728 BAU .4669
    RDE -.9465 RRA .2672 RC3 -.0639 FAU .01106
FDE 1.0300 FRA .5394 FC3 -.1037 BSP 10736
                                                                                                                       LSA 2951.8 M5A 227.0 SSA 1.1
EL1 2848.4 EL2 213.3 ALF 169.22
                                                                     SGB 3536.9 R23 -.1811 R13 -.9829
    BDE 4.6779 BRA 1.6974 BC3 .3782 FSP - -263
                                                                     SG1 3482.3 SG2 618.8 THA 176.08
                                                                                                                                    ARRIVAL DATE NOV 19 1967
                                                                         FLIGHT TIME 132.00
LAUNCH DATE JUL 10 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 361.104
    RL 152.09 LAL -.00 LOL 287.08 VL 27.046 GAL -5.81 A7L 38.49 MCA 177.87 SMA 130.92 ECC .19011 INC51.5120 V1 29.292
RP 107.55 LAP 1.67 LOP 105.75 VP 38.136 GAP 3.81 A7P 141.49 TAL 206.38 TAP 24.25 RCA 106.03 APO 155.81 V2 35.236
RC 113.598 GL 58.64 GP -66.64 ZAL 96.28 ZAP 94.48 ETS 196.67 ZAE 69.30 ETE 114.96 ZAC 115.34 ETC 210.45 CLP 101.36
   PLANETOCENTRIC CONIC
    C3 608.272 VHL 24.665 OLA 49.96 RAL 216.30 RAO 6572.6 VEL 27.010 PTM 33.39 VMP 33.725 DPA -51.25 RAP 61.41 ECC11.0106
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              125.34
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   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 565.6 SGR 3315.6 SG3 53.2
RRT .2335 RRF - 2040 BYF 1177
                                                                                                                      ST 478.5 SR 2039.3 SS 994.9
CRT .8570 CRS .9971 CST .8150
LSA 2304.6 MSA 257.9 SSA 1.0
    TDE-2.0349 TRA .6812 TC3 -.0384 BAU 1.5594
    RDE-8.1297 RRA-7.0970 RC3 -.1879 FAU-.02373
                                                                            .2335 RRF -.9959 RTF -.1459
    FOE 1.3147 FRA 1.4084 FC3 .0338 BSP 9950
BDE 8.3805 BRA 7.1296 BC3 .1918 FSP -167
                                                                     5GB 3363.7 R23 -.0959 R13 -.9952
                                                                     SG1 3318.5 SG2 549.5 THA 87.65
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FLIGHT TIME- 126.00

ARRIVAL DATE NOV 21 1967

LAUNCH DATE JUL 10 1967

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DISTANCE 388.822
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 287.08 VL 27.001 GAL -5.92 AZL 133.70 MCA 182.65 SMA 130.61 ECC .19342 INC43.6966 VI 29.292
RP 107.53 LAP 1.83 LOP 109.00 VP 38.109 GAP 4.58 AZP 46.33 TAL 206.32 TAP 28.97 RCA 105.35 APO 155.87 VZ 35.241
RC 115.842 GL -61.09 GP 73.82 ZAL 97.44 ZAP 96.96 ETS 164.42 ZAE 75.14 ETE 244.99 ZAC 88.23 ETC 138.42 CLP 115.78
     PLANETOCENTRIC CONIC
       C3 449.302 VHL 21.197 DLA -53.93 RAL 145.17 RAD 6572.2 VEL 23.887 PTH 3.31 VMP 25.850 DPA 70.82 RAP 320.28 ECC 8.3944
       ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                    2.53
                                                                  64.87
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                                    714.38
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                                    714.38
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                     SGT 621.4 SGR 3531.8 SG3 60.4
                                                                                                                       ST 195.5 SR 3005.1 SS 1392.8
       TOE .2890 TRA 1.3007 TC3 -.0362 BAU 1.0559
                                                                    RRT -.6429 RRF .9959 RTF -.5746
SCB 3586.1 R23 -.1010 R13 .9945
SCI 3554.7 SCZ 472.9 THA 96.57
                                                                                                                       CRT -.5570 CRS -.9995 CST .5309
      RO-10.9383 RRA-3.8968 RC3 .1720 FAU-.01425
FDE-2.2817 FRA -.6694 FC3 .0275 BSP 10406
BDE10.9421 BRA 4.1082 BC3 .1758 FSP -180
                                                                                                                      LSA 3313.7 MSA 167.6 SSA 1.3
                                                                                                                       ELI 3007.0 ELZ 162.2 ALF 92.08
                                                                                                                                  ARRIVAL DATE NOV 23 1967
                                                                         FLIGHT TIME 136.00
   LAUNCH DATE JUL 10 1967
                                                                         DISTANCE 394.528
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 287.08 VL 26.956 GAL -5.63 A7L 111.12 MCA 185.53 SMA 130.30 ECC .19323 [NC21.1170 V1 29.292 RP 107.52 LAP 1.99 LOP 112.24 VP 38.082 GAP 4.79 A7P 68.97 TAL 204.88 TAP 30.41 RCA 105.12 APO 155.47 V2 35.246 RC 118.080 GL -62.65 GP 74.27 7AL 103.84 ZAP 105.28 ETS 85.50 ZAE 94.65 ETE 168.12 ZAC 87.90 ETC 60.57 CLP-166.40
     PLANETOCENTRIC CONIC
                                                                                                  2.76 VHP 12.364 DPA .77.10 RAP 242.47 ECC 2.9486
      C3 118.400 VHL 10.881 DLA -50.33 RAL 134.22 RAD 6570.2 VEL 15.483 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           3 30 26
                                                                               33.75
                                                                                             139.20
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                                                                                                                                                        48.69
         46.48
                      2 55 44 20A1.24
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         133.52
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2762.7 SR 397.8 SS 985.5
CRT .8453 CRS -.8102 CST -.9980
                                                                    SGT 3695.2 SGR 1023.6 SG3 98.0
RRT .8492 RRF .7697 RTF .9902
SGB 3834.4 R23 -.1677 R13 .9852
       TOE-5.0463 TRA-3.0563 TC3 -.2249 BAU .3568
      ROE -.5037 RRA-1.1979 RC3 -.0156 FAU .01330
                                                                                                                      LSA 2951.8 MSA 221.2 SSA
                                                                                                                                                             1.3
      FOE-1.7117 FRA -.7942 FC3 -.0973 85P 11790
                                                                     SG1 3798.1 SG2 525.9 THA 13.50
                                                                                                                      EL1 2783.2 EL2 210.9 ALF 6.98
       BOF 5.0713 BRA 3.2826 BC3 .2254 FSP -310
                                                                                                                                 ARRIVAL DATE NOV 25 1967
                                                                         FLIGHT TIME 138.00
LAUNCH DATE JUL 10 1967
                                                                        DISTANCE 400.493
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 287.08 VL 26.910 GAL -5.38 AZL 104.35 MCA 188.67 SMA 129.98 ECC .19363 INC14.3527 V1 29.292 RC 107.50 LAP 2.14 LOP 115.48 VP 38.052 GAP 5.08 AZP 75.80 TAL 203.59 TAP 32.26 RCA 104.81 APO 155.15 V2 35.250 RC 120.312 GL -57.94 GP 62.74 ZAL 108.47 ZAP 113.67 ETS 61.41 ZAE 105.49 ETE 147.76 ZAC 90.62 ETC 37.00 CLP-151.22
     PLANETOCENTRIC CONIC
       C3 61.410 VHL 7.836 DLA -44.97 RAL 134.99 RAD 6569.1 VEL 13.519 PTH 2.47 VHP 8.545 DPA 69.80 RAP 202.02 ECC 2.0107
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           131.90 3 54 22
131.89 12 36 51
131.90 3 54 22
131.89 12 36 51
131.90 3 54 22
131.89 12 36 51
                   3 23 8 1874.01
11 0 55 5756.11
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                                                   16.14
                                                                 268.90
         126.53
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                    SGT 3855.1 SGR 705.8 SG3 150.3
RRT -.7106 RRF -.8555 RTF .9698
SGB 3919.2 R23 .2202 R13 -.9736
SGI 3888.1 SG2 492.4 TMA 172.47
                                                                                                                      ST 2560.2 SR 673.9 SS 1000.1
CRT -.9489 CRS .9811 CST -.9921
LSA 2820.8 MSA 228.9 SSA 2.1
       TOE-3.3109 TRA-2.6860 TC3 -.7262 BAU .6062
       ROE .9216 RRA .0226 RC3 .1332 FAU .02930
FOE-1.8137 FRA -.8905 FC3 -.4130 BSP 12077
                                                                                                                      EL1 2639.4 EL2 206.2 ALF 165.89
       BOE 3.4368 BRA 2.6861 BC3 .7383 FSP
                                                      -479
                                                                                                                                  ARRIVAL DATE NOV 27 1967
                                                                         FLIGHT TIME 140.00
   LAUNCH DATE JUL 10 1967
                                                                        DISTANCE 406.499
      RL 152.09 LAL -.00 LOL 287.08 VL 26.862 GAL -5.14 AZL 101.19 HCA 191.87 SMA 129.66 ECC .19422 INC11.1891 VI 29.292
RP 107.49 LAP 2.29 LOP 118.73 VP 38.022 GAP 5.37 AZP 79.04 TAL 202.31 TAP 34.18 RCA 104.47 APO 154.84 V2 35.253
RC 122.538 GL -53.40 GP 52.79 ZAL 111.44 ZAP 121.13 ETS 54.39 ZAE 112.97 ETE 145.87 ZAC 93.17 ETC 30.39 CLP-148.74
     PLANETOCENTRIC CONIC
       C3 41.820 VHL 6.467 DLA -40.74 RAL 137.39 RAD 6568.6 VEL 12.774 PTH 2.32 VHP 6.982 DPA 61.23 RAP 187.56 ECC 1.6882
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       LNCH AZMTH LNCH TIME L-I TIME
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10 46 10 5726.33
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                                                                 268.36
         120.60
                                                    20.60
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                    SGT 3904.8 SGR 814.3 SG3 200.0
RRT -.8315 RRF -.9484 RTF .9589
                                                                                                                     ST 2438.8 SR 730.2 SS 1044.3
CRT -.9628 CRS .9928 CST -.9882
LSA 2742.2 MSA 228.4 SSA 2.9
       TOE-2.5917 TRA-2.3382 TC3-1.2225 BAU .6976
       ROE .8221 RRA .1443 RC3 .2495 FAU .04242
FOE-1.9186 FRA -.9285 FC3 -.8781 BSP 12299
BOE 2.7190 BRA 2.3426 BC3 1.2477 FSP -642
                                                                    SGB 3988.8 R23 .2530 R13 -.9641
SG1 3963.9 SG2 445.6 THA 170.04
                                                                                                                      ELI 2538.7 ELZ 189.6 ALF 163.83
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FLIGHT TIME 134.00

ARRIVAL DATE NOV 29 1967

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LAUNCH DATE JUL 10 1967
                                                                          DISTANCE 412.511
   RL 152.09 LAL -.00 LOL 287.08 VL 26.814 GAL -4.88 A7L 99.36 MCA 195.09 SMA 129.33 ECC .19494 INC 9.3573 V1 29.292 RP 107.49 LAP 2.43 LOP 121.98 VP 37.991 GAP 5.67 A7P 80.96 TAL 201.01 TAP 36.10 RCA 104.12 APO 154.54 V2 35.256 RC 124.755 GL -49.65 GP 44.73 ZAL 113.16 ZAP 127.42 ETS 50.46 ZAE 118.21 ETE 147.69 ZAC 94.99 ETC 26.86 CLP-148.81
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 32.484 VHL 5.699 DLA -37.57 RAL 139.99 RAD 6568.3 VEL 12.404 PTH 2.24 VMP 6.234 DPA 53.66 RAP 181.10 ECC 1.5346
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 64.20 4 30 13 1583.79 21.50 17.57 19.17 121.58 4 56 37 983.8 25.52 10.44 115.80 10 33 40 5727.87 21.52 269.16 19.18 121.57 12 9 8 5127.9 25.53 262.03 64.20 4 30 13 1583.79 21.50 17.57 19.17 121.58 4 56 37 983.8 25.52 10.44
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                    10 33 40 5727.87
       115.80
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121.57 12 9 8
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                                                      21.50
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                     4 30 13 1583.79
        64.20
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                                  5727.87
                                                                                    19.18
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                                                                   269.16
       115.80
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                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2383.6 SR 667.7 SS 1068.5
CRT -.9637 CRS ..9950 CST -.9855
                                                                       SCT 3992.5 SGR 766.5 SG3 238.2
RRT -.8479 RRF -.9595 RTF ..9521
SGB 4065.4 R23 ..2716 R13 -.9567
SGI 4045.6 SG2 401.1 THA 170.66
    TDE-2.2315 TRA-2.1116 TC3-1.6953 BAU .7477
    RDE .6623 RRA .1293 RC3 .3005 FAU .05194
FOE-1.9433 FRA -.8978 FC3-1.3843 BSP 12555
BDE 2.3277 BRA 2.1156 BC3 1.7218 FSP -768
                                                                                                                            LSA 2686.5 MSA 227.3 SSA 3.7
                                                                                                                             EL1 2469.3 EL2 172.1 ALF 164.82
                                                                                                                                         ARRIVAL DATE DEC 1 1967
                                                                            FLIGHT TIME 144.00
LAUNCH DATE JUL 10 1967
                                                                           DISTANCE 418.515
    HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 27.129 VHL 5.209 DLA -35.24 RAL 142.57 RAD 6568.1 VEL 12.186 PTH 2.19 VHP 5.856 DPA 47.30 RAP 177.89 ECC 1.4465
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 1 25 1476.75
10 23 5 5744.67
5 1 25 1476.75
10 23 5 5744.67
5 1 25 1476.75
10 23 5 5744.67
                                                                                                  118.42 5 26 1
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                                                                    270.68
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        111.91
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 4111.5 SGR 689.3 SG3 265.6
RRT -.8472 RRF -.9566 RTF .9480
SGB 4168.9 R23 .2770 R13 -.9515
SG1 4153.1 SG2 362.6 THA 171.85
                                                                                                                            ST 2368.0 SR 596.0 SS 1079.3
CRT -.9632 CRS .9959 CST -.9835
LSA 2660.1 MSA 225.8 SSA 4.7
     TDE-2.0290 TRA-1.9506 TC3-2.1509 BAU .7881
     RDE .5405 RRA .0997 RC3 .3090 FAU .05839
FOE-1.9145 FRA -.8281 FC3-1.8635 BSP 13028
                                                                                                                             EL1 2436.9 EL2 155.6 ALF 166.32
     BOE 2.0997 BRA 1.9532 BC3 2.1729 FSP -873
                                                                                                                                         ARRIVAL DATE DEC 3 1967
                                                                            FLIGHT TIME 146.00
 LAUNCH DATE JUL 10 1967
                                                                            DISTANCE 424.518
     RL 152.09 LAL -.00 LOL 287.08 VL 26.717 GAL -4.35 AZL 97.31 MCA 201.55 SMA 128.68 ECC .19670 INC 7.3090 V1 29.292 RP 107.48 LAP 2.68 LOP 128.47 VP 37.924 GAP 6.26 AZP 83.20 TAL 198.34 TAP 39.89 RCA 103.37 APO 153.99 V2 35.259 RC 129.165 GL -44.16 GP 33.16 ZAL 114.10 ZAP 136.97 ETS 45.07 ZAE 124.29 ETE 153.50 ZAC 96.46 ETC 22.32 CLP-150.84
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.663 VHL 4.865 DLA -33.56 RAL 145.13 RAD 6568.0 VEL 12.043 PTH 2.15 VHP 5.667 DPA 42.01 RAP 176.33 ECC 1.3894
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 116.13 5 53 10
116.12 11 51 0
116.13 5 53 10
116.12 11 51 0
119.93 9 42 47
112.40 12 44 41
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                    5 30 3 1387.06
10 14 53 5766.96
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         71.19
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                                                                    272.46
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        108.81
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                                                                     302.05
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                                      608.21
        110.00
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                     11 11 27 5593.80
                                                                                     20.23
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                                                      26.52
        110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2272.6 SR 503.2 SS 1010.9
                                                                       SGT 4036.9 SGR 560.8 SG3 259.8
RRT -.8009 RRF -.9319 RTF ..9350
SGB 4075.6 R23 .2970 R13 -.9378
SG1 4061.9 SG2 333.8 THA 173.61
      TOE-1.8244 TRA-1.7357 TC3-2.4453 BAU .7775
                                                                                                                            CRT -,9580 CRS .9961 CST -.9795
LSA 2527.6 MSA 225.0 SSA 5.7
EL1 2323.3 EL2 141.1 ALF 167.98
     ROE .4268 RRA .0470 RC3 .2461 FAU .05682
FDE-1.7379 FRA -.6168 FC3-2.0787 85P 11485
      BOE 1.8737 BRA 1.7364 BC3 2.4576 FSP -716
                                                                                                                                          ARRIVAL DATE DEC 5 1967
                                                                             FLIGHT TIME 148.00
 LAUNCH DATE JUL 10 1967
                                                                            DISTANCE 430.494
     RL 152.09 LAL -.00 LOL 287.08 VL 26.687 GAL -4.07 AZL 96.67 MCA 204.79 SMA 128.35 ECC .19776 INC 6.6721 V1 29.292
RP 107.48 LAP 2.79 LOP 131.72 VP 37.890 GAP 6.55 AZP 83.94 TAL 196.98 TAP 41.77 RCA 102.96 APO 153.73 V2 35.259
RC 131.355 GL -42.11 GP 29.03 ZAL 113.72 ZAP 140.61 ETS 42.99 ZAE 125.95 ETE 156.31 ZAC 96.36 ETC 20.63 CLP-152.11
    PLANETOCENTRIC CONIC
     C3 21.241 VHL 4.609 DLA -32.35 RAL 147.68 RAD 6567.9 VEL 11.942 PTH 2.13 VMP 5.589 DPA 37.57 RAP 175.72 ECC 1.3496
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.67 5 56 5 1311.85 21.86 356.38 18.56 114.46 6 17 57 711.9 24.97 348.76
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114.45 11 45 41
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2.02 21.72 107.75 13 27 37
HIO-COURSE EXECUTION ACCURACY
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         110.00
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                                                      29.70
                      11 56 39
         110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2353.6 SR 475.8 SS 1046.9
CRT -.9618 CRS ..9969 CST -.9801
                                                                         SCT 4280.5 SCR 528.4 SC3 282.9
RRT -.8056 RRF -.9199 RTF ..9390
SCB 4313.0 R23 ..2690 R13 -.9410
      TOE-1.7971 TRA-1.6665 TC3-2.9346 BAU .8361
      ROE .3823 RRA .0448 RC3 .2401 FAU .06164
FOE-1.7309 FRA -.5784 FC3-2.5123 BSP 13210
BOE 1.8373 BRA 1.6671 BC3 2.9444 FSP -901
                                                                                                                               LSA 2610.1 MSA 221.6 SSA 6.8
                                                                                                                               EL1 2397.8 EL2 127.8 ALF 168.97
                                                                         SG1 4301.7 SG2 311.5 THA 174.29
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FLIGHT TIME 142.00

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LAUNCH DATE JUL 10 1967
                                                                              FLIGHT TIME 150.00
                                                                                                                                            ARRIVAL DATE DEC 7 1967
    HELIOCENTRIC CONIC
                                                                             DISTANCE 436.461
     RL 152.09 LAL -.00 LOL 287.08 VL 26.618 GAL -3.79 AZL 96.17 MCA 208.03 SMA 128.02 ECC .19893 INC 6.1744 V1 29.292
RP 107.48 LAP 2.90 LOP 134.97 VP 37.854 GAP 6.84 AZP 84.55 TAL 195.60 TAP 43.63 RCA 102.55 APO 153.48 V2 35.259
RC 133.537 GL -40.38 GP 25.68 ZAL 112.91 ZAP 143.70 ETS 41.22 ZAE 127.06 ETE 158.82 ZAC 95.85 ETC 19.19 CLP-153.42
    PLANETOCENTRIC CONTE
     C3 19.441 WHL 4.409 DLA -31.52 RAL 150.27 RAD 6567.8 VEL 11.867 PTH 2.11 VHP 5.575 DPA 33.80 RAP 175.73 ECC 1.3200 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    6 19 2 1251.20
10 6 52 5808.14
         75.54
                                                                                  19.27
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104.85 13 53 42
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                                      725.11
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       110.00
                                     5362.24
                                                                     246.60
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                                                                                                                                                                    237.80
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 4388.2 SGR 475.4 SG3 285.2
RRT -.7768 RRF -.8888 RTF .9365
SGB 4413.9 R23 .2508 R13 -.9379
                                                                                                                               ST 2380.3 SR 439.9 SS 1035.1

CRT -.9636 CRS .9976 CST -.9793

LSA 2623.5 MSA 218.3 SSA 7.9
     TOE-1.7476 TRA-1.5480 TC3-3.3122 BAU .8624
     ROE .3383 RRA .0313 RC3 .1979 FAU .06150
     FOE-1.6448 FRA -.4603 FC3-2.7389 BSP 13581
     BOE 1.7800 BRA 1.5483 BC3 3.3181 FSP
                                                                                                                                EL1 2417.8 EL2 115.8 ALF 169.88
                                                                          SG1 4403.8 SG2 298.3 THA 175.17
LAUNCH DATE JUL 10 1967
                                                                              FLIGHT TIME 152.00
                                                                                                                                            ARRIVAL DATE DEC 9 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 442.415
    RL 152.09 LAL -.00 LOL 287.08 YL 28.568 GAL -3.49 AZL 95.77 MCA 211.27 SMA 127.69 ECC .20021 INC 5.7724 V1 29.292
RP 107.48 LAP 2.99 LOP 138.22 VP 37.818 GAP 7.13 AZP 85.06 TAL 194.19 TAP 45.47 RCA 102.13 APO 153.26 V2 35.257
    RC 135.709 GL -38.88 GP 22.93 7AL 111.75 7AP 146.38 ETS 39.71 7AE 127.80 ETE 161.01 7AC 95.02 ETC 17.95 CLP-154.72
   PLANETOCENTRIC CONIC
    C3 18.052 VHL 4.249 OLA -30.99 RAL 152.91 RAD 6567.7 VEL 11.808 PTH
                                                                                                          2.09 WHP 5.604 DPA 30.55 RAP 176.17 ECC 1.2971
    C3 18.052 WHL 4.249 OLA -30.99 RAL 152.91 RAD 6567.7 VEL 11.808 PTH 2.09 VHP 5.604 OPA 30.55 RAP 176.17 ECC 1.2971 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.84 6 38 45 1204.94 22.02 348.35 20.58 112.38 6 58 50 604.9 24.86 340.61 103.16 10 8 15 5819.54 22.03 276.55 20.58 112.37 11 45 15 5219.5 24.87 268.82 76.84 6 38 45 1204.94 22.02 348.35 20.58 112.38 6 58 50 604.9 24.86 340.61 103.16 10 8 15 5819.54 22.03 276.55 20.58 112.38 6 58 50 604.9 24.86 340.61 103.16 10 8 15 5819.54 22.03 276.55 20.58 112.37 11 45 15 5219.5 24.87 268.82 110.00 9 2 10 738.47 12.77 309.38 15.61 121.98 9 14 28 138.5 16.90 302.71
                                                                                                     121.98 9 14 28
102.89 14 12 55
                    12 44 1
       110.00
                                   5334.01
                                                       31.94
                                                                     243.06
                                                                                                                                  4734.0
                                                                                    24.11
                                                                                                                                                     33.38
                                                                                                                                                                    234.13
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 4489.1 SGR 435.2 SG3 263.5
RRT -.7397 RRF:-.8475 RTF ..9341
SGB 4510.2 R23 .2263 R13 -.9351
SGI 4500.7 SG2 292.1 THA 175.88
                                                                                                                                ST 2415.9 SR 413.8 SS 1022.1
CRT -.9666 CRS .9984 CST -.9788
    TOE-1.7189 TRA-1.4287 TC3-3.6703 BAU .8866
    ROE .3068 RRA .0223 RC3 .1537 FAU .06038
    FOE-1.5598 FRA -.3422 FC3-2.8958 BSP 13907
                                                                                                                                LSA 2647.0 MSA 214.2 SSA 9.0
    BOE 1.7461 BRA 1.4289 BC3 3.6735 FSP
                                                          -910
                                                                                                                                EL1 2448.9 EL2 104.6 ALF 170.58
LAUNCH DATE JUL 10 1967
                                                                             FLIGHT TIME 154.00
                                                                                                                                           ARRIVAL DATE DEC 11 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 448.353
    RL 152.09 LAL -.00 LOL 287.08 VL 26.517 GAL -3.18 AZL 95.44 MCA 214.52 SMA 127.36 ECC .20162 INC 5.4390 V1 29.292 RP 107.49 LAP 3.08 LOP 141.47 VP 37.781 GAP 7.43 AZP 85.51 TAL 192.77 TAP 47.29 RCA 101.69 APO 153.04 V2 35.255 RC 137.871 GL -57.56 GP 20.66 ZAL 110.30 ZAP 148.73 ETS 38.44 ZAE 128.29 ETE 162.91 ZAC 93.95 ETC 16.87 CLP-155.99
   PLANETOCENTRIC CONTC
    C3 16.951 VML 4.117 OLA -30.70 RAL 155.64 RAD 6567.7 VEL 11.762 PTH 2.08 VMP 5.662 OPA 27.70 RAP 176.92 ECC 1.2790
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AZ INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        77.61
                      6 55 10 1172.87
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       110.00
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                   12 59 46 5303.44
       110.00
                                                   32.38
                                                                    240.79
                                                                                     25.66
                                                                                                                                   4703.4
  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 4585.8 SGR 407.2 SG3 279.6

RRT -.6966 RRF -.7978 RTF .9320

SGB 4603.8 R23 .2034 R13 -.9328

SGI 4594.6 SG2 291.6 THA 176.45
                                                                                                                               ST 2461.2 SR 396.0 SS 1010.4
CRT -.9708 CRS .9990 CST -.9787
    TOE-1.7073 TRA-1.3073 TC3-4.0108 BAU .9093
    ROE .2845 RRA .0172 RC3 .1108 FAU .05867
    FDE-1.4812 FRA -. 2294 FC3-2.9965 BSP 14215
                                                                                                                              LSA 2681.7 MSA 209.4 SSA 10.1
    80E 1.7308 BRA 1.3075 BC3 4.0123 FSP -898
                                                                                                                               EL1 2491.1 EL2 93.8 ALF 171.11
LAUNCH DATE JUL 10 1967
                                                                             FLIGHT TIME 156,00
                                                                                                                                           ARRIVAL DATE DEC 13 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 454.275
   RL 152.09 LAL -.00 LOL 287.08 VL 26.467 GAL -2.85 AZL 95.16 MCA 217.76 SMA 127.04 ECC .20316 INC 5.1563 V1 29.292 RP 107.50 LAP 3.16 LOP 144.73 VP 37.743 GAP 7.72 AZP 85.92 TAL 191.33 TAP 49.09 RCA 101.23 APO 152.85 V2 35.253 RC 140.023 GL -36.35 GP 18.75 ZAL 108.58 ZAP 150.83 ETS 37.38 ZAE 128.60 ETE 164.54 ZAC 92.68 ETC 15.93 CLP-157.24
  PLANETOCENTRIC CONIC
    C3 16.066 VHL 4.008 DLA -30.60 RAL 158.47 RAD 6567.6 VEL 11.724 PTH 2.07 VHP 5.740 DPA 25.17 RAP 177.89 ECC 1.2644
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  24,18
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  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 2516.5 SR 384.6 SS 1000.6
CRT -.9759 CRS .9994 CST -.9789
LSA 2727.7 MSA 203.8 SSA 11.3
    TOE-1.7099 TRA-1.1829 TC3-4.3354 BAU
                                                                        SGT 4681.0 SGR 389.5 SG3 274.4
                                                          .9313
                                                                       RRT -.6507 RRF -.7430 RTF .9303
SCB 4697.2 R23 .1780 R13 -.9309
   ROE .2690 RRA .0150 RC3 .0709 FAU .03663
FOE-1.4101 FRA -.1237 FC3-3.0517 BSP 14525
BOE 1.7310 BRA 1.1830 BC3 4.3359 FSP -882
                                                                        SG1 4687.9 SG2 295.3 THA 176.89
                                                                                                                              EL1 2544.4 EL2 83.1 ALF 171.51
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ARRIVAL DATE DEC 15 1967

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FLIGHT TIME 158.00
LAUNCH DATE JUL 10 1967
                                                                                     DISTANCE 460.180
    RL 152.09 LAL -.00 LOL 287.08 VL 26.417 GAL -2.52 A7L 94.91 MCA 221.00 SHA 125.72 ECC .20483 INC 4.9123 VI 29.292 RP 107.51 LAP 3.22 LOP 147.98 VP 37.705 GAP 8.01 A7P 86.29 TAL 189.88 TAP 50.88 RCA 100.76 APO 152.67 V2 35.249 RC 142.165 GL -35.23 GP 17.14 TAL 106.62 TAP 152.72 ETS 36.52 TAE 128.80 ETE 165.95 TAC 91.25 ETC 15.10 CLP-158.45
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 15.351 VHL 3.918 DLA -30.65 RAL 161.41 RAD 6567.6 VEL 11.693 PTH 2.06 VMP 5.834 DPA 22.88 RAP 179.05 ECC 1.2526
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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        110.00
                                                                                                                                                                                      229.82
                                                                                                                                                                      33.82
                                                                                                                                                  4678.0
                                                                                               29.63
                                                                             236.88
                      13 23 40
                                         5278.02
                                                             32.71
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 2575.1 SR 377.7 SS 990.3
CRT -.9812 CRS .9993 CST -.9792
                                                                                 SGT 4765.1 SGR 379.3 SG3 267.8
RRT - ,6031 RRF - ,6655 RTF .9285
SGB 4780.2 R23 .1546 R13 - .9289
SG1 4770.6 SG2 302.2 THA 177.24
     TDE-1.7208 TRA-1.0500 TC3-4.6344 BAU .9511
     ROE .2582 RRA .0143 RC3 .0338 FAU .05425
FOE-1.3426 FRA -.0209 FC3-3.0597 BSP 14776
BOE 1.7401 BRA 1.0501 BC3 4.6345 FSP -858
                                                                                                                                             LSA 2777.7 MSA 197.7 SSA
                                                                                                                                                                                          12.4
                                                                                                                                               EL1 2601.7 EL2 72.2 ALF 171.80
                                                                                                                                                            ARRIVAL DATE DEC 17 1967
                                                                                      FLIGHT TIME 160.00
LAUNCH DATE JUL 10 1967
                                                                                      DISTANCE 466.069
    RL 152.09 LAL -.00 LOL 287.08 VL 26.387 GAL -2.17 AZL 94.70 MCA 224.25 SMA 126.40 ECC .20666 INC 4.6982 VI 29.292 RP 107.52 LAP 3.28 LOP 151.23 VP 37.666 GAP 8.31 AZP 86.63 TAL 188.41 TAP 52.65 RCA 100.28 APO 152.52 V2 35.245 RC 144.295 GL -34.15 GP 15.76 ZAL 104.45 ZAP 154.44 ETS 35.85 ZAE 128.92 ETE 167.16 ZAC 89.69 ETC 14.37 CLP-159.62
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 14.778 VHL 3.844 DLA -30.82 RAL 164.49 RAD 6567.6 VEL 11.669 PTH 2.05 VMP 5.940 DPA 20.79 RAP 180.35 ECC 1.2432 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       7 28 16 1148.71
10 51 6 5784.42
7 28 16 1148.71
10 51 6 5784.42
                                                                                             28.97
                                                             23.05
                                                                             344.57
         77.30
                                                                                                                111.03 12 27 30
111.04 7 47 25
111.03 12 27 30
121.49 9 57 3
100.55 15 1 11
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                                                                             274.36
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        102.70
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                                                                                                                                                                       25.70
                                                                             344.57
                                                                                                28.97
                                                              23.05
          77.30
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                                                                             274.36
                                                                                                28.98
                                                              23.06
        102.70
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                                                             14.05
                                                                              307.39
                         9 45 20
                                           702.64
        110.00
                                                                                                                                                                                       229.45
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                                                                             238.91
                                                                                               32.06
                                                             32.71
                       13 33 12
                                         5278.49
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 2644.3 SR 375.2 SS 983.2

CRT -.9864 CRS ..9985 CST -.9800

LSA 2839.5 MSA 190.9 SSA 13.6

EL1 2670.0 EL2 61.2 ALF 172.03
                                                                                SGT 4854.5 SGR 376.0 SG3 261.3
RRT -.5603 RRF -.6315 RTF .9275
SGB 4868.8 R23 .1324 R13 -.9279
SG1 4858.9 SG2 311.2 THA 177.50
      TDE-1.7435 TRA -.9142 TC3-4.9175 BAU .9715
     ROE .2517 RRA .0154 RC3 .0020 FAU .05191
FDE-1.2843 FRA .0717 FC3-3.0412 BSP 15082
      BOE 1.7616 BRA .9143 BC3 4.9175 FSP -839
                                                                                                                                                            ARRIVAL DATE DEC 19 1967
                                                                                       FLIGHT TIME 162.00
 LAUNCH DATE JUL 10 1967
                                                                                      DISTANCE 471.939
     RL 152.09 LAL -.00 LOL 287.08 VL 26.317 GAL -1.82 A7L 94.51 MCA 227.49 SMA 126.08 ECC .20863 INC 4.5076 V1 29.292
RP 107.53 LAP 3.32 LOP 154.48 VP 37.626 GAP 8.60 A7P 86.95 TAL 186.92 TAP 54.41 RCA 99.78 APO 152.39 V2 35.240
RC 146.414 GL -33.10 GP 14.58 7AL 102.09 7AP 156.03 ETS 35.34 7AE 128.98 ETE 168.20 7AC 88.01 ETC 13.73 CLP-160.76
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 14.329 VHL 3.785 OLA -31.07 RAL 167.70 RAD 6567.6 VEL 11.650 PTH 2.05 VHP 6.056 OPA 18.85 RAP 181.77 ECC 1.2358
      C3 14.329 VML 3.785 OLA -31.07 RAL 167.70 RAD 6567.6 VEL 11.650 PTH 2.05 VMP 6.056 OPA 18.85 RAP 181.77 ECC 1.2558 CLACK AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.64 7 36 20 1156.88 23.40 345.33 31.79 111.05 7 55 36 556.9 26.05 337.43 103.36 11 8 39 5762.56 23.41 272.86 31.79 111.05 7 55 36 556.9 26.05 337.43 103.36 11 8 39 5762.56 23.41 272.86 31.79 111.05 7 55 36 556.9 26.05 337.43 103.36 11 8 39 5762.56 23.41 272.86 31.79 111.04 12 44 42 5162.6 26.06 264.96 110.00 10 2 29 681.61 14.80 306.22 27.33 121.17 10 13 50 81.6 18.82 299.41 110.00 13 41 41 5285.83 32.61 239.47 34.77 100.86 15 9 47 4685.8 33.77 230.42 110.00 13 41 41 5285.83 32.61 239.47 34.77 100.86 15 9 47 4685.8 33.77 230.42
                        13 41 41 5285.83
          110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                  SGT 4937.5 SGR 377.1 SG3 254.4

RRT -.5218 RRF -.5619 RTF .9267

SG8 4951.9 R23 .1129 R13 -.9270

SG1 4941.4 SG2 321.4 THA 177.71
                                                                                                                                                ST 2715.7 SR 375.5 SS 975.3
       TDE-1.7722 TRA -.7701 TC3-5.1719 BAU .9908
                                                                                                                                               CRT -.9909 CRS .9969 CST -.9807
      ROE .2480 RRA .0170 RC3 -.0237 FAU .04949
FDE-1.2294 FRA .1600 FC3-2.9900 BSP 15365
BDE 1.7894 BRA .7703 BC3 5.1720 FSP -817
                                                                                                                                               LSA 2904.1 MSA 183.9 SSA 14.8
                                                                                                                                                EL1 2741.1 EL2 50.0 ALF 172.20
                                                                                                                                                             ARRIVAL DATE DEC 21 1967
                                                                                        FLIGHT TIME 164.00
  LAUNCH DATE JUL 10 1967
      RL 152.09 LAL -.00 LOL 287.08 VL 26.266 GAL -1.44 AZL 94.34 MCA 230.73 SMA 125.77 ECC .21078 INC 4.3359 V1 29.292
RP 107.55 LAP 3.36 LOP 157.73 VP 37.586 GAP 8.90 AZP 87.25 TAL 185.42 TAP 56.15 RCA 99.26 APO 152.28 V2 35.234
RC 148.521 GL -32.05 GP 13.55 ZAL 99.56 ZAP 157.50 ETS 35.01 ZAE 129.01 ETE 169.10 ZAC 86.25 ETC 13.16 CLP-161.87
                                                                                       DISTANCE 477.790
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
       C3 13.995 VML 3.741 DLA -31.39 RAL 171.05 RAD 6567.6 VEL 11.635 PTH 2.04 VMP 6.181 DPA 17.04 RAP 183.29 ECC 1.2303
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.86 7 44 10 1169.06 23.75 346.39 34,87 111.15 8 3 39 569.1 26.41 338.48
                                                                                                                  111.15 8 3 39
111.13 13 3 13
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                                                               23.76
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                                                                                                  34.88
                         11 27 33
                                          5739.96
          104.14
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111.13 13 3 13
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                                                                               346.39
           75.86
                          7 44 10
                                         1169.06
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                                                               23.76
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          104.14
                                         5739.96
                         11 27 33
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101.42 15 17 43
                                                                                                                                                                                        298.02
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                                                               15.63
                                                                                                  30.67
                                                                               304.89
          110.00
                         10 21 30
                                           656.01
                                                                                                                                                                      33.67
                                                                                                                                                                                        231.44
                                                                                                                                                    4699.0
                                         5299.01
                                                                               240.46
                                                                                                  37.75
                                                               32.44
          110.00
                         13 49 24
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                   HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 2790.2 SR 378.5 SS 968.1
CRT -.9946 CRS .9944 CST -.9817
                                                                                  SCT 5018.3 SCR 361.6 SC3 247.4
RRT - 4896 RRF - 5393 RTF .9264
SC6 5032.8 R23 .0961 R13 - 9266
       TOE-1.8070 TRA -.6187 TC3-5.3947 BAU 1.0094
       RDE 1.8236 BRA .6190 BC3 5.3949 FSP -796
                                                                                                                                               LSA 2972.2 MSA 176.8 SSA 15.9
                                                                                                                                                EL1 2815.5 EL2 38.8 ALF 172.31
                                                                                   SG1 5021.8 SG2 332.5 THA 177.86
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LAUNCH DATE JUL 10 1967
                                                                                          FLIGHT TIME 166.00
                                                                                                                                                                 ARRIVAL DATE DEC 23 1967
     HELIOCENTRIC CONIC
                                                                                          DISTANCE 483.622
      RL 152.09 LAL -.00 LOL 287.08 VL 26.217 GAL -1.06 AZL 94.18 MCA 233.97 SMA 125.46 ECC .21310 INC 4.1795 V1 29.292
RP 107.57 LAP 3.38 LOP 160.98 VP 37.545 GAP 9.21 AZP 87.54 TAL 183.91 TAP 57.88 RCA 98.72 APO 152.19 V2 35.228
RC 150.615 GL -30.99 GP 12.66 ZAL 96.86 ZAP 158.87 ETS 34.83 ZAE 129.02 ETE 169.88 ZAC 84.40 ETC 12.65 CLP-162.94
     PLANETOCENTRIC CONIC
      C3 13.768 VML 3.710 DLA -31.74 RAL 174.54 RAD 6567.5 VEL 11.626 PTH 2.04 VMP 6.315 DPA 15.34 RAP 184.89 ECC 1.2266
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       THE C-1 TIME
7 52 19 1183.60
11 47 15 5718.24
7 52 19 1183.60
11 47 15 5718.24
10 42 8 632.71
13 56 36 5317.13
                                                                                                                 111.32 8 12 2

111.30 13 22 33

111.32 8 12 2

111.30 13 22 33

120.37 10 52 41

102.19 15 25 13
          75.02
                                                                                              38.22
                                                              24.10
                                                                                347.64
                                                                                                                                                         583.6
         104.98
                                                               24.11
                                                                                269.81
                                                                                                   38.23
                                                                                                                                                         5116.2
                                                                                                                                                                            26.78
                                                                                                                                                                                            261.87
                                                             24.10
          75.02
                                                                                347.64
                                                                                                   38.22
                                                                                                                                                          583.6
                                                                                                                                                                            26.77
                                                                                                                                                                                           339.71
                                                                                269.81
         104.98
                                                              24.11
                                                                                                   36.23
                                                                                                                                                         5118.2
                                                                                                                                                                            26.78
                                                                                                                                                                                            261.87
                                                          16.50
                                                                                303.45
         110.00
                                                                                                   34.31
                                                                                                                                                           32.7
                                                                                                                                                                            20.41
                                                                                                                                                                                            296.51
         110.00
                                                               32.19
                                                                                                  40.98
                                                                                                                                                         4717.1
                                                                                                                                                                            33.53
                                                                                                                                                                                            232.83
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                    SGT 5098.4 SGR 388.4 SG3 240.6
RRT -.3642 RRF -.3040 RTF ..9266
SGB 5113.1 R23 ..0811 R13 -.9268
SGI 5101.6 SGZ 343.8 THA 177.97
                                                                                                                                                  ST 2864.2 SR 383.5 SS 959.9 CRT -.9972 CRS ..9909 CST -.9827 LSA 3040.2 MSA 169.8 SSA 17.0 EL1 2889.6 EL2 28.3 ALF 172.39
      TOE-1.8460 TRA -.4596 TC3-5.5839 BAU 1.0279
     ROE .2482 RRA .0211 RC3 -.0668 FAU .04474
FOE-1.1331 FRA .3188 FC3-2.8131 8SP 15946
BOE 1.8626 BRA .4601 BC3 5.5843 FSP -777
LAUNCH DATE JUL 10 1967
                                                                                          FLIGHT TIME 168.00
                                                                                                                                                                 ARRIVAL DATE DEC 25 1967
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 489.433
     AL 152.09 LAL -.00 LOL 287.08 VL 26.167 GAL -.66 AZL 94.04 MCA 237.21 SMA 125.15 ECC .21560 INC 4.0355 V1 29.292

RP 107.59 LAP 3.39 LOP 164.22 VP 37.504 GAP 9.52 AZP 87.81 TAL 182.39 TAP 59.60 RCA 98.17 APO 152.13 V2 35.221

RC 152.696 GL -29.90 GP 11.88 ZAL 94.03 ZAP 180.16 ETS 34.81 ZAE 129.00 ETE 170.56 ZAC 82.49 ETC 12.19 CLP-163.99
   PLANETOCENTRIC CONIC
     C3 13.646 WHL 3.694 DLA -32.11 RAL 178.16 RAD 6567.5 VEL 11.620 PTH
                                                                                                                         2.04 WHP 6.455 OPA 13.72 RAP 186.55 ECC 1.2246
     LNCH AZHTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TINE PO CST TIN INJ 2 LAT INJ 2 LONG
                       8 1 9 1199.22
12 7 19 5696.75
8 1 9 1199.22
12 7 19 5696.75
11 4 8 606.60
                                                                                               41.83
                                                                                                                                                                        27.11
                                                               24.41
                                                                               348.96
                                                                                                                  111.54
                                                                                                                                     8 21 8
                                                                                                                                                          599.2
                                                                                                                                                                                          341.02
        105.81
                                                               24.42
                                                                                266.46
                                                                                                   41.83
                                                                                                                    111.52 13 42 18
                                                                                                                                                                            27.12
                                                                                                                                                         5098.7
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          74.19
                                                               24.41
                                                                                348.96
                                                                                                   41.83
                                                                                                                    111.54
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                                                                                                                                                                            27.11
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                                                                                                                                                                                             341.02
                                                                                                                111.52 13 42 18 5098.7
119.90 11 14 14 6.6
103.11 15 32 30 4739.4
        105.81
                                                               24.42
                                                                               268.46
                                                                                                   41.63
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                                                                                                                                                                            27.12
                                                                                                                                                                                            260.51
        110.00
                                                               17.39
                                                                               301.96
                                                                                                   36.21
                                                                                                                                                                            21.24
                                                                                                                                                                                            294.94
                                        5339.37
        110.00
                       14 3 31
                                                               31.86
                                                                               243.46
                                                                                                  44.46
                                                                                                                                                                            33.33
                                                                                                                                                                                            234.54
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                    SGT 5164.1 SGR 396.1 SG3 233.1
RRT -.4426 RRF -.4738 RTF .9264
SG8 5179.3 RZ3 .0689 R13 -.9266
SG1 5167.1 SG2 355.0 TMA 178.05
     TOE-1.8834 TRA -. 2865 TC3-5.7194 BAU 1.0435
                                                                                                                                                  ST 2928.3 SR 389.5 SS 946.9
CRT -.9986 CRS .9865 CST -.9835
     ROE .2510 RRA .0226 RC3 -.0813 FAU .04227
     FOE-1.0850 FRA .3940 FC3-2.6816 BSP 16130
BOE 1.9001 BRA .2894 BC3 5.7199 FSP -750
                                                                                                                                                  LSA 3097.7 MSA 163.5 SSA 18.1
                                                                                                                                                   EL1 2954.0 EL2 20.4 ALF 172.43
LAUNCH DATE JUL 10 1967
                                                                                        FLIGHT TIME 170.00
                                                                                                                                                               ARRIVAL DATE DEC 27 1967
   HELIOCENTRIC CONTC
                                                                                       DISTANCE 495.222
    RL 152.09 LAL -.00 LOL 287.08 VL 26.118 GAL -.24 AZL 93.90 MCA 240.45 SMA 124.84 ECC .21831 INC 3.9017 V1 29.292
RP 107.62 LAP 3.39 LOP 167.47 VP 37.462 GAP 9.83 AZP 88.07 TAL 180.87 TAP 61.31 RCA 97.59 APO 152.10 V2 35.214
RC 154.762 GL -28.77 GP 11.19 ZAL 91.08 ZAP 161.37 ETS 34.96 ZAE 128.98 ETE 171.15 ZAC 80.52 ETC 11.79 CLP-165.01
   PLANETOCENTRIC CONIC
     C3 13.632 VHL 3.692 DLA -32.47 RAL 181.91 RAD 6567.5 VEL 11.620 PTH 2.04 VMP 6.604 DPA 12.18 RAP 188.28 ECC 1.2243
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               111.80 8 31 11
111.79 14 2 8
111.80 8 31 11
111.79 14 2 8
119.41 13 4 56
104.14 15 39 49
         73.41
                        8 10 56 1215.05
                                                              24.68
                                                                              350.29
                                                                                               45.67
                                                                                                                                                                        27.41
                                                                                                                                                        615.0
                      12 27 25 5682.45
8 10 56 1215.05
12 27 25 5682.45
                                                                                                  45.67
        106.59
                                                              24.69
                                                                              267.33
                                                                                                                                                        5082.4
                                                                                                                                                                           27.42
                                                                              350.29
         73.41
                                                              24.68
                                                                                                  45.67
                                                                                                                                                         615.0
                                                                                                                                                                           27.41
                                                                                                                                                                                           342.34
                                                           24.68
24.69
                                                                          267,33
        106.59
                      12 27 25 5682.45 24.69
11 27 8 5868.78 18.26
14 10 24 5364.76 31.45
                                                                                                  45.67
                                                                                                                                                       5082.4
                                                                                                                                                                           27.42
                                                                                                                                                                                           259.38
        110.00
                                                                              278.36
                                                                                                  42.37
                                                                                                                                                       5268.8
                                                                                                                                                                           22.04
                                                                                                                                                                                           271.27
                                                                                                                                                  4764.8
                                                                              245.33
        110.00
                                                                                                  48.16
                                                                                                                                                                           33.07
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5241.3 SGR 405.3 SG3 226.7
RRT -.4295 RRF -.4526 RTF .9281
SG8 5256.9 R23 .0576 R13 -.9282
SG1 5244.2 SG2 365.8 THA 178.09
                                                                                                                                                  ST 2992.6 SR 397.6 SS 936.0
CRT -.9988 CRS .9814 CST -.9845
LSA 3156.7 MSA 157.2 SSA 19.1
     TDE-1.9262 TRA -.1131 TC3-5.8236 BAU 1.0614
    ROE .2560 RRA .0243 RC3 -.0896 FAU .04015
FOE-1.0438 FRA .4596 FC3-2.5498 BSP 16426
BOE 1.9432 BRA .1157 BC3 5.8243 FSP -734
                                                                                                                                                  EL1 3018.9 EL2 19.6 ALF 172.44
LAUNCH DATE JUL 10 1967
                                                                                        FLIGHT TIME 172.00
                                                                                                                                                                ARRIVAL DATE DEC 29 1967
                                                                                       DISTANCE 500.966
    RL 152.09 LAL -.00 LOL 287.08 VL 26.068 GAL .19 AZL 93.78 MCA 243.68 SMA 124.54 ECC .22124 INC 3.7762 V1 29.292
RP 107.64 LAP 3.38 LOP 170.71 VP 37.420 GAP 10.16 AZP 88.32 TAL 179.33 TAP 63.01 RCA 96.99 APO 152.10 V2 35.205
RC 156.813 GL -27.61 GP 10.58 ZAL 88.03 ZAP 162.52 ETS 35.27 ZAE 128.96 ETE 171.67 ZAC 78.51 ETC 11.44 CLP-166.00
   PLANETOCENTRIC CONIC
    C3 13.726 VHL 3.705 OLA -32.80 RAL 185.76 RAD 6567.5 VEL 11.624 PTH 2.04 VHP 6.760 OPA 10.70 RAP 190.06 ECC 1.2259
    13.726 WHL 3.705 DLA -32.80 MAL 183.76 MAD 6367.5 WEL 11.624 PTH 2.04 WHP 6.760 DPA 10.70 RAP 190.06 ECC 1.2259

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

72.72 8 21 47 1230.53 24.88 351.56 49.73 112.10 8 42 17 630.5 27.65 343.61

107.28 12 47 17 5670.00 24.88 266.46 49.73 112.10 8 42 17 630.5 27.65 343.61

107.28 12 47 17 5670.00 24.88 351.56 49.73 112.10 8 42 17 630.5 27.65 343.61

107.28 12 47 17 5670.00 24.88 266.46 49.73 112.09 14 21 47 5070.0 27.66 258.51

110.00 11 50 41 5844.43 19.07 276.94 46.75 118.92 13 28 5 5244.4 22.78 269.76

110.00 14 17 34 5392.13 30.98 247.32 52.06 105.24 15 47 26 4792.1 32.75 238.55
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                SG1 5297.9 SGR 413.7 SG3 218.7 ST 3036.2 SR 405.2 SS 914.6
RRT - .4163 RRF - .4328 RTF .9279 CRT - .9977 CRS .9750 CST - .9850
SG8 5314.0 R23 .0490 R13 - .9280 LSA 3193.0 MSA 153.3 SSA 20.0
SG1 5300.7 SG2 376.0 TMA 178.13 EL1 3063.0 EL2 27.1 ALF 172.41
     TOE-1.9613 TRA .0757 TC3-5.8592 BAU 1.0754
    ROE .2619 RRA .0246 RC3 -.0962 FAU .03768
FOE -.9945 FRA .5278 FC3-2.3768 BSP 16729
BDE 1.9787 BRA .0796 BC3 5.8600 FSP -719
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ARRIVAL DATE DEC 31 1967

LAUNCH DATE JUL 10 1967

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DISTANCE 506.726
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 26.020 GAL .64 A7L 93.66 MCA 246.92 SHA 124.25 ECC .22439 INC 3.6577 V1 29.292 RP 107.67 LAP 3.36 LOP 173.96 VP 37.378 GAP 10.49 AZP 88.56 TAL 177.79 TAP 64.71 RCA 96.37 APO 152.13 V2 35.197 RC 158.850 GL -26.40 GP 10.04 7AL 84.91 ZAP 163.61 ETS 35.76 ZAE 128.93 ETE 172.12 ZAC 76.45 ETC 11.13 CLP-166.97
  PLANETOCENTRIC CONIC
                                                                                                                                    9.26 RAP 191.88 ECC 1.2294
   C3 13.936 VHL 3.733 OLA -33.08 RAL 189.70 RAD 6567.5 VEL 11.633 PTH 2.04 VHP 6.924 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.14 8 33 45 1245.37 24.99 352.76 53.99 112.41 8 54 31 645.4 27.80 344.81
                                                                                               112.41 8 54 31
112.40 14 41 5
                                                                                                                                                  27.82
                                                                                                                                                                257.94
                                                                                                                                 5061.8
                                                                   265.89
                                                                                   53.99
                   13 6 43
                                  5661.80
                                                     25.00
       107.86
                                                                                                 112.41 8 54 31
112.40 14 41 5
118.47 13 51 18
106.33 15 55 43
                                                                                                                                                  27.80
                                                                                                                                                                344.81
                    8 33 45 1245.37
                                                                                                                                  645.4
                                                     24.99
                                                                   352.76
                                                                                   53.99
        72.14
                                                                                                                                                  27.82
                                                                                                                                                                257.94
                                                                                                                                 5061.8
                                                     25.00
                                                                   265.89
                                                                                    53.99
                   13 6 43
                                  5661.80
      107.86
                                                                                                                                 5223.1
                                                                                                                                                  23.42
                                                                                    51.30
                                  5823.06
                                                     19.77
                                                                   275.67
                   12 14 15
      110.00
                                                                                                                                 4620.2
                                                                                                                                                  32.39
                                  5420.15
                                                     30.46
                                                                   249.34
                                                                                   56.16
      110.00
                   14 25 23
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 3065.6 SR 413.9 SS 892.6
CRT -.9955 CRS .9674 CST -.9854
                                                                       SCT 5346.6 SCR 422.5 SC3 211.4

RRT - 4080 RRF - .4190 RTF .9280

SCB 5363.3 R23 .0420 R13 - .9281

SCI 5349.4 SCZ 385.5 TMA 178.14
    TOE-1.9931 TRA .2798 TC3-5.8330 BAU 1.0869
   ROE .2695 RRA .0240 RC3 -.0948 FAU .03530
FOE -.9479 FRA .9954 FC3-2.1931 BSP 16741
BOE 2.0112 BRA .2809 BC3 5.8338 FSP -681
                                                                                                                             LSA 3216.0 MSA 151.0 SSA 20.7
EL1 3093.2 EL2 38.9 ALF 172.34
                                                                                                                                        ARRIVAL DATE JAN 2 1968
                                                                            FLIGHT TIME 176.00
LAUNCH DATE JUL 10 1967
                                                                           DISTANCE 512.438
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.971 GAL 1.11 AZL 93.54 MCA 250.15 SMA 123.95 ECC .22780 INC 3.5447 V1 29.292
RP 107.70 LAP 3.33 LOP 177.20 VP 37.335 GAP 10.83 AZP 88.80 TAL 176.24 TAP 66.39 RCA 95.72 APO 152.19 V2 35.187
RC 160.871 GL -25.15 GP 9.55 ZAL 81.74 ZAP 164.64 ETS 36.43 ZAE 128.90 ETE 172.52 ZAC 74.35 ETC 10.87 CLP-167.92
  PLANETOCENTRIC CONIC
   C3 14.268 VHL 3.777 DLA -33.30 RAL 193.69 RAD 6567.6 VEL 11.647 PTH 2.04 VMP 7.097 DPA 7.88 RAP 193.74 ECC 1.2348 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                 1259.10
564
                                                                                                                                                  27.87
                                                                                                                                                              345.90
                                                                   353.83
                                                                                    58.41
                                                                                                  112.74
                                                                                                                9 7 53
                                                                                                                                  659.1
                     8 46 54
                                                     25.01
       71.70
                                                                                                                                                                 257.70
                    13 25 24
                                                                                                   112.72
                                                                                                               14 59 43
                                                                                                                                  505A.A
                                                                                                                                                   27.88
                                                      25.03
                                                                   265.64
                                                                                    58.42
       104.30
                                                                                                                                                  27.87
                                                                                                                                                                 345.90
                                                                                    58.41
                                                                                                   112.74
                                                                                                                 9 7 53
                                                                                                                                   659.1
                                                                   353.83
                     A 46 54
                                  1259.10
                                                      25.01
        71.70
                                                                                                  112.72 14 59 43
118.12 14 13 48
107.33 16 5 14
                                                                                                                                                  27.88
                                                                                                                                                                 257.70
                                                                                                                                  5058.4
                                                                   265.64
                                                                                    58.42
                                                      25.03
       108.30
                    13 25 24
                                    5658.44
                                                                                                                                                                 267.41
                                                                                                                                  5206.9
                                                                                                                                                  23.89
                                                     20.29
                                                                   274.71
                                                                                    55.98
       110.00
                    12 37 1
                                    5806.91
                                                                                                                                                                 242.63
                                                                                                                                 4846.7
                                                                                                                                                  32.01
                                                                   251.23
                                                                                    60.43
                   14 34 28
                                                     29.93
       110.00
                                   5446.67
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 5406.2 SGR 431.3 SG3 204.9

RRT -.4054 RRF -.4113 RTF .9296

SGB 5423.4 R23 .0355 R13 -.9297

SG1 5409.0 SG2 394.1 THA 178.14
                                                                                                                             ST 3085.7 SR 423.3 SS 870.4
CRT -.9922 CRS .9594 CST -.9859
    TDE-2.0249 TRA .4881 TC3-5.7711 BAU 1.1010
    RDE .2790 RRA .0228 RC3 -.0964 FAU .03326
FOE -.9054 FRA .6553 FC3-2.0181 BSP 16973
                                                                                                                            LSA 3230.4 MSA 149.9 SSA 21.1
ELI 3114.2 EL2 52.3 ALF 172.25
    BOE 2.0440 BRA .4885 BC3 5.7719 FSP -663
                                                                                                                                        ARRIVAL DATE JAN 4 1968
                                                                            FLIGHT TIME 178.00
LAUNCH DATE JUL 10 1967
                                                                           DISTANCE 518.121
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 25.923 GAL 1.60 A7L 93.44 HCA 253.39 SMA 123.66 ECC .23148 INC 3.4364 V1 29.292 RP 107.73 LAP 3.29 LOP 180.44 VP 37.293 GAP 11.18 A7P 89.02 TAL 174.69 TAP 68.07 RCA 95.04 APO 152.29 V2 35.178
    RC 162.878 CL -23.87 GP 9.12 7AL 78.54 ZAP 165.63 ETS 37.32 ZAE 128.87 ETE 172.87 ZAC 72.22 ETC 10.64 CLP-168.85
   PLANETOCENTRIC CONIC
    C3 14.732 VHL 3.838 DLA -33.44 RAL 197.70 RAC 6567.6 VEL 11.667 PTH 2.05 VHP 7.278 DPA 6.54 RAP 195.64 ECC 1.2425
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  9 1 9 1271.68
13 43 13 5660.06
9 1 9 1271.68
13 43 13 5660.06
12 58 2 5798.51
14 45 30 5469.27
                                                                                                                                               27.82
                                                                                                                                   671.7
                                                                                 62.97
                                                                                                  113.06
                                                                                                                 9 22 21
        71.41
                                                    24.93
                                                                  354.76
                                                                                                               15 17 33
                                                                                                                                  5060.1
                                                                                                   113.04
                                                                                                                                                  27.84
                                                                                                                                                                 257.81
                                                                                    62.97
                                                      24.94
                                                                   265.72
       108.59
                                                                                                                                                  27.82
                                                                                                                                                                 346.85
                                                                                    62.97
                                                                                                   113.06
                                                                                                               9 22 21
                                                                                                                                   671.7
                                                     24.93
                                                                   354.76
                                                                                                   113.04
                                                                                                              15 17 33
                                                                                                                                  5060.1
                                                                                                                                                  27.84
                                                                                                                                                                 257.81
                                                      24.94
                                                                   265.72
                                                                                    62.97
       108.59
                                                                                                   117.93 14 34 41
108.17 16 16 39
                                                                                                                                  5198.5
                                                                                                                                                  24.13
                                                                                                                                                                 266.88
                                                      20.56
                                                                   274.21
                                                                                    60.71
       110.00
                                                                                                                                                31.66
                                                                                                                                  4669.3
                                                                                                                                                                 244.30
                                                      29.46
                                                                   252.82
                                                                                    64.89
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5457.3 SGR 439.5 SG3 198.1
RRT -.4042 RRF -.4060 RTF .9306
SG8 5474.9 R23 .0303 R13 -.9307
                                                                                                                             ST 3085.7 SR 432.4 SS 843.3
CRT -.9878 CRS .9500 CST -.9862
    TOE-2.0495 TRA .7086 TC3-5.6505 BAU 1.1130
    RDE .2895 RRA .0205 RC3 -.0920 FAU .03115
FDE -.8604 FRA .7143 FC3-1.8306 BSP 17169
                                                                                                                             LSA 3224.3 MSA 151.2 SSA 21.3
ELI 3115.1 EL2 66.7 ALF 172.12
                                                                        SG1 5460.2 SG2 401.8 THA 178.13
    BDE 2.0698 BRA .7089 BC3 5.6513 FSP -644
                                                                                                                                         ARRIVAL DATE JAN 6 1968
                                                                            FLIGHT TIME 180.00
LAUNCH DATE JUL 10 1967
                                                                           DISTANCE 523.770
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 25.875 GAL 2.10 AZL 93.33 MCA 256.62 SNA 123.38 ECC .23545 INC 3.3317 VI 29.292 RP 107.76 LAP 3.24 LOP 183.67 VP 37.250 GAP 11.54 AZP 89.23 TAL 173.13 TAP 69.75 RCA 94.33 APO 152.43 V2 35.167 RC 164.869 GL -22.56 GP 8.72 ZAL 75.34 ZAP 166.58 ETS 38.44 ZAE 128.84 ETE 173.18 ZAC 70.06 ETC 10.45 CLP-169.76
   PLANETOCENTRIC CONIC
    C3 15.339 VHL 3.917 OLA -33.51 RAL 201.72 RAD 6567.6 VEL 11.693 PTH 2.06 VHP 7.470 OPA
                                                                                                                                     5.24 RAP 197.58 ECC 1.2524
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.29 9 16 25 1282.97 24.73 355.54 67.62 113.36 9 37 48 683.0 27.67 347.66
                                                                                                    113.35
                                                                                                               15 34 24
                                                                                                                                   5066.9
                                                                                                                                                   27.68
                                                                                     67.63
                    13 59 57
                                    5666.85
                                                      24.74
                                                                    266.15
                                                                                                                                                   27.67
                                                                                                                                                                  347.66
                                                                                                    113.36
                                                                                                                                    663.0
                                                                                     67.62
                      9 16 25
                                    1282.97
                                                      24.73
                                                                    355.54
         71.29
                                                                                                   113.35 15 34 24
117.98 14 52 59
108.75 16 30 40
                                                                                                                                                   27.68
                                                                                                                                                                 258.28
                                                                                                                                   5066.9
                                                                                     67.63
                    13 59 57
                                    5666.85
                                                      24.74
                                                                    266.15
                                                                                                                                   5200.6
                                                                                                                                                   24.07
                                                                                                                                                                 267.01
       110.00
                    13 16 18
                                    5800.56
                                                      20.50
                                                                    274.33
                                                                                    65.42
                   14 59 15 5485,30
                                                                                                                                   4885.3
                                                                                                                                                   31.40
                                                                                                                                                                 245.47
                                                                                     69.52
                                                      29.12
                                                                    253.94
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5506.2 SGR 447.1 SG3 191.6
RRT -.4061 RRF -.4044 RTF .9323
SG8 5524.4 R23 .0259 R13 -.9324
SG1 5509.3 SG2 408.4 THA 178.10
                                                                                                                             ST 3068.3 SR 441.2 SS 814.9
CRT -.9824 CRS .9397 CST -.9864
LSA 3201.4 MSA 154.2 SSA 21.2
    TDE-2.0681 TRA .9391 TC3-5.4837 BAU 1.1247
    ROE .3016 RRA .0171 RC3 -.0849 FAU .02919
FOE -.8171 FRA .7699 FC3-1.6476 BSP 17371
                                                                                                                             EL1 3098.8 EL2 81.7 ALF 171.95
     BDE 2.0900 BRA .9392 BC3 5.4843 FSP -626
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FLIGHT TIME 174.00

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FLIGHT TIME 182.00
 LAUNCH CATE JUL 10 1967
                                                                                                                                                                                                                                                 ARRIVAL DATE JAN 8 1968
      HELIOCENTRIC CONIC
                                                                                                                                    DISTANCE 529.385
        RL 152.09 LAL -.00 LOL 287.08 VL 25.828 GAL 2.64 A7L 93.23 MCA 259.84 SMA 123.10 ECC .23973 INC 3.2298 V1 29.292
RP 107.79 LAP 3.18 LOP 186.91 VP 37.207 GAP 11.92 A7P 89.43 TAL 171.58 TAP 71.42 RCA 93.59 APO 152.61 V2 35.156
RC 166.846 GL -21.24 GP 8.37 ZAL 72.17 ZAP 167.48 ETS 39.81 ZAE 128.81 ETE 173.45 ZAC 67.88 ETC 10.50 CLP-170.66
      PLANETOCENTRIC CONIC
       C3 16.104 VHL 4.013 DLA -33.48 RAL 205.69 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 7.671 DPA 3.97 RAP 199.54 ECC 1.2650 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.35 9 32 35 1293.03 24.41 356.17 72.34 113.66 9 54 8 693.0 27.39 348.33 108.65 14 15 30 5678.81 24.42 266.93 72.35 113.64 15 50 9 5078.8 27.40 259.09 110.00 13 31 10 5814.63 20.04 275.17 70.05 118.29 15 8 5 5214.6 23.66 267.90 110.00 15 16 6 5493.25 28.94 254.49 74.33 109.03 16 47 39 4893.2 31.26 246.05
        C3 16.104 VHL 4.013 DLA -33.48 RAL 205.69 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 7.671 DPA
                                                                                                                                                                                                                                          3.97 RAP 199.54 ECC 1.2650
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                        ST 3027.0 SR 449.0 SS 782.0

CRT -.9756 CRS .9274 CST -.9863

LSA 3154.3 MSA 159.9 SSA 20.8

EL1 3058.6 EL2 97.6 ALF 171.76
                                                                                                                           SGT 5542.5 SGR 453.6 SG3 185.0
RRT -.4085 RRF -.4038 RTF ..9334
SGB 5561.0 R23 ..0223 R13 -.9335
SGI 5545.6 SG2 413.8 THA 178.07
        TOE-2.0749 TRA 1.1656 TC3-5.2601 BAU 1.1326
       ROE .3144 RRA .0122 RC3 -.0769 FAU .02715
FOE -.7707 FRA .8263 FC3-1.4595 BSP 17454
BOE 2.0985 BRA 171858 BC3 5.2607 FSP -604
LAUNCH DATE JUL 10 1967
                                                                                                                                     FLIGHT TIME 184.00
                                                                                                                                                                                                                                                 ARRIVAL DATE JAN 10 1961
                                                                                                                                     DISTANCE 534.960
     HELIOCENTRIC CONTC
      RL 152.09 LAL -.00 LOL 287.08 VL 25.781 GAL 3.19 AZL 93.13 MCA 263.07 SMA 122.82 ECC .24437 INC 3.1300 V1 29.292
RP 107.83 LAP 3.11 LOP 190.14 VP 37.163 GAP 12.31 AZP 89.62 TAL 170.02 TAP 73.09 RCA 92.81 APO 152.84 V2 35.145
RC 168.808 GL -19.90 GP 8.05 ZAL 69.05 ZAP 168.35 ETS 41.49 ZAE 128.78 ETE 173.69 ZAC 65.68 ETC 10.19 CLP-171.55
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 17.043 VHL 4.128 DLA -33.36 RAL 209.60 RAD 6567.7 VEL 11.765 PTH 2.08 VHP 7.885 DPA 2.73 RAP 201.53 ECC 1.2805
LNCH APHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.57 9 49 35 1301.66 23.97 356.63 77.10 113.93 10 11 16 701.7 27.00 348.83
108.43 14 29 39 5696.15 23.99 268.06 77.10 113.92 16 4 36 5096.1 27.01 260.27
71.57 9 49 35 1301.66 23.97 356.63 77.10 113.92 16 4 36 5096.1 27.01 260.27
71.57 9 49 35 1301.66 23.97 356.63 77.10 113.92 16 4 36 5096.1 27.00 348.83
108.43 14 29 39 5696.15 23.99 266.06 77.10 113.92 16 4 36 5096.1 27.01 260.27
110.00 13 42 39 5640.29 19.21 276.69 74.56 118.83 15 20 0 5240.3 22.90 269.51
110.00 15 35 45 5493.55 28.94 254.51 79.28 109.05 17 7 19 4893.6 31.26 246.08

DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
                                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          SGT 5582.2 SGR 459.5 SG3 178.8
RRT -.4137 RRF -.4065 RTF ..9351
SGB 5601.1 R23 .0192 R13 -.9352
SG1 5585.5 SG2 418.1 THA 178.04
                                                                                                                                                                                                                         ST 2974.7 SR 456.1 SS 750.1

CRT -.9677 CRS .9140 CST -.9863

LSA 3096.9 MSA 167.2 SSA 20.2

EL1 3007.3 EL2 113.7 ALF 171.55
       TOE-2.0780 TRA 1.4408 TC3-5.0101 BAU 1.1416
       ROE .3286 RRA .0062 RC3 -.0672 FAU .02531
FOE -.7274 FRA .8794 FC3-1.2856 BSP 17637
BOE 2.1038 BRA 1.4408 BC3 5.0106 FSP -587
                                                                                                                                     FLIGHT TIME 186.00
                                                                                                                                                                                                                                               ARRIVAL DATE JAN 12 1968
LAUNCH DATE JUL 10 1967
                                                                                                                                    DISTANCE 540.491
       RL 152.09 LAL -.00 LOL 287.08 VL 25.734 GAL 3.77 AZL 93.03 MCA 266.30 SMA 122.55 ECC .24938 INC 3.0317 V1 29.292
RP 107.86 LAP 3.03 LOP 193.37 VP 37.120 GAP 12.72 AZP 89.60 TAL 168.47 TAP 74.76 RCA 91.99 APO 153.11 V2 35.134
RC 170.755 GL -18.58 GP 7.77 ZAL 65.99 ZAP 169.17 EX5 43.52 ZAE 128.75 ETE 173.91 ZAC 63.47 ETC 10.11 CLP-172.43
      PLANETOCENTRIC CONIC
        C3 18.176 VHL 4.263 DLA -33.16 RAL 213.40 RAD 6567.7.VEL 11.813 PTH 2.09 VHP 8.111 DPA
                                                                                                                                                                                                                                          1.52 RAP 203.54 ECC 1.2991
       C3 18.176 WHL 4.263 DLA -33.16 RAL 213.40 RAD 6567.7.VEL 11.813 PTM 2.09 VMP 8.111 DPA 1.52 RAP 203.54 ECC 1.2991
LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.97 10 7 16 1308.86 23.43 356.92 81.85 114.17 10 29 5 708.9 26.49 349.18
108.03 14 42 19 5718.82 23.44 269.54 81.86 114.16 16 17 38 5118.8 26.50 261.80
71.97 10 7 16 1308.86 23.43 356.92 81.85 114.17 10 29 5 708.9 26.49 349.18
108.03 14 42 19 5718.82 23.44 269.54 81.86 114.16 16 17 38 5118.8 26.50 261.80
110.00 13 51 21 5875.39 18.04 278.75 78.94 119.54 15 29 17 5275.4 21.84 271.67
110.00 15 57 25 5488.32 29.05 254.15 84.32 108.86 17 28 53 4888.3 31.35 245.70
                                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                            SCT 5615.4 SGR 464.4 SG3 172.7
RRT -.4199 RRF -.4104 RTF .9367
SG0 5634.5 R23 .0164 R13 -.9367
SG1 5618.8 SG2 421.2 TMA 178.00
                                                                                                                                                                                                                         ST 2906.3 SR 461.8 SS 716.9

CRT -.9584 CRS .8986 CST -.9860

LSA 3023.6 MSA 176.6 SSA 19.5
        TOE-2.0720 TRA 1.7096 TC3-4.7270 BAU 1.1487
       ROE .3436 RRA -.0013 RC3 -.0572 FAU .02349
FOE -.6837 FRA .9321 FC3-1,1190 88P 17787
                                                                                                                                                                                                                           EL1 2939.9 EL2 130.4 ALF 171.32
       BOE 2,1003 BRA 1,7096 BC3 4,7273 FSP -570
                                                                                                                                                                                                                                                ARRIVAL DATE JAN 14 1968
                                                                                                                                     FLIGHT TIME 188.00
LAUNCH DATE JUL 10 1967
                                                                                                                                    DISTANCE 545.973
     HELIOCENTRIC CONIC
       RL 152.09 LAL -.00 LOL 287.08 VL 25.688 GAL 4.39 AZL 92.93 MCA 269.52 SMA 122.28 ECC .25480 INC 2.9341 V1 29.292
RP 107.90 LAP 2.93 LOP 196.60 VP 37.077 GAP 13.16 AZP 89.98 TAL 166.92 TAP 76.44 RCA 91.13 APO 153.44 V2 35.122
RC 172.886 GL -17.26 GP 7.50 ZAL 63.01 ZAP 169.95 ETS 45.95 ZAE 128.71 ETE 174.10 ZAC 61.24 ETC 10.08 CLP-173.30
     PLANETOCENTRIC CONIC
       C3 19.526 WHL 4.419 DLA -32.89 RAL 217.08 RAD 6567.8 VEL 11.870 PTH 2.11 WHP 8.351 DPA
                                                                                                                                                                                                                                               .35 RAP 205.57 ECC 1.3214
      C3 19.526 VML 4.419 DLA -32.89 RAL 217.08 RAD 6567.8 VEL 11.870 PTM 2.11 VMP 8.351 DPA .35 RAP 205.57 ECC 1.3214 LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.53 10 25 32 1314.67 22.77 357.04 86.58 114.39 10 47 27 714.7 25.87 349.36 107.47 14 53 26 5746.74 22.79 271.37 86.59 114.36 16 29 13 5146.7 25.88 263.69 107.47 14 55 26 5746.74 22.79 271.37 86.59 114.38 16 29 15 5146.7 25.87 349.36 107.47 14 55 26 5746.74 22.79 271.37 86.59 114.38 16 29 15 5146.7 25.88 263.69 110.00 13 57 59 829.42 16.61 303.27 83.20 120.31 14 8 29 29.4 20.52 296.31 110.00 16 20 9 5479.99 29.23 253.57 89.41 108.56 17 51 29 4880.0 31.49 245.09
                                                                                                                           NIO-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                         967 5643.7 968 468.2 963 166.8

RRT -.4273 RRF -.4160 RTF .9364

968 5663.1 R23 .0142 R13 -.9364

961 5647.3 962 423.1 THA 177.96
                                                                                                                                                                                                                        ST 2826.4 SR 466.1 SS 684.8

CRT -.9474 CRS .8815 CST -.9858

LSA 2939.3 MSA 187.3 SSA 18.8

EL1 2860.8 EL2 147.4 ALF 171.10
        TDE-2.0584 TRA 1.9922 TC3-4.4210 BAU 1.1541
       ROE .3595 RRA -.0101 RC3 -.0472 FAU .02175
FDE -.6418 FRA .9839 FC3 -.9643 8SP 17927
BDE 2.0895 BRA 1.9923 BC3 4.4212 FSP --554
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ARRIVAL DATE JAN 16 1968

LAUNCH DATE JUL 10 1967

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DISTANCE 551.401
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.643 GAL 5.03 AZL 92.84 MCA 272.74 5MA 122.02 ECC .26068 INC 2.8367 VI 29.292 RP 107.94 LAP 2.83 LOP 199.82 VP 37.034 GAP 13.61 AZP 90.14 TAL 165.38 TAP 78.12 RCA 90.21 APO 153.83 V2 35.110 RC 174.603 GL -15.97 GP 7.27 ZAL 60.13 ZAP 170.69 ETS 48.86 ZAE 128.67 ETE 174.27 ZAC 59.00 ETC 10.08 CLP-174.16
  PLANETOCENTRIC CONIC
                                                                                                                                   - 79 RAP 207.63 ECC 1.3476
   C3 21.122 VHL 4.596 DLA -32.54 RAL 220.62 RAD 6567.9 VEL 11.937 PTH
                                                                                                    2.12 VHP 8.606 DPA
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               114.58 11 6 23
114.57 16 39 8
114.58 11 6 23
114.57 16 39 8
121.09 14 14 26
108.22 18 14 23
                                                                  356.98
                                                                                 91.27
                                                                                                                                714.7
                                                                                                                                               25.15
                                                                                                                                                             349.36
                                                    22.02
       73.26 10 44 24 1318.72
                                                                                                                               5180.2
                                                                                                                                               25.16
                                                                                                                                                              265.95
                                                                                  91.27
                                                                  273.57
                    15 2 48
                                 5780.19
                                                    22.03
      106.74
                                                                                  91.27
                                                                                                                                718.7
                                                                                                                                               25.15
                                                                                                                                                              349.36
                  10 44 24
                                                                  356.98
       73.26
                                 1318.72
                                                    22.02
                                                                                                                               5180.2
                                                                                                                                               25.16
                                                                                                                                                             265.95
                                                                                  91.27
      106.74
                   15 2 48
                                 5780.19
                                                    22.03
                                                                  273.57
                                                                                                                                 76.4
                                                                                                                                                18.99
                                                                                                                                                             299.10
                                                                                  67.35
                  14 3 10
                                  676.35
                                                   14.98
                                                                  305.93
      110.00
                                                                                                                               4870.6
                                                                                                                                               31.64
                                                                                                                                                             244.39
                   16 43 13 5470.56
                                                                                  94.49
                                                   29.44
                                                                  252.91
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5664.5 SGR 470.8 SG3 161.1
RRT -,4350 RRF -,4220 RTF ,9398
SGB 5684.0 R23 .0120 R13 -,9399
SGI 5668.2 SG2 423.6 THA 177.92
                                                                                                                           ST 2734.8 SR 468.6 SS 652.6
CRT -.9343 CRS .8611 CST -.9853
   TOE-2.0342 TRA 2.2934 TC3-4.0929 BAU 1.1558
   ROE .3758 RRA -.0207 RC3 -.0381 FAU .01997
FOE -.5991 FRA 1.0376 FC3 -.8187 BSP 17958
BOE 2.0686 BRA 2.2935 BC3 4.0931 FSP -533
                                                                                                                           LSA 2843.2 MSA 199.8 SSA 18.0
                                                                                                                           EL1 2769.7 EL2 164.9 ALF 170.87
                                                                                                                                       ARRIVAL DATE JAN 18 1968
                                                                          FLIGHT TIME 192.00
  HELIOCENTRIC CONIC
                                                                          DISTANCE 556.767
   RL 152.09 LAL -.00 LOL 287.08 VL 25.598 GAL 5.71 AZL 92.74 HCA 275.96 SHA 121.76 ECC .26706 INC 2.7388 V1 29.292 RP 107.97 LAP 2.72 LOP 203.04 VP 36.991 GAP 14.09 AZP 90.28 TAL 163.85 TAP 79.80 RCA 89.25 APO 154.28 V2 35.097 RC 176.504 GL -14.70 GP 7.05 ZAL 57.37 ZAP 171.38 ETS 52.33 ZAE 128.63 ETE 174.42 ZAC 56.76 ETC 10.13 CLP-175.02
  PLANETOCENTRIC CONIC
                                                                                                                                   -1.91 RAP 209.70 ECC 1.3785
   C3 22.996 VHL 4.795 DLA -32.12 RAL 224.00 RAD 6567.9 VEL 12.016 PTH
                                                                                                     2.14 VHP 8.879 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                114.74 11 25 48
                                                                                                                                 720.9
                                                                                                                                              24.33
                                                                                                                                                             349.18
                   11 3 47
                                  1320.91
                                                    21.18
                                                                  356.73
                                                                                 95.89
                                                                                                                                                               268.57
                                                                                                  114.73
                                                                                                             16 47 21
                                                                                                                                5219.1
                                                                                                                                                 24.34
                                                    21.19
                                                                  276.13
                                                                                  95.89
      105.84
                  15 10 22 5819.14
                                                                                                 114.73 16 47 21
114.74 11 25 48
114.73 16 47 21
121.82 14 19 23
107.88 18 37 5
                                                                                                                                 720.9
                                                                                                                                                 24.33
                                                                                                                                                               349.18
                                  1320.91
                                                    21.18
                                                                  356.73
                                                                                  95.89
        74.16
                   11 3 47
                 15 10 22 5819.14
14 7 16 726.68
                                                                                  95.89
                                                                                                                                5219.1
                                                                                                                                                24.34
                                                                                                                                                              268.57
                                                   21.19
                                                                  276.13
                                                                                                                                126.7
                                                                                                                                               17.31
                                                                                                                                                               302.03
                                    726.68
                                                    13.19
                                                                  308.73
                                                                                  91.40
      110.00
                  14 7 16
                  17 6 3 5461.37
                                                                                                                                                 31.79
                                                                                                                                                               243.72
                                                                                                                                4861.4
                                                                  252.26
                                                                                  99.53
      110.00
                                                   29.63
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 5684.0 SGR 472.5 SG3 155.7
RRT -.4443 RRF -.4301 RTF .9418
SGB 5703.6 R25 .0104 R13 -.9419
SGI 5687.9 SG2 423.0 THA 177.87
                                                                                                                           ST 2642.4 SR 469.6 SS 623.9
CRT -.9196 CRS .8398 CST -.9852
   TOE-2.0077 TRA 2.6056 TC3-3.7653 BAU 1.1576
    ROE .3929 RRA -.0325 RC3 -.0292 FAU .01836
                                                                                                                            LSA 2747.1 MSA 212.5 SSA 17.2
    FOE -.5606 FRA 1.0889 FC3 -.6913 8SP 18088
                                                                                                                            EL1 2677.6 EL2 182.1 ALF 170.67
    BDE 2.0458 BRA 2.6058 BC3 3.7654 FSP -518
                                                                                                                                      ARRIVAL DATE JAN 20 1968
                                                                          FLIGHT TIME 194.00
LAUNCH DATE JUL 10 1967
                                                                         DISTANCE 562.062
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.553 GAL 6.42 AZL 92.64 MCA 279.17 SMA 121.51 ECC .27399 INC 2.6399 V1 29.292 RP 108.01 LAP 2.61 LOP 206.26 VP 36.948 GAP 14.60 AZP 90.42 TAL 162.33 TAP 81.50 RCA 88.22 APO 154.80 V2 35.084 RC 178.389 GL -13.48 GP 6.85 TAL 54.72 ZAP 172.01 ETS 56.46 ZAE 128.58 ETE 174.56 ZAC 54.52 ETC 10.22 CLP-175.88
   PLANETOCENTRIC CONIC
    C3 25.188 VML 5.019 DLA -31.66 RAL 227.21 RAD 6568.0 VEL 12.106 PTH 2.17 VMP 9.171 DPA -2.99 RAP 211.79 ECC 1.4145
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              INJ AZMTH INJ TIME
114.86 11 45 46
114.86 16 53 44
114.86 16 53 44
122.48 14 23 36
107.58 18 59 12
                                                                                                                                             23.44 348.78
                                                                                                                                 720.8
                                                                                100.43
                   11 23 45 1320.80
15 16 0 5863.87
                                                                  356.27
        75.21
                                                    20.26
                                                                                                                                                              271.58
                                                                                                                                                23.45
                                                     20.27
                                                                  279.07
                                                                                 100.43
                                                                                                                                5263.9
       104.79
                                                                                                                                                              348.78
                                                                                                                                                23.44
                   11 23 45 1320.80
15 16 0 5863.87
                                                                                 100.43
                                                                                                                                 720.8
                                                     20.26
                                                                  356.27
        75.21
                                                                                                                                                              271.58
                                                                                                                                                23.45
                                                     20.27
                                                                  279.07
                                                                                 100.43
                                                                                                                                5263.9
       104.79
                                                                                                                                                               305.03
                  14 10 37
                                                                  311.61
                                                                                  95.34
                                                                                                                                 179.3
                                                                                                                                               15.49
                                    779.33
                                                     11.29
       110.00
                   17 28 19 5453.34
                                                                                                                                              31.91
                                                                                                                                                              243.12
                                                                                                                                4853.3
                                                                  251.70
                                                                                 104.51
                                                   29.80
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2547.7 SR 468.9 SS 597.4

CRT -,9026 CRS .8161 CST -.9850

LSA 2648.8 MSA 225.8 SSA 16.5

EL1 2582.8 EL2 199.0 ALF 170.51
                                                                      SGT 5698.0 SGR 473.0 SG3 150.5
    TDE-1.9753 TRA 2.9346 TC3-3.4352 BAU 1.1568
    RDE .4104 RRA -.0458 RC3 -.0215 FAU .01678
FOE -.5236 FRA 1.1411 FC3 -.5768 BSP 18190
BDE 2.0175 BRA 2.9350 BC3 3.4353 FSP -503
                                                                      RRT -.4541 RRF -.4388 RTF .9438
SGB 5717.6 R23 .0088 R15 -.9438
SGI 5702.1 SG2 421.1 THA 177.83
                                                                                                                                       ARRIVAL DATE JAN 22 1968
                                                                           FLIGHT TIME 196.00
LAUNCH DATE JUL 10 1967
                                                                          DISTANCE 567.278
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 25.509 GAL 7.18 AZL 92.54 MCA 282.38 SMA 121.26 ECC .28153 INC 2.5392 V1 29.292 RP 108.05 LAP 2.48 LOP 209.47 VP 36.905 GAP 15.14 AZP 90.55 TAL 160.83 TAP 83.21 RCA 87.12 APO 155.40 V2 35.071 RC 180.257 GL -12.29 GP 6.67 ZAL 52.20 ZAP 172.58 ETS 61.35 ZAE 128.51 ETE 174.69 ZAC 52.27 ETC 10.36 CLP-176.73
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.44 11 44 22 1317.98 19:27 355.57 104.88 114.96 12 6 20 718.0 22.47 348.14
                                                     19.29
                                                                   304.52
                                                                                  104.89
                                                                                                  114.95
                                                                                                              15 30 1
                                                                                                                                   26.6
                   15 19 34
                                    626.57
       103.56
                                                                                                                                                               348.14
                                                                                                  114.96
                                                                                                             12 6 20
                                                                                                                                  718.0
                                                                                                                                                 22.47
                                                                   355.57
                                                                                  104.88
                                 1317.98
                                                    19.27
        76.44
                   11 44 22
                                                                                                                                                 22.49
                                                                                                  114.95
                                                                                                              15 30 I
                                                                                                                                   26.6
                                                                                                                                                               297.09
                                                    19.29
                                                                   304.52
                                                                                  104.89
                    15 19 34
                                    626,57
       103.56
                                                                                                  123.05 14 27 15
107.35 19 20 32
                                                                                                                                                               300.07
                                                                                                                                                 13.57
                                    833.60
                                                                                                                                 233.6
                                                      9.29
                                                                   314.54
                                                                                   99.18
                    14 13 21
       110.00
                                                                                                                                                               242.65
                                   5446.99
                                                     29.93
                                                                   251.25
                                                                                  109.41
                                                                                                                                 4847.0
                                                                                                                                                 32.01
                   17 49 45
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2453.5 SR 466.5 SS 573.8

CRT -.8834 CRS .7905 CST -.9850

LSA 2551.2 MSA 239.0 SSA 15.8

EL1 2488.1 EL2 215.5 ALF 170.40
    TOE-1.9379 TRA 3.2819 TC3-3.1084 BAU 1.1530
                                                                       SGT 5706.9 SGR 472.3 SG3 145.6
    RDE .4282 RRA -.0606 RC3 -.0148 FAU .01524
FDE -.4887 FRA 1.1943 FC3 -.4757 BSP 18275
BOE 1.9847 BRA 3.2825 BC3 3.1084 FSP -488
                                                                       RRT -.4645 RRF -.4482 RTF .9459
                                                                      SGB 5726.4 R23 .0074 R13 -.9459
                                                                      SG1 5711.1 SG2 418.0 THA 177.79
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FLIGHT TIME 190.00

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LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 198.00
                                                                                                                                   ARRIVAL DATE JAN 24 1968
                                                                        DISTANCE 572.402
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 25.466 GAL 7.98 ATL 92.44 MCA 285.60 SMA 121.02 ECC .28976 INC 2.4361 V1 29.292 RP 108.09 LAP 2.35 LOP 212.69 VP 36.863 GAP 15.72 ATP 90.66 TAL 159.35 TAP 84.94 RCA 85.95 APO 156.08 VZ 35.058 RC 182.108 GL -11.15 GP 6.50 TAL 49.81 TAP 173.07 ETS 67.09 TAE 128.44 ETE 174.80 TAC 50.04 ETC 10.55 CLP-177.60
   PLANETOCENTRIC CONIC
    C3 50.722 VHL 5.545 DLA -30.61 RAL 233.09 RAD 6568.2 VEL 12.333 PTH
                                                                                                  2.22 VMP 9.823 OPA -5.06 RAP 216.00 ECC 1.5056
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                            115.02 12 27 48
115.02 15 37 8
                                 1311.22
                                                                               109.25
                                                                                                                           711.2
        77.86
                   12 5 57
                                                   18.23
                                                                 354.55
                                                                                                                                            21.45
                                                                                                                                                          347.18
                                                                 308.35
       102.14
                   15 20 44
                                  664.34
                                                   18.24
                                                                               109.25
                                                                                                                               84.3
                                                                                                                                             21.46
                                                                                                                                                          300.98
                                                                                              115.02 12 27 48
115.02 15 32 8
123.50 14 30 26
107.18 19 40 56
                  12 5 57
        77.86
                                 1311.22
                                                   18.23
                                                                 354.55
                                                                               109.25
                                                                                                                              711.2
                                                                                                                                             21.45
                                                                                                                                                          347.18
       102.14
                   15 20 44
                                  684.34
                                                   16.24
                                                                 308.35
                                                                               109.25
                                                                                                                               84.3
                                                                                                                                             21.46
                                                                                                                                                          300.98
       110.00
                  14 15 37
                                  888.96
                                                     7.22
                                                                 317.50
                                                                               102.94
                                                                                                                             249.0
                                                                                                                                             11.57
                                                                                                                                                          311.11
       110.00
                   18 10 14
                                  5442.64
                                                   30.02
                                                                 250.94
                                                                               114.22
                                                                                                                             4842.6
                                                                                                                                             32.07
                                                                                                                                                          242.33
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 5710.4 SGR 470.3 SG3 140.9
RRT -.4748 RRF -.4578 RTF .9481
SG8 5729.7 R23 .0060 R13 -.9481
SG1 5714.8 SG2 413.6 THA 177.75
                                                                                                                         ST 2359.7 SR 461.8 SS 552.5
CRT -.8611 CRS .7620 CST -.9850
    TOE-1.8926 TRA 3.6525 TC3-2.7856 BAU 1.1441
    ROE .4460 RRA -.0771 RC3 -.0096 FAU .01369
FDE -.4545 FRA 1.2500 FC3 -.3857 BSP 18257
BDE 1.9445 BRA 3.6533 BC3 2.7856 FSP -470
                                                                                                                        LSA 2454.2 MSA 252.3 SSA 15.1
                                                                                                                         EL1 2393.3 EL2 231.5 ALF 170.34
LAUNCH DATE JUL 10 1967
                                                                         FLIGHT TIME 200.00
                                                                                                                                    ARRIVAL DATE JAN 26 1968
                                                                        DISTANCE 577.418
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.423 GAL 8.84 AZL 92.33 MCA 288.80 SMA 120.78 ECC .29874 INC 2.3298 V1 29.292
RP 108.13 LAP 2.21 LOP 215.90 VP 36.821 GAP 16.34 AZP 90.75 TAL 157.89 TAP 86.69 RCA 84.70 APO 156.86 VZ 35.045
RC 183.942 GL -10.06 GP 6.35 ZAL 47.55 ZAP 173.46 ETS 73.72 ZAE 128.35 ETE 174.90 ZAC 47.81 ETC 10.80 CLP-178.47
  PLANETOCENTRIC CONIC
    C3 34.188 VHL 5.847 DLA -30.05 RAL 235.76 RAD 6568.3 VEL 12.472 PTH
                                                                                                   2.26 WHP 10.189 DPA
                                                                                                                                -6.05 RAP 218.12 ECC 1.5627
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       79.51
                   12 28 53 1299.10
                                                   17.15
                                                                 353.11
                                                                              113.51
                                                                                            115.06 12 50 32
                                                                                                                              699.1
                                                                                                                                            20.38
                                                                                                                                                          345.80
                                                                                              115.05 15 31 36
115.06 12 50 32
115.05 15 31 36
123.85 14 33 14
107.10 20 0 21
      100.49
                  15 19 6
                                   750.30
                                                   17.16
                                                                 312.74
                                                                               113.51
                                                                                                                              150.3
                                                                                                                                             20.39
                                                                                                                                                           305.43
        79.51
                   12 28 53
                                 1299.10
                                                   17.15
                                                                 353.11
                                                                               113.51
                                                                                                                              699.1
                                                                                                                                             20.38
                                                                                                                                                           345.80
                 15 19 6
14 17 29
                                                  17.16
      100.44
                                   750.30
                                                                 312.74
                                                                               113.51
                                                                                                                              150.3
                                                                                                                                             20.39
                                                                                                                                                           305.43
      110.00
                                   945.03
                                                     5.10
                                                                 320.46
                                                                               106.60
                                                                                                                              345.0
                                                                                                                                             9.51
                                                                                                                                                           314.14
                  18 29 40
                                 5440.41
                                                                 250.78
      110.00
                                                   30.06
                                                                               118.92
                                                                                                                             4840.4
                                                                                                                                            32.10
                                                                                                                                                          242.17
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5710.4 SGR 467.3 SG3 136.3
RRT -.4860 RRF -.4686 RTF .9506
SG8 5729.5 R23 .0048 R13 -.9506
SG1 5714.9 SG2 408.1 THA 177.71
                                                                                                                        ST 2274.2 SR 455.9 SS 535.3
CRT -.8373 CRS .7337 CST -.9855
    TOE-1.8490 TRA 4.0392 TC3-2.4812 BAU 1.1341
    ROE .4641 RRA -.0948 RC3 -.0052 FAU .01225
    FDE -.4244 FRA 1.3057 FC3 -.3102 BSP 18331
                                                                                                                        LSA 2365.7 MSA 264.1 SSA 14.5
    BOE 1.9064 BRA 4.0403 BC3 2.4812 FSP -457
                                                                                                                         EL1 2306.4 EL2 245.8 ALF 170.36
                                                                        FLIGHT TIME 202.00
                                                                                                                                   ARRIVAL DATE JAN 28 1968
LAUNCH CATE JUL 10 1967
   HELIOCENTRIC CONIC
                                                                       DISTANCE 582.310
   RL 152.09 LAL -.00 LOL 287.08 VL 25.381 GAL 9.75 AZL 92.22 MCA 292.01 SMA 120.54 ECC .30858 INC 2.2194 VI 29.292 RP 108.18 LAP 2.06 LOP 219.10 VP 36.779 GAP 17.01 AZP 90.83 TAL 156.46 TAP 88,47 RCA 83.35 APO 157.74 V2 35.032 RC 185.758 GL -9.01 GP 6.21 ZAL 45.43 ZAP 173.75 ETS 81.22 ZAE 128.25 ETE 175.00 ZAC 45.59 ETC 11.10 CLP-179.34
   PLANETOCENTRIC CONIC
    C3 38.227 VHL 6.183 OLA -29.46 RAL 238.25 RAD 6568.5 VEL 12.633 PTH 2.29 VHP 10.586 DPA -7.01 RAP 220.25 ECC 1.6291
    UNCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             115.06 13 15 26
115.05 15 27 31
117.54 14 58 7
112.65 16 18 46
124.07 14 35 41
107.10 20 18 42
                                                                           117.66
117.67
                                                                                                                                         19.27
                                                                                                                                                       343.77
                                                                351.03
                                                                                                                            678.4
       81.51
                 12 54 7 1278.36
                                                  16.03
                  15 13 43
                                  827.46
                                                   16.04
                                                                317.92
                                                                                                                             227.5
                                                                                                                                            19.29
                                                                                                                                                          310.67
                 14 42 40
16 7 52
                                                                 323.29
                                                                              115.67
                                                                                                                             326.9
                                                                                                                                            15.70
                                                                                                                                                         316.34
      100.00
                                   926.90
                                                   12.10
                                                                             119.53
      100.00
                                   654.15
                                                  20.04
                                                                306.94
                                                                                                                              54.2
                                                                                                                                            22.94
                                                                                                                                                         299.34
                 14 19 0 1001.50
18 48 2 5440.36
                                                                           110.17
123.52
      110.00
                                                    2.95
                                                                 323.42
                                                                                                                              401.5
                                                                                                                                             7.41
                                                                                                                                                          317.16
                                                                250.78
                                                                                                                            4840.4
                                                                                                                                            32.10
                                                                                                                                                         242.16
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 5705.8 SCR 463.0 SC3 132.0
RRT -.4973 RRF -.4798 RTF .9533
SC8 5724.5 R23 .0039 R13 -.9534
SCI 5710.5 SC2 401.4 TMA 177.68
                                                                                                                       ST 2194.7 SR 448.4 SS 521.2

CRT -.8113 CRS .7049 CST -.9862

LSA 2283.4 MSA 274.6 SSA 13.9

EL1 2225.1 EL2 258.6 ALF 170.46
    TOE-1.8031 TRA 4.4493 TC3-2.1908 BAU 1.1196
    ROE .4822 RRA -.1138 RC3 -.0020 FAU .01084
FOE -.3967 FRA 1.3636 FC3 -.2456 8SP 18387
    BOE 1.8664 BRA 4.4507 BC3 2.1908 FSP
LAUNCH DATE JUL 10 1967
                                                                        FLIGHT TIME 204.00
                                                                                                                                   ARRIVAL DATE JAN 30 1968
                                                                        DISTANCE 587.056
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.340 GAL 10.73 AZL 92.10 MCA 295.21 SMA 120.31 ECC .31937 INC 2.1040 V1 29.292
RP 108.22 LAP 1.90 LOP 222.31 VP 36.738 GAP 17.74 AZP 90.90 TAL 155.08 TAP 90.29 RCA 81.89 APO 158.74 V2 35.019
RC 187.557 GL -8.02 GP 6.09 ZAL 43.44 ZAP 173.91 ETS 89.43 ZAE 128.12 ETE 175.09 ZAC 43.39 ETC 11.47 CLP 179.76
   PLANETOCENTRIC CONIC
    C3 42.939 VHL 6.553 DLA -28.87 RAL 240.56 RAD 6568.6 VEL 12.818 PTH 2.53 VMP 11.018 DPA -7.92 RAP 222.38 ECC 1.7067
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.02 13 45 4
115.01 15 17 19
118.69 14 46 0
111.57 16 50 19
124.18 14 37 49
107.17 20 36 0
                                                                            121.71
                                                                                                                                          18.14
       84.14 13 24 24 1240.03
                                                  14.89
                                                                347.65
                                                                                                                              640.0
                                                                                                                                                          340.44
       95.86
                   15 1 55
                                   924.47
                                                   14.90
                                                                 324.53
                                                                               121.72
                                                                                                                              324.5
                                                                                                                                             18.15
                                                                                                                                                          317.32
                                                                              118.55
                                                                                                                              431.0
                                                                                                                                             12.53
                                                                                                                                                          322.44
                  14 28 49
                                 1030.95
                                                    8.76
                                                                 329.20
      100.00
                                                                 304.07
                                                                               124.57
                                                                                                                               8.8
                                                                                                                                            23.95
                                                                                                                                                          296.34
                   16 40 10
                                   608.78
                                                   21.21
      100.00
                  14 20 11 1058.14
                                                                              113.66
                                                                                                                              458.1
                                                                                                                                              5.27
                                                                                                                                                          320.15
      110.00
                                                                 326.37
                                 5442.40
                                                   30.02
                                                                250.92
                                                                               128.01
                                                                                                                            4842.4
                                                                                                                                            32.07
                                                                                                                                                          242.31
      110.00
                  19 5 18
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2121.4 SR 439.3 SS 510.3
CRT -.7835 CRS .6756 CST -.9871
LSA 2207.5 MSA 283.5 SSA 13.3
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TOE-1.7550 TRA 4.8836 TC3-1.9163 BAU 1.1001 ROE .5003 RRA -.1342 RC3 .0002 FAU .00946 FDE -.3711 FRA 1.4243 FC3 -.1907 83P 18398 BDE 1.8249 BRA 4.8854 BC3 1.9163 FSP -430 SGT 5695.3 SGR 457.5 SG3 127.9

RRT -.5087 RRF -.4913 RTF .9562 SGB 5713.7 R23 .0029 R13 -.9562 SG1 5700.1 SG2 393.5 THA 177.65

EL1 Z149.6 EL2 Z69.4 ALF 170.64

ARRIVAL DATE FEB 1 1968

LAUNCH DATE JUL 10 1967

DISTANCE 591.630 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 287.08 VL 25.300 GAL 11.78 A7L 91.98 MCA 298.41 SMA 120.09 ECC .33125 INC 1.9824 V1 29.292 RP 108.26 LAP 1.74 LOP 225.51 VP 36.698 GAP 18.53 A7P 90.94 TAL 153.73 TAP 92.15 RCA 80.31 APO 159.87 V2 35.005 RC 189.357 GL -7.07 GP 5.97 ZAL 41.59 ZAP 173.92 ETS 98.04 ZAE 127.97 ETE 175.17 ZAC 41.22 ETC 11.91 CLP 178.85 PLANETOCENTRIC CONIC 2.38 WHP 11.490 OPA -8.81 RAP 224.50-ECC 1.7973 C3 48.449 VHL 6.961 DLA -28.27 RAL 242.70 RAD 6568.8 VEL 13.031 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT IÑJ E LONG 124.98 115.68 14 26 11 114.22 14 54 17 119.35 14 39 1 110.94 18 43 31 124.16 14 39 38 107.32 20 52 16 15.72 560.7 12.36 340.61 90.00 14 6 50 1160.71 90.00 14 36 32 1064.42 464.4 18.28 126.31 334.89 15.13 9.79 14 20 24 1116.80 17 5 40 5871.60 334.00 121.59 516.8 5.93 272.57 24.48 5271.6 129.24 21.83 280.36 100.00 117.07 323.12 514.7 3.12 14 21 4 1114.73 19 21 29 5446.44 -1.37 329.33 32.01 242.61 4846.4 132.37 251.21 29.94 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2054.0 SR 428.6 SS 502.0 CRT - .7531 CRS .6451 CST -.9882 LSA 2137.7 MSA 290.9 SSA 12.8 SGT 5683.1 SGR 450.6 SG3 124.0 RRT -.5199 RRF -.5027 RTF .9592 SG8 5701.0 R23 .0020 R15 -.9592 SG1 5688.0 SG2 384.6 THA 177.63 TDE-1.7018 TRA 5.3519 TC3-1.6563 BAU 1.0728 RDE .5179 RRA -.1561 RC3 .0013 FAU .00802 FDE -.3463 FRA 1.4896 FC3 -.1453 BSP 18344 BDE 1.7789 BRA 5.3542 BC3 1.6563 FSP -414 EL1 2079.7 ELZ 278.5 ALF 170.91 ARRIVAL DATE FEB 3 1968 FLIGHT TIME 208.00 DISTANCE 595.997 RL 152.09 LAL -.00 LOL 287.08 VL 25.260 GAL 12.91 AZL 91.85 MCA 301.61 SMA 119.88 ECC .34435 INC 1.8534 V1 29.292 RP 108.30 LAP 1.58 LOP 228.70 VP 36.658 GAP 19.40 AZP 90.97 TAL 152.45 TAP 94.06 RCA 78.60 APO 161.15 V2 34.992 RC 191.100 GL -6.17 GP 5.86 ZAL 39.88 ZAP 173.78 ETS 106.69 ZAE 127.79 ETE 175.25 ZAC 39.07 ETC 12.42 CLP 177.91 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.43 WHP 12.009 OPA -9.65 RAP 226.62 ECC 1.9037 C3 54.911 VHL 7.410 OLA -27.66 RAL 244.67 RAD 6569.0 VEL 13.277 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 717.3 117.36 13 58 9 126.98 90.00 13 36 12 1317.32 7.59 349.64 112.49 15 39 4 119.72 14 34 9 110.55 19 5 8 124.02 14 41 10 107.54 21 7 29 321.66 15 39 4 370.0 20.58 131.78 15 22 54 970.02 17.68 329.14 331.70 594.4 7.25 1194.36 124.65 3.32 336.28 100.00 14 14 14 271.53 5256.3 24.80 17 27 32 5656.26 279.37 133.67 22.20 .96 571 . 1. 326.06 14 21 39 1171.09 19 36 37 5452.29 332.27 120.40 -3.53 110.00 4852.3 31.93 243.05 251.62 29.82 136.60 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1995.7 SR 416.8 SS 497.3 CRT -.7230 CRS .6175 CST -.9896 LSA 2077.6 MSA 295.4 SSA 12.2 SGT 5664.9 SGR 442.6 SG3 120.2 MRT -.5314 MRF -.5147 RTF .9625 TOE-1.6539 TRA 5.8451 TC3-1.4182 BAU 1.0411 RDE .5356 RRA -.1789 RC3 .0019 FAU .00666 FDE -.3255 FRA 1.5572 FC3 -.1049 BSP .18380 SGB 5682.1 R23 .0013 R13 -.9625 SG1 5669.8 SG2 374.6 THA 177.61 ELI 2018.7 EL2 284.6 ALF 171.24 BOE 1.7384 BRA 5.8478 BC3 1.4182 FSP -403 ARRIVAL DATE FEB 5 1968 FLIGHT TIME 210.00 LAUNCH DATE JUL 10 1967 DISTANCE 600.117 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 287.08 VL 25.221 GAL 14.15 A7L 91.72 MCA 304.81 SMA 119.66 ECC .35885 INC 1.7153 V1 29.292 RP 108.34 LAP 1.41 LOP 231.90 VP 36.619 GAP 20.35 A7P 90.98 TAL 151.22 TAP 96.03 RCA 76.72 APO 162.61 V2 34.979 RC 192.846 GL -5.31 GP 5.76 ZAL 38.31 ZAP 173.48 ETS 114.97 ZAE 127.57 ETE 175.33 ZAC 36.97 ETC 13.03 CLP 176.94 PLANETOCENTRIC CONIC C3 62.521 VHL 7.907 DLA -27.06 RAL 246.47 RAD 6569.2 VEL 13.560 PTH 2.48 VMP 12.581 DPA -10.46 RAP 228.72 ECC 2.0289 LNCH ATATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO-EST TIM INJ 2 LAT INJ 2 LONG 117.99 13 46 28 111.74 16 6 10 119.88 14 30 22 110.31 19 24 20 123.77 14 42 22 107.82 21 21 42 816.7 129.66 13 22 51 1416.71 4.44 355.25 90.00 334.0 21.39 319.34 18.60 326.90 136.34 15 50 36 934.04 90.00 666.8 335.72 14 9 15 1266.80 17 46 53 5847.23 127.69 .87 342.26 100.00 5247.2 24.98 270.92 22.41 278.79 137.90 100.00 627.1 -1.18 328.98 14 21 55 1227.05 19 50 43 5459.74 -5.65 335.21 123.64 110.00 19 50 43 4859.7 31.81 243.60 140.69 252.15 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5642.4 SGR 433.3 SG3 116.6 RRT -.5427 RRF -.3268 RTF ..9658 SGB 5659.1 R23 ..0006 R13 -.9658 SGI 5647.4 SG2 363.6 THA 177.60 ST 1943.8 SR 403.7 SS 495.4 CRT -.6924 CRS .5910 CST -.9910 LSA 2024.4 MSA \ 297.5 SSA 11.7 TOE-1.6062 TRA 6.3731 TC3-1.1978 BAU 1.0012 ROE .5529 RRA -.2027 RC3 .0017 FAU .00527 FOE -.3068 FRA 1.6298 FC3 -.0730 BSP 18390 ELI 1964.3 ELZ 288.3 ALF 171.64 BOE 1.6988 BRA 6.3764 BC3 1.1978 FSP -391 ARRIVAL DATE FEB 7 1968 FLIGHT TIME 212.00 LAUNCH DATE JUL 10 1967 DISTANCE 603.939 HELIOCENTRIC CONTC RL 152.09 LAL -.00 LOL 287.08 VL 25.184 GAL 15.49 AZL 91.57 MCA 308.00 SMA 119.46 ECC .37494 INC 1.5661 VI 29.292
RP 108.38 LAP 1.23 LOP 235.09 VP 36.581 GAP 21.40 AZP 90.96 TAL 150.06 TAP 98.08 RCA 74.67 APO 164.25 V2 34.966
RC 194.574 GL -4.50 GP 5.67 ZAL 36.88 ZAP 173.03 ETS 122.61 ZAE 127.52 ETE 175.41 ZAC 34.90 ETC 13.72 CLP 175.94 PLANETOCENTRIC CONIC C3 71.521 VHL 8.457 DLA -26.47 RAL 248.11 RAD 6569.4 VEL 13.888 PTH 2.54 VHP 13.214 DPA -11.22 RAP 230.80 ECC 2.1770 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 13 33 1501.52 1.72 359.99 132.43 118.27 13 38 35 901.5 5.49 353.33 118.27 13 38 35 111.30 16 28 9 913.42 19.12 325.60 140.55 90.00 16 12 55 119.86 14 27 12 110.19 19 41 36 123.40 14 43 15 108.14 21 34 56 735.6 2.52 339.51 346.03 130.66 14 4 56 1335.56 -1.46 100.00 270.62 22.52 5242.7 25.07 16 4 13 278.49 141.93 5842.66 100.00 331.87 14 21 52 1282.42 20 3 47 5468.56 682.4 -7.74 336.14 126.79 110,00 31.67 4868.6 244.25 29.48 252.77 144.62 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1898.1 SR 389.6 SS 496.4 CRT -.6619 CRS .5661 CST -.9924 SCT 5616.0 SCR 422.7 SC3 113.2 RRT -.5537 RRF -.5388 RTF .9692 SCB 5631.9 R23 -.0000 R13 -.9692 TOE-1.5600 TRA 6.9405 TC3 -.9949 BAU .9513 ROE .5699 RRA - .2273 RC3 .0010 FAU .00384 LSA 1978.0 HSA 297.2 SSA 11.1 FOE -.2900 FRA 1.7083 FC3 -.0465 BSP 18360 BDE 1.6609 BRA 6.9442 BC3 .9949 FSP -380 EL1 1915.9 EL2 289.3 ALF 172.08 SG1 5620.9 SG2 351.7 THA 177.60

FLIGHT TIME 206.00

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FLIGHT TIME 214.00
 LAUNCH DATE JUL 10 1967
                                                                                                                                           ARRIVAL DATE FEB 9 1968
    HELIOCENTRIC CONIC
                                                                            DISTANCE 607.395
     RL 152.09 LAL -.00 LOL 287.08 VL 25.148 GAL 16.95 ATL 91.40 MCA 311.19 SMA 119.27 ECC .39286 INC 1.4035 VI 29.292
RP 108.42 LAP 1.06 LOP 238.28 VP 36.544 GAP 22.57 AZP 90.92 TAL 149.03 TAP 100.22 RCA 72.41 APO 166.12 VZ 34.953
RC 196.285 GL -3.73 GP 5.59 ZAL 35.59 ZAP 172.43 ETS 129.44 ZAE 127.01 ETE 175.49 ZAC 32.89 ETC 14.52 CLP 174.89
    PLANETOCENTRIC CONIC
     C3 82.222 VHL 9.068 DLA -25.88 RAL 249.57 RAD 6569.6 VEL 14.268 PTH 2.60 VHP 13.919 DPA -11.94 RAP 232.85 ECC 2.3532
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    13 6 8 1578.44
16 32 1 901.03
14 0 59 1401.36
18 19 52 5841.38
14 21 29 1337.03
20 15 52 5478.47
         90.00
                                                                                 135.18
                                                                                                                                978.4
                                                                                                  118.31 13 32 27
111.02 16 47 2
                                                       -.76
                                                                      4.28
                                                                                                                                                     3.03 357.65
         90.00
                                                      19.42
                                                                     324.82
                                                                                    144.51
                                                                                                                                     301.0
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                                                                                                                                                                   317.16
                                                                                                    119.68 14 24 20
110.16 19 57 14
122.92 14 43 46
108.50 21 47 10
       100.00
                                                      -3.69
                                                                     349.65
                                                                                    133.56
                                                                                                                                     801.4
                                                                                                                                                                   343.12
       100.00
                                                      22.55
                                                                     278.41
                                                                                    145.77
                                                                                                                                    5241.4
                                                                                                                                                    25.09
                                                                                                                                                                   270.53
       110.00
                                                       -9.77
                                                                     341.06
                                                                                    129.84
                                                                                                                                    737.0
                                                                                                                                                    -5.37
                                                                                                                                                                   334.74
                                                                                                                                                  31.51
       110.00
                                                       29.27
                                                                     253.46
                                                                                    148.38
                                                                                                                                    4878.5
                                                                                                                                                                   244.97
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 5585.5 SGR 410.9 SG3 109.9
RRT -.5644 RRF -.5505 RTF .9727
     TOE-1.5161 TRA 7.5518 TC3 -.8090 BAU
                                                                                                                                ST 1857.7 SR - 374.4 SS 500.3
                                                          .8893
                                                                                                                               CRT -.6321 CRS .5430 CST -.9937
LSA 1937.8 MSA 294.5 SSA 10.6
EL1 1873.1 EL2 287.8 ALF 172.56
     ROE .5866 RRA -.2524 RC3 -.0000 FAU .00233
     FOE -.2754 FRA 1.7937 FC3 -.0245 BSP 18351
BOE 1.6257 BRA 7.5560 BC3 .8090 FSP -368
                                                                         568 5600.6 R23 -.0006 R13 -.9727
                                                                         5G1 5590.4 SGZ 338.9 THA 177.61
LAUNCH DATE JUL 10 1967
                                                                             FLIGHT TIME 216.00
                                                                                                                                           ARRIVAL DATE FEB 11 1968
   HELIOCENTRIC CONIC
                                                                             DISTANCE 610.402
    RL 152.09 LAL -.00 LOL 287.08 VL 25.113 GAL 18.57 AZL 91.22 MCA 314.38 SMA 119.08 ECC .41288 INC 1.2243 V1 29.292
RP 108.46 LAP .87 LOP 241.46 VP 36.508 GAP 23.87 AZP 90.86 TAL 148.10 TAP 102.48 RCA 69.91 APO 168.25 V2 34.941
RC 197.979 GL -2.99 GP 5.51 ZAL 34.46 ZAP 171.70 ETS 135.45 ZAE 126.64 ETE 175.57 ZAC 30.94 ETC 15.43 CLP 175.78
   PLANETOCENTRIC CONIC
     C5 95.025 WHL 9.748 DLA -25.30 RAL 250.86 RAD 6569.9 VEL 14.709 PTH
                                                                                                        2.66 WHP 14.708 DPA -12.62 RAP 234.86 ECC 2.5639
     LNCH AFMTH. LNCH TIME. L-I TIME. INJ. LAT. INJ. LCNG. INJ. AFT ASC. INJ. AFMTH. INJ. TIME. PO. CST. TIM. INJ. 2 LAT. INJ. 2 LONG
                                                                                                 118.16 13 27 14
110.86 17 3 39
        90.00
                    12 59 44 1650.01
                                                      -3.07
                                                                      8.28
                                                                                 137.67
                                                                                                                                   1050.0
                                                                                                                                                        .72
        90.00
                     16 48 46
                                     893.83
                                                      19.60
                                                                     324.37
                                                                                    148.22
                                                                                                                                    293.8
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                                                                                                   119.37 14 21 34
110.19 20 11 23
122.34 14 43 53
108.89 21 58 26
                                  1464.59
       100.00
                     13 57 9
                                                       -5.81
                                                                     353.14
                                                                                    136.36
                                                                                                                                      864.6
                                                                                                                                                     -1.85
                   18 34 1 5842.53
14 20 43 1390.70
20 26 57 5489.19
       100.00
                                                     22.53
                                                                     278.48
                                                                                    149.39
                                                                                                                                    5242.5
                                                                                                                                                    25.07
                                                                                                                                                                   270.61
                                                                                                                                                    -7.39
       110.00
                                                     -11.74
                                                                     343.97
                                                                                    132.76
                                                                                                                                     790.7
                                                                                                                                                                   337.57
       110.00
                                                                                                                                                   31.33
                                                      29.03
                                                                     254.21
                                                                                    151.96
                                                                                                                                   4889.2
                                                                                                                                                                   245.76
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        $67 5552.0 $68 397.7 $63 106.9

ART -.5745 ARF -.5618 ATF .9760

$68 5566.2 R23 -.0011 R13 -.9760

$61 5556.7 $62 325.2 TMA 177.64
                                                                                                                               ST 1821.6 SR 358.4 SS 507.2
CRT -.6029 CRS .5212 CST -.9949
    TOE-1.4730 TRA 8.2156 TC3 -.6384 BAU .8111
    RDE .6027 RRA -.2780 RC3 -.0014 FAU .00067
    FOE -. 2622 FRA 1.8880 FC3 -. 0061 85P 18232
                                                                                                                               LSA 1902.6 MSA 289.6 SSA 10.1
    BOE 1.5915 BRA 8.2203 BC3 .6384 FSP -356
                                                                                                                               EL1 1834.7 EL2 283.9 ALF 173.07
LAUNCH DATE JUL 10 1967
                                                                                                                                          ARRIVAL DATE FER 13 1968
                                                                            FLIGHT TIME 218.00
                                                                            DISTANCE 612.850
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 287.08 VL 25.080 GAL 20.36 A7L 91.02 MCA 317.56 SMA 118.90 ECC .43532 INC 1.0247 V1 29.292
RP 108.50 LAP .69 LOP 244.65 VP 36.473 GAP 25.35 A7P 90.76 TAL 147.31 TAP 104.88 RCA 67.14 APO 170.66 V2 34.929
RC 199.655 GL -2.29 GP 5.43 ZAL 33.48 ZAP 170.83 ETS 140.67 ZAE 126.20 ETE 175.66 ZAC 29.08 ETC 16.46 CLP 172.60
   PLANETOCENTRIC CONIC
     C3 110.447 VHL 10.509 DLA -24.72 RAL 251.98 RAD 6570.1 VEL 15.225 PTH 2.73 VHP 15.595 DPA -13.25 RAP 236.81 ECC 2.8177
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 55 49 1717.44 -5.23 12.06 140.45 117.87 13 22 27 1117.4 -1.46 5.41
                                                                                 140.45
                                                                                                117.87 13 22 27
110.77 17 18 24
118.94 14 18 43
110.26 20 24 12
121.65 14 43 34
109.29 22 8 44
                                                                                                                                  290.1
                                                                                                                                                    22.34
                                                                                                                                                                  316.46
                     17 3 34
                                    890.13
                                                     19.69
                                                                    324.13
                                                                                   151.68
                                                                                                                                    925.4
                                                                                                                                                    -3.91
       100.00
                    13 53 18
                                   1525.44
                                                     -7.83
                                                                    356.53
                                                                                   139.04
                                                                                                                                                                  349.94
                                                                                 152.79
                                                     22.46
-13.64
                                                                                                                                                                  270.80
       100.00
                   18 46 47 5845.41
                                                                    278.67
                                                                                                                                   5245.4
                                                                                                                                                    25.01
                                                                                135.59
                  14 19 31
20 37 3
                                  1443.22
5500.39
                                                                    346.86
                                                                                                                                    843.2
                                                                                                                                                    -9.35
                                                                                                                                                                  340.38
       110.00
                                                     28.78
                                                                    254.99
                                                                                   155.31
                                                                                                                                  4900.4
                                                                                                                                                    31.14
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 5512.9 SGR 383.3 SG3 103.9
RRT -.5840 RRF -.5726 RTF .9794
SGB 5526.2 R23 -.0015 R13 -.9794
                                                                                                                              ST 1789.7 SR 341.7 SS 517.4

CRT -.5765 CRS .5030 CST -.9960

LSA 1872.9 MSA 282.3 SSA 9.6
    TOE-1.4397 TRA 8.9310 TC3 -.4857 BAU .7172
    ROE .6186 RRA -.3032 RC3 -.0029 FAU-.00109
FOE -.2525 FRA 1.9910 FC3 .0086 BSP 18201
BOE 1.5670 BRA 8.9362 BC3 .4857 FSP -346
                                                                        SGI 5517.4 SGZ 310.9 THA 177.67
                                                                                                                               EL1 1800.8 EL2 277.5 ALF 173.57
LAUNCH DATE JUL 10 1967
                                                                            FLIGHT TIME 220.00
                                                                                                                                          ARRIVAL DATE FEB 15 1968
                                                                            DISTANCE 614.598
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 287.08 VL 25.049 GAL 22.35 AZL 90.80 MCA 320.75 SNA 118.74 ECC .46056 INC .7993 V1 29.292
RP 108.53 LAP .51 LOP 247.83 VP 36.441 GAP 27.01 AZP 90.62 TAL 146.69 TAP 107.44 RCA 64.05 APO 173.42 V2 34.917
RC 201.315 GL -1.63 GP 5.36 ZAL 32.68 ZAP 169.83 ETS 145.20 ZAE 125.67 ETE 175.75 ZAC 27.30 ETC 17.61 CLP 171.34
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ CONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 48 7 1781.36 -7.25 15.67 142.90 117.45 13 17 48 1181.4 -3.51
    C3 129.166 VHL 11.365 DLA -24.15 RAL 252.91 RAD 6570.4 VEL 15.827 PTH
                                                                                                 INJ AZMTH INJ TIME
117.45 13 17 48
110.74 17 31 30
118.40 14 15 40
110.37 20 35 43
120.68 14 42 43
109.69 22 18 I
                    17 16 41
                                     888,76
                                                     19.72
                                                                    324.05
                                                                                   154.88
                                                                                                                                    288.8
                                                                                                                                                    22.37
        90.00
                   13 49 16
                                   1583.96
                                                      -9.74
                                                                    359.83
                                                                                  141.56
                                                                                                                                     984.0
                                                                                                                                                    -5.87
       100.00
                   18 58 13
                                    5849.43
                                                     22.36
                                                                    278.93
                                                                                   155.94
                                                                                                                                   5249.4
                                                                                                                                                    24.93
                                                                                                                                                                  271.07
       100.00
                   14 17 49 1494.41
20 46 10 5511.75
                                                    -15.45
                                                                    349.72
                                                                                   138.24
                                                                                                                                    894.4
       110.00
                                                                    255.77
                                                                                    158.42
                                                                                                                                   4911.7
       110.00
                                                     28.53
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1760.4 SR. 324.3 SS 531.0

CRT -.5522 CRS .4870 CST -.9969

LSA 1847.0 MSA 273.0 SSA 9.0

EL1 1769.7 EL2 269.0 ALF 174.05
                                                                       SGT 5469.7 SGR 367.6 SG3 101.2
RRT -.5925 RRF -.5824 RTF .9825
    TOE-1.4133 TRA 9.7105 TC3 -.3478 BAU .6006
    ROE .6343 RRA -. 3277 RC3 -. 0044 FAU-. 00311
    FOE -.2452 FRA 2.1056 FC3 .0208 BSP 18142
BOE 1.5491 BRA 9.7160 BC3 .3478 FSP -337
                                                                       SG8 5482.0 R23 -.0019 R13 -.9825
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SG1 5474.0 SG2 295.9 THA 177.71

ARRIVAL CATE SEP 19 1967

LAUNCH DATE JUL 11 1967

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DISTANCE 182.513
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL 26.229 GAL -8.89 AZL 93.21 MCA 79.77 SMA 125.52 ECC .26005 INC 3.2117 V1 29.293 RP 108.61 LAP -3.16 LOP 7.78 VP 37.237 GAP -12.97 AZP 90.57 TAL 207.59 TAP 287.36 RCA 92.88 APO 158.17 V2 34.891 RC 50.476 GL -15.41 GP -7.88 ZAL 137.15 ZAP 12.38 ETS 38.37 ZAE 149.66 ETE 5.71 ZAC 89.27 ETC 13.77 CLP -9.58
   PLANETOCENTRIC CONIC
    C3 29.860 VML 5.464 DLA -2.49 RAL 145.38 RAD 6568.2 VEL 12.298 PTH 2.22 VMP 8.354 DPA -3.42 RAP 176.44 ECC 1.4914
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00. 2 9 0 2235.40 -20.07 42.80 12.70 110.41 2 46 15 1635.4 -17.11 35.38
                                                                                                     110.41 2 46 15

73.58 14 53 58

111.56 4 2 8

72.44 16 12 2

114.79 5 4 17

69.22 17 19 15
                  2 9 0 2235.40
13 30 4 5033.93
3 29 11 1976.75
14 52 35 4767.81
4 34 46 1771.46
16 3 29 4545.87
                                                                                   12.70
        90.00.
                                                                                                                                         4433.9
                                                                                                                                                         20.93
                                                       23.40
                                                                       221.86
                                                                                        14.18
        90.00
                                                                                                                                                                           15.90
                                                                        23.31
                                                                                       12.23
                                                                                                                                         1376.8
                                                                                                                                                        -18.11
                                                      -21.23
       100.00
                                                                                        13.79
                                                                                                                                         4167.8
                                                                                                                                                         21.95
                                                                                                                                                                          194.08
                                                                       201.89
       100.00
                                                       24.59
                                                                                                                                         1171.5
                                                                                                                                                        -20.78
                                                                                                                                                                         358.94
                                                                                        10.79
                                                                         6.29
       110.00
                                                      -24.33
                                                                                                                                                                          175.99
                                                                                                                                        3945.9
                                                                                                                                                         24.69
                                                                       183.81
                                                                                        12.55
       110.00
                                                       27.77
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                           SCT 656.6 SCR 424.8 SC3 110.6
RRT -.1688 RRF .2148 RTF -.6328
SCB 782.0 R23 -.0374 R13 .6411
                                                                                                                                   ST 298.1 SR 397.3 SS 175.3
CRT -.8873 CRS -.9418 CST .7057
LSA 508.5 MSA 135.1 SSA 25.5
    TDE .2659 TRA -.3318 TC3 .4408 BAU .1761
RDE -.3763 RRA -.1491 RC3 .0160 FAU .03839
    FOE -.2084 FRA -.3155 FC3-1.1131 BSP 1737
BOE .4608 BRA .3638 BC3 .4411 FSP -273
                                                                                                                                   ELI 483.7 EL2 112.9 ALF 125.91
                                                                           SG1 663.0 SG2 414.6 THA 169.71
    BOE .4608 BRA .3638 BC3 .4411 FSP
                                                                                                                                                 ARRIVAL DATE SEP 21 1967
                                                                                FLIGHT TIME 72.00
LAUNCH DATE JUL 11 1967
                                                                               DISTANCE 189.311
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL Z6.413 GAL -8.84 AZL 93.11 HCA 82.95 SMA 126.69 ECC .25069 INC 3.1106 V1 29.293

RP 108.58 LAP -3.09 LOP 10.97 VP 37.378 GAP -12.01 AZP 90.38 TAL 208.95 TAP 291.90 RCA 94.93 APO 158.45 V2 34.903

RC 51.950 GL -15.38 GP -8.40 ZAL 138.64 ZAP 14.79 ETS 33.27 ZAE 149.15 ETE 4.10 ZAC 88.88 ETC 13.83 CLP -12.22
   PLANETOCENERIC CONIC
    C3 28.515 VHL 5.340 DLA -1.94 RAL 143.93 RAD 6568.1 VEL 12.243 PTH 2.20 VHP 7.831 DPA -4.12 RAP 176.71 ECC 1.4693 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      110.28 2 36 29
72.79 14 51 46
111.44 3 52 35
71.63 16 9 36
114.71 4 55 18
68.37 17 16 15
                                                                                                                                         1640.9
                                                                                                                                                        -17.26
                                                                                                                                                                           35.72
                     1 59 8 2240.89
13 28 21 5005.37
                                                                        43.15
                                                                                        10.60
                                                       -20.20
        90.00
                                                                                                                                         4405.4
                                                                                                                                                          20.27
                                                                                                                                                                          212.22
                                                                                        11.73
                                                                       219.95
        90.00
                                                        22.84
                   3 19 34 1981.41
14 50 36 4740.08
4 25 44 1774.28
16 0 55 4519.98
                                                                                                                                                                           16.19
                                                                                                                                         1381.4
                                                                                                                                                          -18.24
                                                       -21.34
                                                                        23.61
                                                                                         10.14
       100.00
                                                                                                                                                          21.27
                                                                                                                                                                          102.30
                                                                                                                                         4140.1
                                                                                         11.32
                                                       24.00
                                                                        200.04
       100.00
                                                                                                                                                          -20.87
                                                                                                                                         1174.3
                                                                                                                                                                          359.11
                                                      -24.41
                                                                          6.47
                                                                                          8.72
       110.00
                                                                                                                                        3920.0
                                                                                                                                                         23.95
                                                                                                                                                                          174.34
                                                                       182.06
                                                                                         10.06
                                                         27.14
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 669.9 SCR 429.2 SC3 125.1
RRT -.1927 RRF .2480 RTF -.6438
SCB 795.6 R23 -.0466 R13 .6545
                                                                                                                                   ST 296.3 SR 400.6 SS 179.1
CRT -.8922 CRS -.9203 CST .6680
LSA 510.2 MSA 138.9 SSA 26.5
    TDE .2596 TRA -.3104 TC3 .4775 BAU .1820
    RDE -.3706 RRA -.1504 RC3 .0029 FAU .04219
    FOE -.2147 FRA -.3845 FC3-1.2811 BSP 1797
BDE .4525 BRA .3450 BC3 .4775 FSP -315
                                                                            SG1 678.1 SG2 416.0 THA 168.64
                                                                                                                                     EL1 485.9 EL2 110.3 ALF 125.54
                                                                                                                                                ARRIVAL DATE SEP 23 1967
                                                                                FLIGHT TIME 74.00
LAUNCH DATE JUL 11 1967
                                                                               DISTANCE 196.099
   HELIOCENTRIC CONIC
    RL 152.09 LAL --.00 LOL 288.03 VL 26.578 GAL -8.79 AZL 93.01 MCA 86.13 SMA 127.75 ECC .24246 INC 3.0108 V1 29.293
RP 108.54 LAP -3.00 LOP 14.16 VP 37.505 GAP -11.09 AZP 90.20 TAL 210.28 TAP 296.41 RCA 96.78 APO 158.73 V2 34.914
RC 53.515 GL -15.29 GP -8.98 ZAL 140.06 ZAP 17.41 ETS 29.51 ZAE 148.89 ETE 2.42 ZAC 88.62 ETC 13.88 CLP -14.98
   PLANETOCENTRIC CONIC
    C3 27.385 VHL 5.233 DLA -1.37 RAL 142.58 RAD 6568.1 VEL 12.197 PTH 2.19 VHP 7.339 DPA -4.82 RAP 176.86 ECC 1.4507
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      110.10 2 26 58
72.04 14 50 11
111.27 3 43 20
70.87 16 7 45
114.57 4 46 38
67.57 17 13 49
                                                                                                                                                        -17.46
                                                                                                                                       1648.6
                      1 49 30 2248.57
                                                                                      8.71
                                                       -20.38
                                                                       43.65
         90.00
                                                                                                                                                          19.60
                                                                                                                                         4377.5
                                                                        218.11
                                                                                           9.49
                     13 27 13
                                     4977.53
                                                         22.27
         90.00
                                                                                                                                         1388.2
                                                                                                                                                        -18.43
                                                                                                                                                                            16.60
                                                                                           8.25
                       3 10 12 1988.24
                                                        -21.51
                                                                         24.04
        100.00
                                                                                                                                         4113.1
                                                                                                                                                          20.59
                                                                                                                                                                          190.59
                    14 49 12 4713.10
                                                                       198.25
                                                                                           9.07
                                                        23.41
        100.00
                                                                                                                                                        -21.02
                                                                                                                                                                          359.41
                                                                                                                                         1179.2
                                                                                           6.86
                       4 16 59 1779.19
                                                       -24.55
                                                                          6.78
        110.00
                                                                                                                                                           23.22
                                                                                                                                         3894.9
                                                                        180.40
                                                                                           7.78
                     15 58 54
                                     4494.91
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 292.8 SR 403.1 SS 183.2
CRT -.8956 CRS -.8945 CST .6251
LSA 510.3 MSA 143.9 SSA 27.3
                                                                           SCT 680.1 SGR 433.9 SG3 141.5
RRT -.2193 RRF .2861 RTF -.6519
SGB 806.8 R23 -.0581 R13 .6657
     TOE .2524 TRA -.2909 TC3 .5098 BAU .1867
    TOE -.3653 RRA -.1530 RC3 -.0136 FAU .04650
FOE -.2204 FRA -.4628 FC3-1.4701 BSP 1845
BOE .4440 BRA .3287 BC3 .5100 FSP -364
                                                                                                                                     EL1 486.4 EL2 108.0 ALF 125.02
                                                                           SG1 690.7 SG2 416.9 THA 167.37
    BOE .4440 BRA .3287 BC3 .5100 FSP
                                                                                                                                                 ARRIVAL DATE SEP 25 1967
                                                                                FLIGHT TIME 76.00
LAUNCH DATE JUL 11 1967
                                                                                DISTANCE 202.874
   ATELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 26.725 GAL -8.75 AZL 92.91 HCA 89.31 SMA 128.72 ECC .23526 INC 2.9117 VI 29.293

RP 108.50 LAP -2.91 LOP 17.35 VP 37.620 GAP -10.22 AZP 90.03 TAL 211.55 TAP 300.86 RCA 98.44 APO 159.00 V2 34.926

RC 55.163 GL -15.13 GP -9.62 ZAL 141.39 ZAP 20.22 ETS 26.64 ZAE 148.89 ETE .64 ZAC 88.50 ETC 13.93 CLP -17.87
    PLANETOCENTRIC CONIC
     C3 26.431 VHL 5.141 DLA -.78 RAL 141.34 RAD 6564.1 VEL 12.158 PTH 2.18 VHP 6.878 DPA -5.53 RAP 176.86 ECC 1.4358
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 11 2258.07 -20.60 44.25 7.03 109.87 2 17 49 1658.1 -17.71 36.78 90.00 13 26 40 4950.42 21.69 216.34 7.46 71.33 14 49 10 4350.4 18.94 208.74
                                                                                                                                                           -18.67
                                                                                                                       3 34 27
                                                                                                                                          1396.9
                                                                                           6.58
                                                                                                          111.05
                       3 1 10 1996.86
                                                       -21.72
                                                                         24.60
        100.00
                                                                                                          70.15 16 6 29
114.38 4 38 20
66.82 17 11 58
                                                                                                                                                           19.90
                                                                                                                                                                           188.94
                                                                                                                                          4086.9
                     14 48 22
                                    4686.87
                                                        22.82
                                                                        196.53
                                                                                           7.03
        100.00
                                                                                                                                                          -21.23
                                                                                                                                                                           359.81
                                                                                                                                          1185.8
                   4 8 34 1785.84
15 57 27 4470.65
                                                        -24.73
                                                                           7.21
                                                                                           5.20
        110.00
                                                                        178.60
                                                                                                                                                         22.49
                                                                                                                                          3870.7
                                                                                                                                                                           171.26
                                                                                           5.72
                                                        25.85
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 687.0 SGR 439.4 SG3 160.1
RRT -.2485 RRF .3294 RTF -.6568
SGB 815.5 R23 -.0721 R13 .6750
                                                                                                                                  ST 287.8 SR 404.9 SS 187.5

CRT -.8972 CRS -.8645 CST .5761

LSA 508.5 MSA 150.2 SSA 27.9

ELI 485.3 EL2 106.0 ALF 124.39
     TOE .2443 TRA -.2737 TC3 .5369 BAU .1901
     RDE -. 3603 RRA -. 1572 RC3 -. 0337 FAU . 05139
     FDE -.2251 FRA -.5509 FC3-1.6632 BSP 1884
BDE .4353 BRA .3156 BC3 .5379 FSP -419
                                                                        SG1 700.6 SG2 417.4 THA 165.86
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FLIGHT TIME 70.00

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LAUNCH DATE JUL 11 1967
                                                                                            FLIGHT TIME 78.00
                                                                                                                                                                    ARRIVAL CATE SEP 27 1967
     HELIOCENTRIC CONIC
                                                                                           DISTANCE 209.632
      RL 152.09 LAL -.00 LOL 288.03 VL 26.854 GAL -8.72 ATL 92.81 MCA 92.50 SMA 129.59 ECC .22898 INC 2.8126 V1 29.293
RP 108.46 LAP -2.81 LOP 20.54 VP 37.724 GAP -9.38 ATP 89.88 TAL 212.75 TAP 305.25 RCA 99.92 APO 159.27 V2 34.938
RC 56.885 GL -14.91 GP -10.34 TAL 142.64 TAP 23.22 ETS 24.38 TAE 149.14 ETE 358.69 TAC 88.54 ETC 13.97 CLP -20.91
     PLANETOCENTRIC CONIC
                                                   -.18 RAL 140.23 RAD 6568.0 YEL 12.124 PTH 2.17 YHP 6.448 DPA -6.23 RAP 176.70 ECC 1.4216
      C3 25.619 VHL 5.061 DLA -.18 RAL 140.23 RAD 6568.0 VEL 12.124 PTH 2.17 VHP 0.448 DPA -0.23 RAP 1.0.10 ELC....

ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 31 16 2269.05 -20.85 44.96 5.54 109.60 2 9 5 1669.0 -17.99 37.46 90.00 13 26 41 4924.00 21.10 214.62 5.64 70.67 14 48 45 4324.0 18.27 207.09 100.00 2 52 32 2006.93 -21.97 25.24 5.10 110.80 3 25 59 1406.9 -18.94 17.76
      C3 25.619 VHL 5.061 DLA
                                                                                      4.87 5.20 69.47 16 5 48
7.72 3.75 114.15 4 30 29
7.27 3.86 66.12 17 10 40
HID-COURSE EXECUTION ACCURACY
         100.00
                         14 48 7
                                           4661.35
                                                                                  194.87
                                                               22.22
                                                                                                                                                            4061.3
                                                                                                                                                                              19.22
                                                                                                                                                                                                187.35
                       4 0 35 1793.90
15 56 33 4447.14
                                                                                     7.72
                                                               -24.96
                                                                                                                                                            1193.9
                                                                                                                                                                             -21.48
                                                                                                                                                                                                     . 30
         110.00
                                                               25.22
                                                                                  177.27
                                                                                                                                                                                                169.81
                                                                                                                                                            3647.1
                                                                                                                                                                              21.77
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      SGT 691.5 SGR 446.5 SG3 181.4

RRT -.2830 RRF .3791 RTF -.6603

SGB 823.1 R23 -.0875 R13 .6845

SG1 709.4 SG2 417.4 THA 163.96
      TOE .2370 TRA -.2579 TC3 .5596 BAU .1927
                                                                                                                                                     ST 282.7 SR 406.1 SS 193.1

CRT -.8981 CR5 -.8321 CST .5256

LSA 506.5 MSA 157.7 SSA 28.3
      ROE -.3554 RRA -.1630 RC3 -.0581 FAU .05697
     FDE -.2302 FRA -.6512 FC3-1.9252 BSP 1946
BDE .4272 BRA .3051 BC3 .5626 FSP -485
                                                                                                                                                       EL1 483.7 EL2 104.4 ALF 123.81
LAUNCH DATE JUL 11 1967
                                                                                           FLIGHT TIME 80.00
                                                                                                                                                                     ARRIVAL DATE SEP 29 1967
    HELIOCENTRIC CONIC
                                                                                          DISTANCE 216.372
     RL 152.09 LAL -.00 LOL 288.03 VL 26.968 GAL -8.70 A7L 92.71 HCA 95.69 SMA 130.37 ECC .22353 INC 2.7130 V1 29.293
RP 108.43 LAP -2.70 LOP 23.73 VP 37.816 GAP -8.58 A7P 89.73 TAL 213.86 TAP 309.55 RCA 101.23 APO 159.52 V2 34.951
RC 58.673 GL -14.64 GP -11.13 ZAL 143.79 ZAP 26.42 ETS 22.54 ZAE 149.66 ETE 356.52 ZAC 88.76 ETC 13.98 CLP -24.12
    PLANETOCENTRIC CONIC
     C3 24.920 VHL 4.992 DLA .44 RAL 139.24 RAD 6568.0 VEL 12.095 PTH 2.16 VHP 6.047 DPA -6.95 RAP 176.35 ECC 1.4101 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     C3 24.920 VHL 4.992 DLA
                                                                                                 4.25
                                                                                                                    109.30
                                                                                                                                                                           -18.30
                          1 22 47
                                          2281.18
                                                               -21.13
                                                                                  45.74
                                                                                                                                       2 0 49
                                                                                                                                                        1681.2
                                                                                                                                                                                                  34.21
                        13 27 16 4898.22
                                                                                                                        70.04 14 48 55
                                                               20.51
                                                                                 212.96
                                                                                                       4.02
                                                                                                                                                            4298.2
                                                                                                                                                                               17.61
                                                                                                                                                                                                 205.49
                                                                                                                      110.51 3 17 58
68.83 16 5 41
113.88 4 23 6
65.46 17 9 56
         100.00
                          2 44 20 2018.15
                                                               -22.24
                                                                                  25.97
                                                                                                       3.62
                                                                                                                                                            1418.1
                                                                                                                                                                             -19.25
                                                                                                                                                                                                  18.45
                                                                                                       3.57
                      14 48 25 4636.49
                                                                                 193.27
                                                               21.62
                                                                                                                                                            4036.5
                                                                                                                                                                              18.55
                                                                                                                                                                                                 185.82
                          3 53 3
                                         1803.08
                                                               -25.21
                                                                                    8.32
                                                                                                       2.49
                                                                                                                                                            1203.1
                                                                                                                                                                             -21.77
                                                                                                                                                                                                     .86
                      15 56 12 4424.32
                                                                                                                                                                             21.06
                                                                24.58
                                                                                 175.81
                                                                                                      2.21
                                                                                                                                                            3824.3
                                                                                                                                                                                                 164.43
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     SCT 688.9 SCR 455.4 SC3 205.0
RRT - 3150 RRF .4328 RTF - 6560
SGB 825.9 R23 - .1093 R13 .6894
     TOE .2272 TRA -.2471 TC3 .5720 BAU .1928
                                                                                                                                                     ST 274.9 SR 406.3 SS 198.1
CRT -.8945 CRS -.7953 CST .4628
LSA 501.3 MSA 166.6 SSA 28.5
     RDE -.3502 RRA -.1705 RC3 -.0868 FAU .06315
FDE -.2319 FRA -.7611 FC3-2.1938 BSP 1959
BDE .4175 BRA .3002 BC3 .5786 FSP -557
                                                                                      SG1 712.2 SG2 418.1 THA 161.76
                                                                                                                                                      ELI 479.3 ELZ 104.1 ALF 122.94
                                                                                           FLIGHT TIME 82.00
LAUNCH DATE JUL 11 1967
                                                                                                                                                                   ARRIVAL DATE OCT 1 1967
                                                                                          DISTANCE 223.090
     RL 152.09 LAL -.00 LOL 288.03 VL 27.067 GAL -8.57 A7L 92.61 MCA 98.88 SMA 131.06 ECC .21881 INC 2.6122 V1 29.293
RP 108.39 LAP -2.58 LOP 26.92 VP 37.899 GAP -7.82 A7P 89.60 TAL 214.88 TAP 313.76 RCA 102.39 APO 159.74 V2 34.964
RC 60.521 GL -14.32 GP -12.00 TAL 144.85 TAP 29.84 ETS 20.98 TAE 150.43 ETE 354.02 TAC 89.18 ETC 13.96 CLP -27.52
    PLANETOCENTRIC CONIC
     C3 24.310 VHL 4.930 DLA 1.05 RAL 138.38 RAC 6568.0 VEL 12.070 PTH 2.16 VHP 5.676 DPA -7.66 RAP 175.80 ECC 1.4001
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                    108.98 1 53 1 69.44 14 9 38 110.19 3 10 27 68.23 16 6 8 113.59 4 16 12 64.84 17 9 45
                      1 14 47 2294.23
13 28 25 4872.99
2 36 36 2030.27
14 49 16 4612.18
                                                                                                   3.14
                                                                                                                                                                         -18.63
                                                                                                                                                       1694.2
          90.00
                                                             -21.42
                                                                                 46.59
                                                                                                                                                                                                 39.02
          90.00
                                                              19.92
                                                                                 211.35
                                                                                                      2.58
                                                                                                                                                           4273.0
                                                                                                                                                                                               203.94
                                                                                                                                                                             15.94
                                                                                                      2.72
                                                                                                                                                          1430.3
                                                                                                                                                                           -19.57
        100.00
                                                              -22.52
                                                                                 26.76
                                                                                                                                                                                                 19.20
        100.00
                                                                                 191.72
                                                                                                      2.13
                                                                                                                                                           4012.2
                                                                                                                                                                            17.87
                                                              21.01
                                                                                                                                                                                               184.33
                      3 45 59 1813.14
15 56 23 4402.07
                                                                                                                                                                        -22.08
        110.00
                                                                                   8.97
                                                                                                      1.41
                                                                                                                                                           1213.1
                                                              -25.49
                                                                                                                                                                                                  1.48
        110.00
                                                                                                       . 76
                                                             23.94
                                                                                 174.39
                                                                                                                                                           3802.1
                                                                                                                                                                             20.35
                                                                                                                                                                                               167.09
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ORBIT OFTERMINATION ACCURACY
                                                                                     SGT 680.6 SGR 467.2 SG3 231.4
RRT -.3455 RRF .4908 RTF -.6454
SGB 825.6 R23 -.1361 R13 .6924
     TOE .2166 TRA -.2404 TC3 .5753 BAU .1910
                                                                                                                                                    ST 265.8 SR 405.5 SS 203.4
                                                                                                                                                    CRT -.8872 CRS -.7555 CST .3903
    FOE -.3447 RRA -.1798 RC3 -.1205 FAU .07004
FDE -.2310 FRA -.8819 FC3-2.4942 BSP 1953
BDE .4071 BRA .3002 BC3 .5878 FSP -639
                                                                                                                                                     LSA 494.3 MSA 176.9 SSA
                                                                                                                                                                                                    24.6
                                                                                     SG1 710.8 SG2 419.8 THA 159.05
                                                                                                                                                    FLT 473.4 FLZ 105.1 ALF 121.94
                                                                                          FLIGHT TIME 84.00
LAUNCH DATE JUL 11 1967
                                                                                                                                                                   ARRIVAL DATE OCT 3 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 229.785
    RL 152.09 LAL -.00 LOL 288.03 VL 27.153 GAL -8.65 AZL 92.51 MCA 102.07 SMA 131.67 ECC .21473 INC 2.5095 V1 29.293 RP 108.35 LAP -2.45 LOP 30.12 VP 37.972 GAP -7.08 AZP 89.47 TAL 215.79 TAP 317.86 RCA 103.40 APO 159.94 VZ 34.977 RC 62.420 GL -13.95 GP -12.96 ZAL 145.81 ZAP 33.47 ETS 19.63 ZAE 151.44 ETE 351.10 ZAC 89.82 ETC 13.90 CLP -31.13
   PLANETOCENTRIC CONIC
    C3 23.769 VHL 4.875 OLA
                                                 1.68 RAL 137.64 RAD 6568.0 VEL 12.048 PTH 2.15 VHP 5.334 DPA 78.37 RAP 175.02 ECC 1.3912
                                                          RAL 137.64 RAO 6568.0 VEL 12.048 PTH 2.15 VMP 5.334 DPA -8.37 RAP 175.02 ECC 1.3912 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -21.72 47.49 2.21 108.63 1 45 42 1708.0 -18.98 39.89 19.31 209.78 1.33 68.88 14 50 54 4248.2 16.27 202.42 -22.82 27.59 1.79 109.85 3 3 24 1443.1 -19.91 20.01 20.40 190.21 .87 67.66 16 7 8 3988.3 17.19 182.88 -25.78 9.67 .51 113.26 4 9 47 1223.9 -22.41 2.14 23.30 173.02 359.48 64.25 17 10 8 3780.3 19.65 16.79
    C3 23.769 VHL 4.875 DLA 1.68

LNCH AZMTH LNCH TIME L-I TIME

90.00 1 7 14 2308.02

90.00 13 30 6 4848.18

100.00 2 29 21 2043.13

100.00 14 50 40 4588.30

110.00 3 39 23 1823.92

110.00 15 57 7 4380.27
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    TOE .2068 TRA -.2372 TC3 .5703 BAU .1882
ROE -.3390 RRA -.1912 RC3 -.1603 FAU .07775
                                                                                  SGT 667.9 SGR 483.4 SG3 261.0
RRT -.3748 RRF .5530 RTF -.6286
SGB 824.5 R23 -.1662 R13 .6962
SG1 707.7 SG2 422.9 THA 155.63
                                                                                                                                                  ST 257.6 SR 404.1 SS 210.1

CRT -.8768 CRS -.7165 CST .3147

LSA 487.3 MSA 188.4 SSA 28.5

EL1 467.1 EL2 107.2 ALF 121.01
    FOE -.2295 FRA-1.0151 FC3-2.8319 BSP 1967
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BOE .3971 BRA .3047 BC3 .5923 FSP

ARRIVAL DATE OCT 5 1967

LAUNCH DATE JUL 11 1967

DISTANCE 236.456 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 27.227 GAL -8.62 ATL 92.40 MCA 105.27 SMA 132.19 ECC .21121 INC 2.4043 V1 29.293
RP 108.31 LAP -2.32 LOP 33.31 VP 38.037 GAP -6.38 AZP 89.37 TAL 216.59 TAP 321.86 RCA 104.27 APO 160.11 V2 34.990
RC 64.367 GL -13.54 GP -14.02 ZAL 146.68 ZAP 37.34 ETS 18.40 ZAE 152.67 ETE 347.61 ZAC 90.68 ETC 13.78 CLP -34.97 PLANETOCENTRIC CONIC 2.15 VMP 5.022 OPA -9.07 RAP 174.01 ECC 1.3831 C3 23.281 VHL 4.825 OLA 2.30 RAL 137.04 RAD 6567.9 VEL 12.027 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 0 9 2322.40 13 32 21 4823.65 48.43 1.43 108.25 1 38 52 1722.4 -19.33 40.79 -22.03 90.00 14 52 44 200.93 208.23 .25 68.35 4223.6 15.60 18.71 90.00 28.47 1.03 109.46 2 56 51 1456.6 -20.26 20.85 2 22 34 2056.56 14 52 37 4564.71 100.00 -23.13 67.12 16 8 41 112.92 4 3 52 188.73 359.78 3964.7 16.51 181.46 100.00 19.78 -22.75 2.84 359.77 112.92 1235.3 110.00 3 33 17 1835.26 15 58 24 4358.78 -26.OA 10.41 63,70 17 11 3 358.37 3758.8 18.94 171.64 110.00 15 58 24 22.66 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 247.2 SR 401.3 SS 215.6 CRT -.8574 CRS -.6723 CST .2174 LSA 476.8 MSA 201.1 SSA 28.4 SGT 646.4 SGR 504.2 SG3 292.8 RRT -.3901 RRF .6148 RTF -.5967 TOE .1947 TRA -.2412 TC3 .5504 BAU .1829 RDE -.3323 RRA -.2044 RC3 -.2059 FAU .08603 SGB 819.7 R23 - .2031 R13 .6976 FDE -.2209 FRA-1.1548 FC3-3.1994 BSP 1926 SG1 698.0 SG2 429.9 THA 151.38 EL1 457.9 EL2 111.5 ALF 119.78 BDE .3851 BRA .3162 BC3 .5877 FSP -834 ARRIVAL DATE OCT 7 1967 LAUNCH DATE JUL 11 1967 FLIGHT TIME 88.00 DISTANCE 243.100 HELIOCENTRIC CONÍC RL 152.09 LAL -.00 LOL 288.03 VL 27.289 GAL -8.59 A7L 92.30 MCA 108.47 SMA 132.64 ECC .20818 INC 2.2957 V1 29.293 RP 108.27 LAP -2.18 LOP 36.51 VP 38.093 GAP -5.71 A7P 89.27 TAL 217.27 TAP 325.73 RCA 105.03 APO 160.25 V2 35.003 RC 66.356 GL -13.07 GP -15.18 7AL 147.45 7AP 41.44 ETS 17.23 7AE 154.07 ETE 343.35 7AC 91.79 ETC 13.59 CLP -39.04 PLANETOCENTRIC CONIC 2.14 WHP 4.741 OPA -9.77 RAP 172.75 ECC 1.3757 C3 22.830 VHL 4.778 OLA 2.94 RAL 136.56 RAD 6567.9 VEL 12.009 PTH ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.86 1 32 29 1737.3 -19.69 41.74 90.00 0 53 32 2337.31 -22.35 49.41 .41 4799.21 14.92 199.46 90.00 13 35 8 18.08 206.71 359.32 67.63 14 55 8 4199.2 2 16 14 2070.52 14 55 7 4541.23 3 27 38 1847.08 16 0 13 4337.43 2 50 45 1470.5 -20.62 21.73 100.00 -23.45 29.39 .41 109.09 66.60 354.65 16 10 48 3941.2 15.63 180.05 100.00 19.15 187.26 1247.1 3.5A 112.55 3 58 25 -23.11 110.00 -26.40 11.19 359.16 63.16 17 12 30 110.00 3737.4 163.27 22.01 170.37 357.42 18.23 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 237.0 SR 397.3 SS 221.1
CRT -.8283 CRS -.6257 CST .1029
LSA 464.6 MSA 215.1 SSA 28.3
EL1 447.3 EL2 117.9 ALF 118.45 SGT 618.7 SGR 551.0 SG3 327.0 RRT - .3875 RRF .6752 RTF - .5468 SG8 815.3 R23 - .2406 R13 .7026 TOE .1822 TRA -.2516 TC3 .5167 BAU .1763 RDE -.3246 RRA -.2195 RC3 -.2583 FAU .09490 FOE -.2064 FRA-1.3003 FC3-3.5986 BSP 1879 BDE .3722 BRA .3339 BC3 .5777 FSP -943 SG1 685.1 SG2 442.1 THA 145.80 ARRIVAL DATE OCT 9 1967 LAUNCH DATE JUL 11 1967 FLIGHT TIME 90.00 DISTANCE 249.718 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 27.340 GAL -8.56 AZL 92.18 MCA 111.67 SMA 133.01 ECC .20557 INC 2.1830 V1 29.293 RP 108.22 LAP -2.03 LOP 39.71 VP 38.142 GAP -5.07 AZP 89.19 TAL 217.82 TAP 329.49 RCA 105.67 APO 160.36 V2 35.016 RC 68.382 GL -12.57 GP -16.43 ZAL 148.13 ZAP 45.78 ETS 16.07 ZAE 155.60 ETE 338.10 ZAC 93.14 ETC 13.31 CLP -43.36 PLANETOCENTRIC CONIC C3 22.405 VHL 4.733 DLA 3.58 RAL 136.20 RAO 6567.9 VEL 11.991 PTH 2.14 VHP 4.490.0PA -10.47 RAP 171.22 ECC 1.3687 C3 22.405 VML 4.735 DLA 3.58 RAL 136.20 RAO 6567.9 VEL 11.991 PM 2.14 VMP 4.490.0PA -10.47 RAP 171.22 ECC 1.367 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 38 31 4774.64 17.45 205.19 358.55 67.34 14 58 5 4174.6 14.23 197.99 100.00 2 10 19 2084.99 -23.76 30.35 359.95 108.69 2 45 4 1485.0 -20.99 22.65 100.00 14 58 11 4517.64 18.51 185.81 358.06 66.10 16 13 28 3917.6 15.12 178.65 110.00 3 22 24 1859.38 -26.71 12.01 358.73 112.17 3 53 23 1259.4 -23.47 4.35 110.00 16 2 35 4316.01 21.35 169.06 356.62 62.65 17 14 31 3716.0 17.51 162.03 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 588.1 SGR 565.7 SG3 363.8 ST 228.9 SR 392.4 55 227.6 TOE .1708 TRA -.2675 TC3 .4698 BAU .1701 RDE -.3162 RRA -.2368 RC3 -.3187 FAU .10436 FDE -.1888 FRA-1.4518 FC3-4.0324 BSP 1865 RRT -.3612 RRF .7327 RTF -.4741 CRT -. 7889 CRS -. 5819 CST -. 0196 SGB 816.0 R23 -.2650 R13 .7191 LSA 452.1 MSA 230.2 SSA 28.1 BDE .3594 BRA .3573 BC3 .5677 FSP -1067 SG1 673.6 SG2 460.5 THA 138.07 EL1 436.3 EL2 126.5 ALF 117.19 LAUNCH DATE JUL 11 1967 FLIGHT TIME 92.00 ARRIVAL DATE OCT 11 1967 DISTANCE 256.308 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 27.382 GAL -8.52 AZL 92.07 MCA 114.87 SMA 133.32 ECC .20333 INC 2.0650 V1 29.293 RP 108.18 LAP -1.87 LOP 42.92 VP 38.184 GAP -4.45 AZP 89.13 TAL 218.26 TAP 333.13 RCA 106.21 APO 160.43 V2 35.029 RC 70.443 GL -12.01 GP -17.77 ZAL 148.72 ZAP 50.36 ETS 14.88 ZAE 157.13 ETE 331.57 ZAC 94.73 ETC 12.92 CLP -47.94 PLANETOCENTRIC CONIC 4.23 RAL 135.96 RAD 6567.9 VEL 11.974 PTH 2.13 VHP 4.270 DPA -11.15 RAP 169.45 ECC 1.3620 C3 21.997 VHL 4.690 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2368.79 1768.8 90.00 0 41 26 -22.99 51.49 360.00 107.01 1 20 55 -20.44 43.75 90.00 13 42 29 4749.71 16.79 203.66 357.91 66.86 15 1 39 4149.7 13.51 196.51 2 39 46 1500.0 -21.37 23.60 100.00 2 4 46 2100.01 -24.09 31.35 359.62 108.26 15 1 51 357.42 16 16 44 3893.7 14.46 177.24 4493.71 17.84 184.34 65.61 3 48 46 3 17 34 1872.17 16 5 32 4294.32 1272.2 -23.64 5.15 -27.04 12.86 358.43 111.76 17 17 6 160.78 110.00 20.66 167.75 355.95 62.14 3694.3 16.77 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TDE .1583 TRA -.2922 TC3 .4030 BAU .1641 SGT 555.4 SGR 607.1 563 400.8 ST 221.5 SR 385.4 SS 232.€ CRT -.7300 CRS -.5308 CST -.1715 LSA 436.1 MSA 246.5 SSA 28.0 RDE -.3059 RRA -.2552 RC3 -.3861 FAU .11384 RRT -.2886 RRF .7833 RTF -.3597 FOE -.1591 FRA-1.5958 FC3-4.4802 BSP 1836 BDE .3444 BRA .3880 BC3 .5582 FSP -1187 SGB 822.8 R23 -. 2498 R13 .. 7554 SG1 663.6 SG2 486.5 THA 126.42 EL1 422.6 EL2 138.1 ALF 115.70

FLIGHT TIME 86.00

ARRIVAL DATE OCT 13 1967

LAUNCH DATE JUL- 11 1967

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DISTANCE 262.870
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 27.414 GAL -8.48 AZL 91.94 MCA 118.07 SMA 133.56 ECC .20141 INC 1.9406 V1 29.293
RP 108.14 LAP -1.71 LOP 46.12 VP 38.220 GAP -3.85 AZP 89.09 TAL 218.57 TAP 336.65 RCA 106.66 APO 160.46 V2 35.042
RC 72.534 GL -11.40 GP -19.20 ZAL 149.22 ZAP 55.14 ETS 13.61 ZAE 158.54 ETE 323.49 ZAC 96.55 ETC 12.40 CLP -52.76
   PLANETOCENTRIC CONIC
     C3 21.598 VHL 4.647 DLA
                                           4.91 RAL 135.85 RAO 6567.9 VEL 11.957 PTH 2.13 VHP 4.081 OPA -11.83 RAP 167.42 ECC 1.3554
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                   359.79
                    0 35 53 2385.53
13 47 7 4724.11
                                                                                                    106.54 1 15 38
66.38 15 5 51
                                                                                                                                                    -20.63
                                                                                                                                     1785.5
                                                                                                                                                                       44.82
        90.00
                                                      -23.32
                                                                      52.61
                                                       16.09
                                                                      202.10
                                                                                      357.40
                                                                                                                                      4124.1
                                                                                                                                                       12.76
                                                                                                                                                                      195.00
         90.00
                                                                                                       107.80 2 34 47
65.13 16 20 38
       100.00
                      1 59 32 2115.71
                                                      -24.42
                                                                       32.39
                                                                                      359.42
                                                                                                       107.80
                                                                                                                                      1515.7
                                                                                                                                                      -21.76
                                                                                                                                                                       24.51
       100.00
                    15 6 9
                                    4469.17
                                                       17.15
                                                                      182.85
                                                                                      356.90
                                                                                                                                      3869.2
                                                                                                                                                       13.65
                                                                                                                                                                      175.81
                                                                                                      111.32 3 44 30
61.65 17 20 17
                      3 13 4
                                                      -27.37
                                                                       13.75
                                                                                      358.25
                                                                                                                                      1285.5
                                                                                                                                                      -24.23
                                                                                                                                                                        6.00
                                  1885.54
                                                                      166.42
                                                                                      355.42
                                                                                                                                      3672.1
                                                                                                                                                       16.01
                                                                                                                                                                      159.51
       110.00
                    16 9 5
                                     4272.10
                                                       19.95
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          SGT 529.9 SGR 656.0 SG3 437.5
RRT -.1595 RRF .8267 RTF -.1941
SGB 843.3 R23 -.1415 R13 .8169
                                                                                                                                 ST 217.3 SR 376.5 SS 237.2

CRT -.6513 CRS -.4757 CST -.3385

LSA 418.0 MSA 264.1 SSA 27.9
    TOE .1466 TRA -.3244 TC3 .3174 BAU .1616
    RDE -. 2938 RRA -. 2746 RC3 -. 4610 FAU . 12312
    FDE -.1193 FRA-1.7290 FC3-4.9350 BSP 1855
    BDE .3283 BRA .4250 BC3 .5597 FSP -1306
                                                                          5G1 669.8 SG2 512.3 THA 108.29
                                                                                                                                  EL1 407.1 EL2 152.5 ALF 114.22
                                                                              FLIGHT TIME 96.00
                                                                                                                                              ARRIVAL DATE OCT 15 1967
   HELIOCENTRIC CONIC
                                                                              DISTANCE 269.403
    RL 152.09 LAL -.00 LOL 288.03 VL 27.439 GAL -8.43 AZL 91.81 MCA 121.28 SMA 133.74 ECC .19977 INC 1.8085 V1 29.293 RP 108.10 LAP -1.55 LOP 49.33 VP 38.249 GAP -3.28 AZP 89.06 TAL 218.77 TAP 340.06 RCA 107.02 APO 160.46 V2 35.056 RC 74.852 GL -10.72 GP -20.71 ZAL 149.64 ZAP 60.11 ETS 12.23 ZAE 159.63 ETE 313.72 ZAC 98.56 ETC 11.73 CLP -57.81
   PLANETOCENTRIC CONIC
    C3 21.201 VHL 4.604 DLA
                                            5.62 RAL 135.85 RAD 6567.9 VEL 11.941 PTH
                                                                                                           2.12 VHP 3.924 OPA -12.49 RAP 165.17 ECC 1.3489
    C3 21.201 VHL 4.604 DLA 5.62 RAL 135.85 RAO 6567.9 VEL 11.941 PTH 2.12 VHP 3.924 OPA -12.49 RAP 165.17 ECC 1.3489
LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 30 32 2403.21 -23.65 53.80 359.71 106.04 1 10 35 1803.2 -21.23 45.96
90.00 13 52 27 4697.51 15.36 200.49 357.01 65.92 15 10 44 4097.5 11.98 193.44
100.00 1 54 32 2132.28 -24.76 33.51 359.35 107.31 2 30 4 1532.3 -22.16 25.68
100.00 15 11 8 4443.67 16.41 181.32 356.51 64.66 16 25 12 3843.7 12.86 174.32
110.00 3 8 52 1899.67 -27.72 14.71 358.21 110.85 3 40 31 1299.7 -24.63 6.90
110.00 16 13 18 4249.04 19.20 165.05 355.01 61.16 17 24 7 3649.0 15.20 158.21
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SCT 523.4 SGR 713.2 SG3 473.2
RRT .0248 RRF .8633 RTF .0200
SGB 884.6 R23 .0264 R13 .8629
                                                                                                                                 ST 218.5 SR 366.1 SS 242.5
CRT -.5571 CRS -.4236 CST -.4985
    TOE .1373 TRA -.3631 TC3 .2136 BAU .1657
    RDE -.2802 RRA -.2949 RC3 -.5441 FAU .13200
    FDE -.0737 FRA-1.8488 FC3-5.3903 8SP 1971
                                                                                                                                  LSA 399.4 MSA 283.3 SSA 27.8
    BOE .3120 BRA .4677 BC3 .5846 FSP -1432
                                                                          SG1 713.4 SG2 523.0 THA 87.74
                                                                                                                                  EL1 391.0 EL2 169.9 ALF 112.97
                                                                                                                                             ARRIVAL DATE OCT 17 1967
                                                                              FLIGHT TIME 98.00
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 275.908
    RL 152.09 LAL -.00 LOL 288.03 VL 27.456 GAL -8.37 AZL 91.67 MCA 124.49 SMA 133.86 ECC .19835 INC 1.6669 VI 29.293 RP 108.06 LAP -1.37 LOP 52.54 VP 38.274 GAP -2.73 AZP 89.06 TAL 218.86 TAP 343.35 RCA 107.31 APO 160.42 VZ 35.069 RC 76.795 GL -9.98 GP -22.28 ZAL 149.97 ZAP 65.21 ETS 10.71 ZAE 160.18 ETE 302.43 ZAC 100.74 ETC 10.91 CLP -63.06
   PLÂNETOCENTRIC CONIC
                                          5.36 RAL 135.96 RAD 6567.8 VEL 11.924 PTH 2.12 VHP 3.800 CPA -13.15 RAP 162.74 ECC 1.3424
    C3 20.802 VHL 4.561 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 25 20 2422.10
13 58 35 4669.49
                                                                                                                                     1822.1
                                                                                    359.76
                                                                                                     105.49
                                                                                                                    1 5 42
                                                                                                                                                   -21.65
                                                                                                                                                                      47.19
                                                      -24,00
                                                                       55.07
        90.00
                                                                      198.80
                                                                                     356.75
                                                                                                       65.45 15 16 25
                                                                                                                                      4069.5
                                                                                                                                                      11.14
                                                                                                                                                                     191.81
        90.00
                                                      14.58
                    1 49 42 2149.99
15 16 54 4416.84
                                                                                                                   2 25 32
                                                                                                                                      1550.0
                                                                                                                                                     -22.58
                                                                                                                                                                      26.83
                                                                       34.70
                                                                                     359.41
                                                                                                      106.77
       100.00
                                                      -25.11
                                                                     179.72
                                                                                     356.25
                                                                                                       64.19 16 30 31
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                                                                                                                                                                    172.78
                                                      15.62
       100.00
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14.35
                    3 4 52 1914.76
16 18 14 4224.83
                                                                       15.73
                                                                                     358.29
                                                                                                      110.34
                                                                                                                    3 36 47
                                                                                                                                      1314.8
                                                                                                                                                                        7.87
                                                      -28.08
       110.00
                                                                                                       60.67 17 28 39
                                                                                                                                      3624.8
                                                                                                                                                                     156.85
                                                                     163.63
                                                                                     354.73
                                                      18.40
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
    TOE .1292 TRA -.4095 TC3 .0A69 BAU .1776
RDE -.2655 RRA -.5140 RC3 -.6327 FAU .13958
FDE -.0119 FRA-1.9358 FC3-5.8090 BSP 2163
BDE .2935 BRA .5160 BC3 .6386 FSP -1535
                                                                                                                                ST 224.6 SR 352.2 SS 246.6
CRT -.4458 CRS -.3594 CST -.6589
                                                                          SGT 548.2 SGR 774.7 SG3 504.3
                                                                         RRT .2495 RRF .8922 RTF .2638
SGB 949.1 R23 .1386 R13 .8824
                                                                                                                                 LSA 376.9 MSA 304.2 SSA 27.8
                                                                          SG1 796.2 SG2 516.6 THA 72.36
                                                                                                                                 ELI 371.8 EL2 190.5 ALF 111.89
                                                                              FLIGHT TIME 100.00
                                                                                                                                              ARRIVAL DATE OCT 19 1967
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 282.385
   HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL 27.466 GAL -8.31 AZL 91.51 HCA 127.70 SMA 133.94 ECC .19714 INC 1.5139 VI 29.293
RP 108.02 LAP -1.20 LOP 55.75 VP 38.293 GAP -2.21 AZP 89.07 TAL 218.83 TAP 346.53 RCA 107.53 APO 160.34 V2 35.082
RC 78.958 GL -9.15 GP -23.90 ZAL 150.22 ZAP 70.40 ETS 9.03 ZAE 159.99 ETE 290.32 ZAC 103.02 ETC 9.93 CLP -68.47
   PLANETOCENTRIC CONIC
    C3 20.398 VHL 4.516 DLA
                                          7.15 RAL 136.20 RAD 6567.8 VEL 11.907 PTH 2.12 VMP 3.708 DPA -13.82 RAP 160.17 ECC 1.3357
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -24.37 56.46 359.94 104.88 1 0 49 1442 6 -29.00
    UNCH AZHTH LNCH TIME L-1 TIME
90.00 0 20 10 242.64
                     14 5 39 4639.56
1 44 56 2169.24
15 23 34
                                                      13.72
                                                                      197.02
                                                                                     356.62
                                                                                                        64.99 15 22 58
                                                                                                                                      4039.6
                                                                                                                                                       10.24
                                                                                                                                                                      190.08
                    14 5 39
        90.00
                                                                                                                                      1569.2
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                                                                                                       106.18
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                                                                       36.01
       100,00
                                                      -25.48
                                                                                                        63.71 16 36 42
                                                                                                                                      3788.2
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                                                      14,77
                                                                      178.02
                                                                                     356.10
                    15 23 34
       100.00
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                                                                                                                                      1331.2
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                                  1931.18
                                                                       16.85
                                                                                     358.52
                                                      -28.46
       110.00
                      3 1 0
                                                                                                        60.17 17 33 58
                                                      17.53
                                                                      162.13
                                                                                     354.56
                                                                                                                                      3599.0
                                                                                                                                                      13.43
                                                                                                                                                                      155.42
                                   4199.02
       110.00
                    16 23 59
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 612.7 SGR 842.0 SG3 530.9
RRT .4576 RRF .9153 RTF .4811
SGB 1041.3 R23 .1842 R13 .8993
    TOE .1251 TRA -.4609 TC3 -.0589 BAU .1991
                                                                                                                                  ST 237.6 SR 336.3 SS 251.8
                                                                                                                                CRT -.3345 CRS -.2993 CST -.7847
LSA 353.8 MSA 327.1 SSA 27.8
    ROE - .2448 RRA - .3322 RC3 - .7276 FAU .14583
FOE .0549 FRA-1.9938 FC3-6.1894 BSP 2478
BOE .2749 BRA .5682 BC3 .7300 FSP -1635
                                                                         SCB 1041.3 R23
                                                                        SG1 911.7 SG2 503.1 THA 62.62
                                                                                                                                ELI 351.7 EL2 214.1 ALF 111.67
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FLIGHT TIME 94.00

ARRIVAL DATE OCT 21 1967

LAUNCH DATE JUL 11 1967

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DISTANCE 288.835
   HELIOCENTRIC CONIC
    RL 152.09 LAL 0-.00 LOL 288.03 VL 27.469 GAL -8.24 AZL 91.35 MCA 130.92 SMA 133.96 ECC .19511 INC 1.3469 V1 29.293 RP 107.98 LAP -1.02 LOP 58.96 VP 38.307 GAP -1.70 AZP 89.12 TAL 218.70 TAP 349.62 RCA 107.69 APO 160.23 V2 35.094 RC 81.139 GL -8.22 GP -25.55 ZAL 150.38 ZAP 75.58 ETS 7.15 ZAE 158.99 ETE 278.44 ZAC 105.34 ETC 8.79 CLP -73.98
   PLANETOCENTRIC CONIC
     C3 19.986 VHL 4.471 DLA 8.02 RAL 136.56 RAD 6567.8 VEL 11.890 PTH 2.11 VHP 3.649 DPA -14.51 RAP 157.52 ECC 1.3289
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         1865.4
                                                                                                                                                                            -22.56
                                                               -24.76
                                                                                  58.02
                                                                                                      .26
                                                                                                                     104.20
                                                                                                                                     0 55 57
                        0 14 52 2465.39
14 13 47 4607.08
         90.00
                                                                                                                                                                                                144.21
                                                                                                   356.60
                                                                                                                       64.51
                                                                                                                                    15 30 34
                                                                                                                                                           4007.1
                                                                                                                                                                                 9.24
                                                              12.78
                                                                                 195.10
         90.00
                                                                                                                                                           1590.6
                                                                                                                                                                              -23.50
                                                                                                                                                                                                  29.48
                        1 40 5 2190.55
15 31 16 4357.15
                                                                                  37.47
                                                                                                   359.94
                                                                                                                       105.51
                                                                                                                                      2 16 35
                                                              -25.88
        100.00
                                                                                                                                                                                                169.37
                                                                                                                        63.23 16 43 53
109.14 3 29 39
                                                                                                                                                           3757.1
                                                                                                                                                                              10.12
                                                                                 176.20
                                                                                                   356.08
        100,00
                                                              13.82
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                       2 57 9 1949.35
16 30 41 4171.12
                                                                                                                       109.14
                                                                                                                                                          1349.3
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                                                             -28.88
                                                                                  18.11
                                                                                                  358.88
        110.00
                                                                                                                        59.67 17 40 12
                                                                                                                                                                                                153.88
                                                                                                                                                          3571.1
                                                                                                                                                                             12.43
                                                                                160.53
                                                                                                  354.52
        110.00
                                                              16.58
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 256.7 SR 315.6 SS 257.5
CRT -.2255 CRS -.2244 CST -.8661
                                                                                     SGT 717.6 SGR 909.0 SG3 549.2
RRT .6202 RRF .9330 RTF .6446
SGB 1158.1 R23 .2028 R13 .9146
     TOE .1246 TRA -.5174 TC3 -.2266 BAU .2285
     ROE -.2220 RRA -.3468 RC3 -.8247 FAU .14977
FOE .1392 FRA-2.0036 FC3-6.4877 BSP 2871
                                                                                                                                                      LSA 353.1 MSA 326.1 SSA 28.0
EL1 328.0 EL2 240.6 ALF 113.66
     BDE .2546 BRA .6229 BC3 .8553 FSP -1697
                                                                                      SG1 1050.7 SG2 487.0 THA 55.52
                                                                                                                                                                    ARRIVAL DATE OCT 23 1967
                                                                                           FLIGHT TIME 104.00
LAUNCH DATE JUL 11 1967
                                                                                         DISTANCE 295.256
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 27.467 GAL -8.16 AZL 91.16 MCA 134.13 SMA 133.95 ECC .19522 INC 1.1627 V1 29.293
RP 107.94 LAP -.83 LOP 62.17 VP 38.317 GAP -1.21 AZP 89.19 TAL 218.47 TAP 352.60 RCA 107.80 APO 160.10 V2 35.107
RC 83.336 GL -7.16 GP -27.25 ZAL 150.46 ZAP 80.70 ETS 5.08 ZAE 157.21 ETE 267.75 ZAC 107.64 ETC 7.50.CLP -79.52
   PLANETOCENTRIC CONIC
                                                                                                                           2.11 VHP 3.621 OPA -15.25 RAP 154.85 ECC 1.3220
                                                  8.97 RAL 137.04 RAD 6567.8 VEL 11.872 PTH
     C3 19.566 VHL 4.423 DLA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                             -23.08
                                                                                                                                                                                                  51.74
                                                                                                                      103.41
                                                                                                                                       0 50 47
                                                                                                                                                        1891.1
                                                                                                       .74
          90.00
                         0 9 16 2491.13
                                                               -25.18
                                                                                 59.79
                                                                                                                        64.04 15 39 26
104.73 2 11 54
62.74 16 52 16
108.40 3 26 2
59.15 17 47 30
                                                                                                                                                            3971.3
                                                                                                                                                                                 8.13
                                                                                                                                                                                                  186.16
                       14 23 15 4571.25
1 35 0 2214.66
                                                                                 193.00
                                                                                                   356.72
          90.00
                                                                11.72
                                                                                                                                                            1614.7
                                                                                                                                                                              -24.03
                                                                                                                                                                                                  31.08
                                                                                                                       104.73
                                                                                  39.14
                                                                                                       .42
                                                               -26.31
         100.00
                                                                                                                                                            3723.0
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                                                                                 174.21
                                                                                                   356.19
                       15 40 13 4322.95
                                                               12.76
         100.00
                                                                                                                                                            1369.9
                                                                                                                                                                              -26.53
                                                                                                                                                                                                  11.47
                                                                                                                       108.40
                       2 53 12 1969.90
16 38 29 4140.48
                                                              -29.33
                                                                                  19.54
                                                                                                   359.41
        110.00
                                                                                                                                                            3540.5
                                                                                                                                                                              11.31
                                                                                                                                                                                                 152.21
                                                                                                   354.61
                                                              15.52
                                                                                 158.79
        110.00
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 282.5 SR 291.1 SS 265.8
CRT -.1289 CRS -.1515 CST -.9496
                                                                                     SGT 855.3 SGR 975.9 SG3 559.2
RRT .7304 RRF .9468 RTF .7521
     TOE .1301 TRA -.5757 TC3 -.4125 BAU .2647
     RDE -.1958 RRA -.3577 RC3 -.9239 FAU .15142
                                                                                     SGB 1297.7 R23 .2089 R13 .9277
SGI 1209.0 SG2 471.6 THA 50.13
                                                                                                                                                       LSA 383.0 MSA 296.1 55A 28.4
     FOE .2312 FRA-1.9697 FC3-6.6999 BSP 3348
BDE .2351 BRA .6774 BC3 1.0118 FSP -1734
                                                                                                                                                       EL1 305.2 EL2 267.2 ALF 128.50
                                                                                                                                                                    ARRIVAL DATE OCT 25 1967
                                                                                           FLIGHT TIME 106.00
LAUNCH DATE JUL 11 1967
                                                                                         DISTANCE 301.651
    HELIOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 288.03 VL 27.459 GAL -8.07 A7L 90.96 MCA 137.35 SMA 133.89 ECC .19447 INC .9571 VI 29.293 RP 107.91 LAP -.65 LOP 65.39 VP 38.322 GAP -.73 A7P 89.30 TAL 218.14 TAP 355.49 RCA_107.85 APO 159.93 V2 35.119 RC 85.546 GL -5.96 GP -28.98 7AL 150.44 7AP 85.66 ETS 2.81 7AE 154.79 ETE 258.74 7AC 109.85 ETC 6.06 CLP -85.04
    PLANETOCENTRIC CONIC
     C3 19.140 VHL 4.375 DLA 10.05 RAL 137.66 RAD 6567.8 VEL 11.854 PTH 2.10 VHP 3.626 DPA -16.07 RAP 152.22 ECC 1.3150
     C3 19.140 VHL 4.375 OLA 10.05 RAL 137.66 RAO 6567.8 VEL 11.854 PTH 2.10 VHP 3.626 DPA -16.07 RAP 152.22 ELC 1.3150 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 5 8 2520.94 -25.63 61.85 1.39 102.47 0 45 9 1920.9 -23.66 53.74 100.00 12 29 27 2242.57 -26.78 41.08 1.09 103.81 2 6 49 1642.6 -24.61 32.95 100.00 15 50 42 4284.63 11.56 172.00 356.45 62.24 17 2 6 3684.6 7.75 165.28 110.00 2 48 59 1993.69 -29.83 21.21 .12 107.53 3 22 12 1393.7 -27.14 13.05 110.00 16 47 39 4106.27 14.31 156.87 354.85 58.62 17 56 5 3506.3 10.06 150.35
                       O 3 8 2520.94
14 34 19 4531.03
1 29 27 2242.57
15 50 42 4264.63
2 48 59 1993.69
16 47 39 4106.27
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SCT 1016.7 SCR 1042.7 SC3 561.1

RRT .8015 RRF .9576 RTF .8197

SCB 1456.4 R23 .2101 R13 .9384

SCI 1382.3 SC2 458.6 THA 45.90
                                                                                                                                                     ST 315.1 SR 263.4 SS 277.6
CRT -.0441 CRS -.0952 CST -.9806
     TOE .1432 TRA -.6334 TC3 -.6141 BAU .3058
     ROE -.1664 RRA -.3646 RC3-1.0251 FAU .15083
FOE .3247 FRA-1.8961 FC3-6.8223 BSP 3897
BOE .2195 BRA .7309 BC3 1.1950 FSP -1754
                                                                                                                                                      LSA 418.0 MSA 265.0 SSA 28.8
                                                                                                                                                       EL1 315.8 EL2 262.6 ALF 173.12
                                                                                                                                                                     ARRIVAL DATE OCT 27 1967
LAUNCH DATE JUL 11 1967
                                                                                           FLIGHT TIME 108.00
                                                                                           DISTANCE 308.019
    HELTOCENTRIC CONIC
     RL 152.09 LAL -.00 LOL 288.03 VL 27.447 GAL -7.97 AZL 90.72 MCA 140.57 SMA 133.80 ECC .19384 INC .7245 V1 29.293

RP 107.87 LAP -.46 LOP 68.61 VP 38.324 GAP -.28 AZP 89.44 TAL 217.72 TAP 358.29 RCA 107.86 APO 159.73 V2 35.131

RC 87.767 GL -4.56 GP -30.77 ZAL 150.32 ZAP 90.39 ETS .31 ZAE 151.91 ETE 251.45 ZAC 111.89 ETC 4.50 CLP -90.46
    PLANETOCENTRIC CONIC
     C3 18.711 VHL 4.326 DLA 11.28 RAL 138.43 RAD 6567.8 VEL 11.836 PTH 2.10 VMP 3.663 DPA -17.00 RAP 149.67 ECC 1.3079
     C3 18.711 VHL 4.326 OLA 11.28 RAL 138.43 RAO 6567.8 VEL 11.836 PTH 2.10 VMP 3.663 OPA -17.00 RAP 149.67 ECC 1.3079
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 52 11 2556.31 -26.13 64.32 2.25 101.32 24 34 48 1956.3 -24.30 56.13
90.00 14 47 28 4484.97 9.10 188.02 357.45 65.07 16 2 13 3885.0 5.42 181.27
100.00 1 23 9 2275.65 -27.29 43.40 1.97 102.69 2 1 4 1675.7 -25.27 35.19
100.00 16 3 8 4240.85 10.16 169.51 356.89 61.74 17 13 49 3640.9 6.30 162.84
110.00 2 44 15 2021.87 -30.39 23.21 1.06 106.47 3 17 57 1421.9 -27.83 14.95
110.00 16 58 31 4067.41 12.92 154.71 355.25 58.08 18 6 18 3467.4 8.61 148.27
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 355.3 SR 230.3 SS 295.5

CRT .0458 CRS -.0564 CST -.9915

LSA 461.4 MSA 230.0 SSA 29.5

ELI 355.5 EL2 229.9 ALF 2.93
                                                                                     SGT 1195.2 SGR 1103.4 SG3 552.4
RRT .8477 RRF .9660 RTF .8622
SGB 1626.6 R23 .2117 R13 .9461
SGI 1563.9 SG2 447.3 THA 42.31
     TOE .1652 TRA -.6886 TC3 -.8300 BAU .3494
     ROE -.1315 RRA -.3649 RC3-1.1233 FAU .14742
FOE .4301 FRA-1.7728 FC3-6.8208 BSP 4469
BOE .2112 BRA .7793 BC3 1.3966 FSP -1729
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FLIGHT TIME 102.00

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LAUNCH DATE JUL 11 1967
                                                                                     FLIGHT TIME 110.00
    HELIOCENTRIC CONIC
                                                                                     DISTANCE 314.361
     RL 152.09 LAL -.00 LOL 288.03 VL 27.430 GAL -7.87 AZL 90.46 MCA 143.79 SMA 133.67 ECC .19331 INC .4573 VL 29.293
RP 107.83 LAP -.27 LOP 71.83 VP 38.323 GAP .16 AZP 89.63 TAL 217.22 TAP 1.01 RCA 107.83 APO 159.51 VZ 35.143
RC 89.996 GL -2.91 GP -32.67 ZAL 150.07 ZAP 94.82 ETS 357.60 ZAE 148.70 ETE 245.69 ZAC 113.73 ETC 2.82 CLP -95.73
    PLANETOCENTRIC CONIC
     C3 18.286 VHL 4.276 DLA 12.72 RAL 139.37 RAD 6567.7 VEL 11.818 PTH 2.09 VHP 3.734 DPA -18.10 RAP 147.23 ECC 1.3009
    LNCM ARTHH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ ARTHH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 43 49 2599.44 -26.67 67.36 3.37 99.89 24 27 8 1999.4 -25.03 59.08 90.00 15 3 20 4431.08 7.43 184.94 358.13 62.60 16 17 11 3831.1 3.70 178.25
                     23 43 49 2599.44
15 3 20 4431.08
1 15 39 2315.94
16 18 7 4189.81
                                                                                                               101.29 1 54 15
61.23 17 27 56
        100.00
                                                           -27.86
                                                                             46.26
                                                                                               3.12
                                                                                                                                                 1715.9
                                                                                                                                                                  -26.02
                                                                                                                                                                                     37.94
                                                                                            357.55
        100.00
                                                             8.50
                                                                            166.63
                                                                                                                                                 3589.8
                                                                                                                                                                     4.60
                                                                                                                                                                                   160.02
                       2 38 41
                                                                                                               105.13 3 12 57
57.52 18 18 36
        110.00
                                      2056.11
4022-40
                                                         -31.02
                                                                             25.68
                                                                                              2.27
                                                                                                                                                 1456.1
                                                                                                                                                                  -28.63
                                                                                                                                                                                    17.29
                                                                            152.25
                                                                                             355.87
       110.00
                      17 11 34
                                                          11.29
                                                                                                                                                 3422.4
                                                                                                                                                                     6.93
                                                                                                                                                                                    145.87
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              SGT 1383.4 SGR 1162.9 SG3 536.0
RRT .8778 RRT .9728 RTF .8896
SG8 1807.3 R23 .2132 R13 .9521
SG1 1753.0 SG2 439.6 THA 39.38
     TOE .1988 TRA -.7379 TC3-1.0560 BAU .3948
                                                                                                                                           ST 405.1 SR 195.8 SS 320.1
CRT .1638 CRS -.0822 CST -.9893
    ROE -.0924 RRA -.3601 RC3-1.2221 FAU .14196
FOE .5330 FRA-1.6191 FC3-6.7206 BSP 5086
BOE .2192 BRA .8211 BC3 1.6151 FSP -1689
                                                                                                                                           LSA 515.8 MSA 194.9 SSA 30.3
                                                                                                                                             EL1 406.7 EL2 192.4 ALF 5.83
LAUNCH DATE JUL 11 1967
                                                                                     FLIGHT TIME 112.00
                                                                                                                                                          ARRIVAL DATE OCT 31 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 320.677
    RL 152.09 LAL -.00 LOL 288.03 VL 27.409 GAL -7.75 AZL 90.15 MCA 147.01 SMA 133.52 ECC .19288 INC .1454 V1 29.293
RP 107.80 LAP -.08 LOP 75.05 VP 38.318 GAP .59 AZP 89.88 TAL 216.63 TAP 3.65 RCA 107.76 APO 159.27 V2 35.154
RC 92.232 GL -.94 GP -34.71 ZAL 149.65 ZAP 98.86 ETS 354.64 ZAE 145.26 ETE 241.21 ZAC 115.31 ETC 1.01 CLP-100.80
   PLANETOCENTRIC CONIC
    C3 17.879 VHL 4.228 DLA 14.43 RAL 140.51 RAD 6567.7 VEL 11.801 PTH
                                                                                                                   2.09 WHP 3.839 DPA -19.43 RAP 144.92 ECC 1.2942
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 33 19 2653.61 -27.24 71.22 4.83 98.04 24 17 33 2053.6 -25.85 62.83 90.00 15 22 55 4366.39 5.38 181.29 359.11 62.16 16 35 41 3766.4 1.62 174.63 100.00 1 6 18 2366.39 -28.48 49.88 4.61 99.48 1 45 45 1766.4 -26.88 41.45
                     15 22 55 4366.39
1 6 18 2366.39
16 36 32 4128.84
2 31 49 2098.83
                                                                                                               100.00
                                                                            163.22
                                                                                        358.51
                                                            5.49
                                                                                                                                                 3528.8
                                                                                                                                                                     2.54
                                                                                                                                                                                   156.66
                                                          -31.74
       110.00
                                                                             28.80
                                                                                              3.85
                                                                                                               103.41
                                                                                                                                                 1498.8
                                                                                                                                                                  -29.57
                                                                                                                                                                                     20.27
                     17 27 31
                                                                            149.37
                                                                                            356.77
       110.00
                                       3969.16
                                                           9.33
                                                                                                                                                 3369.2
                                                                                                                                                                     4.92
                                                                                                                                                                                    143.07
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              SCT 1576.9 SCR 1216.2 SC3 510.6
RRT .9978 RRF .9783 RTF .9074
SCB 1991.4 RZ3 .2164 R13 .9563
SCI 1943.4 SCZ 434.6 THA 36.85
    TOE .2468 TRA -. 7787 TC3-1.2887 BAU .4403
                                                                                                                                            ST 468.7 SR 162.2 SS 355.1
CRT .3665 CRS -.2220 CST -.9820
    RDE -.0461 RRA -.3475 RC3-1.3162 FAU .13413
    FOE .6429 FRA-1.4290 FC3-6.4950 BSP 5697
BOE .2510 BRA .8527 BC3 1.8421 FSP -1612
                                                                                                                                             LSA 588.0 MSA 159.3 SSA 31.3
                                                                                                                                             EL1 472.9 ELZ 149.5 ALF
                                                                                                                                                                                        8.04
                                                                                    FLIGHT TIME 114.00
                                                                                                                                                        ARRIVAL DATE NOV 2 1967
LAUNCH DATE JUL 11 1967
                                                                                   DISTANCE 326.969
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 27.384 GAL -7.63 AZL 89.78 MCA 150.24 SMA 133.33 ECC .19253 INC .2241 V1 29.293
RP 107.77 LAP .11 LOP 78.27 VP 38.310 GAP 1.00 AZP 90.20 TAL 215.98 TAP 6.21 RCA 107.66 APO 159.01 VZ 35.165
RC 94.474 GL 1.46 GP -36.98 ZAL 149.01 ZAP 102.45 ETS 351.40 ZAE 141.63 ETE 237.79 ZAC 116.60 ETC 359.08 CLP-105.66
   PLANETOCENTRIC CONIC
    C3 17.511 VHL 4.185 DLA 16.52 RAL 141.89 RAD 6567.7 VEL 11.785 PTH 2.08 VHP 3.985 DPA -21.06 RAP 142.73 ECC 1.2882
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 19 27 2724.11 -27.81 76.31 6.73 95.55 24 4 51 2124.1 -26.75 67.80 90.00 15 47 50 4286.22 2.82 176.79 .53 61.81 16 59 17 3686.2 -.97 170.16 100.00 0 54 3 2431.74 -29.12 54.63 6.56 97.06 1 34 34 1831.7 -27.84 46.07 100.00 16 59 52 4053.82 3.97 159.07 359.89 60.35 18 7 26 3453.8 -.00 152.54 110.00 2 22 54 2153.73 -32.53 32.89 5.93 101.12 2 58 48 1555.7 -30.66 24.17 110.00 17 47 30 3904.60 6.92 145.93 358.07 56.44 18 52 34 3304.6 2.46 139.68
   DIFFERENTIAL CORRECTIONS
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SGT 1772.6 SGR 1269.1 SG3 478.9
RRT .9110 RRF .9628 RTF .9194
SG8 2160.0 R23 .2201 R13 .9596
SG1 2136.3 SG2 434.2 THA 34.76
                                                                                                                                           ST 552.3 SR 145.4 SS 399.8

CRT .6753 CRS -.5273 CST -.9767

LSA 684.6 MSA 128.2 SSA 31.8

EL1 561.3 EL2 105.5 ALF 10.45
    TOE .3131 TRA -.8078 TC3-1.5242 BAU .4859
    RDE .0071 RRA -.3283 RC3-1.4090 FAU .12472
    FOE .7489 FRA-1.2204 FC3-6.1662 BSP 6338
BOE .3132 BRA .8720 BC3 2.0756 FSP -1522
LAUNCH DATE JUL 11 1967
                                                                                    FLIGHT TIME 116.00
                                                                                                                                                         ARRIVAL DATE NOV 4 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 333.236
    RL 152.09 LAL -.00 LOL 288.03 VL 27.356 GAL -7.50 AZL 88.32 MCA 153.46 SMA 133.13 ECC .19227 INC .6771 V1 29.293
RP 107.73 LAP .30 LOP 81.50 VP 38.300 GAP 1.40 AZP 90.61 TAL 215.25 TAP 8.71 RCA 107.53 APO 158.75 V2 35.175
RC 96.719 GL 4.43 GP -39.57 ZAL 148.04 ZAP 105.51 ETS 347.84 ZAE 137.82 ETE 235.22 ZAC 117.57 ETC 356.98 CLP-110.30
   PLANETOCENTRIC CONIC
    C3 17.222 VHL 4.150 DLA 19.11 RAL 143.60 RAD 6567.7 VEL 11.773 PTH 2.08 VHP 4.179 DPA -23.07 RAP 140.60 ECC 1.2834
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 22 59 53 2820.29
90.00 16 21 4 4182.53
100.00 0 36 55 2520.02
100.00 17 30 36 3957.83
                                                                                         9.22
                                                          -28.25
                                                                           83.31
                                                                                                            92.07 23 46 53
                                                                                                                                                2220.3
                                                                                                                                                               -27.66
                                                                                                                                                                                    74.69
                                                            -.53
                                                                           171.00
                                                                                               2.63
                                                                                                                61.69
                                                                                                                           17 30 46
                                                                                                                                                 3582.3
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                                                          -29.69
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56.01 19 17 7
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                                     2226.75
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       110.00
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                                      3623.66
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                                                                                                                                                                    -.63
                                                                                                                                                                                   135.47
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    TDE .4053 TRA -.8209 TC3-1.7526 BAU .5298
                                                                                                                                            ST 666.7 SR 169.0 SS 459.6
CRT .9295 CRS -.8410 CST -.9747
                                                                                SGT 1966.7 SGR 1316.3 SG3 439.6
                                                                              RRT .9195 RRF .9864 RTF .9275
SGB 2366.5 R23 .2250 R13 .9618
    RDE .0724 RRA -.2992 RC3-1.4910 FAU .11341
    FOE .8608 FRA -.9896 FC3-5.7010 BSP 6948
BOE .4117 BRA .8737 BC3 2.3010 FSP -1399
                                                                                                                                           LSA 819.9 MSA 106.1 SSA 30.2
                                                                             SG1 2325.7 SG2 437.4 THA 32.92
                                                                                                                                            EL1 685.1 EL2 60.6 ALF 13.37
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ARRIVAL DATE NOV 6 1967

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FLIGHT TIME 118.00
LAUNCH DATE JUL 11 1967
                                                                                                  DISTANCE 339.478
   HELIOCENTRIC CONTC
     RL 152.09 LAL -.00 LOL 288.03 VL 27.325 GAL -7.36 AZL 88.75 MCA 156.69 SMA 132.90 ECC .19208 INC 1.2448 V1 29.293 RP 107.70 LAP .49 LOP 84.73 VP 38.287 GAP 1.79 AZP 91.14 TAL 214.45 TAP 11.14 RCA 107.38 APO 158.43 VZ 35.185 RC 98.967 GL 8.19 GP -42.61 ZAL 146.57 ZAP 107.94 ETS 343.91 ZAE 133.77 ETE 233.35 ZAC 118.19 ETC 354.68 CLP-114.75
    PLANETOCENTRIC CONIC
                                                                                                                                      2.08 WHP 4.437 OPA -25.57 RAP 138.45 ECC 1.2812
     C3 17.086 VHL 4.134 DLA 22.39 RAL 145.76 RAD 6567.7 VEL 11.767 PTH
     CS 17.086 VAL 4.134 DLA 22.39 KAL 143.10 KAL
           90.00 22 29 11 2962.07
90.00 17 8 58 4036.89
                                                                                                                                   62.13 18 16 14
88.72 0 54 53
60.32 19 17 46
93.34 2 31 28
55.82 19 50 34
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                                                                     -5.20
                                                                                        162.86
                         0 10 46 2647.20
18 13 59 3826.99
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         100.00
                                                                     -29.87
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         100.00
                                                                      -3.70
                                                                                        146.61
                                                                                                               5.07
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18 48 35 3718.54
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                                                                    -34.04
                                                                                          46.28
         110.00
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                                                                                                               2.86
                                                                       -.16
                                                                                        136.18
         110.00
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2160.3 SGR 1363.9 SG3 395.3
RRT .9245 RRT .9883 RTT .9334
SG8 2554.8 R23 .2292 R13 .9637
SG1 2515.5 SG2 446.3 THA 51.37
                                                                                                                                                                    ST 825.8 SR 243.4 SS 532.2
CRT .9938 CRS -.9644 CST -.9771
      TDE .5329 TRA -.8136 TC3-1.9630 BAU .5728
      RDE .1515 RRA - .2601 RC3-1.5604 FAU .10090
                                                                                                                                                                    LSA 1007.0 MSA 98.2 SSA 24.6
EL1 860.5 EL2 26.0 ALF 16.34
     FOE .9670 FRA -.7531 FC3-5.1124 BSF 7582
      BOE .5540 BRA .8541 BC3 2.5076 FSP -1268
                                                                                                                                                                                    ARRIVAL DATE NOV 8 1967
                                                                                                   FLIGHT TIME 120.00
LAUNCH DATE JUL 11 1967
                                                                                                   DISTANCE 345.696
   HELIOCENTRIC CONIC
     RL 192.09 LAL -.00 LOL 288.03 VL 27.291 GAL -7.21 AFL 88.02 MCA 159.91 SMA 132.66 ECC .19195 INC 1.9839 VI 29.293 RP 107.67 LAP .68 LOP 87.96 VP 36.272 GAP 2.16 AFP 91.86 TAL 213.59 TAP 13.50 RCA 107.19 APO 158.12 V2 35.195 RC 101.218 GL 13.04 GP -46.26 FAL 144.32 FAP 109.62 ETS 339.52 FAE 129.38 ETE 232.01 FAC 118.44 ETC 352.08 CLP-119.05
    PLANETOCENTRIC CONIC
     C3 17.251 VHL 4.153 OLA 26.62 RAL 148.57 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 4.787 OPA -28.69 RAP 136.14 ECC 1.2839
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 21 26 9 3220.50 -25.81 112.18 16.27 77.92 22 19 49 2620.5 -27.21 103.79
                                                                                                                                   64.68 19 37 30
80.68 24 6 12
61.86 20 25 4
86.31 2 4 26
56.25 20 40 8
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                         18 34 27 3782.91
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           90.00
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          100.00
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                                              2858.11
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         110.00
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                          19 40 37 3570.66
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                                                                      -5.60
         110.00
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2352.2 SGR 1404.8 SG3 344.8
RRT .9265 RRF .9915 RTF .9376
SG8 2739.8 R23 .2334 R13 .9650
SG1 2700.8 SG2 460.4 THA 29.91
                                                                                                                                                                     ST 1051.7 SR 363.7 SS 621.3
CRT .9947 CR5 -.9936 CST -.9815
      TOE .7154 TRA -.7769 TC3-2.1270 BAU .6129
      RDE .2529 RRA -.2046 RC3-1.5934 FAU .08690
                                                                                                                                                                     LSA 1270.2 MSA 103.7 SSA 16.8
      FOE 1.0726 FRA -. 5088 FC3-4.3612 8SP 8175
                                                                                                                                                                     EL1 1112.3 EL2 35.3 ALF 19.00
      BOE .7588 BRA .8034 BC3 2.6576 FSP -1109
                                                                                                                                                                                   ARRIVAL DATE NOV 10 1967
                                                                                                   FLIGHT TIME 122.00
 LAUNCH DATE JUL 11 1967
                                                                                                   DISTANCE 351.889
      RL 152.09 LAL -.00 LOL 288.03 VL 27.255 GAL -7.04 AZL 87.01 MCA 163.13 SMA 132.40 ECC .19190 INC 2.9922 VI 29.293 RP 107.65 LAP .87 LOP 91.19 VP 38.254 GAP 2.53 AZP 92.86 TAL 212.68 TAP 15.81 RCA 106.99 APO 157.80 V2 35.204 RC 103.470 GL 19.42 GP -50.73 ZAL 140.83 ZAP 110.36 ETS 334.59 ZAE 124.46 ETE 231.02 ZAC 118.29 ETC 349.04 CLP-123.35
     PLANETOCENTRIC CONIC
      C3 18.040 VML 4.247 DLA 32.15 RAL 152.45 RAD 6567,7 VEL 11.808 PTH 2.09 VMP 5.285 DPA -32.57 RAP 133.44 ECC 1.2969
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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66.69 23 11 16
66.70 19 17 18
66.69 23 11 16
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                                                                     -15.32
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          110.00
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                                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                    ST 1371.6 SR 522.0 SS 720.4
CRT .9912 CR8 -.9992 CST -.9866
      TOE .9854 TRA -.6978 TC3-2.1981 BAU .6501
                                                                                               SGT 2547.5 SGR 1437.1 SG3 289.6
      RDE .3832 RRA -.1274 RC3-1.5603 FAU .07188
FDE 1.1638 FRA -.2705 FC3-3.4494 BSP 8797
BDE 1.0573 BRA .7094 BC3 2.6956 FSP -942
                                                                                              RRT .9254 RRF .9929 RTF .9412
SGB 2924.9 R23 .2357 R13 .9663
SG1 2885.1 SG2 481.0 THA 28.43
                                                                                                                                                                    LSA 1630.8 MSA 114.8 SSA 10.6
                                                                                                                                                                     EL1 1466.2 EL2 64.8 ALF 20.71
                                                                                                                                                                                    ARRIVAL DATE NOV 12 1967
                                                                                                    FLIGHT TIME 124.00
 LAUNCH DATE JUL 11 1967
                                                                                                    DISTANCE 358.054
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 288.03 VL 27.217 GAL -6.87 AZL 85.54 MCA 166.35 SMA 132.12 ECC .19190 INC 4.4607 V1 29.293

RP 107.62 LAP 1.05 LOP 94.42 VP 38.234 GAP 2.88 AZP 94.34 TAL 211.70 TAP 18.05 RCA 106.77 APO 157.48 V2 35.212

RC 105.723 GL 27.85 GP -56.30 ZAL 135.47 ZAP 109.96 ETS 328.93 ZAE 118.76 ETE 230.02 ZAC 117.67 ETC 345.29 CLP-127.97
     PLANETOCENTRIC CONIC
      LNCH AZNITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.48 17 23 43 4149.32 -26.58 183.36 30.56 59.88 18 32 52 3840 3 -20.27
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59.86 24 42 22
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59.86 24 42 22
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                            17 23 43
                                                                      -26.58
            61.48
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                                             2929.25
                            23 53 35
                                                                      -26.57
                                                                                            90.73
                                                                                                               30.56
          118.52
                                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 1818.8 SR 704.0 SS 820.2
CRT .9899 CRS -.9999 CST -.9907
                                                                                              SGT 2752.3 SGR 1437.9 SG3 229.7
RRT .9195 RRF .9926 RTF .9448
SGB 3105.3 R23 .2365 R13 .9675
       TOE 1.4117 TRA -.5472 TC3-2.0886 BAU
       ROE .5520 RRA -.0122 RC3-1.3937 FAU .05574
                                                                                                                                                                    LSA 2111.8 MSA 128.9 SSA
                                                                                                                                                                                                                         6.4
       FDE 1.2330 FRA -.0409 FC3-2.3836 BSP 9373
BDE 1.5158 BRA .5473 BC3 2.5109 FSP -754
                                                                                                                                                                     ELI 1948.0 EL2 93.2 ALF 21.02
                                                                                               SG1 3063.5 SG2 507.8 THA 26.44
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LAUNCH DATE JUL 11 1967
                                                                                FLIGHT TIME 126.00
                                                                                                                                                 ARRIVAL DATE NOV 14 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 364.184
    RL 152.09 LAL -.00 LOL 288.03 VL 27.176 GAL -6.69 APL 83.19 MCA 169.55 SMA 131.84 ECC .19195 INC 6.8113 V1 29.293
RP 107.60 LAP 1.23 LOP 97.66 VP 38.213 GAP 3.22 APP 96.70 TAL 210.66 TAP 20.22 RCA 106.53 APO 157.14 V2 35.220
RC 107.975 GL 38.74 GP -63.31 7AL 127.52 ZAP 108.12 ETS 321.98 ZAE 111.85 ETE 228.18 ZAC 116.57 ETC 340.08 CLP-133.84
   PLANETOCENTRIC CONIC
    C3 26.167 VHL 5.115 DLA 48.12 RAL 167.54 RAD 6568.1 VEL 12.147 PTH 2.18 VHP 7.314 DPA -45.27 RAP 124.59 ECC 1.43D6 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   17 12 14 4342.34
1 23 38 2861.18
                                                                                        47.73
                                                                                                         49.76 18 24 36
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        49.31
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        130.69
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                      17 12 14
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       130.69
                      1 23 34
                                     2861.18
                                                      -29.01
                                                                        86.58
                                                                                                                                        2261.2
                                                                                                                                                         -33.9A
                                                                                                                                                                           79.64
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SGT 2984.1 SGR 1359.1 SG3 168.3
RRT .9014 RRF .9873 RTF .9501
SG8 3279.1 R23 .2341 R13 .9692
SG1 3233.8 SG2 542.9 THA 23.01
                                                                                                                                    ST 2397.1 SR 823.9 SS 886.7
CRT .9880 CRS -.9991 CST -.9935
    TOE 2.1365 TRA -.2568 TC3-1.6910 BAU
                                                            . SOI A
    RDE .7313 RRA .1643 RC3-1.0252 FAU .03917
    FOE 1.2500 FRA .1664 FC3-1.2958 8SP 9924
BOE 2.2582 BRA .3049 BC3 1.9775 FSP -562
                                                                                                                                     LSA 2681.4 MSA 145.7 SSA 3.8
                                                                                                                                     EL1 2531.9 EL2 120.7 ALF 18.80
LAUNCH DATE JUL 11 1967
                                                                                FLIGHT TIME 128.00
                                                                                                                                                 ARRIVAL DATE NOV 16 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 370.262
    RL 152.09 LAL -.00 LOL 288.03 VL 27.134 GAL -6.49 A7L 78.80 MCA 172.72 SMA 131.54 ECC .19200 INC11.1976 V1 29.293 RP 107.58 LAP 1.41 LOP 100.89 VP 38.189 GAP 3.54 A7P 101.11 TAL 209.56 TAP 22.28 RCA 106.28 APO 156.79 V2 35.227
    RC 110.226 GL 51.62 GP -72.11 ZAL 116.85 ZAP 104.60 ETS 311.07 ZAE 102.98 ETE 222.33 ZAC 115.06 ETC 330.40 CLP-145.12
   PLANETOCENTRIC CONIC
    C3 44.610 VHL 6.679 DLA 56.88 RAE 184.08 RAD 6568.7 VEL 12.883 PTH 2.35 VHP 9.824 DPA -50.06 RAP 115.33 ECC 1.7342 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 38.36 17 45 3 4551.07 -25.97 221.34 75.57 37.42 19 0 54 3951.1 -32.21 216.02
       141.64
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                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 3271.5 SGR 1044.4 SG3 111.7
RRT .8103 RRF .9362 RTF .9616
SGB 3434.2 R23 .2228 R13 .9730
SGI 3382.8 SG2 592.0 THA 14.97
    TOE 3.4173 TRA .3913 TC3 -.9851 BAU .6489
ROE .6179 RRA .4170 RC3 -.4621 FAU .02299
FOE 1.1698 FRA .3547 FC3 -.4462 BSP 10432
                                                                                                                                    ST 2937.6 SR 565.6 SS 863.7
CRT .9575 CRS -.9819 CST -.9948
                                                                                                                                    LSA 3108.6 MSA 177.8 SSA 2.2
EL1 2987.2 EL2 160.5 ALF 10.48
    BOE 3.4727 BRA .5718 BC3 1.0881 FSP -377
                                                                                FLIGHT TIME 130.00
                                                                                                                                                ARRIVAL DATE NOV 18 1967
LAUNCH DATE JUL 11 1967
                                                                               DISTANCE 376.210
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 27.091 GAL -6.26 A7L 67.90 MCA 175.79 SMA 131.23 ECC .19194 INC22.0985 VI 29.293
RP 107.56 LAP 1.58 LOP 104.13 VP 38.164 GAP 3.82 A7P 112.05 TAL 208.34 TAP 24.13 RCA 106.04 APO 156.42 V2 35.233
RC 112.475 GL 62.73 GP -80.32 7AL 104.76 7AP 99.33 ETS 272.08 7AE 89.95 ETE 187.74 7AC 113.89 ETC 291.27 CLP 164.50
   PLANETOCENTRIC CONTC
    C3 129,919 VHL 11.398 DLA 59.87 RAL 208.51 RAD 6570.4 VEL 15.851 PTH 2.81 VHP 16.356 DPA -55.95 RAP 95.41 ECC 3.1381 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 34.76 19 13 4 4813 48 -19 84 918 49 11/103
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30.98 5 42 3
                                                                                     110.93
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                                                                      233.52
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        34.76 19 13 8 4813.55
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                      4 49 36 3146.86
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       145.24
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                                                                       233.52
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        34.76
                    19 13 8 4813.55
                                                       -12.84
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30.99 20 33 21
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                                                      -12.83
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       145.24
                      4 49 36 3146.86
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                    19 13 8 4813.55
4 49 36 3146.86
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        34.76
                                                      -12.84
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                         2546.9
                                                                                                                                                                           92.99
       145.24
                                                      -12.83
                                                                         96.94
                                                                                                                                                         -19.65
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                                    ST 2411.0 SR 1269.6 SS 764.0

CRT - 9806 CRS .9660 CST - 9979

LSA 2820.2 MSA 234.4 SSA .9

EL1 2715.9 EL2 221.0 ALF 152.49
                                                                           SGT 3279.7 SGR 1321.8 SG3 69.9
RRT -.8781 RRF -.8243 RTF .9944
SG8 3536.0 R23 -.1640 R13 -.9861
    TOE 4.5981 TRA 2.2835 TC3 -.1884 BAU .3273
    ROE-2.5151 RRA -.3852 RC3 .0027 FAU .00676
FOE 1.0092 FRA .6216 FC3 -.0450 BSP 10567
BOE 5.2410 BRA 2.3157 BC3 .1884 FSP -228
                                                                           561 3485.6 562 595.0 THA 159.90
                                                                                                                                                 ARRIVAL DATE NOV 20 1967
LAUNCH DATE JUL 11 1967
                                                                                FLIGHT TIME 132.00
   HELIOCENTRIC CONIC
                                                                                DISTANCE 361.373
    RL 152.09 LAL -.00 LOL 288.03 VL 27.046 GAL -5.86 A7L 20.62 MCA 178.13 SMA 130.92 ECC .19059 INC69.5838 VI 29.293 RP 107.54 LAP 1.75 LOP 107.37 VP 38.136 GAP 3.88 AZP 159.37 TAL 206.55 TAP 24.69 RCA 105.97 APO 155.87 VZ 35.239 RC 114.720 GL 51.54 GP -56.70 ZAL 94.84 ZAP 93.54 ETS 189.45 ZAE 59.12 ETE 109.42 ZAC 117.33 ETC 200.49 CLP 96.46
   PLANETOCENTRIC CONIC
    C31034.300 WHL 32.161 DLA 42.41 RAL 214.00 RAD 6573.0 VEL 33.994 PTH 3.51 WHP 43.367 DPA -44.11 RAP 50.86 ECC18.0220
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ 2 LONG 57.01 20 46 33 4871.71 .34 223.32 124.39 47.59 22 7 45 4271.7 -5.04 217.82 122.99 3 59 58 3941.15 .36 121.21 124.36 47.59 4 56 59 2941.2 -5.03 115.70
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       172.99
                      3 59 56
                                     3541.15
                                                            . 36
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 696.8 SR 1668.0 SS 1149.7

CRT .9309 CRS .9985 CST .9095

LSA 2126.7 MSA 258.5 SSA .9

EL1 1792.1 EL2 237.0 ALF 68.35
                                                                          561 826.1 SGR 2985.2 SG3 51.0
RRT .7349 RRF -.9982 RTF -.6944
    TOE-3.9079 TRA -.3407 TC3 -.0679 BAU 2.9356
    ROE-8.5860 RRA-9.1727 RC3 -.2011 FAU-.04663
FOE 1.5396 FRA 1.8972 FC3 .0390 BSP 9663
BOE 9.4335 BRA 9.1790 BC3 .2123 FSP -166
                                                                          SGB 3097.4 RE3 -.0955 R13 -.9953
SGI 3048.5 SGE 548.6 THA 78.11
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FLIGHT TIME 134.00.
                                                                                                                                  ARRIVAL DATE NOV 22 1967
LAUNCH DATE JUL 11 1967
                                                                       DISTANCE 389.396
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL 27.000 GAL -6.03 AZL 126.50 MCA 183.21 SMA 130.60 ECC .19449 INC36.4958 VI 29.293
RP 107.52 LAP 1.91 LOP 110.62 VP 38.110 GAP 4.74 AZP 53.33 TAL 206.67 TAP 29.88 RCA 105.20 APO 156.00 V2 35.244
RC 116.961 GL -62.83 GP 77.00 ZAL 98.93 ZAP 98.61 ETS 152.58 ZAE 80.34 ETE 233.09 ZAC 87.78 ETC 125.84 CLP 131.70
   PLANETOCENTRIC CONIC
    C3 322.224 VML 17.951 DLA -54.13 RAL 141.16 RAD 6571.8 VEL 21.060 PTH 3.19 VMP 21.597 DPA 74.43 RAP'306.67 ECC 6.3030
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            144.01 3 42 56
144.01 12 11 37
144.01 3 42 56
144.01 12 11 37
144.01 12 11 37
144.01 3 42 56
144.01 12 11 37
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       130.27
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 539.4 SR 2900.5 SS 1214.0
CRT .9491 CRS -.9987 CST -.9639
                                                                   SGT 563.0 SGR 3608.8 SG3 64.8
RRT .5609 RRF .9918 RTF .6602
SGB 3652.5 R25 -.1142 R13 .9931
    TOE-1.6831 TRA .2987 TC3 -.0122 BAU .5375
    ROE-8.8483 RRA-4.0421 RC3 .1242 FAU-.00585
FDE-2.0058 FRA -.7087 FC3 .0157 BSP 10666
                                                                                                                      LSA 3165.5 MSA 173.5 SSA
                                                                                                                                                             1.0
                                                                                                                       EL1 2945.5 EL2 167.3 ALF 79.96
                                                                   SG1 3622.8 SG2 464.3 THA 84.92
    BOE 9.0070 BRA 4.0532 BC3 .1248 FSP -194
                                                                        FLIGHT TIME 136.00
                                                                                                                                  ARRIVAL DATE NOV 24 1967
LAUNCH DATE JUL 11 1967
                                                                       DISTANCE 395.185
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL 26.953 GAL -5.75 AZL 109.56 MCA 186.18 SMA 130.27 ECC .19445 INC19.5606 V1 29.293 RP 107.51 LAP 2.07 LOP 113.86 VP 38.081 GAP 4.97 AZP 70.54 TAL 205.26 TAP 31.45 RCA 104.94 APO 155.60 V2 35.248 RC 119.197 GL -61.78 GP 72.08 ZAL 105.08 ZAP 107.05 ETS 78.81 ZAE 96.85 ETE 161.60 ZAC 88.43 ETC 52.92 CLP-162.28
   PLANETOCENTRIC CONIC
    C3 103.836 WHL 10.190 OLA -49.34 RAL 134.42 RAD 6570.0 VEL 15.006 PTH 2.70 WHP 11.499 DPA 76.25 RAP 231.10 ECC 2.7089
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG.
                 2 56 41 2044.53
11 14 53 5825.35
2 56 41 2044.53
11 14 53 5825.35
2 56 41 2044.53
11 14 53 5825.35
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       132.26
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                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2715.2 SR 213.7 SS 961.1
CRT .0615 CRS .0191 CST -.9968
                                                                    SGT 3771.0 SGR 694.1 SG3 104.2
RRT .6548 RRF .5203 RTF .9854
    TDE-4.6147 TRA-3.0863 TC3 -.3046 BAU .4228
    RDE .0893 RRA -.8022 RC3 .0006 FAU .01615
FDE-1.6795 FRA -.8092 FC3 -.1346 BSP 11657
                                                                                                                       LSA 2879.3 MSA 225.5 SSA
EL1 2715.2 EL2 213.3 ALF
                                                                   SGB 3834.3 R23 -.1817 R13 .9824
SG1 3798.8 SG2 520.8 THA 7.00
                                                                                                                                                            1.6
    BOE 4.6156 BRA 3.1908 BC3 .3046 FSP -327
                                                                                                                                  ARRIVAL DATE NOV 26 1967
LAUNCH DATE JUL II 1967
                                                                        FLIGHT TIME 138.00
                                                                       DISTANCE 401.152
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 26.905 GAL -5.50 AZL 103.78 MCA 189.34 SMA 129.94 ECC .19486 INC13.7837 VI 29.293 RP 107.50 LAP 2.22 LOP 117.11 VP 38.050 GAP 5.26 AZP 76.39 TAL 203.96 TAP 33.29 RCA 104.62 APO 155.26 V2 35.252 RC 121.426 GL -57.00 GP 60.89 ZAL 109.41 ZAP 115.26 ETS 60.68 ZAE 106.79 ETE 147.43 ZAC 91.03 ETC 35.24 CLP-151.32
   PLANETOCENTRIC CONIC
    C3 57.891 VHL 7.609 DLA -44.17 RAL 135.69 RAD 6569.1 VEL 13.388 PTH 2.45 VHP 8.301 DPA 68.23 RAP 198.62 ECC 1.9527
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             130.86 3 56 58
130.85 12 31 26
                                  1848.63
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130.85 12 31 26
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                                                                268.94
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       125.44
                                                   18.52
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 3859.3 SGR 700.7 SGS 154.5
RRT -.7211 RRF -.8661 RTF ..9669
SGB 3922.3 RZ3 .2307 RI3 -.9708
SGI 3892.7 SGZ 481.3 THA 172.42
                                                                                                                        ST 2508.9 SR 663.8 SS 984.8
CRT -.9483 CRS .9823 CST -.9909
    TDE-3.1393 TRA-2.6645 TC3 -.7993 BAU .6288
    RDE .8813 RRA .0381 RC3 .1453 FAU .03121
FDE-1.7844 FRA -.8935 FC3 -.4667 BSP 12070
                                                                                                                        LSA 2766.2 MSA 229.9 SSA 2.2
    BOE 3.2607 BRA 2.6648 BC3 .8124 FSP -492
                                                                                                                        EL1 2587.1 EL2 204.3 ALF 165.83
                                                                                                                                   ARRIVAL DATE NOV 28 1967
                                                                        FLIGHT TIME 140.00
LAUNCH DATE JUL 11 1967
                                                                        DISTANCE 407.151
   HELIOCENTRIC CONIC
 RL 192.09 LAL -.00 LOL 288.03 VL 26.856 GAL -5.25 AZL 100.92 MCA 192.54 SMA 129.61 ECC .19544 INC10.9213 V1 29.293
RP 107.49 LAP 2.36 LOP 120.35 VP 38.018 GAP 5.55 AZP 79.33 TAL 202.65 TAP 35.19 RCA 104.28 APO 154.94 V2 35.255
RC 123.648 GL -52.61 GP 51.41 ZAL 112.17 ZAP 122.49 ETS 54.49 ZAE 113.75 ETE 146.42 ZAC 93.32 ETC 29.43 CLP-149.44
   PLANETOCENTRIC CONIC
                                                                                                  2.31 WHP 6.925 DPA 59.83 RAP 186.52 ECC 1.6693
    C3 40.670 WHL 6.377 DLA -40.15 RAL 130.15 RAD 6568.6 VEL 12.729 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.26 3 59 54 1694.95 20.61 26.19 21.63 125.25 4 28 9 1094.9 25.07 19.40
                                                                                               125.24 12 16 47
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                   10 41 17
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                   10 41 17 5730.21
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125.24 12 16 47
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                     3 59 54 1694.95
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       119.74
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                    SCT 3919.5 SCR 773.2 SC3 199.9
RRT -.8210 RRF -.9442 RTF ..9566
SC8 3995.1 R23 .2609 R13 -.9614
SC1 3971.2 SC2 435.7 THA 170.69
                                                                                                                        ST 2403.6 SR 692.1 SS 1021.6
CRT -.9595 CRS .9922 CST -.9871
    TOE-2.5116 TRA-2.3439 TC3-1.2838 BAU .7107
    RDE . 7686 RRA . 1286 RC3 . 2455 FAU . 04331
FDE-1.8662 FRA - .9159 FC3 - .9219 89P 12306
                                                                                                                        LSA 2692.1 MSA 229.5 SSA
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BOE 2.6266 BRA 2.3475 BC3 1.3071 FSP -642

EL1 2494.2 EL2 187.8 ALF 164.47

ARRIVAL DATE NOV 30 1967

JPL TM 33-99

LAUNCH DATE JUL 11 1967

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01STANCE 413.152
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 26.807 GAL -4.99 AZL 99.21 MCA 195.76 SMA 129.27 ECC .19615 INC 9.2116 V1 29.293
RP 107.48 LAP 2.49 LOP 123.60 VP 37.986 GAP 5.84 AZP 81.13 TAL 201.33 TAP 37.09 RCA 103.92 APO 154.63 VZ 35.257
RC 125.861 GL -49.00 GP 43.73 ZAL 113.76 ZAP 128.56 ETS 50.77 ZAE 118.63 ETE 148.38 ZAC 94.90 ETC 26.11 CLP-149.62
   PLANETOCENTRIC CONIC
     C3 32.082 VML 5.664 DLA -37.14 RAL 140.71 RAD 6568.3 VEL 12.388 PTH 2.24 VMP 6.250 DPA 52.51 RAP 180.94 ECC 1.5280
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 64.89 4 52 43 1570,32 21.39 16.41 19.55 121.12 4 58 53 970.3 25.35 9.25 115.11 10 29 6 5735.07 21.41 269.67 19.56 121.11 12 4 41 5135.1 25.36 262.51
                                                                            HJ LONG HJ NT ASC INJ ATHTH INJ TIME

16.41 19.55 121.12 4 56 53

269.67 19.56 121.11 12 4 41

16.41 19.55 121.12 4 56 53

269.67 19.56 121.11 12 4 41

16.41 19.55 121.12 4 56 53

269.67 19.56 121.11 12 4 41

HID-COURSE EXECUTION ACCURACY

SGT 4010.7 SCP 793.8 4C3 934 9
                                                                       269.67
                     4 32 45 1570.32
10 29 6 5735.07
4 32 43 1570.32
10 29 6 5735.07
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        115.11
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 4010.7 SGR 723.8 SG3 234.2
RRT -.8356 RRF -.9539 RTF ..9499
SGB 4075.5 R23 .2775 R13 -.9541
SGI 4056.5 SG2 393.1 TMA 171.34
                                                                                                                                            ST 2353.7 SR 632.0 SS 1040.0

CRT -.9602 CRS .9944 CST -.9843

LSA 2639.8 MSA 228.6 SSA 3.9
     TOE-2.1837 TRA-2.1286 TC3-1.7456 BAU .7587
    ROE .6233 RRA .1141 RC3 .2866 FAU .05193
FOE-1.8746 FRA -.8755 FC3-1.4013 BSP 12582
BOE 2.2709 BRA 2.1316 BC3 1.7689 FSP -756
                                                                                                                                            EL1 2431.1 EL2 170.8 ALF 165.47
                                                                                    FLIGHT TIME 144.00
                                                                                                                                                         ARRIVAL DATE DEC 2 1967
LAUNCH DATE JUL 11 1967
                                                                                    DISTANCE 419.146
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LCL 288.03 VL 26.757 GAL -4.72 A7L 98.07 MCA 198.99 SMA 128.94 ECC .19697 INC 8.0710 V1 29.293 RP 107.48 LAP 2.62 LOP 126.85 VP 37.952 GAP 6.13 AZP 82.36 TAL 199.99 TAP 38.98 RCA 103.54 APO 154.34 V2 35.258 RC 128.086 GL -46.08 GP 37.59 ZAL 114.48 ZAP 133.61 ETS 47.93 ZAE 122.02 ETE 151.17 ZAC 95.75 ETC 23.68 CLP-150.50
   PLANETOCENTRIC CONIC
    C3 27,016 VHL 5.198 DLA -34.93 RAL 143.28 RAD 6566.1 VEL 12.182 PTH 2.19 VHP 5.904 DPA 46.36 RAP 178.14 ECC 1.4446
    LNCH APRITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.64 5 3 30 1466.16 21.64 8.22 18.65 118.11 5 27 56 866.2 25.22 .84
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118.10 11 54 43
                     10 18 49 5753.20
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        111.36
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   DIFFERENTIAL CORRECTIONS
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 4128.2 SCR 652.1 SC3 258.6
RRT -.8336 RRF -.9498 RTF .9457
SC8 4179.4 R23 .2813 R13 -.9490
SCI 4164.2 SC2 356.9 THA 172.44
                                                                                                                                         ST 2339.7 SR 567.1 SS 1047.2
CRT -.9598 CRS .9954 CST -.9823
LSA 2615.5 MSA 227.1 SSA 4.9
    TOE-1.9953 TRA-1.9708 TC3-2.1901 BAU .7979
ROE .5134 RRA .0079 RC3 .2902 FAU .05767
    FOE-1.8383 FRA -.8010 FC3-1.8479 BSF 13051
                                                                                                                                            EL1 2402.5 EL2 155.0 ALF 166.85
     BOE 2.0603 BRA 1.9727 BC3 2.2092 FSP -850
                                                                                                                                                        ARRIVAL DATE DEC 4 1967
                                                                                    FLIGHT TIME 146.00
LAUNCH DATE JUL 11 1967
                                                                                  DISTANCE 425,136
    RL 152.09 LAL -.00 LOL 288.03 VL 26.707 GAL -4.45 AZL 97.25 MCA 202.23 SMA 128.60 ECC .19790 INC 7.2517 V1 29.293 RP 107.48 LAP 2.74 LOP 130.10 VP 37.917 GAP 6.42 AZP 83.28 TAL 198.62 TAP 40.84 RCA 103.15 APO 154.05 V2 35.259 RC 130.261 GL -43.69 GP 32.66 ZAL 114.55 ZAP 137.80 ETS 45.56 ZAE 124.34 ETE 154.04 ZAC 95.99 ETC 21.72 CLP-151.63
   PLANETOCENTRIC CONIC
     C3 23.676 VML 4.866 DLA -33.33 RAL 145.84 RAD 6568,D VEL 12.044 PTH 2.15 VMP 5.732 DPA 41.23 RAP 176.82 ECC 1.3897
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.64 5 31 45 1378.53 21.70 1.42 18.57 115.93 5 54 44 778.5 25.01 353.90
108.36 10 10 57 5775.75 21.72 273.07 18.58 115.92 11 47 13 5175.7 25.02 265.55
                                                                                                          115.93 5 54 44
115.92 11 47 13
115.93 5 54 44
                     5 31 45 1378.53
10 10 57 5775.75
9 23 10 634.27
11 18 42 5568.01
                                                                                                                                                                                   353.90
         71.64
                                                                            1.42
                                                                                              18.57
                                                                                                                                                 778.5
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                                                           21.70
                                                                                                           115,92 11 47 13
120,40 9 33 45
111,58 12 51 30
                                                                                                                                                                25.02
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                                                           21.72
        106.36
                                                                                             15.59
                                                                                                                                                  34.3
                                                                                                                                                                  20.36
                                                                                                                                                                                   296.50
                                                           16.45
                                                                           303.54
        110.00
                                                                                                                                            4968.0
                                                                                                                                                                  29.86
                                                                                                                                                                                   251.42
                                                                          259.59
                                                                                             21.21
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 4105.3 SGR 546.7 SG3 257.6

RRT -.7953 RRF -.9262 RTF .9355

SGB 4141.5 R23 .2925 R13 -.9360

SG1 4128.4 SG2 329.5 THA 173.92
                                                                                                                                           ST 2271.8 SR 490.6 55 996.9

CRT -.9560 CRS .9957 CST -.9788

LSA 2518.8 MSA 225.8 SSA 5.9

EL1 2319.9 EL2 140.9 ALF 168.29
     TOE-1.8195 TRA-1.7786 TC3-2.5128 BAU .7990
     RDE .4162 RRA .0467 RC3 .2395 FAU .05717
     FOE-1.6940 FRA -.6233 FC3-2.0906 BSP 12050
     BOE 1.8665 BRA 1.7792 BC3 2.5242 FSP -752
                                                                                                                                                        ARRIVAL DATE DEC 6 1967
                                                                                    FLIGHT TIME 148.00
LAUNCH DATE JUL 11 1967
                                                                                    DISTANCE 431.104
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 26.656 GAL -4.16 ATL 96.63 MCA 205.46 SMA 128.27 ECC .19895 INC 6.6518 V1 29.293
RP 107.48 LAP 2.85 LOP 133.35 VP 37.881 GAP 8.71 AZP 84.01 TAL 197.24 TAP 42.70 RCA 102.75 APO 153.79 V2 35.259
RC 152.447 GL -41.69 GP 28.69 ZAL 114.12 ZAP 141.35 ETS 43.55 ZAE 125.91 ETE 156.73 ZAC 95.76 ETC 20.09 CLP-152.87
   PLANETOCENTRIC CONIC
    C3 21.309 WHL 4.616 OLA -32.18 RAL 148.39 RAD 6567.9 VEL 11.945 PTH 2.13 WHP 5.660 OPA 36.91 RAP 176.37 ECC 1.3507
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.03 5 57 22 1305.22 21.74 355.81 19.07 114.54 6 19 7 705.2 24.83 348.20
                                                                                                           114.34
                                                                                                                                                 5197.9
                                                                                                                                                                   24.85
                                                                                                                                                                                   267:17
                                                                           274.79
                                                                                              19.06
                                                                                                               114.53 11 42 21
                     10 5 43
                                       5797.92
                                                            21.75
        105.97
                                                                                                              114.34 6 19 7
114.33 11 42 21
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                                                                                              19.07
                                                                                                                                                  705.2
                        5 57 22 1305.22
                                                            21.74
                                                                           355.81
         74.03
                     10 5 43 5797.92
9 3 2 704.07
11 59 13 5447.07
                                                                                              19.08
                                                                                                                                                5197.9
                                                                                                                                                                   24.85
                                                                                                                                                                                   267.17
                                                           21.75
                                                                           274.79
        104.97
                                                                                                              121.51 9 14 47
107.35 13 30 0
                                                                                                                                                                                   300.72
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                                                                           307.47
                                                                                              14.77
                                                                                                                                                 104.1
                                                            14.00
        110.00
                                                                                                                                                4847.1
                                                                                                                                                                   32.00
                                                                                                                                                                                   242.66
                                                           29.93
                                                                           251.25
                                                                                              22.53
        110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            $1 2327.5 $R 459.7 $5 1014.1
CRT -.9589 CRS .9966 CST -.9787
LSA 2570.4 MSA 222.8 $5A 7.0
                                                                                SCT 4296.0 SCR 506.2 SG3 273.4
RRT -.7890 RRF -.9087 RTF .9367
SCB 4325.7 R23 .2699 R13 -.9385
     TDE-1.7760 TRA-1.6876 TC3-2.9606 BAU .8458
    ROE 1.8141 BRA 1.6861 BC3 2.9869 FSP -872
                                                                                SG1 4314.6 SG2 309.7 THA 174.66
                                                                                                                                            EL1 2369.0 EL2 128.2 ALF 169.24
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 8 1967

LAUNCH DATE JUL 11 1967

RL 152.09 LAL -.00 LOL 288.03 VL 26.605 GAL -3.87 AZL 96.14 MCA 208.70 SMA 127.93 ECC .20011 INC 6.1435 V1 29.293 RP 107.48 LAP 2.95 LOP 136.60 VP 37.845 GAP 7.00 AZP 84.61 TAL 195.83 TAP 44.54 RCA 102.33 APO 153.53 V2 35.258 RC 134.624 GL -40.00 GP 25.45 ZAL 113.27 ZAP 144.34 ETS 41.82 ZAE 126.98 ETE 159.14 ZAC 95.14 ETC 18.69 CLP-154.14 DISTANCE 437.061 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 19.533 VHL 4.420 DLA -31.41 RAL 150.99 RAD 6567.8 VEL 11.871 PTH 2.11 VHP 5.651 DPA 33.23 RAP 176.48 ECC 1.3215 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 40 40 20.03 113.18 351.37 6 19 54 1246.32 21.80 75.61 24.76 113.17 11 40 49 5215.3 10 3 54 5815.26 6 19 54 1246.32 21.82 276.13 20.04 343.69 24.75 20.03 113.18 6 40 40 646.3 351.37 75.81 21.60 268.45 113.17 11 40 49 121.91 9 10 6 104.61 13 54 42 24.76 20.04 5215.3 276.13 10 3 54 5815.26 21.82 17.09 302.41 133.2 15.21 309.09 110.00 8 57 52 733.19 12.96 32.94 4776.4 12 25 6 5376.38 23.64 246.18 31.25 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2354.2 SR 428.1 55 1002.9 CRT -.9611 CRS ..9974 CST -.9779 LSA 2585.2 MSA 219.4 55A 8.1 SGT 4402.0 SGR 459.0 SG3 275.4 TDE-1.7290 TRA-1.5674 TC3-3.3339 BAU .8719 RRT - . 7587 RRF - . 8752 RTF . . 9341 ROE .3301 RRA .0278 RC3 .1816 FAU .06006 FDE-1.5760 FRA -.4399 FC3-2.6621 BSP 13613 SGB 4425.8 R23 .2506 R13 -.9354 ELI 2390.0 ELZ 116.5 ALF 170.06 3G1 4415.8 3G2 298.1 THA 175.46 BDE 1.7602 BRA 1.5677 BC3 3.3389 FSP -882 ARRIVAL DATE DEC 10 1967 FLIGHT TIME 152.00 LAUNCH DATE JUL 11 1967 DISTANCE-443.005 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 26.554 GAL -3.56 A7L 95.75 MCA 211.95 SMA 127.60 ECC .20139 INC 5.7468 VI 29.293
RP 107.48 LAP 3.04 LOP 139.85 VP 37.807 GAP 7.29 A2P 85.12 TAL 194.41 TAP 46.36 RCA 101.90 APO 153.30 V2 35.256 RC 136.791 GL -38.53 GP 22.79 ZAL 112.07 ZAP 146.95 ETS 40.36 ZAE 127.70 ETE 161.25 ZAC 94.24 ETC 17.49 CLP-155.40 PLANETOCENTRIC CONIC 2.09 WHP 5.681 OPA 30.04 RAP 177.00 ECC 1.2987 C3 18.152 VHL 4.261 DLA -30.92 RAL 153.65 RAD 6567.7 VEL 11.812 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.77 21.38 6 59 13 601.7 340.34 112.35 346.07 1201.72 21.93 77.04 6 39 11 11 42 55 5225.4 24.78 269.22 112.34 21.39 102.96 10 5 50 5825.36 21.95 276.95 6 59 13 601.7 24.77 340.34 112.35 348.07 21.38 6 39 11 1201.72 21.93 77.04 112.34 11 42 55 122.05 9 12 15 102.76 14 13 12 269.22 5225.4 24.78 10 5 50 5825.36 21.95 276.95 21.39 102.96 303.03 144.1 16.71 8 59 51 744.08 12.57 309.69 16.35 4731.0 33.. 41 233.90 24.94 5330.99 31.98 242.84 110.00 12 44 21 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4500.4 SGR 423.5 SG3 273.7 RRT - 7204 RRF - .8517 RTF .9316 SG8 4520.3 RZ3 .2274 R13 - .9326 SG1 4510.8 SG2 293.1 THA F76.11 ST 2389.9 SR 405.4 SS 990.9 CRT -.9646 CRS .9983 CST -.9774 TDE-1.7023 TRA-1.4461 TC3-3.6879 BAU .8956 RDE .3014 RRA .0202 RC3 .1395 FAU .03889 FDE-1.4959 FRA -.3250 FC3-2.8087 85P 13929 LSA 2609.9 MSA 215.2 SSA 9.2 EL1 2421.8 EL2 105.5 ALF 170.69 BOE 1.7287 BRA 1.4462 BC3 3.6905 FSP -878 ARRIVAL CATE DEC 12 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 11 1967 DISTANCE 448.932 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 26.503 GAL -3.25 AZL 95.42 MCA 215.19 SMA 127.27 ECC .20279 INC 5.4162 VI 29.293 RP 107.49 LAP 3.12 LOP 143.10 VP 37.769 GAP 7.58 AZP 85.57 TAL 192.97 TAP 48.16 RCA 101.46 APO 153.08 V2 35.254 RC 138.949 GL -37.22 GP 20.58 ZAL 110.58 ZAP 149.25 ETS 39.13 ZAE 128.18 ETE 163.08 ZAC 93.10 ETC 16.44 CLP-156.64 PLANETOCENTRIC CONIC C3 17.052 VHL 4.129 DLA -30.66 RAL 156.40 RAD 6567.7 VEL 11.766 PTH 2.08 VHP 5.739 DPA 27.23 RAP 177.81 ECC 1.2806 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.89 23.06 7 14 40 571.4 345.88 111.78 22.13 6 55 9 1171.41 77.73 111.78 7 14 40 111.76 11 48 55 111.78 7 14 40 111.76 11 48 55 24.90 5226.6 23.07 277.14 10 11 48 5826.64 6 55 9 1171.41 22.14 102.27 571.4 24.89 338.10 23.06 22.13 345.88 77.73 24.90 5226.6 23.07 277.14 22.14 102.27 10 11 48 5826.64 9 18 53 14 28 0 303.01 16.72 143.8 122.05 12.58 309.67 17.99 9 6 30 743.75 110.00 4702.3 33.65 101.56 5302.30 32.39 240.70 26.52 110.00 12 59 37 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2436.3 SR 390.3 SS 980.8 CRT -.9693 CRS .9990 CST -.9774 SGT 4597.5 SGR 399.5 SG3 270.2 RRT -.6775 RRF -.7809 RTF .9296 SGB 4614.9 R23 .2020 R13 -.9304 TOE-1.6926 TRA-1.3232 TC3-4.0280 BAU .9186 ROE .2812 RRA .0162 RC3 .0991 FAU .05724 FDE-1.4225 FRA -.2163 FC3-2.9060 BSP 14251 BOE 1.7158 BRA 1.3233 BC3 4.0292 FSP -868 LSA 2646.8 MSA 210.2 SSA 10.4 94.8 ALF 171.16 EL1 2465.5 EL2 SG1 4605.5 SG2 293.4 THA 176.62 ARRIVAL DATE DEC 14 1967 FLIGHT TIME 156.00 LAUNCH DATE JUL 11 1967 DISTANCE 454.844 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 26.452 GAL -2.92 AZL 95.13 MCA 218.43 SMA 126.94 ECC .20433 INC 5.1348 VI 29.293 RP 107.50 LAP 3.19 LOP 146.35 VP 37.730 GAP 7.87 AZP 85.97 TAL 191.51 TAP 49.94 RCA 101.00 APO 152.87 V2 35.251 RC 141.095 GL -36.02 GP 18.72 ZAL 108.83 ZAP 151.31 ETS 38.12 ZAE 128.50 ETE 164.65 ZAC 91.77 ETC 15.53 CLP-157.85 PLANETOCENTRIC CONIC C3 16.164 VHL 4.020 DLA -30.58 RAL 159.25 RAD 6567.6 VEL 11.728 PTH 2.07 VMP 5.818 DPA 24.73 RAP 178.83 ECC 1.2660 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.94 7 8 5 1154.25 22.38 344.70 25.06 111.40 7 27 19 554.2 25.09 336.89 111.40 7 27 19 111.39 11 58 37 111.40 7 27 19 7 8 5 1154.25 10 21 38 5819.28 25.10 268.88 5219.3 10 21 38 22.39 276.69 25.06 102.06 25.09 111.40 554.2 7 8 5 10 21 36 22.36 344.70 25.06 1154.25 77.94 111.39 11 58 37 121.94 9 28 54 100.87 14 40 21 268.88 25.10 5219.3 22.39 276.69 25.06 5819.28 102.06 302.54 17.00 9 16 38 735.57 12.87 309.22 20.05 135.6 110.00 33.77 239.48 4686.0 28.39 32.61 13 12 15 5285.95 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS CRT - .9748 CRS .9994 CST - .9776

CRT - .9748 CRS .9994 CST - .9776

LSA 2692.9 MSA 204.5 SSA 11.5

EL1 2518.3 EL2 84.1 ALF 171.51 SCT 4649.5 SCR 384.6 SC3 265.2 RRT -.6319 RRF -.7257 RTF .9278 SCB 4705.2 R23 .1769 R13 -.9284 TOE-1.6958 TRA-1.1954 TC3-4.3501 BAU .9401 ROE .2671 RRA .0145 RC3 .0612 FAU .05522 FOE-1.3550 FRA -.1123 FC3-2.9575 BSP 14552 SG1 4695.8 SG2 297.7 THA 177.02 BOF 1.7167 BRA 1.1955 BC3 4.3505 FSP -853

FLIGHT TIME 150.00

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LAUNCH DATE JUL 11 1967
                                                                                                       FLIGHT TIME 158.00
                                                                                                                                                                                        ARRIVAL DATE DEC 16 1967
    HELIOCENTRIC CONIC
                                                                                                      DISTANCE 460.740
      RL 152.09 LAL -.00 LOL 288.03 VL 26.401 GAL -2.58 A7L 94.89 MCA 221.67 SMA 126.61 ECC .20601 INC 4.8910 V1 29.293
RP 107.51 LAP 3.25 LOP 149.60 VP 37.691 GAP 8.16 AZP 86.34 TAL 190.04 TAP 51.71 RCA 100.53 APO 152.69 VZ 35.247
RC 143.232 GL -34.90 GP 17.14 ZAL 106.85 ZAP 153.16 ETS 37.30 ZAE 128.71 ETE 166.01 ZAC 90.29 ETC 14.73 CLP-159.03
     PLANETOCENTRIC CONIC
     LD 13.444 WHL 3.930 DLA -30.65 RAL 182.23 RAD 6567.6 VEL 11.697 PTH 2.06 VMP 5.911 DPA 22.46 RAP 180.03 ECC 1.2542 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.75 7 18 33 1148.36 22.69 344.39 27.34 111.18 7 37 41 548.4 25.36 336.55 102.25 10 34 54 5804.53 22.70 275.71 27.35 111.17 12 11 39 5204.5 25.37 267.87 77.75 7 18 33 1148.36 22.69 344.39 27.34 111.18 7 37 41 548.4 25.36 336.55 102.25 10 34 54 5804.53 22.70 275.71 27.35 111.17 12 11 39 5204.5 25.37 267.87 110.00 9 29 36 721.54 13.38 308.44 22.48 121.75 9 41 40 121.5 17.48 301.75 110.00 13 22 59 527.35 32.69 23.69 30.55 100.58 14 50 58 4679.4 33.81 229.92
      C3 15.444 WHL 3.930 DLA -30.65 RAL 162.23 RAD 6567.6 VEL 11.697 PTH 2.06 VMP 5.911 DPA 22.46 RAP 180.03 ECC 1.2542
    DIFFERENTIAL CORRECTIONS
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                SGT. 4771.8 SGR 376.6 SG3 258.8

MRT -.5857 MRF -.6689 RTF .9259

SGB 4786.7 R23 .1535 R13 -.9264

SGI 4776.9 SG2 304.9 THA 177.34
                                                                                                                                                                       ST 2549.4 SR 375.4 SS 962.0
CRT -.9804 CRS .9992 CST -.9781
LSA 2743.5 MSA 198.1 SSA 12.7
      TOE-1.7075 TRA-1.0603 TC3-4.6478 BAU .9596
     ROE .2574 RMA .0143 RC3 .0261 FAU .05288
FOE-1.2911 FRA -.0123 FC3-2.9645 88F 14799
     BOE 1.7267 BRA 1.0604 BC3 4.6478 FSP -830
                                                                                                                                                                        EL1 2575.9 EL2 73.2 ALF 171.78
LAUNCH DATE JUL 11 1967
                                                                                                       FLIGHT TIME 160.00
                                                                                                                                                                                         ARRIVAL DATE DEC 18 1967
    HELIOCENTRIC CONIC
                                                                                                      DISTANCE 466.618
     RL 192.09 LAL -.00 LOL 288.03 VL 26.350 GAL -2.23 AZL 94.68 MCH 224.92 SMA 126.29 ECC .20784 INC 4.6764 V1 29.293
RP 107.53 LAP 3.30 LOP 152.65 VP 37.651 GAP 8.45 AZP 86.68 TAL 188.55 TAP 53.47 RCA 100.04 APO 152.53 VZ 35.243
RC 145.356 GL -33.83 GP 15.79 ZAL 104.65 ZAP 154.85 ET8 36.66 ZAE 128.84 ETE 167.18 ZAC 88.68 ETC 14.02 CLP-160.18
    PLANETOCENTRIC CONIC
     C3 14.868 WHL 3.856 OLA -30.83 RAL 165.33 RAD 6567.6 VEL 11.673 PTH 2.05 WHP 6.017 DPA 20.38 RAP 181.36 ECC 1.2447 LNON AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          7 27 22 1151.10
10 50 52 5784.66
                                                                                                           29.91
                                                                                                                                 111.09 7 46 33
111.08 12 27 16
           77.26
                                                                        23.03
                                                                                           344,74
                                                                                                                                                                                551.1 25.69 336.87
         102.74
                                                                        23,04
                                                                                           274.37
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111.06 12 27 16
121.49 9 56 46
100.64 15 0 22
                          7 27 22 1151.10
10 50 52 5784.66
           77.26
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                                                                                           344,74
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         102.74
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                                                                                           274.37
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         110.00
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                                                                        14.04
                                                                                           307.42
                                                                                                                 25.24
                                                                                                                                                                                103.0
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                          13 32 21 5200.74
         110.00
                                                                        32.60
                                                                                           230.08
                                                                                                                  33.01
                                                                                                                                                                               4680.7
                                                                                                                                                                                                      33.60
    DIFFERENTIAL CORRECTIONS
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                SCT 4859.0 SCR 375.0 SC3 252.8
RRT -.5451 RRF -.6167 RTF .9249
SCB 4873.5 R23 .1317 R13 -.9253
                                                                                                                                                                       ST 2618.5 SR 374.1 SS 955.9
CRT -.9859 CRS .9983 CST -.9789
      TDE-1.7308 TRA -.9212 TC3-4.9301 BAU
                                                                             .9798
     ROE .2517 RRA .0155 RC3 -.0030 FAU .05062
     FOE-1.2363 FRA .0787 FC3-2.9477 88P 19097
80E 1.7490 8RA .9214 8C3 4.9301 FSP -611
                                                                                                                                                                        LSA 2806.0 MSA 191.2 SSA 13.9
                                                                                                 SG1 4863.4 SG2 314.1 THA 177.56
                                                                                                                                                                        EL1 2644.4 EL2 62.0 ALF 171.98
LAUNCH DATE JUL 11 1967
                                                                                                     FLIGHT TIME 162.00
                                                                                                                                                                                       ARRIVAL DATE DEC 20 1967
                                                                                                    DISTANCE 472.478
     RL 152.09 LAL -.00 LOL 288.03 VL 26.299 GAL -1.86 AZL 94.48 MCA 228.16 SMA 125.96 ECC .20982 INC 4.4849 V1 29.293 RP 107.54 LAP 3.34 LOP 156.10 VP 37.610 GAP 8.75 AZP 87.00 TAL 187.05 TAP 55.21 RCA 99.53 APO 152.39 V2 35.237
     RC 147.469 GL -32.78 GP 14.63 FAL 102.26 FAP 156.41 ETS 36.20 FAE 128.91 ETE 168.19 FAC 86.97 ETC 13.39 CLP-161.29
    PLANETOCENTRIC CONIC
      C3 14.413 VHL 3.797 DLA -31.10 RAL 168.58 RAD 6567.6 VEL 11.653 PTH 2.05 VHP 6.133 DPA 18.45 RAF 182.81 ECC 1.2372
     C3 14.413 VHL 3.797 OLA -31.10 RAL 168.38 RAD 6567.6 VEL 11.653 PTM 2.05 VHP 6.133 OPA 18.45 RAP 182.81 ECC 1.2372 LNCH AZHTH LNCH TINE L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.56 7 35 22 1159.85 23.39 345.55 32.77 111.11 7 54 42 559.8 26.05 337.65 103.44 11 8 46 5762.18 23.40 272.83 32.77 111.10 12 44 48 5162.2 26.05 264.93 103.44 11 8 46 5762.18 23.40 272.83 32.77 111.10 12 44 48 5162.2 26.05 264.93 110.00 10 2 35 681.14 14.81 306.19 28.32 121.16 10 13 57 81.1 18.83 299.38
                                                                                                                                 111.11 7 54 42

111.10 12 44 48

111.11 7 54 42

111.10 12 44 48

121.16 10 13 57

100.99 15 8 52
                                             5288.89
         110.00
                          13 40 43
                                                                       32.57
                                                                                          239.70
                                                                                                                35.75
                                                                                                                                                                              4688.9
                                                                                                                                                                                                     33.75
    DIFFERENTIAL CORRECTIONS
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                               SCT 4942.5 SCR 377.4 SC3 246.4

RRT -.5099 RRF -.5697 RTF .9245

SCB 4956.9 R23 .1119 R13 -.9248

SCI 4946.3 SG2 324.4 THA 177.76
                                                                                                                                                                        ST 2690.6 SR 375.6 SS 949.4
CRT -.9907 CRS .9966 CST -.9798
     TOE-1,7602 TRA -.7754 TC3-5,1856 BAU .9992
     ROE .2488 RRA .0174 RC3 -.0296 FAU .04831
FOE-1.1851 FRA .1632 FC3-2.9016 BBP 15381
BOE 1.7777 BRA .7756 BC3 5.1857 FSP -792
                                                                                                                                                                        LSA 2871.8 MSA 183.8 SSA 15.0
                                                                                                                                                                        EL1 2716.2 EL2 50.6 ALF 172.12
                                                                                                     FLIGHT TIME 164.00
                                                                                                                                                                                        ARRIVAL DATE DEC 22 1967
LAUNCH DATE JUL 11 1967
                                                                                                    DISTANCE 478.320
     RL 152.09 LAL -.00 LOL 288.03 VL 26.248 GAL -1.49 A7L 94.31 MCA 231.40 SMA 125.65 ECC .21198 INC 4.3119 V1 29.293 RP 107.56 LAP 3.37 LOP 159.35 VP 37.569 GAP 9.05 A7P 87.31 TAL 185.54 TAP 56.94 RCA 99.01 APO 152.28 VZ 35.231 RC 149.570 GL -31.73 GP 13.63 ZAL 99.69 ZAP 157.85 ETS 35.90 ZAE 128.96 ETE 169.06 ZAC 85.18 ETC 12.84 CLP-162.37
   PLANETOCENTRIC CONIC
     C3 14.075 WHL 3.752 DLA -31.43 RAL 171.97 RAD 6567.6 VEL 11.639 PTH 2.04 VMP 6.257 OPA 16.65 RAP 184.35 ECC 1.2316
    C3 14.079 WHL 3.752 DLA -31.43 RAL 171.97 RAD 6567.6 VEL 11.639 PTM Z.D4 VMP 6.257 DPA 16.65 RAP 184.35 ECC 1.2316 LNON AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 75.76 7 43 12 1172.48 23.75 346.65 35.89 111.21 8 2 45 572.5 26.42 338.74 104.24 11 27 58 5739.06 23.76 271.24 35.90 111.20 13 3 37 5139.1 26.43 263.32 104.24 11 27 58 5739.06 23.76 271.24 35.90 111.21 8 2 45 572.5 26.42 338.74 104.24 11 27 58 5739.06 23.76 271.24 35.90 111.20 13 3 37 5139.1 26.43 263.32 110.00 10 22 0 656.74 15.67 304.82 31.71 120.78 10 32 57 56.7 19.63 297.94
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111.20 13 3 37
120.76 10 32 57
101.58 15 16 43
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                          10 22 0 656.74
13 48 20 5302.80
                                                                                          240.74
                                                                                                                                                                              4702.8
                                                                                                                36.77
                                                                                                                                                                                                     33.64
         110.00
                                                                        32.39
   DIFFERENTIAL CORRECTIONS
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    TOE-1.7956 TRA -.8208 TC3-5.4086 BAU 1.0178

RDE .2483 RRA .0194 RC3 -.0510 FAU .04596

FDE-1.1379 FRA .2445 FC3-2.8271 BSP 15663

BDE 1.8127 BRA .6211 BC3 5.4089 FSP -772
                                                                                                                                                                        ST 2765.1 SR 379.3 SS 942.6

CRT -.9945 CRS ..9939 CST -.9808

LSA 2940.6 MSA 176.7 SSA 16.2

EL1 2790.7 EL2 39.3 ALF 172.23
                                                                                              SGT 5022.4 SGR 362.7 SG3 259.9
RRT -.4802 RRF -.5293 RTF .9241
SGB 5036.9 R23 .0955 R13 -.9243
                                                                                                SG1 5025.6 SG2 335.5 THA 177.90
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ARRIVAL DATE DEC 24 1967 FLIGHT- TIME 166.00 LAUNCH DATE JUL 11 1967 HELIOCENTRIC CONIC DISTANCE 484.142 RL 152.09 LAL -.00 LOL 288.03 VL 26.198 GAL -1.09 AZL 94.15 MCA 234.64 SMA 125.33 ECC .21431 INC 4.1540 VI 29.293 RP 107.58 LAP 3.39 LOP 162.60 VP 37.528 GAP 9.35 AZP 87.59 TAL 184.02 TAP 58.65 RCA 98.47 APO 152.19 V2 35.225 RC 151.657 GL -30.66 GP 12.75 ZAL 96.96 ZAP 159.20 ETS 35.77 ZAE 128.97 ETE 169.82 ZAC 83.30 ETC 12.35 CLP-163.43 PLANETOCENTRIC CONIC C3 13.846 VHL 3.721 DLA -31.79 RAL 175.50 RAD 6567.5 VEL 11.629 PTH 2.04 VMP 6.390 DPA 14.95 RAP 185.96 ECC 1.2279 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.90 7 51 25 1187.31 24.10 347.93 39.28 111.39 8 11 12 587.3 26.79 340.00 105.10 11 47 56 5717.02 24.11 269.72 39.29 111.37 13 23 13 5117.0 26.80 261.79 INJ man. 111.59 8 13 22 111.57 13 25 15 7 11 12 111.39 6 11 12 111.37 13 23 13 26.79 340.00 7 51 25 1187.31 347.93 39.28 587.3 24.10 74.90 11 47 56 5717.02 269.72 39.29 5117.0 26.80 261.79 24.11 105.10 120.34 10 53 33 102.37 15 24 11 30.7 20.47 296.39 16.57 303.34 35.39 10 43 2 630.72 110.00 13 55 29 5321.61 242.14 4721.6 33.49 233.18 32.12 42.04 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2837.7 SR 384.8 SS 934.6 CRT -.9972 CRS .9904 CST -.9818 LSA 3007.5 MSA 169.4 SSA 17.4 SGT 5099.7 SGR 389.9 SG3 233.4 TDE-1.6340 TRA -.4586 TC3-5.5957 BAU 1.0359 ROE .2498 RRA .0214 RC3 -.0677 FAU .04369 FOE-1.0929 FRA .3196 FC3-2.7318 88P 15933 BOE 1.8509 BRA .4591 BC3 5.5962 FSP -752 RRT -.4570 RRF -.4959 RTF .9244 SGB 5114.6 RE3 .0804 R13 -.9246 SGI 5102.9 SGE 346.6 THA 177.99 EL1 2863.5 EL2 28.6 ALF 172.30 ARRIVAL DATE DEC 26 1967 FLIGHT TIME 168.00 LAUNCH DATE JUL 11 1967 DISTANCE 489.943 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 26.147 GAL -.69 AZL 94.01 MCA 237.88 SMA 125.02 ECC .21683 INC 4.0083 VI 29.293 RP 107.60 LAP 3.39 LOP 165.85 VP 37.486 GAP 9.66 AZP 87.87 TAL 182.48 TAP 60.36 RCA 97.91 APO 152.13 V2 35.217 RC 153.730 GL -29.56 GP 11.97 ZAL 94.09 ZAP 160.47 ETS 35.80 ZAE 128.98 ETE 170.48 ZAC 81.37 ETC 11.91 CLP-164.45 PLANETOCENTRIC CONIC C3 13.724 VHL 3.705 DLA -32.17 RAL 179.17 RAD 6567.5 VEL 11.624 PTH 2.04 VHP 6.530 OPA 13.33 RAP 187.65 ECC 1.2259 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8 0 23 1203.05 12 8 13 5697.42 42.93 603.1 8 20 26 27.13 341.32 24.42 349.26 111.62 74.07 111.60 13 43 10 5097.4 27.14 260.42 260.36 42.94 24.43 12 8 13 105.93 8 20 26 603.1 27.13 341.32 24.42 349.26 42.93 111.62 8 0 23 1203.05 12 8 13 5697.42 74.07 111.60 13 43 10 119.85 11 15 28 103.32 15 31 27 5097.4 27.14 260.42 266.36 42.94 105.93 12 8 13 24.43 21.32 294.78 39.36 4.0 110.00 11 5 24 603.99 17.48 301.81 4744.5 234.93 45.56 33.26 14 2 22 5544.48 31.78 243.64 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5164.0 SGR 397.8 SG3 226.4 RRT -.4377 RRF -.4675 RTF .9245 ST 2899.9 SR 391.3 SS 921.6 CRT -.9986 CRS .9857 CST -.9827 TOE-1.8705 TRA -.2848 TC3-5.7304 BAU 1.0515 RDE .2529 RRA .0229 RC3 -.0807 FAU .04132 FDE-1.0463 FRA .3931 FC3-2.6067 85P 16125 968 5179.3 R23 .0677 R13 -.9246 861 5168.9 862 357.5 THA 178.06 LSA 3063.5 MSA 163.0 SSA 18.5 EL1 2926.1 EL2 20.6 ALF 172.33 BOE 1.8875 BRA .2857 BC3 5.7309 FSF -728 APRIVAL DATE DEC 28 1967 FLIGHT TIME 170.00 LAUNCH DATE JUL 11 1967 DISTANCE 495.721 HELIOCENTRIC CONIC RL 152.09 LAL -.00 LOL 288.03 VL 28.097 GAL -.26 AZL 93.87 MCA 241.11 SMA 124.71 ECC .21955 INC 3.8727 V1 29.293
RP 107.65 LAP 3.39 LOP 169.09 VP 37.444 GAP 9.97 AZP 88.13 TAL 180.94 TAP 62.05 RCA 97.33 APO 152.09 V2 35.210
RC 155.789 GL -28.42 GP 11.29 ZAL 91.11 ZAP 161.66 ETS 35.99 ZAE 128.97 ETE 171.06 ZAC 79.38 ETC 11.52 CLP-165.45 PLANETOCENTRIC CONIC C3 13.711 WHL 3.703 DLA -32.53 RAL 182.96 RAD 6567.5 VEL 11.623 PTH 2.04 WHP 6.678 DPA 11.78 RAP 189.39 ECC 1.2257 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.88 8 30 40 111.87 14 3 11 27.43 46.82 8 30 40 618.9 342.64 73.28 8 10 21 1218.89 12 28 29 5681.16 24.68 350.59 5081.2 259.29 46.63 111.88 8 30 40 111.87 14 3 11 119.35 13 6 31 124.37 15 38 46 106.72 12 28 29 24.70 267.24 618.9 27.43 342.64 46.82 8 10 21 1218.89 24.66 350.59 73.28 5081.2 27.44 259.29 12 28 29 5681.16 24.70 267.24 46.83 106.72 11 28 45 5865.68 14 9 16 5370.41 5265.7 22.14 271.07 43.57 18.37 278.18 110.00 4770.4 33.01 236.91 31.35 245.74 44.79 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5233.8 SCR 406.6 SC3 219.9 RRT -.4248 RRF -.4457 RTF .9253 SCB 5249.6 R23 .0560 R13 -.9254 SCI 5236.6 SCZ 367.9 TMA 178.10 ST 2958.5 SR 399.0 SS 907.3 CRT -.9987 CRS .9802 CST -.9835 TDE-1.9098 TRA 1-.1041 TC3-5.8272 BAJ 1.0683 RDE .2577 RRA .0239 RC3 -.0886 FAU .03916 FDE-1.0022 FRA .4615 FC3-2.4728 BBP 16368 LSA 3116.1 MSA 157.5 SSA 19.4 EL1 2985.2 EL2 20.0 ALF 172.33 BOE 1.9271 BRA .1068 BC3 5.8278 FSP - 704 ARRIVAL DATE DEC 30 1967 FLIGHT TIME 172.00 LAUNCH DATE JUL 11 1967 **DISTANCE 501.475** HELIOCENTRIC CONIC' RL 152.09 LAL -.00 LOL 288.03 VL 26.048 GAL .17 AZL 93.75 MCA 244.35 SMA 124.41 ECC .22250 INC 3.7453 V1 29.293
RP 107.65 LAP 3.38 LOP 172.33 VP 37.401 GAP 10.30 AZP 88.38 TAL 179.39 TAP 63.74 RCA 96.73 APO 152.09 V2 35.201
RC 157.834 GL -27.25 GP 10.69 ZAL 88.02 ZAP 162.79 ETS 36.36 ZAE 128.96 ETE 171.57 ZAC 77.34 ETC 11.18 CLP-166.43 PLANETOCENTRIC CONIC C3 13.810 WHL 3,716 OLA -32.85 RAL 186.85 RAD 6567.5 VEL 11.627 PTH 2.04 VHP 6.834 DPA 10.30 RAP 191.18 ECC 1.2273 TRION AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG TR.60 8 Z1 Z7 1Z34.Z1 Z4.88 351.85 90.93 112.18 8 42 1 634.2 27.67 345.90 112.18 8 42 1 112.17 14 22 57 50.94 5069.0 27.67 258.44 12 48 28 5668.98 8 21 27 1234.21 266.39 107.40 24.89 351.85 50.93 112.18 6 42 1 634.2 27.67 343.90 72.60 8 21 27 24.88 112.17 14 22 57 118.65 13 29 56 105.48 15 46 27 5069.0 27.67 258.44 24.89 50.94 107.40 12 48 28 5466.96 260.39 276.73 269.55 5241.0 11 52 37 5841.00 48.00 110.00 19.19 14 14 28 5396.23 4798.2 32.68 239.01 247.76 55.24 110.00 30.87 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5294.7 SGR 416.5 SG3 213.0 RRT -.4152 RRF -.4319 RTF .9257 SGB 5311.0 R23 .0500 R13 -.9258 SGI 5297.5 SG2 378.7 THA 178.12 ST 3010.7 SR 408.4 SS 894.5 CRT -.9976 CRS .9740 CST -.9844 LSA 3163.4 MSA 153.2 SSA 20.3 TOE-1.9506 TRA .0861 TC3-5.8592 BAU 1.0819 ROE .2647 RRA .0243 RC3 -.0942 FAU .03678 FDE -.9637 FRA .5265 FC3-2.3056 83P 16616 80E 1.9665 BRA .0095 8C3 5.8599 FSP -690 ELI 3038.1 ELZ 27.8 ALF 172.29

ARRIVAL DATE JAN 1 1968

LAUNCH DATE JUL 11 1967

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HELIOCENTRIC CONIC
                                                                                                                              DISTANCE 507.204
       RL 152.09 LAL -.00 LOL 288.03 VL 25.998 GAL .63 AZL 93.62 MCA 247.58 SMA 124.11 ECC .22568 INC 3.6248 V1 29.293
RP 107.68 LAP 3.35 LOP 175.58 VP 37.358 GAP 10.63 AZP 88.62 TAL 177.84 TAP 65.42 RCA 96.10 APO 152.12 VZ 35.192
RC 159.863 GL -28.03 GP 10.15 ZAL 84.87 ZAP 163.86 ETS 36.91 ZAE 128.94 ETE 172.01 ZAC 75.26 ETC 10.89 CLP-167.38
      PLANETOCENTRIC CONIC
        C3 14.026 VHL 3.745 DLA -33.13 RAL 190.83 RAD 6587.6 VEL 11.637 PTH 2.04 VHP 6.998 DPA
                                                                                                                                                                                                                               8.87 RAP 193.02 ECC 1.2308
       C3 14.026 VHL 3.745 0LA -33.13 RAL 190.85 RAD 6567.6 VEL 11.637 PTH 2.04 VHP 6.998 0PA 8.87 RAP 193.02 ECC 1.2308 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.03 8 33 42 1248.80 24.99 353.02 55.24 112.49 8 54 31 648.8 27.82 345.08 107.97 13 7 58 5661.21 25.00 265.84 55.24 112.48 14 42 19 5061.2 27.83 257.90 72.03 8 33 42 1248.80 24.99 353.02 55.24 112.48 14 42 19 5061.2 27.83 257.90 110.00 12 16 25 5619.63 19.88 275.47 52.61 118.40 13 53 24 5219.6 23.52 268.21 110.00 14 24 26 5428.42 30.34 249.79 57.38 106.57 15 54 53 4826.4 32.30 241.12 2000 245.84 24.97 24.00 245.84 24.97 24.00 245.84 24.97 24.00 245.84 24.97 24.00 245.84 24.97 24.00 245.84 25.98 25.98 24.21 24.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25.98 25
                                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                        SCT 5352.9 SCR 425.0 SG3 206.2
RRT - 4088 RRF - 4188 RTF . 9268
SCB 5369.8 R23 .0416 R13 - 9269
SG1 5355.7 SG2 387.7 THA 178.13
                                                                                                                                                                                                               CREST DETERMINATION ACCUMACY
3 3040.0 9R 417.0 8S 871.6
CRT -.9954 CRS .9664 CST -.9849
LSA 3186.3 MSA 150.4 SSA 21.0
ELI 3068.2 EL2 39.7 ALF 172.22
        TOE-1.9826 TRA .2882 TC3-5.8464 BAU 1.0965
       ROE .2725 RRA .0237 RC3 -.0949 FAU .03464
FOE -.9178 FRA .5889 FC3-2.1379 BSP 16834
BDE 2.0012 BRA .2891 BC3 5.8472 FSP -669
                                                                                                                                                                                                                                      ARRIVAL DATE JAN 3 1968
                                                                                                                               FLICHT TIME 178.00
LAUNCH DATE JUL 11 1967
     HELIQUENTRIC CONIC
                                                                                                                              DISTANCE 512.906
       RL 152.09 LAL -.00 LOL 288.03 VL 25.949 GAL 1.11 AZL 93.51 MCA 250.82 SMA 123.82 ECC .22912 INC 3.5096 V1 29.293
RP 107.71 LAP 3.31 LOP 178.82 VP 37.315 GAP 10.97 AZP 88.85 TAL 176.28 TAP 67.09 RCA 95.45 APO 152.18 V2 35.183
RC 181.876 GL -24.77 GP 9.67 ZAL 81.66 ZAP 164.88 ETS 37.66 ZAE 128.92 ETE 172.40 ZAC 73.15 ETC 10.64 CLP-168.32
     PLANETOCENTRIC CONIC
       C3 14.367 WHL 3.790 DLA -33.34 RAL 194.87 RAD 6567.6 VEL 11.651 PTH 2.05 VHP 7.171 DPA 7.40 RAP 194.90 ECC 1.2365 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               6 47 9 1262.25
13 26 42 5658.36
8 47 9 1262.25
13 26 42 5658.36
12 39 17 5603.63
14 33 45 5452.62
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112.80 15 1 1
112.81 9 8 11
112.81 9 8 11
112.80 15 1 1
118.05 14 16 1
107.56 16 4 38
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           110.00
    DIFFERENTIAL CORRECTIONS
                                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                       SGT 5401.8 SGR 433.6 SG3 199.6
RRT -.4058 RRF -.4109 RTF ..9278
SGB 5419.2 R23 .0354 R13 -.9279
SG1 5404.7 SG2 396.1 TMA 178.12
       TDE-2.0094 TRA .5033 TC3-5.7687 BAU 1.1082
RDE .2818 RRA .0220 RC3 -.0927 FAU .03251
                                                                                                                                                                                                                  ST 3052.4 SR 426.2 SS 847.8
CRT -.9919 CRS .9577 CST -.9853
       FOE -.8740 FRA .6512 FC3-1.9589 BSP 16972
BOE 2.0290 BRA .5036 BC3 5.7694 FSP -647
                                                                                                                                                                                                                   LSA 3192.9 MSA 150.0 SSA 21.4
                                                                                                                                                                                                                   EL1 3081.6 EL2 53.5 ALF 172.11
                                                                                                                                                                                                                                     ARRIVAL DATE JAN 5 1968
                                                                                                                               FLIGHT TIME 178.00
LAUNCH DATE JUL 11 1967
                                                                                                                              DISTANCE 518.577
     HELIOCENTRIC CONIC
       RL 152.09 LAL -.00 LOL 288.03 VL 25.901 GAL 1.60 ATL 93.40 MCA 254.05 SMA 123.53 ECC .23283 INC 3.3992 V1 29.293
RP 107.74 LAP 3.27 LOP 182.05 VP 37.272 GAP 11.32 AZP 89.07 TAL 174.71 TAP 68.76 RCA 94.77 APO 152.29 V2 35.172
RC 163.875 GL -23.48 GP 9.24 ZAL 78.44 ZAP 165.85 ETB 38.62 ZAE 128.90 ETE 172.75 ZAC 71.00 ETC 10.42 CLP-169.23
       RC 163.875 GL -23.48 GP
      PLANETOCENTRIC CONIC
        C3 14.844 VHL 3.853 DLA -33.48 RAL 198.92 RAD 6567.6 VEL 11.672 PTH 2.05 VHP 7.353 DPA
                                                                                                                                                                                                                             6.14 RAP 196.81 ECC 1.2443
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               9 1 41 1274.58
13 44 33 5660.53
9 1 41 1274.58
13 44 33 5660.53
13 0 12 5796.42
14 45 13 5474.73
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257.84
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             71.35
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108.37 16 16 28
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            110.00
                                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                ST 3051.1 SR 435.4 SS 821.8

CRT -.9874 CRS .9482 CST -.9856

LSA 3186.0 MSA 151.3 SSA 21.5

EL1 3081.2 EL2 68.1 ALF 171.98
                                                                                                                      SCT 5453.9 SGR 441.8 SGS 193.3
RRT -.4060 RRF -.4069 RTF .9293
SGB 5471.7 R23 .0302 R13 -.9294
SGI 5456.8 SGZ _403.5 THA 178.11
        TDE-2.0331 TRA .7259 TC3-5.6462 BAU 1.1206
       ROE .2927 RRA .0193 RC3 -.0875 FAU .03051
FOE -.8313 FRA .7087 FC3-1.7793 BSP 17182
BOE 2.0540 BRA .7262 BC3 5.6469 FSP -630
                                                                                                                                                                                                                                     ARRIVAL DATE JAN 7 1968
                                                                                                                               ELICHT TIME 180,00
LAUNCH DATE JUL 11 1967
                                                                                                                              DISTANCE 524.215
  - HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 288.03 VL 25.852 GAL 2.12 AZL 93.29 MCA 257.28 SMA 123.24 ECC .23683 INC 3.2923 V1 29.293
RP 107.78 LAP 3.21 LOP 185.29 VP 37.228 GAP 11.68 AZP 89.27 TAL 173.15 TAP 70.43 RCA 94.05 APO 152.43 V2 35.162
RC 165.860 GL -22.16 GP 8.85 ZAL 75.22 ZAP 166.78 ETS 39.82 ZAE 128.88 ETE 173.05 ZAC 68.83 ETC 10.25 CLP-170.13
     PLANETOCENTRIC CONIC
      C3 15,467 VHL 3,933 DLA -33.52 RAL 202.97 RAO 6567.6 VEL 11.698 PTH 2.06 VHP 7.545 DPA 4.84 RAP 198.75 ECC 1.2545 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.26 9 17 16 1285.57 24.69 355.72 69.01 113.43 9 38 41 685.6 27.64 347.85 108.74 14 1 16 5667.99 24.70 266.22 69.02 113.42 15 35 44 5068.0 27.65 258.35 108.74 14 1 16 5667.99 24.70 266.22 69.02 113.43 9 38 41 685.6 27.64 347.85 108.74 14 1 16 5667.99 24.70 266.22 69.02 113.42 15 35 44 5068.0 27.65 258.35 110.00 13 18 8 5800.11 20.51 274.30 66.84 117.97 14 54 48 5200.1 24.08 266.98 110.00 14 59 35 5489.48 29.03 254.23 70.90 108.90 16 31 4 4889.5 31.33 245.78
       C3 15.467 VHL 3.933 DLA -33.52 RAL 202.97 RAD 6567.6 VEL 11.698 PTH 2.06 VHP 7.545 DPA
                                                                                                                                                                                                                               4.84 RAP 198.75 ECC 1.2545
                                                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                    SGT 5499.9 SGR 449.1 SG3 187.0
RRT -.4080 RRF -.4051 RTF .9309
SGB 5518.2 R23 .0255 R13 -.9309
SG1 5502.9 SG2 409.8 THA 178.08
                                                                                                                                                                                                                $1 3028.9 SR 443.9 SS 792.5
CR1 -.9818 CRS .9372 CST -.9857
       TDE-2.0482 TRA .9605 TC3-5.4723 BAU-1.1317 RDE .3047 RRA .0154 RC3 -.0802 FAU .02857
                                                                                                                                                                                                                LSA 3158.3 MSA 154.9 SSA 21.3
EL1 3060.1 EL2 83.5 ALF 171.81
       FOE -.7874 FRA .7647 FC3-1.5991 BSP 17361
BOE 2.0707 BRA .9606 BC3 5.4729 FSP -612
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FLIGHT TIME 174.00

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ARRIVAL DATE JAN 9 1968
                                                                             FLIGHT TIME 182.00
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 529.817
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.804 GAL 2.66 AZL 93.19 MCA 260.51 SMA 122.96 ECC .24117 INC 3.1881 VI 29.293

RP 107.81 LAP 3.14 LOP 188.52 VP 37.185 GAP 12.06 AZP 89.47 TAL 171.58 TAP 72.09 RCA 93.30 APO 152.61 VZ 35.151

RC 167.829 GL -20.83 GP 8.50 ZAL 72.02 ZAP 167.66 ETS 41.30 ZAE 128.86 ETE 173.32 ZAC 66.64 ETC 10.11 CLP-171.02
   PLANETOCENTRIC CONIC
    C3 16.251 VHL 4.031 OLA -33.48 RAL 206.98 RAD 6567.7 VEL 11.732 PTH 2.07 VHP 7.747 DPA
                                                                                                                                        3.57 RAP 200.72 ECC 1.2675
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    113.72 9 55 20
113.71 15 51 26
                                                                                    73.77
                                                                                                                                 695.2
                                                                                                                                                  27.35 348.48
                                                                    356.31
        71.34
                     9 33 45 1295.25
                                                      24.35
                                                                                                                                     5080.7
                                                                                                                                                      27.36
                                                                                                                                                                     259.22
                                                                                      73.78
                                                                     267.05
                    14 16 45 5680.74
                                                       24.37
       108.66
                                                                                      73.77
                                                                                                      113.72
                                                                                                                 9 55 20
                                                                                                                                      695.2
                                                                                                                                                      27.35
                                                                                                                                                                     348.48
                                                                     356.31
        71.34
                     9 33 45 1295.25
                                                       24.35
                                                                                                      113.71
                                                                                                                 15 51 Z6
                                                                                                                                     5080.7
                                                                                                                                                      27.36
                                                                                                                                                                     259.22
                                                                                      73.76
                    14 16 45
                                     5680.74
                                                       24,37
                                                                     267.05
       108.66
                                                                                                                 15 9 27
                                                                                                                                                                     268.00
                                                                                                      118.32
                                                                                                                                     5216.3
                                                                                                                                                      23.62
                                                                                      71.47
                                                                      275.27
       110.00
                    13 32 31
                                     5816.27
                                                       19.99
                                                                                                                                                      31.22
                                                                                                     109.12 16 48 45
                                                                                                                                                                     246.24
                   15 17 9 5495.76
                                                                                      75.76
                                                                                                                                      4895.8
                                                                     254.66
       110.00
                                                       28.89
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RET -,4108 RRT -,4050 RTF .9320
SGB 5553.9 RZ3 .0220 R13 -.9320
SGB 5558.0 SGZ 415.1 THA 178.05
                                                                                                                                ST 2984.4 SR 451.5 SS 760.1
CRT -.9747 CRS .9243 CST -.9856
    TOE-2.0522 TRA 1.2106 TC3-5.2432 BAU 1.1393
    RDE .5176 RRA .0101 RC3 -.0721 FAU .02656
FDE -.7420 FRA .8212 FC3-1.4148 BSR 17439
                                                                                                                                LSA 3108.3 MSA 161.2 85A 20.9
                                                                                                                                 EL1 3016.7 EL2 99.8 ALF 171.60
    BOE 2.0766 BRA 1.2107 BC3 5.2437 FSF -590
                                                                                                                                             ARRIVAL DATE JAN 11 1968
                                                                              ELICHT TIME 184.00
   HELIOCENTRIC CONIC
                                                                              DISTANCE 535.379
    RL 152.09 LAL -.00 LOL 288.03 VL 25.757 GAL 3.22 ATL 93.09 MCA 263.73 SMA 122.68 ECC .24585 INC 3.0859 V1 29.293
RP 107.84 LAP 3.07 LOP 191.75 VP 37.141 GAP 12.45 AZP 89.66 TAL 170.02 TAP 73.75 RCA 92.52 APO 152.84 V2 35.139
RC 169.783 GL -19.49 GP 8.18 ZAL 68.87 ZAP 168.51 ETS 43.09 ZAE 128.84 ETE 173.56 ZAC 64.43 ETC 10.01 CLP-171.90
   PLANETOCENTRIC CONIC
    C3 17.214 WHL 4.149 DLA -33.35 RAL 210.91 RAD 6567.7 VEL 11.773 PTH 2.08 WHP 7.961 DPA 2.34 RAP 202.72 ECC 1.2833 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    9 51 3 1303.45
14 30 48 5696.96
9 51 3 1303.45
14 30 48 5696.96
                                                                                                    113.96 10 12 47
113.97 16 5 47
                                                                                                                                       703.4
                                                                                  78.56
                                                                                                                                                       26.93
                                                       23.90
                                                                      356.73
        71.60
                                                                                                                                      5099.0
                                                                                                                                                       26.94
                                                                                      78.57
       108.40
                                                        23.91
                                                                      260.24
                                                                                                      113.98 10 12 47
113.97 16 5 47
                                                                                                                                                                      348.95
                                                                                                                                       703.4
                                                                                                                                                       26.93
        71.60
                                                        23.90
                                                                      356.73
                                                                                       78.56
                                                                                                                                      $700.0
                                                                                                                                                       26.94
                                                        23.91
                                                                      268.24
                                                                                       78.57
       106.40
                                                                                                      118.91 15 20 54
109.08 17 9 6
                                                                                                                                      5244.0
                                                                                                                                                       22.79
                                                                                                                                                                      269.74
                    13 43 30
15 37 32
                                     5644.05
                                                        19.09
                                                                      276.91
                                                                                      75.99
       110.00
                                                                                                                                                       31.24
                                                                                      80.77
                                                                                                                                      4694.4
                                     5494.41
                                                        28.92
                                                                      254.57
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2928.2 SR 458.2 SS 728.2
CRT -. 9665 CRS .9101 CST -. 9854
                                                                        SCT 5572.4 SCR 461.1 363 174.7
RRT -.4161 RRF -.4077 RTF .9336
SGB 5591.5 R23 .0188 R13 -.9337
     TOE-2.0517 TRA 1.4694 TC3-4.9868 BAU 1.1478
    RDE .3318 RRA .0036 RC3 -.0625 FAU .02473
FDE -.6989 FRA .8744 FC3-1.2439 BSP 17604
BDE 2.0784 BRA 1.4894 BC3 4.9872 FSP -573
                                                                                                                                 LSA 3047.2 MSA 169.1 SSA 20.3
                                                                          SG1 5575.8 SG2 419.1 THA 178.02
                                                                                                                                 EL1 2961.5 EL2 116.3 ALF 171.39
                                                                                                                                            ARRIVAL DATE JAN 13 1968
                                                                              FLIGHT TIME 186.00
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 540.897
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.710 GAL 3.81 A7L 92.99 MCA 266.95 SMA 122.41 ECC .25092 INC 2.9851 V1 25.293 RP 107.88 LAP 2.98 LOP 194.98 VP 37.097 GAP 12.86 A7P 85.84 TAL 168.45 TAP 75.41 RCA 91.69 APO 153.12 V2 35.128 RC 171.722 GL -18.16 GP 7.89 TAL 65.80 ZAP 169.31 EJS 45.23 ZAE 128.81 ETE 173.77 ZAC 62.20 ETC 9.95 CLP-172.77
   PLANETOCENTRIC CONIC
                                                                                                                                        1.15 RAP 204.75 ECC 1.3024
     C3 18.377 VHL 4.287 OLA -33.13 RAL 214.73 RAD 6567.7 VEL 11.822 PTH 2.09 VMP 8.189 DPA
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG
                                                                                                   114.22 10 30 53
114.21 16 18 42
114.22 10 30 53
114.21 16 18 42
119.65 15 29 47
108.84 17 31 15
        72.03 10 9 3 1310.21
107.97 14 43 19 5722.61
72.03 10 9 3 1310.21
107.97 14 43 19 5722.61
110.00 13 51 46 5881.02
110.00 15 59 47 5487.83
                                                                                                                                                    26.40
                                                       23.33
                                                                    356.97
                                                                                    83.35
                                                                                                                                      710.2
                                                                                                                                                                    349.24
                                                                                                                                                                     262.06
                                                                                      83.35
                                                                                                                                      5122.6
                                                                                                                                                      26.41
                                                        23.35
                                                                      269.79
       107.97
                                                                                                                                                                     349.24
                                                                                                                                      710.2
                                                                                                                                                      26.40
                                                        23.33
                                                                      356.97
                                                                                      83.35
                                                                                                                                                                     262.06
                                                                                                                                      5122.6
                                                                                                                                                      26.41
                                                       23.35
                                                                      269.79
                                                                                      83.35
       107.97
                                                                                                                                                                     272.01
                                                                                                                                     5281.0
                                                                                                                                                      21.66
                                                        17,85
                                                                      279.07
                                                                                      80.38
       110.00
                                                                                                                                     4887.8
                                                                                                                                                      31.36
                                                                                                                                                                     245.66
                                                       29.06
                                                                      254.11
                                                                                      85.87
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                        SGT 5608-5 SGE 465-8 SG3 168-8
RRT --4226 RRF --4121 RTF -9355
SGB 5624-4 R23 -0160 R13 --9355
SGI 5608-5 SGE 421-9 THA 177-98
                                                                                                                                 ST 2837.4 SR 463.6 SS 696.0

CRT -.9567 CRS .8940 CST -.9852

LSA 2971.8 MSA 178.8 SSA 19.6
     TOE-2.0429 TRA 1.7411 TC3-4.7002 BAU 1.1548
    ROE .3466 RRA -.0043 RC3 -.0525 FAU .02298
FOE -.6565 FRA .9266 FC3-1.0826 BSP 17762
BDE 2.0721 BRA 1.7411 BC3 4.7005 FSP -558
                                                                                                                                 EL1 2891.7 EL2 133.3 ALF 171.16
                                                                                                                                             ARRIVAL DATE JAN 15 1968
                                                                              FLIGHT TIME 188.00
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 546.364
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.664 GAL 4.43 ATL 92.88 MCA 270.18 SMA 122.14 ECC .25641 INC 2.8849 VI 29.293 RP 107.92 LNP 2.88 LOP 198.21 VP 37.054 GAP 13.30 ATP 90.01 TAL 166.90 TAP 77.07 RCA 90.82 APO 153.45 V2 35.116 RC 173.647 GL -16.84 GP 7.63 ZAL 62.81 ZAP 170.07 ETS 47.80 ZAE 128.78 ETE 173.96 ZAC 59.97 ETC 9.93 CLP-173.63
   PLANETOCENTRIC CONIC
     C3 19.762 WHL 4.445 DLA -32.84 RAL 218.43 RAD 6567.8 VEL 11.880 PTH 2.11 WHP 8.430 DPA -.04 RAP 206.79 ECC 1.3252
    LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.64 10 27 40 1315.40 22.66 357.04 88.10 114.42 10 49 35 715.4 25.76 349.37 107.36 14 54 11 5751.71 22.67 271.70 88.11 114.41 16 30 3 5151.7 25.77 264.03
                     10 27 40 1315.40
14 54 11 5751.71
                                                                                                      114.42
                                                                                                                  10 49 35
                                                                                                                                       715.4
                                                                                                                                                       25.76
                                                                                                                                                                      349.37
                                                        22.66
                                                                      357.04
                                                                                      88.10
         72.64
                                                                                                      114.41 16 30 3
120.44 14 8 40
108.51 17 54 17
                                                                                                                                                                      264.03
                                                        22.67
                                                                      271.70
                                                                                      88.11
                                                                                                                                      5151.7
                                                                                                                                                       25.77
        107.36
                                      636.57
                                                        16.37
                                                                      303.67
                                                                                       84.64
                                                                                                                                        36.6
                                                                                                                                                       20.29
                                                                                                                                                                      296.74
        110.00
                     13 56 4
                                   5478.54
                                                                      253.47
                                                                                                                                      4878.5
                                                                                                                                                       31.51
                                                                                                                                                                      244.98
                     16 22 56
                                                                                       90.99
                                                        29.27
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2775.5 SR 467.5 SS 664.4

CRT -.9452 CRS .8757 CST -.9849

LSA 2885.6 MSA 190.1 SSA 18.8
                                                                          SGT 5632.4 SGR 469.4 SG3 163.2
     TOE-2.0261 TRA 2.0272 TC3-4.3901 BAU 1.1599
    RDE .3627 RRA -.0136 RC3 -.0428 FAU .02127
FDE -.6151 FRA .9786 FC3 -.9316 BSP 17892
                                                                         RRT -.4301 RRF -.4178 RTF .9372
SGB 5651.9 R23 .0137 R13 -.9373
                                                                          SG1 5636.1 SG2 423.5 THA 177.94
                                                                                                                                 EL1 2810.5 EL2 150.7 ALF 170.93
     BOE 2.0583 BRA 2.0273 BC3 4.3903 FSP -541
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ARRIVAL DATE JAN 17 1968

EL1 2433.8 EL2 220.4 ALF 170.26

LAUNCH DATE JUL 11 1967

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DISTANCE 551.777
     HELIOCENTRIC CONIC
       RL 152.09 LAL -.00 LOL 288.03 VL 25.618 GAL 5.08 AZL 92.78 MCA 273.39 SMA 121.87 ECC .26236 INC 2.7847 VI 29.293
RP 107.96 LAP 2.78 LOP 201.43 VP 37.010 GAP 13.75 AZP 90.17 TAL 165.35 TAP 78.74 RCA 89.90 APO 153.85 V2 35.103
RC 175.555 GL -15.54 GP 7.39 ZAL 59.92 ZAP 170.78 ETS 50.86 ZAE 128.75 ETE 174.13 ZAC 57.72 ETC 9.95 CLP-174.48
      PLANETOCENTRIC CONIC
       C3 21.400 VHL 4.626 DLA -32.47 RAL 221.98 RAD 6567.9 VEL 11.949 PTH 2.13 VMP 8.588 DPA -1.18 RAP 208.86 ECC 1.3522
      C3 21.400 VHL 4.626 DLA -32.47 RAL 221.98 RAD 6567.9 VEL 11.949 PTH 2.13 VHP 6.688 DPA -1.18 RAP ZUB.86 ELC 1.3222 LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.41 10 46 51 1318.85 21.88 356.92 92.81 114.60 11 8 50 718.9 25.02 349.32 106.59 15 3 19 5786.35 21.90 273.97 92.82 114.59 16 39 45 5186.3 25.03 266.36 73.41 10 46 51 1318.85 21.88 356.92 92.81 114.60 11 8 50 718.9 25.02 349.32 106.59 15 3 19 5786.35 21.90 273.97 92.82 114.59 16 39 45 5186.3 25.03 266.36 110.00 14 2 59 684.74 14.69 306.40 88.80 121.22 14 14 24 84.7 18.71 299.59 110.00 16 46 21 5468.46 29.48 252.76 96.11 108.14 18 17 29 4868.5 31.67 244.24
                                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    SCT 5651.9 SCR 471.7 SC3' 157.8
RRT -.4379 RRT -.4259 RTF .9388
SCB 5671.6 R23 .0116 R13 -.9388
SCI 5655.7 SC2 423.8 THA 177.89
                                                                                                                                                                                                                ST 2682.1 SR 469.4 SS 633.2
CRT -,9314 CRS .8541 CST -.9844
       TOE-1.9984 TRA 2.3316 TC3-4.0590 BAU 1.1613
      RDE .3789 RRA -.0246 RC3 -.0339 FAU .01953
FDE -.5734 FRA 1.0322 FC3 -.7902 88P 17936
BDE 2.0341 BRA 2.3317 BC3 4.0591 FSP -523
                                                                                                                                                                                                                LSA 2788.1 MSA 203.1 SSA 18.0
                                                                                                                                                                                                                 EL1 2717.6 EL2 168.7 ALF 170.71
                                                                                                                               FLIGHT TIME 192.00
                                                                                                                                                                                                                                      ARRIVAL DATE JAN 19 1968
LAUNCH DATE JUL 11 1967
                                                                                                                               DISTANCE 557.125
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 288.03 VL 25.572 GAL 5.77 AZL 92.68 MCA 276.61 SMA 121.61 ECC .26882 INC 2.6840 V1 29.293
RP 107.99 LAP 2.67 LOP 204.65 VP 36.967 GAP 14.24 AZP 90.31 TAL 163.81 TAP 80.42 RCA 88.92 APO 154.31 V2 35.091
RC 177.448 GL -14.28 GP 7.18 ZAL 57.15 ZAP 171.44 ETS 54.49 ZAE 128.71 ETE 174.29 ZAC 55.48 ETC 10.01 CLP-175.33
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 23,324 VHL 4.829 DLA -32.04 RAL 225.36 RAD 6567.9 VEL 12.029 PTH 2.15 VHP 8.963 DPA -2.29 RAP 210.94 ECC 1.3839
LNON AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.35 11 6 34 1320.33 21.02 356.61 97.45 114.75 11 28 34 720.3 24.18-349.07
105.65 15 10 34 5626.62 21.04 276.62 97.46 114.74 16 47 41 5226.6 24.20 269.08
74.35 11 6 34 1320.33 21.02 356.61 97.45 114.75 11 28 34 720.3 24.18 349.07
105.65 15 10 34 5626.62 21.04 276.62 97.46 114.74 16 47 41 5226.6 24.20 269.08
110.00 14 6 55 736.06 12.86 309.25 92.85 121.95 14 19 11 136.1 16.99 302.57
110.00 17 9 24 5458.88 29.68 252.09 101.17 107.79 18 40 23 4658.9 31.82 243.53
    DIFFERENTIAL CORRECTIONS
                                                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                    SGT 5670.0 SGR 473.2 SG3 152.6
RRT -.4471 RRF -.4319 RTF .9408
SGB 5689.8 R23 .0099 R13 -.9409
SGI 5674.0 SGZ 422.9 TMA 177.85
                                                                                                                                                                                                                ST 2588.2 SR 469.9 SS 605.2
CRT -.9157 CRS .8313 CST -.9842
       TOE-1.9681 TRA 2.6477 TC3-3.7282 BAU 1.1625
       ROE .3959 RRA -.0369 RC3 -.0255 FAU .01794
      FOE -.5353 FRA 1.0840 FC3 -.4858 BSP 18047
BOE 2.0079 BRA 2.6480 BC3 3.7283 FSP -508
                                                                                                                                                                                                                LSA 2690.5 MSA 216.3 SSA 17.2
                                                                                                                                                                                                                ELI 2624.0 ELZ 186.3 ALF 170.51
                                                                                                                                                                                                                                    ARRIVAL DATE JAN 21 1968
                                                                                                                              FLIGHT TIME 194.00
LAUNCH DATE JUL 11 1967
                                                                                                                             DISTANCE 562.402
    HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 288.03 VL 25.528 GAL 6.30 AZL 92.58 MCA 279.83 SMA 121.36 ECC .27585 INC 2.5820 V1 · 29.293 RP 108.03 LAP 2.54 LOP 207.87 VP 36.924 GAP 14.75 AZP 90.44 TAL 162.28 TAP 82.11 RCA 87.88 APO 154.84 V2 35.078 RC 179.325 GL -13.06 GP 6.98 ZAL 54.50 ZAP 172.05 ETS 58.78 ZAE 128.66 ETE 174.42 ZAC 53.23 ETC 10.12 CLP-176.18
     PLANETOCENTRIC CONIC
       C3 25.575 VHL 5.057 DLA -31.56 RAL 228.57 RAD 6568.0 VEL 12.122 PTH 2.17 VMP 9.258 DPA -3.56 RAF 213.04 ECC 1.4209
      C3 25.575 VML 5.057 DLA -31.56 RAL 228.57 RAD 6968.0 VEL 12.122 PTM 2.17 VMP 9.236 DPA -3.36 RAP 213.04 ECC 1.4209 LNCA AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.46 11 26 55 1319.31 20.09 356.07 102.00 114.86 11 48 54 719.3 23.27 348.59 104.54 15 15 49 5872.89 20.10 279.67 102.01 114.85 16 53 42 5272.9 23.28 272.19 104.54 15 15 49 5872.89 20.10 279.67 102.00 114.86 11 48 54 719.3 23.27 348.59 104.54 15 15 49 5872.89 20.10 279.67 102.01 114.85 16 53 42 5272.9 23.28 272.19 110.00 14 10 6 789.54 10.91 312.17 96.80 122.60 14 23 16 189.5 15.13 305.61 110.00 17 31 48 5450.65 29.85 251.51 106.17 107.48 19 239 4850.6 31.95 242.92
                                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                     MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    SGT 5683.0 SGR 473.4 SG3 147.6
RRT - 4569 RRF - 4406 RTF .9430
SG8 5702.7 R23 .0084 R13 - .9430
SG1 5687.2 SG2 420.8 THA 177.81
                                                                                                                                                                                                                 ST 2493.1 SR 468.7 SS 579.9

CRT -.8977 CRS .8063 CST -.9840

LSA 2591.9 MSA 230.0 SSA 16.4
       TOE-1.9320 TRA 2.9807 TC3-3.3963 BAU 1.1612
      ROE .4133 RRA -.0507 RC3 -.0161 FAU .01640
FOE -.4991 FRA 1.1364 FC3 -.5550 BSP 18151
BOE 1.9757 BRA 2.9812 BC3 3.3963 FSP -494
                                                                                                                                                                                                                 EL1 2528.6 EL2 203.6 ALF 170.36
                                                                                                                                                                                                                                     ARRIVAL DATE JAN 23 1968
                                                                                                                               FLIGHT TIME 196.00
LAUNCH DATE JUL 11 1967
                                                                                                                              OISTANCE 567.597
     HELIOCENTRIC CONIC
      RL 152.09 LAL -.00 LOL 288.03 VL 25.483 GAL 7.26 AZL 92.48 MCA 283.04 SMA 121.11 ECC .28350 INC 2.4780 V1 29.293
RP 108.07 LAP 2.41 LOP 211.08 VP 36.881 GAP 15.30 AZP 90.56 TAL 160.78 TAP 83.81 RCA 86.78 APO 155.44 V2 35.065
RC 181.185 GL -11.88 GP 6.80 ZAL 51.97 ZAP 172.58 ETS 63.83 ZAE 128.60 ETE 174.55 ZAC 50.98 ETC 10.28 CLP-177.03
     PLANETOCENTRIC CONIC
       C3 28.201 VML 5.310 OLA -31.03 RAL 231.59 RAD 6566.1 VEL 12.230 PTH 2.20 VMP 9.575 DPA -4.41 RAP 215.15 ECC 1.4641
      C3 28.201 VHL 5.310 OLA -31.03 RAL 231.59 RAO 6568.1 VEL 12.230 PTH 2.20 WHP 9.575 OPA -4.41 RAP 213.15 ECC 1.4641 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.74 11 48 0 1315.22 19.08 355.27 106.47 114.95 12 9 55 715.2 22.29 347.65 103.26 15 18 32 637.47 19.10 305.25 106.48 114.93 15 29 30 37.5 22.30 297.62 103.26 15 18 52 637.47 19.10 305.25 106.48 114.95 12 9 55 715.2 22.29 347.65 103.26 15 18 52 637.47 19.10 305.25 106.48 114.93 15 29 30 37.5 22.30 297.62 110.00 14 12 44 644.49 8.88 315.13 100.65 123.15 14 26 49 244.5 13.18 308.67 110.00 17 53 19 5444.24 29.98 251.05 111.08 107.24 19 24 3 4844.2 32.05 242.45
                                                                                                                    MID-COURSE EXECUTION ACCURACY
SCT 3690.8 SGR 472.4 SG3 142.8
RRT - 4670 RRF - .4500 RTF .9452
SGB 5710.4 R23 .0070 R13 - .9453
                                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                               ST 2399.0 SR 465.6 SS 557.3
CRT -.8772 CRS .7791 CST -.9840
        TOE-1.8907 TRA 3.3320 TC3-3.0687 BAU 1.1570
      RDE .4309 RRA -.0659 RC3 -.0119 FAU .01489
FDE -.4648 FRA 1.1899 FC3 -.4570 8SP 18234
BDE 1.9392 BRA 3.3326 BC3 3.0687 FSP --479
                                                                                                                                                                                                               LSA 2494.6 MSA 243.6 SSA 15.7
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FLIGHT TIME 190.00

SG1 5695.1 SG2 417.4 THA 177.77

ARRIVAL DATE JAN 25 1968

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LAUNCH DATE JUL 11 1967
                                                                               DISTANCE 572.698
  HELIOCENTRIC CONIC
   RL 152.09 LAL -.00 LOL 288.03 VL 25.440 GAL 8.08 AZL 92.37 MCA 286.25 SHA 120.87 ECC .29185 INC 2.3715 V1 29.293 RF 108.11 LAP 2.28 LOP 214.29 VP 36.838 GAP 13.88 AZP 90.66 TAL 159.29 TAP 85.54 RCA 85.59 APO 156.14 V2 35.052 RC 183.028 GL -10.74 GP 6.63 ZAL 49.58 ZAP 173.04 ETS 69.69 ZAE 128.53 ETE 174.66 ZAC 48.74 ETC 10.49 CLP-177.89
   PLANETOCENTRIC CONIC
    C3 31.262 VHL 5.591 DLA -30.48 RAL 234.44 RAD 6568.2 VEL 12.355 PTH 2.23 VMP 9.918 DPA -5.42 RAP 217.27 ECC 1.5145 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     115.00 12 31 54
114.99 15 31 4
115.00 12 31 54
114.99 15 31 4
123.50 14 29 55
107.00 19 44 29
                                                                                                                                         707.0
                                                                                                                                                        21.25
                                    1306.95
                                                        18.03
                                                                       354.13
                                                                                    110.84
                    12 10 7
        78.23
                                                                                                                                                                         301.86
                                                                                                                                           97.4
                                                                                                                                                          21.26
                                                                                       110.85
                                                        18.04
                                                                       309.22
       101.77
                    15 19 27
                                     697.36
                                                                                                                                                                         346.77
                   12 10 7
                                                                                                                                          707.0
                                                                                                                                                          21.25
                                                        18.03
                                                                       354.13
                                                                                       110.84
                                    1306.95
        78.23
                                                                                                                                                                         301.86
                                                                                                                                           47.4
                                                                                                                                                          21.26
                                                                                      110.85
                                                      18.04
                                                                       309.22
                    15 19 27
       101.77
                                     697.36
                                                                                                                                                                         311.73
                                                                                                                                         300.4
                                                                                                                                                          11.16
                                                          6.79
                                                                       318.10
                                                                                      104.40
       110.00
                    14 14 55
                                       900.42
                                                                                                                                                                         242.13
                                                                       250.75
                                                                                                                                       4639.9
                                                                                                                                                          32.11
                                                                                      115.90
       110.00
                                    5439.93
                                                        30.07
                    18 13 49
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 2306.3 SR 460.6 SS 537.2

CRT -.8534 CRS .7488 CST -.9841

LSA 2398.6 MSA 257.1 SSA 15.0

EL1 2339.9 EL2 236.6 ALF 170.23
                                                                         SGT 5693.3 SGR 470.1 $G3 138.3

RRT -.4772 RRF -.4594 RTF .9475

SGB 5712.6 R23 .0056 R13 -.9475

SGI 5697.7 SG2 412.8 THA 177.73
    TOE-1.8418 TRA 3.7065 TC3-2.7458 BAU 1.1476
    ROE .4485 RRA -.0828 RC3 -.0071 FAU .01336
FDE -.4312 FRA 1.2462 FC3 -.3699 BBP 18207
BDE 1.8956 BRA 3.7074 BC3 2.7458 FSP -462
                                                                                                                                                ARRIVAL DATE JAN 27 1968
                                                                                FLIGHT TIME 200.00
LAUNCH DATE JUL 11 1967
                                                                               DISTANCE 577.688
   RL 192.09 LAL -.00 LOL 288.03 VL 25.397 GAL 8.95 AZL 92.26 MCA 289.45 3MA 120.63 ECC .30097 INC 2.2614 V1 29.293 RP 108.16 LAP 2.13 LOP 217.50 VP 36.796 GAP 16.51 AZP 90.75 TAL 157.83 TAP 87.28 RCA 84.32 APO 156.93 V2 35.039 RC 184.853 GL -9.66 GP 6.48 ZAL 47.33 ZAP 173.40 ETS 76.40 ZAE 128.44 ETE 174.76 ZAC 46.51 ETC 10.76 CLP-178.76
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 34.827 VML 5.901 0LA -29.90 RAL 237.10 RAD 6568.4 VEL 12.498 PTH 2.26 VMP 10.288 0PA -6.40 RAP 219.40 ECC 1.5732 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.98 12 33 49 1292.50 16.93 352.52 115.11 115.02 12 55 21 692.5 20.16 345.21
                                                                                                                                                                          306.52
                                                                                                                     15 29 44
                                                                                                                                          166.2
                                                                                                                                                           20.18
                                                                       313.62
                                                                                       115.11
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       100.02
                    15 16 56
                                      766.24
                                                         16.95
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                                                                       352.52
                                     1292.50
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        79.98
                     12 33 49
                                                        16.93
                                    766.24
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123.90 14 32 39
107.00 20 3 52
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                                                       16.95
                                                                       313.82
                                                                                       115.11
       100.02
                    15 16 58
                                                                                                                                          357.0
                                                                                                                                                           9.07
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                                                                       321.06
                                                                                      108.07
       110.00
                     14 16 42
                                      956.96
                                                         4.65
                                                                                                                                        4837.8
                                                                                                                                                          32.14
                                                                                                                                                                         241.97
                                     5437.82
                                                                       250.60
                                                                                       120.61
       110.00
                     18 33 14
                                                        30.11
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5692.1 SGR 466.7 SG3 133.9
RRT -.4881 RRF -.4701 RTF .9502
                                                                                                                                    ST 2222.2 SR 454.1 SS 521.1
CRT -.8280 CRS .7190 CST -.9847
    TOE-1.7944 TRA 4.0981 TC3-2.4411 BAU 1.1366
ROE .4664 RRA -.1009 RC3 -.0031 FAU .01194
    FOE -.4016 FRA 1.3026 FC3 -.2967 89P 18279
BOE 1.8540 BRA 4.0993 BC3 2.4411 FSP -449
                                                                           SG8 5711.2 R23 .0045 R13 -.9502
SG1 5696.7 SG2 407.0 THA 177.70
                                                                                                                                    LSA 2311.6 MSA 269.1 SSA
                                                                                                                                                                             14.4
                                                                                                                                    EL1 2254.2 EL2 251.0 ALF 170.27
                                                                                                                                               ARRIVAL DATE JAN 29 1968
                                                                                FLIGHT TIME 202.00
LAUNCH DATE JUL 11 1967
                                                                              DISTANCE 582.550
   HELIOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.355 GAL 9.88 AZL 92.15 MCA 292.66 SMA 120.39 ECC .31097 INC 2.1470 V1 29.293
RP 108.20 LAP 1.98 LOP 220.70 VP 36.754 GAP 17.19 AZP 90.83 TAL 156.40 TAP 89.06 RCA 82.95 APO 157.83 V2 35.025
RC 186.660 GL -8.62 GP 6.35 ZAL 45.22 ZAP 173.64 ETS 83.88 ZAE 128.33 ETE 174.86 ZAC 44.29 ETC 11.09 CLP-179.63
   PLANETOCENTRIC CONIC
    C3 38.983 VHL 6.244 DLA -29.30 RAL 239.57 RAD 6568.5 YEL 12.663 PTH 2.30 VHP 10.690 DPA -7,34 RAP 221.53 ECC 1.6416
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.12 13 0 20 1267.73 15.80 350.13 119.27 115.00 13 21 27 667.7 19.04 342.88
                                                                                                      115.00 13 21 27
114.99 15 24 21
117.89 14 52 45
                                                                                                                                          248.0
                                                                                                                                                          19.06
                                                                                                                                                                         312.08
                                                                                       119.27
                     15 10 13
                                     847.99
                                                         15.82
                                                                       319.33
         97.88
                                                                                                                                          355.0
                                                                                                                                                          14.86
                                                                                                                                                                         318.01
       100.00
                                                                       324,90
                                                                                       116.92
                     14 36 50
                                       955.02
                                                         11.21
                                                                                                        112.23 16 26 59
124.10 14 35 3
107.00 20 22 11
                                                                                                                                                          23.35
                                                                                                                                                                         298.14
                                                                                                                                           35.9
                    16 16 24
                                                      20.52
       100.00
                                       635.93
                                                                       305.79
                                                                                       121.43
                                   1013.83
5437.93
                                                                                                                                           413.8
                                                                                                                                                                         317.81
       110.00
                     14 18 9
                                                          2.48
                                                                       324.06
                                                                                       111.64
                                                                                                                                                          32.14
                                                                                                                                        4837.9
                                                                                                                                                                         241.98
                     18 51 33
                                                        30.11
                                                                       250.61
                                                                                       125.21
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RRT -,4991 RRT -,4810 RTF .,9530
SGB 5705.0 R23 .0035 R13 -,9530
SGI 5691.0 SG2 400.1 THA 177.67
                                                                                                                                    ST 2143.9 SR 446.0 SS 508.1
CRT -.8002 CRS .6884 CST -.9855
     TOE-1.7436 TRA 4.5130 TC3-2.1516 BAU 1.1214
    RDE .4843 RRA -.1203 RC3 -.0003 FAU .01055
FDE -.3742 FRA 1.3613 FC3 -.2543 BSP 18331
                                                                                                                                    LSA 2230.5 MSA 279.7 SSA 13.8
                                                                                                                                    EL1 2173.9 EL2 263.8 ALF 170.41
     HOF 1.8096 BRA 4.5146 BC3 2.1516 FSP -436
                                                                                                                                                ARRIVAL DATE JAN 31 1968
LAUNCH DATE JUL 11 1967
                                                                                FLIGHT TIME 204.00
                                                                                DISTANCE 587.262
   HELFOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.313 GAL 10.87 AZL 92.03 MCA 295.86 SMA 120.16 ECC .32195 INC 2.0273 V1 29.293 RP 108.24 LAP 1.82 LOP 223.91 VP 36.713 GAP 17.93 AZP 90.88 TAL 155.01 TAP 90.87 RCA 81.48 APO 158.85 V2 35.012 RC 188.449 GL -7.63 GP 6.22 ZAL 43.24 ZAP 173.76 ETS 91.96 ZAE 128.21 ETE 174.95 ZAC 42.09 ETC 11.49 CLP 179.48
   PLANETOCENTRIC CONIC
                                                                                                                                            -8.25 RAP 223.67 ECC 1.7214
     C3 43.836 WHL 6.621 DLA -28.70 RAL 241.87 RAD 6568.7 VEL 12.853 PTH 2.34 WHP 11.129 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      114.95 13 53 59
114.94 15 11 9
                                   1219.52
                                                                                     123.31
                                                                                                                                                                         33A.A3
                                                                                                                                           619.5
         85,12 13 33 39
                                                        14.66
                                                                        346.03
                                                                                                                                                                          319.49
                                                                                                                                           355.4
                                                                                                                                                           17.92
         94.88
                     14 55 13
                                       955.40
                                                         14.67
                                                                        326.69
                                                                                       123.32
                                                                                                         118.89 14 42 31
111.29 18 24 41
                                                                                                                                                                          323.70
                                                                                                                                           452.9
                                                                                                                                                           11.84
                    14 24 58
                                    1052.92
                                                          8.04
                                                                        330.44
                                                                                       119.89
        100.00
                                                                                                                                                                          273.48
                                                                                                                                          5285.3
                                                                                                                                                         24.20
                     16 46 35
                                      5885.27
                                                         21.49
                                                                        281.24
                                                                                       126.38
        100,00
                                                                                                         124.18 14 37 8
107.09 20 39 26
                                                                                                                                                                          320.82
                                                                                                                                           470.8
                      19 17
19 8 46
                     14 19 17
                                      1070.78
                                                           . 31
                                                                        327.03
                                                                                       115.14
                                                                                                                                                         32.11
                                                                                                                                          4840.2
                                                                                                                                                                          242.15
                                      5440.17
                                                         30.06
                                                                        250.77
                                                                                       129.69
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2073.2 SR 436.5 SS 498.3
CRT - .7706 CRS .6577 CST - .9866
                                                                           SCT 5675.0 SCR 456.2 SC3 125.8
RRT -.5102 RRF -.4923 RTF .9560
SCB 5693.3 R23 .0026 R13 -.9560
     TDE-1.6919 TRA 4.9527 TC3-1.8784 BAU 1.1008
     ROE .5021 RRA -.1410 RC3 .0015 FAU .00918
FDE -.3489 FRA 1.4227 FC3 -.1812 BSP 18376
BOE 1.7648 BRA 4.9547 BC3 1.8784 FSP -423
                                                                                                                                   LSA 2157.2 MSA 288.4 SSA 13.2
                                                                                                                                     EL1 2100.8 EL2 274.5 ALF 170.62
                                                                            SG1 5679.8 SG2 392.0 THA 177.64
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FLIGHT TIME 198.00

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LAUNCH DATE JUL 11 1967
                                                                                      FLIGHT TIME 206.00
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 591.796
     RL 152.09 LAL -.00 LOL 288.03 VL 25,273 GAL 11.94 AZL 91.90 MCA 299.06 SMA 119.94 ECC .33404 INC 1.9009 V1 29.293
RP 108.28 LAP 1.66 LOP 227.11 VP 36.672 GAP 18.73 AZP 90.92 TAL 153.67 TAP 92.73 RCA 79.88 APO 160.00 V2 34.999
RC 190.221 GL -6.69 GP 6.10 ZAL 41.40 ZAP 173.73 ETS 100.33 ZAE 128.06 ETE 175.04 ZAC 39.92 ETC 11.97 CLP 178.56
    PLANETOCENTRIC CONIC
     C3 49.516 VHL 7.037 DLA -28.09 RAL 243.99 RAD 6568.8 VEL 13.072 PTM 2.39 VMP 11.608 DPA -9.12 RAP 225.80 ECC 1.8149
    C3 49.516 WHL 7.037 OLA -28.09 RAL 243.99 RAD 6568.8 VEL 13.072 PTM 2.39 VMP 11.608 DPA -9.12 RAP 225.80 ECC 1.8149 LNCH AZHTH LNCH-TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 51 31 1219.90 10.59 344.05 125.82 116.41 14 11 51 619.9 14.06 337.09 90.00 14 54 18 1016.11 16.46 331.97 128.62 113.37 15 11 14 416.1 19.48 324.60 100.00 14 17 18 1136.49 5.27 335.09 122.97 119.47 14 36 14 536.5 9.15 328.46 100.00 17 11 12 5862.79 22.04 279.79 131.01 110.72 18 48 54 5262.8 24.66 271.97 110.00 14 20 7 1127.62 -1.87 330.00 118.55 124.14 14 38 55 527.6 2.62 323.79 110.00 19 24 52 5444.42 29.98 251.07 134.05 107.25 20 55 36 4844.4 32.04 242.46
                                                                               MID-COURSE EXECUTION ACCURACY

SGT 5661.6 SGR 449.0 SG3 122.0

RRT -.5210 RRF -.5035 RTF .9592

SG8 5679.4 RZ3 .0017 R13 -.9592

SG1 5666.5 SG2 382.9 TMA 177.62
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                              ST 2008.5 SR 425.4 SS 491.2

CRT -.7384 CRS .6260 CST -.9878

LSA 2090.2 MSA 295.5 SSA 12.7
     TOE-1.6348 TRA 5.4265 TC3-1.6198 BAU 1.0723
    RDE .5195 RRA -.1651 RC3 .0025 FAU .00776 FDE -.3247 FRA 1.4690 FC3 -.1357 88P 18293
     BOE 1.7153 BRA 5.4290 BC3 1.6196 FBP -408
                                                                                                                                              EL1 2033.4 EL2 283.3 ALF 170.93
LAUNCH DATE JUL 11 1967
                                                                                      FLIGHT TIME 208.00
                                                                                                                                                           ARRIVAL DATE FEB 4 1968
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 596.116
    RL 152.09 LAL -.00 LOL 288.03 VL 25.253 GAL 13.10 AZL 91.77 MCA 302.26 SMA 119.72 ECC .34738 INC 1.7666 V1 29.293
RP 108.32 LAP 1.49 LOP 230.30 VP 36.633 GAP 19.61 AZP 90.94 TAL 152.38 TAP 94.64 RCA 78.13 APO 161.31 VZ 34.986
RC 191.975 GL -5.80 GP 5.99 ZAL 39.70 ZAP 173.55 ETS 108.64 ZAE 127.87 ETE 175.12 ZAC 37.78 ETC 12.53 CLP 177.63
   PLANETOCENTRIC CONIC
     C3 56.183 WHL 7.496 DLA -27.48 RAL 245.94 RAD 6569.0 YEL 13.324 PTH
                                                                                                                    2.44 WHP 12.136 DPA
                                                                                                                                                      -9.95 RAP 227.92 ECC 1.9246
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              117.58 13 52 48
112.13 15 46 52
119.78 14 31 45
110.36 19 10 0
123.97 14 40 24
107.48 21 10 44
                    13 30 22 1345.63
15 31 0 952.79
14 11 32 1212.61
17 32 31 5649.06
14 20 39 1164.17
19 39 53 5450.49
         90.00
                                                             6.69
                                                                            351.25
                                                                                            126.25
                                                                                                                                                    745.8
                                                                                                                                                                      10.34
         90.00
                                                             18.13
                                                                             328.07
                                                                                             133.65
                                                                                                                                                     352.8
                                                                                                                                                                      20.97
                                                                                                                                                                                      320.55
        100.00
                                                              2.70
                                                                            339.30
                                                                                             126.05
                                                                                                                                                     612.8
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                                                                                                                                                                                      332.73
       100.00
                                                            22.37
                                                                            278.91
                                                                                             135.41
                                                                                                                                                   5249.1
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                                                                                                                                                                                      271.05
       110.00
                                                            -4.02
                                                                            332.95
                                                                                             121.68
                                                                                                                                                   584.2
                                                                                                                                                                        .46
                                                                                                                                                                                      326.74
                                                                                             136.27
       110.00
                                                            29.86
                                                                            251.50
                                                                                                                                                   4850.5
                                                                                                                                                                      31.95
                                                                                                                                                                                      242.91
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                               SGT 5642.9 SGR 440.6 SG3 118.4

RRT -.5321 RRF -.5153 RTF .9625

SG8 5660.1 RZ3 .0011 R13 -.9625

SG1 5647.8 SG2 372.7 THA 177.61
                                                                                                                                            ST 1953.0 SR 413.2 SS 487.5

CRT -.7065 CRS .5973 CST -.9893

LSA 2032.9 MSA 299.6 SSA 12.1
     TOE-1.5827 TRA 5.9264 TC3-1.3838 BAU 1.0394
    RDE .5368 RRA -.1860 RC3 .0026 FAU .00641
FDE -.3041 FRA 1.5578 FC3 -.0968 BSP 18317
     BOE 1.6713 BRA 5.9293 BC3 1.3636 FSP -396
                                                                                                                                            ELI 1975.2 ELZ 289.1 ALF 171.31
                                                                                     FLIGHT TIME 210.00
                                                                                                                                                          ARRIVAL DATE FEB 6 1958
LAUNCH DATE JUL 11 1967
                                                                                     DISTANCE 600.181
   HELTOCENTRIC CONIC
    RL 152.09 LAL -.00 LOL 288.03 VL 25.195 GAL 14.35 AZL 91.62 MCA 305.45 SMA 119.51 ECC .36216 INC 1.6225 V1 29.293
RP 108.36 LAP 1.32 LOP 233.49 VP 36.594 GAP 20.58 AZP 90.94 TAL 151.16 TAP 96.61 RCA 76.23 APO 162.80 V2- 34.973
RC 193.712 GL -4.95 GP 5.89 ZAL 38.15 ZAP 173.23 ETS 116.56 ZAE 127.65 ETE 175.20 ZAC 35.68 ETG 13.18 CLP 176.66
   PLANETOCENTRIC CONIC
     C3 64.042 VHL 8.003 OLA -26.88 RAL 247.72 RAD 6569.2 VEL 13.616 PTH 2.49 VHP 12.718 DPA -10.74 RAP 230.02 ECC 2.0540
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            118.09 15 42 37
111.49 16 12 20
119.89 14 28 13
110.15 19 28 48
123.69 14 41 34
107.76 21 24 49
                                                                                         131.00
                                                                                                                                                840.1
                                                                                                                                                                                  349.86
                     13 18 37 1440.13
                                                             3.69
                                                                            356.56
                                                                                                                                                                      7.42
         90,00
                                                                                                                                                                                     318.57
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         90.00
                     15 56 58
                                         922.22
                                                            18.90
                                                                            326.16
                                                                                            138.13
                                                                                                                                                                                   336.70
                      14 6 48
                                      1284.45
                                                              .27
                                                                            343.23
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        100.00
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        100.00
                     17 51 27
                                      5841.18
                                                            22.56
                                                                            278.39
                                                                                            139.61
                    14 20 53 1240.23
19 53 51 5458.16
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        110.00
                                                            -6.15
                                                                            335.90
                                                                                            125.12
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                                                            29.70
                                                                            252.04
                                                                                            142.34
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                                                                                                                                                                                    243.48
        110.00
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                SCT 5619.7 SGR 430.9 SG3 114.9
RRT -.5429 RRF -.5270 RTF ..9660
SGB 5636.2 R23 .0004 R13 -.9660
SGI 5624.6 SGZ 361.5 THA 177.61
                                                                                                                                            ST 1904.1 SR 399.8 SS 486.7

CRT -.6743 CRS .5699 CST -.9908

LSA 1982.8 MSA 301.2 SSA 11.6

EL1 1923.5 EL2 292.2 ALF 171.75
     TOE-1.5309 TRA 6.4617 TC3-1.1654 BAU .9978
    RDE .5539 RRA -.2098 RC3 .0022 FAU .00503
FDE -.2855 FRA 1.6318 FC3 -.0680 BSP 18326
     BDE 1.6280 BRA 6.4651 BC3 1.1654 FSP
                                                              -365
                                                                                                                                                          ARRIVAL DATE FEB 8 1968
                                                                                     FLIGHT TIME 212.00
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 603.935
    RL 152.09 LAL -.00 LOL 288.03 VL 25.157 GAL 15.72 ATL 91.47 MCA 308.64 SMA 119.31 ECC .37857 INC 1.4666 VI 29.293 RP 108.40 LAP 1.15 LOP 236.68 VP 36.556 GAP 21.65 ATP 90.92 TAL 150.03 TAP 98.67 RCA 74.14 APO 164.48 VZ 34.960 RC 195.431 GL -4.15 GP 5.80 ZAL 36.73 ZAP 172.75 ETS 123.84 ZAE 127.39 ETE 175.28 ZAC 33.62 ETC 13.93 CLP 175.65
   PLANETOCENTRIC CONIC
    C3 73.347 VHL 8.564 DLA -26.28 RAL 249.34 RAD 6569.4 VEL 13.953 PTH 2.55 VHP 13.363 DPA -11.49 RAP 232.11 ECC 2.2071
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         133.79
                                                                                                            118.30 13 35 24
111.09 16 33 28
119.83 14 25 12
110.05 19 45 45
123.29 14 42 24
108.09 21 37 55
         90.00 13 10 2 1522.53
90.00 16 18 23 904.25
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                                         904.25
                                                            19.34
                                                                            325.03
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                                      1352.59
                                                            -2.04
                                                                            346.97
                                                                                             132.06
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        100,00
                     14 2 39
                      18 8 27
                                        5837.46
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                                                                                             143.62
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       110.00
                                        5467.18
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                                                                                             146.26
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                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 5592.2 SGR 419.9 SG3 111.6
RRT -.5535 RRF -.5385 RTF .9695
SG8 5608.0 R23 -.0002 R13 -.9695
                                                                                                                                           ST 1861.1 SR 385.3 SS 488.7

CRT -.6423 CRS .5442 CST -.9923

LSA 1939.3 MSA 300.4 SSA 11.1
     TDE-1.4802 TRA 7.0367 TC3 -.9644 BAU
                                                                .9457
     ROE .5706 RRA -.2343 RC3 .0013 FAU .00360
     FOE -.2688 FRA 1.7118 FC3 -.0424 BSP 18309
BOE 1.5864 BRA 7.0406 BC3 .9644 FSP -374
                                                                                                                                           EL1 1877.9 EL2 292.7 ALF 172.24
                                                                              SG1 5597.1 SG2 349.4 THA 177.61
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LAUNCH DATE JUL 11 1967
                                                                              FLIGHT TIME 214.00
                                                                                                                                            ARRIVAL DATE FEB 10 1968
   HELIOCENTRIC CONIC
                                                                              DISTANCE 607.310
    RL 152.09 LAL -.00 LOL 288.03 VL 25.121 GAL 17.21.A2L 91.30 MCA 311.83 SMA 119.12 ECC .39686 INC 1.2964 V1 29.293
RP 108.44 LAP .97 LOP 239.87 VP 36.519 GAP 22.84 AZP 90.86 TAL 148.99 TAP 100.82 RCA 71.84 APO 166.39 V2 34.947
RC 197.134 GL -3.39 GP 5.72 ZAL 35.47 ZAP 172.14 ETS 130.36 ZAE 127.08 ETE 175.37 ZAC 31.62 ETC 14.80 CLP 174.59
   PLANETOCENTRIC CONIC
   _ C3 84.427 VML 9.188 DLA -25.68 RAL 250.78 RAD 6569.7 VEL 14.345 PTH 2.61 VMP 14.083 DPA -12.19 RAP 234.16 ECC 2.3894
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 13 3 2 1597.94

90.00 16 36 53 893.50

100.00 13 58 48 1417.96

100.00 18 23 48 5836.86

110.00 14 20 22 1350.21

110.00 20 18 44 5477.27
                                                       -1.39
                                                                       5.37
                                                                                   136.56
                                                                                                     118.29 13 29 40
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                                                                      324.35
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                                                                                                      110.85 16 51 46
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110.04 20 1 5
122.79 14 42 52
108.46 21 50 1
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                                                        -4.24
                                                                      350.56
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                                                      22.66
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                                                                      278.11
                                                                                     147.42
                                                                      341.77
                                                                                     131.31
                                                                                                                                      750.2
                                                                                                                                                                     335.43
                                                     -10.26
                                                                                                                                                      -5.86
                                                                                                                                                    31.53
                                                                      253.38
                                                                                                                                     4877.3
                                                                                     150.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                        SGT 5562.2 SGR 407.5 SG3 108.5
RRT -.5635 RRF -.5497 RTF .9729
SG8 5577.1 R23 -.0007 R13 -.9729
                                                                                                                                 ST 1823.0 SR 369.6 SS 493.6
CRT -.6102 CRS .5193 CST -.9937
    TDE-1.4279 TRA 7.6606 TC3 -.7789 BAU .8792
     ROE .5867 RRA -.2595 RC3 -.0000 FAU .00204
     FOE -.2532 FRA 1.8000 FC3 -.0209 BSP 18183
                                                                                                                                LSA 1901.4 MSA 297.2 SSA 10.5
                                                                          SG1 5567.0 SG2 336.4 THA 177.63
                                                                                                                                 EL1 1837.3 EL2 290.7 ALF 172.76
     BDE 1.5437 BRA 7.6650 BC3 .7789 FSP
LAUNCH DATE JUL 11 1967
                                                                              FLIGHT TIME 216,00
                                                                                                                                             ARRIVAL DATE FEB 12 1968
   HELIOCENTRIC CONIC
                                                                             DISTANCE 610.216
    RL 152.09 LAL -.00 LOL 288.03 VL 25.086 GAL 18.86 AZL 91.11 MCA 315.02 SMA 118.93 ECC .41731 INC 1.1084 V1 29.293
RP 108.48 LAP .78 LOP 243.06 VP 36.483 GAP 24.18 AZP 90.78 TAL 148.08 TAP 103.10 RCA 69.30 APO 168.56 V2 34.935
RC 198.819 GL -2.66 GP 5.64 ZAL 34.35 ZAP 171.39 ETS 136.12 ZAE 126.70 ETE 175.45 ZAC 29.68 ETC 15.78 CLP 173.48
   PLANETOCENTRIC CONIC
    C3 97.700 VML 9.884 DLA -25.10 RAL 252.04 RAD 6569.9 VEL 14.800 PTH
                                                                                                         2.67 VHP 14.888 DPA -12.85 RAP 236.16 ECC 2.6079
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 56 53 1668.40 -3.66 9.30 139.25 118.10 13 24 41 1068.4 .13 2.67
                                  1660.40
                    16 53 9
                                                                                                                  17 7 56
         90.00
                                      887.47
                                                       19.75
                                                                      323.96
                                                                                     149.67
                                                                                                      110.71
                                                                                                                                       287.5
                                                                                                                                                       22.39
                                                                                                                                                                      316.29
                   13 55 3 1480.59
18 37 40 5838.54
14 19 33 1403.77
                                                                                                     119.27 14 19 44
110.08 20 14 58
122.18 14 42 56
108.85 22 1 8
                  13 55 3
                                                        -6.34
                                                                      354.03
                                                                                     137.77
                                                                                                                                       880.6
                                                                                                                                                                      347.47
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                                                                                                                                                    25.15
       100.00
                                                       22.62
                                                                      278.22
                                                                                     151.02
                                                                                                                                     5238.5
                                                                                                                                                                     270.34
                                                                                                                                      803.8
                                                                                                                                                       -7.88
                                                     -12.22
                                                                      344.66
                                                                                     134.24
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                    20 29 39
                                    5488.14
                                                       29.06
                                                                      254.14
                                                                                     153.54
                                                                                                                                     4888.1
                                                                                                                                                       31.35
                                                                                                                                                                     245.58
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TOE-1.3847 TRA 8.3297 TC3 -.6127 BAU .6003
                                                                        SGT 5526.4 SGR 394.0 SG3 105.5
RRT -.5731 RRF -.5605 RTF .9764
                                                                                                                                 ST 1790.0 SR 353.6 SS 501.5
CRT -.5810 CRS .4985 CST -.9950
    RDE .6028 RRA -.2844 RC3 -.0014 FAU .00042
    FOE -.2412 FRA 1.8952 FC3 -.0037 8SP 18166
BOE 1.5102 BRA 8.3345 BC3 .6127 FSP -351
                                                                                                                               LSA 1869.7 MSA 291.4 SSA 10.0
EL1 1802.1 EL2 285.9 ALF 173.28
                                                                          5G8 5540.4 R23 -. 0011 R13 -. 9764
                                                                          SG1 5531.0 SG2 322.6 THA 177.65
                                                                              FLIGHT TIME 218.00
                                                                                                                                            ARRIVAL DATE FEB 14 1968
LAUNCH DATE JUL 11 1967
                                                                             DISTANCE 612.540
    RL 152.09 LAL -.00 LOL 288.03 VL 25.054 GAL 20.69 AZL 90.90 MCA 318.20 SMA 118.76 ECC .44025 INC .8983 VL 29.293
RP 108.51 LAP .60 LOP 246.24 VP 36.449 GAP 25.68 AZP 90.67 TAL 147.31 JAP 105.51 RCA 66.47 APO 171.04 V2 34.923
RC 200.487 GL -1.98 GP 5.56 ZAL 33.40 ZAP 170.50 ETS 141.15 ZAE 126.25 ETE 175.54 ZAC 27.83 ETC 16.89 CLP 172.29
   PLANETOCENTRIC CONIC
    C3 113.712 VML 10.664 DLA -24.53 RAL 253.13 RAD 6570.2 VEL 15.331 PTH 2.74 VMP 15.796 DPA -13.47 RAP 238.11 ECC 2.8714
    LNCM AZMIH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 51 9 1734,89 -5.78 13.04 141.83 117.77 13 20 4 1134.9 -2.02 6.38
        CH A7MTH LINCH TIME L-I TIME 90.00 12 51 9 1734.89 90.00 17 7 32 884.62 100.00 13 51 14 1540.92 100.00 18 50 8 5841.86 110.00 14 18 17 1456.10 110.00 20 39 35 5499.45
                                                                                                  117.77 13 20 4
110.65 17 22 17
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                                                     -8.34
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       100.00
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121.47 14 42 33
109.25 22 11 15
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       100.00
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       110.00
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                                                                                     137.03
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       110.00
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                                                   28.81
                                                                     254.92
                                                                                     156.86
                                                                                                                                     4899.5
                                                                                                                                                                     246.51
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                         SCT 5486.6 SCR 379.2 SC3 102.7
RRT -.5818 RRF -.5706 RTF ..9797
SC8 5499.7 R23 -.0015 R13 -.9797
SC1 5491.0 SC2 308.1 THA 177.69
    TOE-1.3462 TRA 9.0565 TC3 -.4620 BAU .7024
                                                                                                                                ST 1760.4 SR 336.8 SS 512.6

CRT -.5536 CRS .4798 CST -.9961

LSA 1842.4 MSA 283.4 SSA 9.5
    ROE .6184 RRA -.3090 RC3 -.0030 FAU-.00139
FOE -.2312 FRA 2,0007 FC3 .0106 BSP 18125
BOE 1.4815 BRA_9.0618 BC3 .4620 FSP -342
                                                                                                                                EL1 1770.5 EL2 278.8 ALF 173.80
LAUNCH DATE JUL 11 1967
                                                                              FLIGHT TIME 220.00
                                                                                                                                            ARRIVAL DATE FEB 16 1968
  HELIOCENTRIC CONIC
                                                                             DISTANCE 614.131
    RL 152.09 LAL -.00 LOL 288.03 VL 25.023 GAL 22.73 AZL 90.66 MCA 321.38 SMA 118.59 ECC .46607 INC .6606 V1 29.293 RP 108.55 LAP .41 LOP 249.42 VP 36.416 GAP 27.38 AZP 90.52 TAL 146.72 TAP 108.10 RCA 63.32 APO 173.86 VZ 34.941 RC 202.138 GL -1.32 GP 5.49 ZAL 32.62 ZAP 169.48 ETS 145.54 ZAE 125.70 ETE 175.64 ZAC 26.08 ETC 18.14 CLP 171.02
  PLANETOCENTRIC CONIC
    C3 133.179 VHL 11.540 DLA -23.96 RAL 254.03 RAD 6570.4 VEL 15.953 PTH 2.82 VHP 16.824 DPA -14.03 RAP 239.98 ECC 3.1918
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 45 34 1797.96 ~7.77 16.61 144.26 117.32 13 15 32 1198.0 -4.05 9.91
                                  1797.96
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110.63 17 35 1
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        90.00
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278.72
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                                   1596.91
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109.66 22 20 21
                    14 16 32
       110.00
                                    1507.02
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                    20 40 30
       110.00
                                    5510.89
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                                                                                     159.93
                                                                                                                                     4910.9
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  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SGT 5442.5 SGR 363.0 SG3 100.0
RRT -.5894 RRF -.5796 RTF .9829
SG8 5454.6 R23 -.0018 R13 -.9829
                                                                                                                              ST 1733.0 SR 319.3 SS 527.1
CRT -.5286 CRS .4635 CST .9970
LSA 1818.8 MSA 273.5 SSA 8.9
    TOE-1.3151 TRA 9.8479 TC3 -.3263 BAU .5811
    ROE .6338 RRA -.3327 RC3 -.0045 FAU-.00344
FOE -.2237 FRA 2.1180 FC3 .0224 BSP 18064
BOE 1.4599 BRA 9.8536 BC3 .3264 FSP -333
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SG1 5446.7 SG2 293.0 THA 177.74

ELI 1741.4 EL2 269.7 ALF 174.30

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ARRIVAL DATE SEP 20 1967
                                                                                                                   FLIGHT TIME 70.00
LAUNCH DATE JUL 12 1967
                                                                                                                   DISTANCE 183.551
     PLISTENINIC LUMIC PROPERTY OF THE PROPERTY OF 
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 30.456 VHL 5.519 DLA -1.83 RAL 144.40 RAD 6568.2 VEL 12.322 PTH 2.22 VHP 8.131 DPA -3.90 RAP 176.39 ECC 1.5012
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
                                                                                                                          12.22
                                                                                                                                                                                                                           -17.78
                            1 56 12 2260.56
13 27 8 5018.29
3 16 42 2001.31
14 49 20 4753.17
4 22 59 1793.79
15 59 32 4533.46
                                                                                                                                                                                                   1661.0
                                                                                 -20.67
                                                                                                         44.44
                                                                                                                                                      109.60
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            90.00
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110.94 3 50 3
72.01 16 8 35
114.15 4 52 55
68.81 17 15 5
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21.59
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           100,00
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           110.00
                                                                                                       102.97
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                                                                                                                            11.65
                                                                                                                                                                                                      3933.5
                                                                                27.47
           110.00
                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                             MID-COURSE EXECUTION ACCUMACY

96T 646.2 96R 425.6 863 114.7

MRT -.1789 MRF .2309 MTF -.6262

868 773.8 R25 - 0414 R13 .6364
     DIFFERENTIAL CORRECTIONS
      TOE .2592 TRA -.3809 TC3 .4384 BAU .1785

RDE -.3800 RRA -.1537 RC3 .0070 FAU .04005

FDE -.1956 FRA -.3625 FC3-1.1386 BSP 1712

BOE .4599 BRA .3558 BC3 .4384 FSP -286
                                                                                                                                                                                               ST 287.5 SR 397.4 SS 165.4
CRT -.8874 CRS -.9140 CST .6487
                                                                                                                                                                                                LSA 498.7 MBA 136.2 SSA 25.8
ELI 477.9 EL2 110.2 ALF 124.82
                                                                                                              $61 653.8 862 413.9 THA 168.70
                                                                                                                                                                                                                  APPIVAL DATE SEP 22 1967
                                                                                                                    FLIGHT TIME 72.00
                                                                                                                    DISTANCE 190.351
      PL 152.08 LAL -.00 LOL 288.99 VL 26.547 GAL -9.18 AZL 93.07 MCA 83.59 SMA 127.54 ECC .24805 INC 3.0659 VI 29.294 RP 108.56 LAP -3.05 LOP 12.56 VP 37,477 GAP -11.58 AZP 90.34 TAL 210.84 TAP 294.43 RCA 95.90 APO 159.18 VZ 34.908 RC 52.722 GL -15.04 GP -8.90 ZAL 140.65 ZAP 16.32 ETS 31.58 ZAE 149.15 ETE 2.02 ZAC 88.93 ETC 13.85 CLP -13.74
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 29.178 VML 5,402 OLA -1.26 RAL 143.02 RAO 6566.2 VEL 12.270 PTM 2.21 VMP 7.819 OPA -4.80 RAP 176.58 ECC 1.4802

LNON AZMTM LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 13 45 30 2267.76 -20.02 -44.88 10.26 109.63 2 24 18 1667.8 -17.96 37.38

90.00 13 25 90 4990.00 22.53 218.93 11.00 72.37 14 49 0 4390.0 19.90 211.24

100.00 3 7 16 2007.26 -21.98 25.27 9.80 110.79 3 40 43 1407.3 -18.95 17.78

100.00 14 47 48 4725.73 23.60 199.08 10.56 71.22 16 6 32 4125.7 20.91 191.39

110.00 4 14 10 1797.85 -29.07 7.98 8.41 114.04 4 44 8 1197.8 -21.61 .54

110.00 15 57 21 4507.90 28.83 181.26 8.29 87.98 17 19.90 3007.9 93.60 173.48
     PLANETOCENTRIC CONIC
                                                                                                                                                     24.43
                                                                                                        181.26
                                                                                                                                    9.29
                              15 57 21
                                                     4407.90
           110.00
                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                            NID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                           SGT 857.6 SGR 430.5 SGR 129.8 ST 284.8 SR 400.4 S5 169.3 RRT -.2035 RRT .2848 RTF -.6352 CRT -.8912 CRS -.8858 CST .6026 SGB 785.9 R23 -.0519 R13 .6484 LSA 499.5 MSA 140.9 SSA 26.6 SGI 667.2 SGZ 415.4 TMA 167.50 ELI 479.4 ELZ 107.9 ALF 124.35
       TOE .2524 TRA -.3011 TC3 .4707 BAU .1837
       RDE -.3746 RRA -.1560 RC3 -.0074 FAU .04410
       FOE -.2000 FRA -.4366 FC3-1.3064 BSP 1763
BOE .4517 BRA .3391 BC3 .4706 FSP -330
                                                                                                                                                                                                                  ARRIVAL DATE SEP 24 1967
                                                                                                                    FLIGHT TIME 74:00
LAUNCH DATE JUL 12 1967
      RL 152.08 LAL -.00 LOL 288.99 VL 26.703 GAL -9.13 AZL 92.96 MCA 86.77 SMA 128.57 ECC .24035 INC 2.9636 V1 29.294 MP 108.52 LAP -2.96 LOP 15.75 VP 37.598 GAP -10.67 AZP 90.17 TAL 212.16 TAP 298.93 RCA 97.67 APO 159.47 V2 34.920 RC 54.330 GL -14.90 GP -9.51 ZAL 142.01 ZAP 19.05 ETS 28.28 ZAE 149.04 ETE 1.17 ZAC 88.77 ETC 13.89 CLP -16.58
                                                                                                                    DISTANCE 197.138
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 28.101 VHL 5.301 DLA -.68 RAL 141.75 RAD 6568.1 VEL 12.226 PTH 2.20 VHP 7.139 DPA -5.30 RAP 176.63 ECC 1.4625
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ E LAT INJ 2 LONG 90.00 1 37 7 2274.50 -21.02 45.44 8.50 109.42 2 15 3 1676.5 -18.18 37.92
                                                                                                                                                   109.42 2 15 3
71.64 14 47 49
110.59 3 31 43
70.48 16 5 5
113.86 4 35 43
67.20 17 10 27
           90.00 1 37 7 2276.50

90.00 13 25 7 4962.47

100.00 2 58 8 2015.13

100.00 14 46 46 4699.07

110.00 4 5 40 1803.77

110.00 15 55 44 4483.20
                                                                                                                                                                                                                              19.24
                                                                                                                                                                                                        4362.5
                                                                                                        217.12
                                                                                                                                   8.89
                                                                                21.95
                                                                                                                                                                                                                              -19.16
                                                                                                                                                                                                                                                        18.26
                                                                                                                                                                                                      1415.1
                                                                                                         25.77
                                                                                                                                   6.06
                                                                               -22.17
                                                                                                                                                                                                       4000.1
                                                                                                                                                                                                                              20.22
                                                                                                                                    8.47
                                                                                                        197.33
                                                                               23.10
                                                                                                                                                                                                                             -21.79
                                                                                                                                                                                                       1203.8
                                                                                                           4.36
                                                                                                                                    6.69
                                                                               -25.23
                                                                                                                                                                                                       3463.2
                                                                                                                                                                                                                                22.87
                                                                                                        179.62
                                                                                                                                    7.15
                                                                            26.19
                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                            HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                             ST 280.5 SR 402.8 SS 175.6
CRT -.8933 CRS -.8528 CST .5505
                                                                                                               SGT 665.8 SGR 435.9 SG3 147.0
        TOE .2448 TRA -.2833 TC3 .4987 BAU .1876
                                                                                                             RRT -.2307 RRF .3070 RTF -.6415

#G8 795.8 R23 -.0649 R13 .6588

#G1 678.2 #G2 416.4 THA 166.06
       RDE -.3695 RRA -.1597 RC3 -.0253 FAU .04869
                                                                                                                                                                                               LSA 498.7 MSA 146.8 SSA 27.3
EL1 479.2 EL2 105.9 ALF 123.76
       FOE -.2034 FRA -.5209 FC3-1.5000 BSP 1804
BOE .4433 BRA .3252 BC3 .4993 FSP -361
                                                                                                                                                                                                                  ARRIVAL DATE SEP 26 1967
                                                                                                                     FLIGHT TIME 76.00
 LAUNCH DATE JUL 12 1967
                                                                                                                   DISTANCE 803.911
     HELIOCENTRIC CONIC
       TELIOLENINIC CONIC

RL 152.08 LAL -.00 LOL 288.99 VL 26.841 GAL -9.08 AZL 92.86 MCA 89.95 SMA 129.50 ECC .23364 INC 2.8618 V1 29.294

RP 108.48 LAP -2.86 LOP 18.94 VP 37.708 GAP -9.81 AZP 90.00 TAL 213.42 TAP 303.37 RCA 99.24 APO 159.75 V2 34.932

RC 96.016 GL -14.70 GP -10.20 ZAL 143.29 ZAP 21.96 ETS 25.71 ZAE 149.19 ETE 359.28 ZAC 88.75 ETC 13.93 CLP -19.57
     PLANETOCENTRIC CONIC
                                                                                                                                                               2.19 WHP 6.690 DPA -6.01 RAP 176.52 ECC 1.4474
       C3 27.188 VML 5.214 DLA -. 08 RAL 140.80 RAD 6566.1 VEL 12.189 PTH 2.19 VMP 9.990 UPA -. 01 RAT INJ 2 LAT INJ 2 LONG LNOH AZNTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNOH AZNTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC 109.16 2 6 12 1686.8 -18.44 38.56
                                                                  -. 08 RAL 140.60 RAD 6566.1 VEL 12.189 PTH
                                                                                                                                                     -21.25
                                                                                                                                    6.95
                                                                                                          46.11
                                                    2204.02
              90.00
                                  1 28 5
                                                                                                                                                                                                                                 18.57
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                                                                                                                                    7.00
                                                                                                         215.36
              90.00
                               13 24 57 4935.70
                                                                                 21.34
                                                                                                                                                                                                                                -19.42
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                                                                                                          26.30
                                                                                                                                                                                                        1424.6
                                                                                                                                    6.51
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4073.2
19.2
-22.02
                               Z 49 23 2024.55
                                                                                -22.39
            100.00
                                                                                                                                                                                                                                                       188.09
                                                                                                         195.64
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                                                     4673.19
                                                                                 22.50
                               14 46 20
            100.00
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                                                                                                                                                                                                      1211.2
                                                                                                            8.84
                                                                                                                                     5.17
                               3 57 53 1811.20
15 54 40 4459.32
                                                                                -25.44
            110.00
                                                                                                                                                                                                                                 22.15
                                                                                                                                                                                                        3459.3
                                                                                                         178.06
                                                                                                                                    5.22
            110.00
                                                                                   25.55
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                              NIO-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                             SGT 670.1 SGR 442.4 SG3 166.3 ST 274.7 SR 404.2 SS 176.2 RRT -.2590 RRF .3525 RTF -.6437 CRT -.8932 CRS -.8154 CST .4913 SG8 803.0 R23 -.0610 R13 .6668 LSA 496.1 MSA 154.1 SSA 27.6 SG1 686.0 SG2 417.3 TMA 164.35 EL1 477.5 EL2 104.6 ALF 123.05
         TOE .2363 TRA -.2682 TC3 .5206 BAU
                                                                                         .1900
         MDE -.3645 RRA -.1690 RC5 -.0460 FAU .05366
        FOE -. 2057 FRA -. 6151 FC3-1.7150 BBP 1836
BOE .4344 BRA .3149 BC3 .5227 FSP -436
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ARRIVAL DATE SEP 28 1967
                                                                     FLIGHT TIME 78.00
LAUNCH DATE JUL 12 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 210.665
    RL 152.08 LAL -.00 LOL 288.99 VL 26.962 GAL -9.04 AZL 92.76 MCA 93.14 SMA 130.33 ECC .22780 INC 2.7600 VL 29.294
RP 108.45 LAP -2.76 LOP 22.13 VP 37.806 GAP -8.98 AZP 89.85 TAL 214.59 TAP 307.74 RCA 100.64 APO 160.02 V2 34.945
RC 57.772 GL -14.45 GP -10.96 ZAL 144.46 ZAP 25.10 ETS 23.65 ZAE 149.59 ETE 357.19 ZAC 88.91 ETC 13.95 CLP -22.73
   PLANETOCENTRIC CONIC
    C3 26.406 VHL 5.139 DLA
                                        .53 RAL 139.57 RAD 6568.1 VEL 12.157 PTH 2.18 VHP 6.272 DPA -6.71 RAP 176.24 ECC 1.4346
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG
                  1 19 29 2298,40
13 25 22 4909,63
2 41 4 2035,23
14 46 27 4648,03
                                                                                                                                 -18.74
                                                                        5.60
                                                                                                                   1698.4
                                                                                       108.87 1 57 48
                                                -21.51
                                                              46.86
                                                                                                                                                   39.29
                                                                              5.30
                                                                                           70.31
                                                                                                     14 47 11
                                                                                                                      4309.6
                                                                                                                                     17.90
        90.00
                                                20.77
                                                             213.69
                                                                                                                                                  206.20
                                                                                           110.06 3 15 0
69.13 16 3 55
113.39 4 20 13
65.80 17 8 4
                                               -22.64
                                                               27,06
                                                                              5.17
                                                                                          110.06
                                                                                                                     1435.2
                                                                                                                                    -19.70
                                                                                                                                                   19.51
       100.00
                                                21.90
                                                             194.01
                                                                              4.86
                                                                                                                      4048.0
                                                                                                                                     18.86
                                                                                                                                                  186.53
                   3 49 53 1819.84
                                               -25.67
                                                                9.40
                                                                              3.84
                                                                                          113.39
                                                                                                                      1219.8
                                                                                                                                    -22.28
                                                                                                                                                   1.89
                  15 54 B
                                 4436.18
                                                24.91
                                                              176.57
                                                                              3.49
                                                                                                                      3636.2
                                                                                                                                     21.43
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 267.8 SR 404.9 SS 183.3
CRT -.8906 CRS -.7742 CST .4249
LSA 492.0 MSA 162.6 SSA 28.1
                                                                 SGT 670.1 SGR 450.5 SG3 188.1
    TOE .2271 TRA -.2563 TC3 .5358 BAU
                                                    .1909
    RDE -.3594 RRA -.1720 RC3 -.0724 FAU .05968
                                                                 RRT -. 2903 RRF .4033 RTF -. 6415
    FOE -.2060 FRA -.7202 FC3-1.9567 88P 1856
80E .4252 BRA .3067 BC3 .5407 FSP -504
                                                                 SG8 807.4 R23 -.1009 R13 .6729
                                                                 SG1 690.7 SG2 418.2 THA 162.27
                                                                                                                  EL1 474.2 EL2 104.0 ALF 122.24
                                                                     FLIGHT TIME 80.00
LAUNCH DATE JUL 12 1967
                                                                                                                             ARRIVAL DATE SEP 30 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 217.399
    RL 152.08 LAL -.00 LOL 288.99 VL 27.089 GAL -9.01 AZL 92.66 MCA 96.33 SMA 151.07 ECC .22274 INC 2.6575 V1 29.294
RP 108.41 LAP -2.64 LOP 25.32 VP 37.893 GAP -8.20 AZP 89.71 TAL 215.67 TAP 312.00 RCA 101.67 APO 160.26 V2 34.957
        59,590 GL -14.15 GP --11.80 ZAL 145.54 ZAP 20.44 ETS 21.93 ZAE 150.25 ETE 354.81 ZAC 89.26 ETC 13.94 CLP -26.06
    #C
   PLANETOCENTRIC CONIC
   C3 25.728 VHL 5.072 DLA 1.14 RAL 138.67 RAD 6568.0 VEL 12.129 PTH 2.17 VHP 5.884 DPA -7.42 RAP 175.76 ECC 1.4234 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         4.43
                              2310.97
4864.18
                                                -21.79
                                                                                                                                   -19.05
       90.00
                   1 11 21
                                                               47.66
                                                                                         108.55
                                                                                                      1 49 52
                                                                                                                     1711.0
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                  13 26 19
                                                                                                     14 47 43
                                               20.18
                                                             212.06
       90.00
                                                                              3.80
                                                                                            69.70
                                                                                                                      4264.2
                                                                                                                                    17.24
                                                                                                                                                  204.62
                   2 33 13 2046.88
14 47 7 4623.50
                                                                                                    3 7 20
16 4 11
      100.00
                                                               27.84
                                                                              4.01
                                                                                          109.74
                                                                                                                      1445.9
                                                                                                                                                    20.24
                                               -22.91
                                                                                                                                    -20.01
                                                                                            66.51
                                                                                                                                                  185.02
      100.00
                  14 47 7
                                4623.50
                                                                              3.35
                                                                                                                      4023.5
                                                21.29
                                                              192.44
                                                                                                                                    18.19
                                                                                          113.10 4 13 10
65.16 17 7 42
                   3 42 41 1829.46
      110.00
                                               -25.93
                                                               10.03
                                                                              2.70
                                                                                                                      1229.5
                                                                                                                                   -22.58
                                                                                                                                                    2.48
      110.00
                   15 54 9
                                4413.69
                                                                                                                      3613.7
                                                                                                                                     20.72
                                                 24.28
                                                              175.13
                                                                              1.96
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SCT 666.6 SCR 461.3 SC3 212.9

MRT -.3239 MRF .4600 MTF -.6356

SCB 810.6 M23 -.1234 M13 .6790
                                                                                                                 ST 261.3 SR 404.8 SS 189.8

CRT -.8862 CRS -.7324 CST .3566

LSA 487.4 MSA 172.5 SSA 28.2
    TDE .2186 TRA -.2469 TC3 .5449 BAU
                                                    .1907
    RDE -.3542 RRA -.1809 RC3 -.1029 FAU .06628
    FOE -. 2059 FRA -. 8382 FC3-2.2303 BSP 1894
    BOE .4162 BRA .3061 BC3 .5545 FSP
                                                                 SG1 693.7 SG2 419.4 THA 159.67
                                                                                                                  EL1 470.4 EL2 104.2 ALF 121.49
                                                    -563
                                                                     FLIGHT TIME 82.00
                                                                                                                            ARRIVAL DATE OCT 2 1967
LAUNCH DATE JUL 12 1967
                                                                    DISTANCE 224.110
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.161 GAL -8.98 AZL 92.55 MCA 99.52 3MA 131.72 ECC .21837 INC 2.5536 V1 29.294
RP 108.37 LAP -2.52 LOP 28.52 VP 37.971 GAP -7.44 AZP 89.58 TAL 216.64 TAP 316.17 RCA 102.96 APO 160.48 V2 34.970
RC 61.464 GL -13.79 GP -12.73 ZAL 146.53 ZAP 31.98 ETS 20.46 ZAE 151.16 ETE 352.05 ZAC 89.81 ETC 13.89 CLP -29.59
   PLANETOCENTRIC CONIC
    C3 25.131 VHL 5.013 DLA 1.76 RAL 137.90 RAD 6568.0 VEL 12.104 PTH 2.17 VHP 5.526 DPA -8.13 RAP 175.07 ECC 1.4136
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1724.3
       90.00
                    i 3 41 2324.31
i3 27 48 4859.25
                                               -22.07
                                                             48.55
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       90.00
                  13 27 48
                                                19.58
                                                             210.48
                                                                             2.49
                                                                                                                      4259.3
                                                                                                                                    16.57
      100.00
                   2 25 50 2059.30
                                               -23.19
                                                              28.65
                                                                             3.02
                                                                                          109.41
                                                                                                    3 0 10
                                                                                                                     1459.3
                                                                                                                                    -20.33
                                                                                                                                                  21.02
                                                                                           67.93 16 4 59
      100.00
                  14 48 19 4599.50
                                               20.69
                                                             190.91
                                                                             2.02
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                                                                                                                                    17.51
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                                                                                          112.78 4 6 38
64.56 17 7 53
                   3 35 56 1839.81
15 54 41 4391.75
                                                                                                                                   -22.89
      110.00
                                               -26.20
                                                              10.71
                                                                             1.74
                                                                                                                     1239.8
                                                                                                                                                   3.12
      110.00
                  15 54 41
                                                23.64
                                                             173.74
                                                                               . 62
                                                                                                                     3791.8
                                                                                                                                    20.02
                                                                                                                                                  166.47
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 655.2 SGR 475.0 SG3 239.9
RRT -.3493 RRF .5190 RTF -.6189
SGB 809.3 R23 -.1535 R13 .6811
                                                                                                                  ST 252.2 SR 403.5 SS 195.6

CRT -.8753 CRS -.6855 CST .2708

LSA 479.7 MSA 183.7 SSA 28.3
    TOE .2077 TRA -.2438 TC3 .5420 BAU .1879
    RDE -.3483 RRA' -.1916 RC3 -.1382 FAU .07348
    FDE -.2005 FRA -.9646 FC3-2.5314 BSP 1877
                                                                                                                  EL1 463.9 EL2 106.1 ALF 120.44
    BDE .4055 BRA .3101 BC3 .5593 FSP -666
                                                                 SG1 690.3 SG2 422.5 THA 156.56
LAUNCH DATE JUL 12 1967
                                                                     FLIGHT TIME 84.00
                                                                                                                            ARRIVAL DATE OCT 4 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 230.796
   RL 152.08 LAL -.00 LOL 288.99 VL 27.240 GAL -8.95 AZL 92.45 MCA 102.72 SMA 132.28 ECC .21460 INC 2.4477 V1 29.294
RP 108.33 LAP -2.39 LOP 31.72 VP 38.040 GAP -6.72 AZP 89.46 TAL 217.50 TAP 320.22 RCA 103.90 APO 160.67 V2 34.983
RC 63.386 GL -13.40 GP -13.74 ZAL 147.43 ZAP 35.76 ETS 19.14 ZAE 152.29 ETE 348.78 ZAC 90.59 ETC 13.79 CLP -33.34
  PLANETOCENTRIC CONIC
   C3 24.596 VHL 4.959 DLA
                                      2.38 RAL 137.25 RAD 6568.0 VEL 12.082 PTH 2.16 VHP 5.199 DPA
                                                                                                                         -8.83 RAP 174.15 ECC 1.4048
   LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 56 29 2336.27 -22.37 49.47 2.61 107.63 1 35 27 1738.3 -19.72 41.80
                                                             206.93
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       90.00
                  13 29 50
                               4634.70
                                                18.98
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                                                                                           68.58
                                                                                                     14 50 24
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                                                                                                                      1472.3
      100.00
                   2 18 56
                              2072.32
                                               -23.49
                                                              29.51
                                                                             2.20
                                                                                          109.04
                                                                                                     2 53 29
                                                                                                                                    -20.67
                                                                                                                                                   21.84
                                                                             .87
                                                                                           67.38 16 6 20
112.44 4 0 34
      100.00
                  14 50 4
                               4575.88
                                               20.06
                                                             189.42
                                                                                                                      3975.9
                                                                                                                                    16.84
                                                                                                                                                 182.13
                  3 29 44 1850.76
15 55 46 4370.21
      110.00
                                               -26.49
                                                              11.43
                                                                               .95
                                                                                          112.44
                                                                                                                      1250.8
                                                                                                                                    -23.21
                                                                                                                                                    3.81
                                                                                           63.99 17 8 36
      110.00
                                                23.00
                                                             172.39
                                                                          359.45
                                                                                                                     3770.2
                                                                                                                                    19.32
                                                                                                                                                  165.19
                                                                                                               ST 242.9 SR 401.2 SS 201.9
CRT -.8583 CRS -.6369 CST .1739
LSA 470.5 MSA 196.2 SSA 28.2
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE .1964 TRA -.2457 TC3 .5283 BAU .1834
                                                                 SGT 637.8 SGR 493.3 SG3 269.7
   ROE -.3418 RRA -.2042 RC3 -.1793 FAU .08139
                                                                RRT -.3676 RRF .5802 RTF -.5914
SGB 806.3 R23 -.1884 R13 .6829
   FDE -.1915 FRA-1.1009 FC3-2.8647 89F 1852
BDE .3942 BRA .3195 BC3 .5579 FSP -760
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SG1 663.1 SG2 428.3 THA 152.63

EL1 456.0 EL2 109.7 ALF 119.32

ARRIVAL DATE OCT 6 1967

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FLIGHT TIME 86.00
LAUNCH DATE JUL 12 1967
                                                                                                        DISTANCE 237.457
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.307 GAL -8.91 AZL 92.34 MCA 105.91 SMA 132.77 ECC .21135 INC 2.3390 V1 29.294 RP 108.29 LAP -2.25 LOP 34.91 VP 38.100 GAP -6.03 AZP 89.36 TAL 218.24 TAP 324.15 RCA 104.71 APO 160.83 V2 34.996 RC 65.337 GL -12.96 GP -14.85 ZAL 148.23 ZAP 39.77 ETS 17.91 ZAE 153.62 ETE 344.83 ZAC 91.60 ETC 13.63 CLP -37.33
     PLANETOCENTRIC CONIC

C3 24.108 VHL 4.910 OLA 3.01 RAL 136.73 RAO 6568.0 VEL 12.062 PTH 2.16 VHP 4.901 OPA -9.52 RAP 172.98 ECC 1.3967

LHCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 0 49 45 2352.76 -22.66 50.43 1.94 107.44 1 28 58 1752.8 -20.06 42.72

90.00 13 32 24 4810.35 18.37 207.40 .36 68.06 14 52 34 4210.4 15.23 200.13

100.00 2 12 30 2083.87 -23.78 30.41 1.54 108.66 2 47 15 1485.9 -21.01 22.70

100.00 14 52 20 4552.48 19.46 187.96 359.88 66.85 16 8 12 3952.5 16.16 180.72

110.00 3 23 57 1862.20 -26.79 12.19 .31 112.08 3 54 59 1262.2 -23.55 4.52

110.00 15 57 22 4348.91 22.36 171.07 358.44 63.45 17 9 51 3748.9 18.62 163.94
     PLANETOCENTRIC CONIC
                                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  RID-COURSE EXECUTION ACCURACY
SGT 615.7 SGR 517.4 SG3 302.4
RRT -.3749 RRF .6421 RTF -.5506
SGB 804.2 R23 -.2241 R13 .6884
SG1 674.7 SG2 437.7 THA 147.51
                                                                                                                                                                            ST 234.8 SR 398.0 SS 209.3
CRT -.8348 CRS -.5905 CST .0708
LSA 460.9 MSA 210.0 SSA 28.1
      TOE .1859 TRA -.2526 TC3 .5039 BAU
                                                                               .1781
      RDE -.3346 RRA -.2191 RC3 -.2270 FAU .09003
      FOE -.1798 FRA-1.2469 FC3-3.2332 88P 1841
ROF 3828 884 .3344 8C3 .3527 FSP -867
                                                                                                                                                                              EL1 447.6 EL2 115.0 ALF 118.25
      BOE .3828 BRA .3344 BC3 .5527 FSP
                                                                                                                                                                                              ARRIVAL DATE OCT 8 1967
                                                                                                         FLIGHT TIME 88.00
LAUNCH DATE JUL 12 1967
                                                                                                         DISTANCE 244.091
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.363 GAL -8.88 AZL 92.23 MC. 109.11 SMA 133.18 ECC .20856 INC 2.2267 VI 29.294

RP 108.25 LAP -2.10 LOP 38.11 VP 38.152 GAP -5.37 AZP 89.27 TAL 218.85 TAP 327.97 RCA 105.40 APO 160.95 V2 35.009

RC 67.365 GL -12.47 GP -16.06 ZAL 148.93 ZAP 44.01 ETS 16.72 ZAE 155.09 ETE 339.98 ZAC 92.86 ETC 13.37 CLP -41.55
    PLANETOCENTRIC CONIC
                                                           3.64 RAL 136.33 RAD 6566.0 VEL 12.043 PTH 2.15 VHP 4.635 DPA -10.21 RAP 171.56 ECC 1.3892
TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      C5 23.651 WHL 4.863 DLA
     C3 25,651 WHL 4,863 DLA 3.04
LNDH AZMTH LNCH TIME L-I TIME
90.00 0 43 26 2367.74
90.00 13 35 31 4786.02
100.00 2 6 29 2099.88
100.00 14 55 9 4529.11
110.00 3 18 36 1874.08
                                                                                                                                     107.04 1 22 54
67.56 14 55 17
108.26 2 41 29
68.34 16 10 38
111.69 3 49 52
62.92 17 11 37
                                                                                                                                                                                   1767.7
                                                                                                                                                                                                        -20.42
                                                                                                                     1.41
                                                                         -22.97
                                                                                              51.42
                                                                                                                                                                                     4186.0
                                                                                                                                                                                                           14.55
                                                                                                                   359.53
                                                                          17.74
                                                                                              205.89
                                                                                                                                                                                                                                 23.60
                                                                                                                      1.02
                                                                                                                                                                                     1499.9
                                                                                                                                                                                                          -21.37
                                                                                               31.34
                                                                        -24.09
                                                                                                                                                                                                                               179.33
                                                                                              186.52
                                                                                                                                                                                    3929.1
                                                                                                                                                                                                          15.47
                                                                          18.62
                                                                                                                   350.05
                                                                                                                                                                                   1274.1
                                                                                                                                                                                                         -23.90
                                                                                                                                                                                                                                 5.27
                                                                        -27.09
                                                                                               12.98
                                                                                                                   359.61
                                                                                              169.77
                                                                                                                                                                                  3727.7
                                                                                                                                                                                                         17.91
                           15 59 30
                                                 4327.66
                                                                           21.71
                                                                                                                   357.59
                                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                   SCT 567.1 SCR 547.2 SC3 336.6
RRT -.3544 RRF .7002 RTF -.4839
SCB 802.6 R23 -.2554 R13 .6990
      TOE .1736 TRA -.2677 TC3 .4631 BAU .1713
RDE -.3260 RRA -.2355 RC3 -.2809 FAU .09904
                                                                                                                                                                             ST 226.0 SR 393.1 SS 215.6
                                                                                                                                                                            CRT -. 7973 CRS -. 5379 CST -. 0582
                                                                                                                                                                            LSA 448.1 MSA 224.9 SSA 28.0
      FOE -.1587 FRA-1.3939 FC3-3.6854 BSP 1796
                                                                                                    SG1 661.9 SG2 453.9 THA 140.62
                                                                                                                                                                             EL1 436.5 EL2 122.9 ALF 116.94
      BOE .3694 BRA .3565 BC3 .5417 FSP -977
                                                                                                                                                                                              ARRIVAL DATE OCT 10 1967
                                                                                                         FLIGHT TIME 90.00
LAUNCH DATE JUL 12 1967
                                                                                                         DISTANCE 250.697
      RL 152.08 LAL -.00 LOL 288.99 VL 27.409 GAL -8.84 AZL 92.11 MCA 112.31 SMA 133.51 ECC .20615 INC 2.1099 V1 29.294
RP 108.20 LAP -1.95 LOP 41.31 VP 38.197 GAP -4.74 AZP 89.20 TAL 219.34 TAP 331.66 RCA 105.99 APO 161.04 V2 35.023
RC 69.409 GL -11.94 GP -17.35 ZAL 149.55 ZAP 48.49 ETS 15.52 ZAE 156.62 ETE 333.98 ZAC 94.35 ETC 13.02 CLP -46.03
     HELIOCENTRIC CONTC
     PLANETOCENTRIC CONIC
                                                          4.28 RAL 136.05 RAD 6567.9 VEL 12.025 PTH 2.15 VHP 4.400 DPA -10.89 RAP 169.89 ECC 1.3821
      C3 23.217 VHL 4.818 DLA 4.28 RAL 136.05 RAD 6567.9 VEL 12.025 PTH 2.15 VMP 4.400 DPA -10.89 RAP 169.89 ECC 1.3821
LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT. ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 37 31 2363.22 -23.27 52.46 1.02 106.60 1 17 14 1783.2 -20.78 44.67
90.00 13 39 12 4761.48 17.10 204.38 358.84 67.08 14 58 34 4161.5 13.85 197.21
100.00 2 0 52 2114.38 -24:39 32.31 .64 107.84 2 36 6 1514.4 -21.72 24.52
100.00 14 58 32 4505.55 18.17 185.07 358.35 65.85 16 13 38 3905.6 14.76 177.94
110.00 3 13 43 1886.39 -27.39 13.81 359.46 111.29 3 45 9 1286.4 -24.25 6.05
110.00 18 2 11 4306.31 21.04 168.47 356.87 62.42 17 13 57 3706.3 17.18 161.47
                                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 557.0 SGR 584.2 SG3 372.2
RRT -.2984 RRF .7537 RTF -.3841
SG8 807.2 R23 -.2577 R13 .7277
                                                                                                                                                                             ST 219.1 SR 386.7 SS 222.1
       TDE .1620 TRA -.2898 TC3 .4068 BAU .1650
                                                                                                                                                                             CRT -. 7448 CRS -. 4841 CST -. 2024
       FOE -.3160 RRA -.2536 RC3 -.3420 FAU .10835
FDE -.1303 FRA-1.5405 FC3-4.0405 BBP 1765
BOE .3551 BRA .3651 BC3 .5315 FSP -1091
                                                                                                                                                                             LSA 433.6 MSA 241.0 SSA 27.8
                                                                                                                                                                            EL1 424.0 EL2 133.3 ALF 115.59
                                                                                                  SG1 651.2 SG2 476.9 THA 130.45
                                                                                                                                                                                               ARRIVAL DATE OCT 12 1967
                                                                                                          FLIGHT TIME 92.00
 LAUNCH DATE JUL 12 1967
                                                                                                         DISTANCE 257.274
      RL 152.08 LAL -.00 LOL 288.99 VL 27.445 GAL -8.79 AZL 91.99 MCA 115.52 SMA 133.78 ECC .20409 INC 1.9875 V1 29.294

RP 108.16 LAP -1.79 LOP 44.32 VP 38.235 GAP -4.13 AZP 89.14 TAL 219.71 TAP 335.23 RCA 106.48 APO 161.08 V2 35.036

RC 71.485 GL -11.36 GP -18.74 ZAL 190.08 ZAP 53.19 ET8 14.25 ZAE 158.08 ETE 326.53 ZAC 96.07 ETC 12.55 CLP -50.76
     PLANETOCENTRIC CONIC
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 31 55 2399.31 -23.58 53.53 .77 106.15 1 11 55 1799.3 -21.14 45.71 90.00 13 43 30 4736.46 16.43 202.85 358.28 66.61 15 2 27 4136.5 13 13
                                                                                                                                        106.15 1 11 22
66.61 15 2 27
107.39 2 31 5
                           1 55 35 2129.45
15 2 31 4461.55
3 9 9 1899.21
16 5 27 4284.56
                                                                                                                                                                                                                                 25.49
                                                                                                                                                                                     1529.5
                                                                                                33.32
                                                                                                                      .40
                                                                          -24.70
                                                                                                                                          65.37 16 17 13
110.67 3 40 48
61.92 17 16 51
           100.00
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                                                                                              183.00
           100.00
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                                                                                                                                                                                      1299.2
                                                                                                                                                                                                          -24.62
                                                                          -27.71
                                                                                                 14.67
                                                                                                                    359.23
           110.00
                                                                                                                                                                                     3684.6
                                                                                                                                                                                                            16.44
                                                                                                                                                                                                                                160.22
                                                                                               167.16
                                                                                                                    356.29
                                                                          20.35
           110.00
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                  HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 531.6 SGR 629.3 SG3 408.7 ST 215.8 SR 379.1 SS 229.2 RRT -.1966 RRF .8014 RTF -.2425 CRT -.6776 CRS -.4343 CST -.3486 SG8 823.8 R23 -.1851 R13 .7845 LSA 418.6 MSA 258.5 SSA 27.7 SG1 652.8 SG2 502.4 TMA 114.63 EL1 410.9 EL2 146.4 ALF 114.38
         TOE .1519 TRA -.3184 TC3 .3349 BAU .1615
       TUE .1319 THA -.3184 TL3 .3349 BAU .1615

RDE -.3048 RRA -.2733 RC3 -.4108 FAU .11779

FDE -.0949 FRA-1.4630 FC3-4.4736 BBP 1792

BOE .3406 BRA .4196 BC3 .5300 FSP -1216
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ARRIVAL DATE OCT 14 1967

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FLIGHT TIME 94.00
LAUNCH DATE JUL 12 1967
                                                                               DISTANCE 263.823
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.473 GAL -8.74 AZL 91.86 MCA 118.72 SMA 133.98 ECC .20231 INC 1.8582 V1 29.294 RP 108.12 LAP -1.63 LOP 47.72 VP 38.267 GAP -3.54 AZP 89.11 TAL 219.96 TAP 338.68 RCA 106.88 APO 161.09 V2 35.049 RC 73.590 GL -10.73 GP -20.19 ZAL 150.53 ZAP 58.09 ETS 12.90 ZAE 159.30 ETE 317.44 ZAC 98.01 ETC 11.93 CLP -55.72
   PLANETOCENTRIC CONIC
                                            5.61 RAL 135.84 RAD 6567.9 VEL 11.990 PTH 2.14 VHP 4.024 DPA -12.21 RAP 165.81 ECC 1.3683
    C3 22.379 VHL 4.731 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1 6 52
15 6 58
                                                                                                                                       1816.2
                                                                                                                                                        -21.52
                                                                        54.67
                                                                                           . 64
                                                                                                        105.66
                      0 26 36 2416.16
13 48 27 4710.67
                                                       -23.89
        90.00
                                                                                                                                                                          194.21
                                                                                                                                         4110.7
                                                                                                                                                          12.37
                                                                                        357.85
                                                                                                          66.14
                     13 48 27
                                                        15.73
                                                                       201.28
         90.00
                                                                                                                                                                           26.52
                                                                                                         106.92
                                                                                                                      2 26 21
                                                                                                                                         1545.2
                                                                                                                                                         -22.46
                                                                                           .28
                                                                        34.30
       100.00
                      1 50 36 2145.23
                                                       -25.02
                                                                                                          64.90 16 21 26
                                                                                                                                                                          175.09
                                                                                       357.34
                                                                                                                                         3856.8
                                                                                                                                                         13.27
       100.00
                     15 7 9
                                     4456.82
                                                        16.79
                                                                       182.11
                                                                                                                                                                            7.73
                                                                                                         110.42
                                                                                                                       3 36 47
                                                                                                                                         1312.6
                                                                                                                                                         -24.99
                      3 4 55 1912.63
                                                       -28.03
                                                                        15.59
                                                                                       359.14
       110.00
                                                                                                          110.42 3 36 47
61.44 17 20 21
                                                                                                                                                                          154.95
                                                                                                                                       3662.2
                                                                                                                                                         15.66
                                                                                       355.63
                     16 9 19
                                                        19.63
                                                                       165.83
       110.00
                                      4262.19
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 215.4 SR 368.8 SS 235.3
CRT -.5884 CRS -.3754 CST -.5104
                                                                           SGT 519.3 SGR 680.4 SG3 443.4
RRT -. 0324 RRF .8411 RTF -. 0454
    TDE .1418 TRA -.3559 TC3 .2424 BAU .1624
    RDE - . 2912 RRA - . 2931 RC3 - . 4858 FAU . 12666
                                                                           SCB 855.9 R23 -.0196 R13 .8410
                                                                                                                                    LSA 400.2 MSA 277.4 SSA 27.6
    FDE -.0496 FRA-1.8068 FC3-4.9001 BSP 1859
BDE .3239 BRA .4611 BC3 .5429 FSP -1331
                                                                            SG1 680.9 SG2 518.6 THA 93.38
                                                                                                                                     EL1 395.0 EL2 162.7 ALF 113.11
                                                                                                                                                 ARRIVAL DATE OCT 16 1967
                                                                                FLIGHT TIME 96.00
LAUNCH DATE JUL 12 1967
                                                                                DISTANCE 270.343
    RL 152.08 LAL -.00 LOL 288.99 VL 27.493 GAL -8.69 AZL 91.72 MCA 121.93 SMA 134.13 ECC .20078 INC 1.7207 V1 29.294
RP 108.08 LAP -1.46 LOP 50.93 VP 38.293 GAP -2.98 AZP 89.09 TAL 220.09 TAP 342.02 RCA 107.20 APO 161.06 V2 35.062
RC 75.721 GL -10.03 GP -21.71 ZAL 150.89 ZAP 63.13 ETS 11.41 ZAE 160.08 ETE 306.74 ZAC 100.11 ETC 11.17 CLP -60.89
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                             6.32 RAL 135.91 RAD 6567.9 VEL 11.973 PTH 2.13 VHP 3.885 DPA -12.85 RAP 163.47 ECC 1.3615
    C3 21.963 VHL 4.686 DLA 6.32 RAL 135.91 RAD 6567.9 VEL 11.973 PTH 2.13 VHP 3.885 DPA -12.85 RAP 163.47 ECC 1.3615
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 D 21 27 2434.01 -24.22 55.88 .63 105.14 1 2 1 1834.0 -21.90 47.97
90.00 13 54 9 4683.73 14.96 199.66 357.54 65.68 15 12 12 4083.7 11.57 192.64
100.00 1 45 48 2161.96 -25.55 35.52 .28 106.40 2 21 50 1562.0 -22.85 27.61
100.00 15 12 29 4431.01 16.04 180.56 357.03 64.43 16 26 20 3631.0 12.47 173.59
110.00 5 0 55 1926.86 -28.37 16.56 359.17 109.93 3 33 2 1326.9 -25.39 8.65
110.00 16 13 51 4238.87 18.86 164.45 355.50 60.95 17 24 30 3638.9 14.85 157.64
    C3 21.963 VHL 4.686 DLA
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 532.7 SGR 738.7 SG3 476.1
RRT .1727 RRF .8741 RTF .1838
SGB 910.7 R23 .1121 R13 .8675
SG1 749.9 SG2 516.9 TMA 76.29
                                                                                                                                    ST 220.9 SR 356.9 S5 242.1
CRT -.4885 CRS -.3213 CST -.6530
    TOE .1346 TRA -.3994 TC3 .1320 BAU .1712
     RDE - .2759 RRA - .3133 RC3 - .5660 FAU .13488
                                                                                                                                     LSA 381.2 MSA 297.9 SSA 27.5
    FOE .0031 FRA-1.9125 FC3-5.3168 BSP 2029
                                                                                                                                     EL1 378.3 EL2 181.9 ALF 112.22
     BOE .3069 BRA .5076 BC3 .5831 FSP -1447
                                                                                                                                                 ARRIVAL DATE OCT 18 1967
                                                                                FI IGHT TIME 98.00
LAUNCH DATE JUL 12 1967
                                                                                DISTANCE 276.834
    RL 152.08 LAL -.00 LOL 288.99 VL 27.505 GAL -8.62 A7L 91.57 MCA 125.14 SMA 134.22 ECC .19946 INC 1.5731 V1 29.294 RP 108.04 LAP -1.29 LOP 54.14 VP 38,314 GAP -2.44 A7P 89.09 TAL 220.11 TAP 345.25 RCA 107.45 APO 160.99 V2 35.075 RC 77.874 GL -9.26 GP -23.28 TAL 151.16 TAP 68.28 ETS 9.78 ZAE 160.20 ETE 294.89 TAC 102.34 ETC 10.26 CLP -66.24
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                            7.07 RAL 136.09 RAD 6567.9 VEL 11.955 PTH 2.13 VHP 3.777 OPA -13.49 RAP 160.96 ECC 1.3545
     C3 21.543 VHL 4.641 DLA
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        104.57 0 57 18
65.23 15 18 15
105.84 2 17 28
63.96 16 32 1
109.40 3 29 29
60.46 17 29 22
                                                                                                                                                       -22.31 49.23
                                                                                                                                       1853.2
                     0 16 25 2453.19
14 0 40 4655.22
                                                                                            .75
                                                        -24.55
                                                                         57.18
         90.00
                                                                                                                                                           10.71
                                                                                                                                                                           190,98
                                                                                                                                          4055.2
                                                         14.17
                                                                        197.95
                                                                                        357.35
         90.00
                                                                                                                                          1579.9
                                                                                                                                                                            28.78
                     1 41 8 2179.92
15 18 37 4403.72
2 57 7 1942.15
16 19 8 4214.26
                                                                         36.75
                                                                                          .41
                                                        -25.69
        100.00
                                                                                                                                          3803.7
                                                                                                                                                          11.61
                                                                                                                                                                           172.02
                                                        15.23
                                                                        178.94
                                                                                        356.83
        100.00
                                                                                                                                          1342.2
                                                                                                                                                                             9.64
                                                         -28.72
                                                                          17.61
                                                                                        359.33
        110.00
                                                                        163.01
                                                                                                                                                           13.98
                                                                                                                                          3614.3
                                                                                        355.28
                                                         18.04
        110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 231.7 SR 341.4 SS 248.4

CRT - .3777 CRS - .2561 CST - .7837

LSA 358.9 MSA 320.0 SSA 27.6

EL1 358.4 EL2 204.3 ALF 111.78
                                                                           SGT 582.4 SGR 800.0 SG3 503.5
RRT .3871 RRF .9000 RTF .4107
SGB 989.6 R23 .1756 R13 .8853
SGI 851.2 SG2 504.8 THA 64.91
     TOE .1292 TRA -.4503 TC3 .0001 BAU .1884
     ROE -.2573 RRA -.3317 RC3 -.6543 FAU .14153
FOE .0710 FRA-1.9814 FC3-5.6876 BSP 2283
BOE .2879 BRA .5593 BC3 .6543 FSP -1538
                                                                                                                                                  ARRIVAL DATE OCT 20 1967
                                                                                 FLIGHT TIME 100.00
LAUNCH DATE JUL 12 1967
                                                                                DISTANCE 283.297
    HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.510 GAL -8.55 AZL 91.41 MCA 128.36 SMA 134.26 ECC .19833 INC 1.4133 VI 29.294
RP 108.00 LAP -1.11 LOP 57.35 VP 38.330 GAP -1.92 AZP 89.12 TAL 220.01 TAP 348.37 RCA 107.64 APO 160.89 V2 35.088
RC 80.046 GL -8.40 GP -24.89 ZAL 151.36 ZAP 73.45 ETS 7.97 ZAE 159.54 ETE 282.85 ZAC 104.64 ETC 9.19 CLP -71.70
    PLANETOCENTRIC CONIC
                                             7.88 RAL 136.39 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 3.703 DPA -14.14 RAP 158.36 ECC 1.3475
     C3 21.116 VHL 4.595 OLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 CONG
                                                                                                                                                          -22.74
                                                                                                        103.93 0 52 34
64.76 15 25 13
                                                                                                                                          1874.2
                      0 11 20 2474.19
14 8 8 4624.60
1 36 29 2199.58
                                                         -24.90
                                                                           58.62
                                                                                           1.00
         90.00
                                                                                                                                           4024.6
                                                          13.29
                                                                        196.13
                                                                                         357.28
          90.00
                                                                                                                    2 13 8
16 38 35
                                                                                                                                           1599.6
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                                                                                                          105.22
                                                         -26.04
                                                                          36.10
        100.00
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                                       4374.44
                                                          14.35
                                                                        177.21
                      15 25 41
        100.00
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17 35 3
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                                                         -29.09
                                                                          18.77
                                                                                         359.63
                                                                                                          108.80
                        2 53 23 1958.87
        110.00
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                      16 25 15
                                      4187790
                                                         17.15
                                                                         161.49
                                                                                         355.18
                                                                                                           59.97
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            SGT 671.2 SGR 863.7 SG3 524.7
RRT .5639 RRF .9205 RTF .5910
SGB 1093.9 R23 .2000 R13 .9027
SG1 978.3 SG2 489.4 THA 57.16
                                                                                                                                      ST 248.9 SR 322.7 SS 255.7
CRT -.2702 CRS -.1894 CST -.8814
      TDE .1279 TRA -.5061 TC3 -.1510 BAU .2144
     ROE -.2358 RRA -.3477 RC3 -.7444 FAU .14639
FOE .1482 FRA-2.0123 FC3-6.0019 BSP 2638
BOE .2683 BRA .6141 BC3 .7595 FSP -1612
                                                                                                                                     LSA 348.1 MSA 330.9 SSA 27.7
                                                                                                                                      EL1 336.6 EL2 229.8 ALF 112.92
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LAUNCH DATE JUL 12 1967

ARRIVAL DATE OCT 22 1967

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DISTANCE 289.732
    HELIOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 288.99 VL 27.510 GAL -8.47 AZL 91.24 MCA 131.57 SMA 134.26 ECC .19735 INC 1.2384 V1 29.294
RP 107.96 LAP -.93 LOP 60.56 VP 38.341 GAP -1.42 AZP 89.18 TAL 219.82 TAP 351.39 RCA 107.76 APO 160.76 VZ 35.101
RC 82.236 GL -7.43 GP -26.52 ZAL 151.47 ZAP 78.60 ETS 5.97 ZAE 158.08 ETE 271.64 ZAC 106.94 ETC 7.96 CLP -77.23
     PLANETOCENTRIC CONIC
      C3 20.682 VHL 4.548 OLA 8.76 RAL 136.81 RAD 6567.8 VEL 11.919 PTH 2.12 VHP 3.660 OPA -14.82 RAP 155.72 ECC 1.3404 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      LNCH AZNTH LNCH TIME - L-I TIME
                                                                                                                             103.20
                          0 6 4 2497.62
14 16 45 4591.19
                                                                                        60.23
                                                                                                                                                                      1897.6
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                                                                                                             1.40
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           90.00
                                                                    -25.28
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           90.00
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                                                                                                                               104.51 2 8 42
63.01 16 46 12
108.13 3 22 36
59.47 17 41 40
                          1 31 41 2221.51
15 33 50 4342.53
         100.00
                                                                    -26.43
                                                                                         39.61
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                                                                                                                                                                       1621.5
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         100.00
                                                                     13.37
                                                                                        175.35
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                           2 49 39 1977,53
16 32 21 4159.27
          110.00
                                                                   -29.49
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         110.00
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                          16 32 21
                                                                     16.17
                                                                                        159.85
                                                                                                          355.20
                                                                                                                                                                      3559.3
                                                                                                                                                                                            12.00
                                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                            SGT 793.6 SGR 929.3 SG3 539.1
RRT .6889 RRF .9386 RTF .7146
SGB 1222.0 R23 .2074 R13 .9184
SG1 1126.1 SG2 474.7 THA 51.48
                                                                                                                                                                 ST 272.7 SR 301.2 SS 264.7

CRT -.1753 CRS -.1301 CST -.9422

LSA 374.8 MSA 306.5 SSA 487.9
      TOE .1321 TRA -.5644 TC3 -.3193 BAU .2479
      ROE -.2117 RRA -.3610 RC3 -.8378 FAU .14932
      FOE .2291 FRA-2.0052 FC3-6.2506 88P 3085
      BDE .2496 BRA .6700 BC3 .8966 FSP -1670
                                                                                                                                                                  EL1 314.8 EL2 256.9 ALF 120.20
                                                                                                  FLIGHT TIME 104.00
                                                                                                                                                                                 ARRIVAL DATE OCT 24 1967
LAUNCH DATE JUL 12 1967
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 296.139
      RL 152.08 LAL -.00 LOL 288.99 VL 27.504 GAL -8.39 AZL 91.05 MCA 134.79 SMA 134.21 ECC .19652 INC 1.0451 V1 29.294
RP 107.92 LAP -.74 LOP 63.78 VP 38.348 GAP -.93 AZP 89.26 TAL 219.52 TAP 354.31 RCA 107.84 APO 160.59 V2 35.113
RC 84.440 GL -6.33 GP -28.18 ZAL 151.49 ZAP 83.62 ETS 3.79 ZAE 155.94 ETE 261.94 ZAC 109.18 ETC 6.60 CLP -82.76
     L3 ZU.240 VHL 4.499 DLA 9.75 RAL 137.36 RAO 6567.8 VEL 11.900 PTH 2.11 VHP 3.650 DPA -15.55 RAP 153.10 ECC 1.3331 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 0 26 2524.33 -25.68 62.09 1.95 102.36 0 42 30 1924.3 -23.72 53.97 90.00 14 26 45 4554.15 11.21 192.01 357.52 63.83 15 42 40 3954.2 7.60 185.19 100.00 1 26 34 2246.50 -26.84 41.35 1.65 103.68 2 4 1 1646.5 -24.69 33.21 100.00 15 3 18 4307.21 12.27 173.30 356.97 62.53 16 55 5 3707.2 8.50 166.55 110.00 2 45 44 1998.79 -29.93 21.57 .66 107.34 3 19 3 1398.8 -27.27 13.39 110.00 16 40 30 4127.69 15.07 158.07 355.36 58.95 17 49 26 3527.7 10.44 144.41
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                            SGT 943.4 SGR 991.5 SG3 544.2

RRT .7728 RRF .9491 RTF .7947

SGB 1368.6 R23 .2102 R13 .9305

SG1 1288.7 SG2 460.6 THA 46.84
      TOE .1424 TRA -.6242 TC3 -.5050 BAU .2864
                                                                                                                                                                 ST 302.7 SR 275.1 SS 276.3
CRT -.0887 CRS -.0705 CST -.9776
      ROE -.1834 RRA -.3692 RC3 -.9304 FAU .14964
                                                                                                                                                                 LSA 407.6 MSA 277.0 SSA 28.2
EL1 307.5 EL2 269.8 ALF 158.58
      FOE .3209 FRA-1.9487 FC3-6.4007 BSP 3586
      BOE .2322 BRA ..7252 BC3 1.0586 FSP -1692
                                                                                                                                                                               ARRIVAL DATE OCT 26 1967
                                                                                                 FI I GHT TIME 106.00
LAUNCH DATE JUL 12 1967
                                                                                                DISTANCE 302.518
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.492 GAL -8.29 AZL 90.83 MCA 138.01 SMA 134.13 ECC .19580 INC .8287 VI 29.294
RP 107.89 LAP -.55 LOP 67.00 VP 38.351 GAP -.47 AZP 89.38 TAL 219.13 TAP 357.14 RCA 107.87 APO 160.39 VZ 35.125
RC 86.655 GL -5.07 GP -29.87 ZAL 151.41 ZAP 88.45 ETS 1.39 ZAE 153.28 ETE 253.96 ZAC 111.28 ETC 5.12 CLP -88.21
    PLANETOCENTRIC CONIC
      C3 19.793 VHL 4.449 OLA 10.86 RAL 138.04 RAD 6567.8 VEL 11.882 PTH 2.11 VHP 3.671 OPA -16.38 RAP 150.55 ECC 1.3257
     C3 19.793 WH 4.449 OLA 10.86 RAL 138.04 RAD 5567.8 VEL 11.882 PTM 2.11 VRP 3.61 DPA -16.38 RAP 190.59 ECC 1.3257

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 23 50 13 2555.52 -26.12 64.27 2.68 101.35 24 32 48 1955.5 -24.29 56.08

90.00 14 38 30 4512.33 9.94 189.59 357.87 63.35 15 53 42 3912.3 6.29 182.82

100.00 1 20 55 2275.67 -27.29 43.40 2.40 102.69 1 58 51 1675.7 -25.27 35.19

100.00 15 54 25 4267.42 11.01 171.02 357.31 62.03 17 5 32 3667.4 7.18 164.32

110.00 2 41 28 2023.59 -30.42 23.34 1.48 106.40 3 15 12 1423.6 -27.87 15.07

110.00 16 50 21 4092.26 13.82 156.09 355.67 58.42 17 58 33 3492.3 9.54 149.60
                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 1111.6 SGR 1052.4 SG3 541.4
                                                                                                                                                                 ST 339.5 SR 246.1 SS 291.4
      TOE .1608 TRA -.6822 TC3 -.7041 BAU .3288
     ROE -.1519 RRA -.3729 RC3-1.0239 FAU .14777
FOE .4128 FRA-1,8539 FC3-6.4634 BSP 4146
                                                                                           RRT .8273 RRF .9590 RTF .8453
SGB 1530.8 R23 .2110 R13 .9401
SGI 1463.4 SG2 449.1 THA 43.11
                                                                                                                                                                 CRT -.0077 CRS -.0340 CST -.9907
                                                                                                                                                                 LSA 446.4 MSA 246.2 SSA 28.6
      BOE .2213 BRA .7775 BC3 1.2427 FSP -1695
                                                                                                                                                                 ELI 339.6 EL2 246.1 ALF 179.33
                                                                                                 FLIGHT TIME 108.00
                                                                                                                                                                                ARRIVAL DATE OCT 28 1967
LAUNCH DATE JUL 12 1967
                                                                                                DISTANCE 308.872
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.476 GAL -8.19 AZL 90.58 MCA 141.23 SMA 134.01 ECC .19519 INC .5832 V1 29.294
RP 107.85 LAP -.37 LOP 70.22 VP 38.350 GAP -.02 AZP 89.54 TAL 218.66 TAP 359.89 RCA 107.85 APO 160.17 V2 35.137
RC 88.880 GL -3.61 GP -31.64 ZAL 151.22 ZAP 93.01 ETS 358.80 ZAE 150.26 ETE 247.58 ZAC 113.19 ETC 3.52 CLP -93.53
    PLANETOCENTRIC CONIC
     C3 19,346 VHL 4.398 OLA 12.13 RAL 138.88 RAD 6567.8 VEL 11.863 PTH 2.10 VHP 3.723 DPA -17.34 RAP 148.11 ECC 1.3184 LNCH ÄZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 42 54 2592.87 -26.59 66.90 3.64 100.11 24 26 7 1992.9 -24.92 58.63
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62.88 16 6 53
                          14 52 29 4464.16
1 14 22 2510.54
                        14 52 29
                                                                      8.46
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2 36 36
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         100.00
                         16 7 38 4221.72
2 36 36 2053.21 -30.97
17 1 53 4051.81 12.36
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         110.00
                                                                                      153.86
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         110.00
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 384.4 SR 214.8 SS 310.9
CRT .0844 CRS -.0372 CST -.9916
LSA 493.6 MSA 214.5 SSA 29.2
      TOE .1889 TRA -.7361 TC3 -.9149 BAU .3736
                                                                                            SGT 1292.4 SGR 1111.7 SG3 531.0
     RDE -.1169 RRA -.3718 RC3-1.1180 FAU .14382
FDE .5031 FRA-1.7253 FC3-6.4357 BBP 4754
BDE .2222 BRA .8247 BC3 1.4446 FBP -1681
                                                                                          RRT .8630 RRF .9671 RTF .8779
SGB 1704.8 R23 .2120 R13 .9474
SG1 1646.8 SG2 440.8 THA 40.03
                                                                                                                                                                EL1 385.0 EL2 213.7 ALF 3.91
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FLIGHT TIME 102.00

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ARRIVAL DATE OCT 30 1967
                                                                                                               FLIGHT TIME 110.00
LAUNCH DATE JUL 12 1967
                                                                                                               DISTANCE 315.199
    HELIOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 288.99 VL 27.456 GAL -8.07 AZL 90.30 HCA 144.45 SMA 133.86 ECC .19468 INC .3002 V1 29.294
RP 107.82 LAP -.17 LOP 73.44 VP 38.346 GAP .42 AZP 89.75 TAL 218.10 TAP 2.55 RCA 107.80 APO 159.92 V2 35.149
RC 91.113 GL -1.88 GP -33.52 ZAL 150.89 ZAP 97.22 ETS 355.98 ZAE 146.98 ETE 242.58 ZAC 114.87 ETC 1.81 CLP -98.67
     PLANETOCENTRIC CONIC
      C3 18.908 VHL 4.348 OLA 13.63 RAL 139.89 RAD 6567.8 VEL 11.844 PTH 2.10 VHP 3.809 DPA -18.48 RAP 145.81 ECC 1.3112 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   98.55 24 18 0
62.42 16 22 53
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           90.00 23 34 1 2638.78
90.00 15 9 26 4407.43
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18 22 30
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          110.00
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          110.00
                             17 15 46
                                                     4004.74
                                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                        SCT 1480.0 SGR 1160.6 SG3 509.8
RRT .8870 RRF .9733 RTF .8989
SGB 1880.8 R23 .2156 R13 .9522
SG1 1830.2 SG2 433.3 THA 37.26
                                                                                                                                                                                        ST 440.3 SR 179.4 SS 340.2
CRT .2313 CRS -.1050 CST -.9853
      TOE .2296 TRA -.7831 TC3-1.1335 BAU .4180
      ROE -.0741 RRA -.3618 RC3-1.2043 FAU .13701
                                                                                                                                                                                        LSA 555.6 MSA 179.4 SSA 30.1
      FOE .6094 FRA-1.5490 FC3-6.2730 BSP 5332
BOE .2413 BRA .8626 BC3 1.6536 FSP -1610
                                                                                                                                                                                         EL1 442.6 EL2 173.6 ALF
                                                                                                                                                                                                          ARRIVAL DATE NOV 1 1967
                                                                                                                FLIGHT TIME 112.00
LAUNCH DATE JUL 12 1967
                                                                                                               DISTANCE 321.500
    HELTOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.432 GAL -7.95 AZL 89.97 MCA 147.67 SMA 133.68 ECC .19426 INC .0210 V1 29.294
RP 107.78 LAP .02 LOP 76.66 VP 38.339 GAP .84 AZP 90.03 TAL 217.47 TAP 5.14 RCA 107.71 APO 159.65 V2 35.160
RC 93.352 GL .19 GP -35.57 ZAL 150.37 ZAP 101.03 ETS 352.91 ZAE 143.52 ETE 238.70 ZAC 116.28 ETC 360.00 CLP-103.61
    PLANETOCENTRIC CONIC
                                                                                                                                                        2.09 WHP 3.931 OPA -19.88 RAP 143.63 ECC 1.3044
      C3 18.495 VHL 4.301 DLA 15.43 RAL 141.11 RAD 6567.7 VEL 11.827 PTH
      C3 18.495 WH 4.301 DLA 15.43 RAL 141.11 RAD 6567.7 VEL 11.227 FIN 2.03 VIN 15.05 FIN 1
                             23 22 42 2697.04
15 30 29 4336.79
0 56 26 2407.46
16 43 23 4103.59
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          110.00
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                                                    2135.07
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          110.00
                              17 32 49
                                                     3948.75
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                                                                                                    148.28
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                                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                         SGT 1670.4 SGR 1207.5 SG3 482.3
RRT .9030 RRF .9785 RTF .9130
SGB 2061.2 R23 .2200 R13 .9559
SG1 2015.9 SG2 429.8 THA 34.96
                                                                                                                                                                                         ST 511.7 SR 151.0 SS 378.0
CRT .4783 CRS -.3164 CST -.9785
      TOE .2858 TRA -.8200 TC3-1.3563 BAU .4626
      ROE -.0255 RRA -.3455 RC3-1.2889 FAU .12853
FOE .7126 FRA-1.3505 FC3-6.0164 BSP 5927
                                                                                                                                                                                         LSA 636.4 MSA 146.7 SSA 30.9
EL1 517.1 EL2 131.2 ALF 8.59
                 .2870 BRA .8898 BC3 1.8710 FSP -1525
                                                                                                                                                                                                         ARRIVAL DATE NOV 3 1967
                                                                                                                FLIGHT TIME 114.00
LAUNCH DATE JUL 12 1967
                                                                                                               DISTANCE 327.777
     HELIOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 288.99 VL 27.404 GAL -7.82 AZL 89.57 MCA 150.90 SMA 133.48 ECC .19391 INC ,4256 V1 29.294
RP 107.75 LAP .21 LOP 79.88 VP 38.329 GAP 1.24 AZP 90.37 TAL 216.76 TAP 7.66 RCA 107.59 APO 159.36 V2 35.170
RC 95.596 GL 2.72 GP -37.87 ZAL 149.59 ZAP 104.36 ETS 349.57 ZAE 139.91 ETE 235.76 ZAC 117.38 ETC 358.06 CLP-108.32
     PLANETOCENTRIC CONIC
       C3 18.134 VML 4.258 DLA 17.62 RAL 142.59 RAD 6567.7 VEL 11.812 PTH 2.09 VMP 4.094 DPA -21.59 RAP 141.55 ECC 1.2984
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 7 27 2773.81 -26.09 79.92 8.52 93.76 23 53 40 2173.8 -27.27 71.34 90.00 15 57 35 4252.76 1.74 174.92 1.95 61.73 17 8 28 3652.8 -2.05 168.30 100.00 0 43 0 2478.33 -29.46 58.06 8.40 95.29 1 24 19 1878.3 -28.42 49.41 100.00 17 8 38 4023.49 2.95 157.40 1.28 60.24 18 15 42 3423.5 -1.03 150.88
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                              2 13 49 2194.19
17 54 19 3680.40
           110.00
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                                                                                 6.00
                                                                                                    144.65
           110.00
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                         ST 605.4 SR 146.9 SS 424.7
CRT .7880 CRS -.6535 CST -.9753
       TOE .3618 TRA -.8445 TC3-1.5793 BAU .5071
                                                                                                          SGT 1862.1 SGR 1254.6 SG3 449.5
      RDE .0302 RRA -.3230 RC3-1.3715 FAU .11870
FDE .8102 FRA-1.1389 FC3-5.6671 BSP 6555
                                                                                                         RRT .9137 RRF .9828 RTF .9227
5G8 2245.3 R23 .2247 R13 .9587
                                                                                                                                                                                         LSA 743.7 MSA 119.6 SSA
                                                                                                                                                                                                                                                  30.8
                                                                                                                                                                                         EL1 616.6 EL2 88.8 ALF 11.06
       BDE .3630 BRA .9041 BC3 2.0917 FSP -1431
                                                                                                          SG1 2203.5 SG2 430.9 THA 33.04
                                                                                                                FLIGHT TIME 116.00
                                                                                                                                                                                                           ARRIVAL DATE NOV 5 1967
 LAUNCH DATE JUL 12 1967
                                                                                                                DISTANCE 334.029
     HELIOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 288.99 VL 27.373 GAL -7.68 AZL 89.09 MCA 154.12 SMA 133.25 ECC .19364 INC .9114 V1 29.294
RP 107.72 LAP .40 LOP 83.11 VP 38.316 GAP 1.63 AZP 90.82 TAL 215.98 TAP 10.10 RCA 107.45 APO 159.05 V2 35.180
RC 97.843 GL 5.86 GP -40.53 ZAL 148.44 ZAP 107.14 ETS 345.90 ZAE 136.11 ETE 233.57 ZAC 118.17 ETC 355.96 CLP-112.81
     PLANETOCENTRIC CONIC
       C3 17.873 VHL 4.228 OLA 20.35 RAL 144.43 RAD 6567.7 VEL 11.801 PTH 2.09 WHP 4.308 OPA -23.72 RAP 139.53 ECC 1.2941
      C3 17.873 WHL 4.228 OLA 20.35 RAL 144.43 RAO 6567.7 VEL 11.801 PTR 2.09 WHP 4.308 UPA 22.3.72 RAP 139.35 CCC 1.294 LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 34 21 4139.30 -1.92 166.60 4.36 61.74 17 43 20 3539.3 -5.68 161.94 100.00 0 23 48 2575.56 -29.86 65.25 11.19 91.52 1 6 44 1975.6 -29.33 56.49 100.00 17 42 27 3919.51 -.57 151.69 3.61 60.11 18 47 47 3319.5 -4.55 145.16 110.00 2 0 18 2273.67 -33.74 42.03 10.90 95.84 2 38 12 1673.7 -32.57 32.99 110.00 18 22 27 3794.17 2.73 140.13 1.55 55.91 19 25 41 3194.2 -1.76 133.92
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                        MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
      TOE .4662 TRA -.8510 TC3-1.7914 BAU .5495
RDE .0983 RRA -.2899 RC3-1.4422 FAU .10720
FDE .9128 FRA -.9085 FC3-5.1928 BSP 7144
BDE .4765 BRA .8990 BC3 2.2998 FSP -1308
                                                                                                                                                                                          ST 733.1 SR 186.8 SS 485.7
CRT .9657 CRS -.8992 CST -.9752
                                                                                                           SGT 2051.0 SGR 1296.3 SG3 410.1
                                                                                                        RRT .9203 RRF .9863 RTF .9293
SGB 2426.3 R23 .2303 R13 .9607
                                                                                                                                                                                          LSA 892.7 MSA 102.7 SSA 28.0
                                                                                                                                                                                          EL1 755.1 EL2 47.1 ALF 13.88
                                                                                                         SG1 2386.8 SG2 435.8 THA 31.35
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LAUNCH DATE JUL 12 1967

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ARRIVAL DATE NOV 7 1967
                                                                                           DISTANCE 340.257
   HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 27.340 GAL -7.53 A7L 88.48 MCA 157.35 SMA 133.00 ECC .19344 INC 1.5245 V1 29.294
RP 107.69 LAP .59 LOP 86.34 VP 38.301 GAP 2.02 A7P 91.41 TAL 215.14 TAP 12.49 RCA 107.28 APO 158.75 V2 35.190
RC 100.092 GL 9.84 GP -43.66 ZAL 146.72 ZAP 109.25 ETS 341.84 ZAE 132.06 ETE 231.99 ZAC 118.61 ETC 353.64 CLP-117.12
    PLANETOCENTRIC CONIC
     C3 17.805 VHL 4.220 DLA 23.82 RAL 146.75 RAD 6567.7 VEL 11.798 PTH 2.09 VHP 4.591 DPA -26.35 RAP 137.45 ECC 1.2930 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     CS 17.805 WHL 4.220 DLA 25.82

LNCH AZMTH LNCH TIME L-I TIME

90.00 22 8 39 3044.26

90.00 17 29 30 3973.80

100.00 23 49 19 2719.71

100.00 18 31 31 3773.59

110.00 1 39 54 2366.04

110.00 19 1 22 3680.03
                                                                                                14.64
                                                                                                                    83.92 22 59 24
62.54 18 35 44
                                                               -27.71
                                                                                  99.64
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60.57 19 34 25
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                                                                                 143.66
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                                                               -1.64
   DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     SGT 2239.3 SGR 1336.0 SG3 366.3
RRT .9236 RRF .9692 RTF .9342
SGB 2608.6 R23 .2352 R13 .9623
SGI 2570.1 SG2 446.5 THA 29.89
                                                                                                                                                      ST 909.5 SR 271.8 SS 558.4
CRT .9964 CRS -.9780 CST -.9786
     TOE .6101 TRA -.8351 TC3-1.9799 BAU .5906
             .1810 RRA -. 2463 RC3-1.4971 FAU .09466
                                                                                                                                                      LSA 1096.6 MSA 99.0 SSA 21.9
EL1 948.9 EL2 22.1 ALF 16.59
     FDE 1.0091 FRA -.6754 FC3-4.8029 BSP 7757
     BOE .6364 BRA .8707 BC3 2.4822 FSP -1177
                                                                                                                                                                     ARRIVAL DATE NOV 9 1967
                                                                                           FLIGHT TIME 120.00
                                                                                          DISTANCE 346.460
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.303 GAL -7.36 AZL 87.67 MCA 160.57 SMA 132.74 ECC .19351 INC 2.3300 V1 29.294 RP 107.66 LAP .78 LOP 89.57 VP 38.284 GAP 2.36 AZP 92.20 TAL 214.24 TAP 14.81 RCA 107.08 APO 158.40 V2 35.199 RC 102.344 GL 14.99 GP -47.46 ZAL 144.11 ZAP 110.58 ETS 337.32 ZAE 127.64 ETE 230.A7 ZAC 118.68 ETC 351.00 CLP-121.33
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 18.114 VHL 4.256 OLA 28.29 RAL 149.80 RAD 6567.7 VEL 11.811 PTN 2.09 VHP 4.978 OPA -29.63 RAP 135.16 ECC 1.2981
LNCH AFMTH LINCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 20 11 20 3480.42 -20.95 129.65 17.06 70.50 21 9.20 2880.4 -23.42 121.85
90.00 19 51 12 3545.67 -19.41 133.82 16.45 68.97 20.50 18 2945.7 -22.10 126.17
100.00 22 44 33 2986.32 -26.78 95.21 18.96 78.19 23 34 19 2386.3 -28.41 86.79
100.00 20 0 40 3515.00 -13.84 129.00 13.88 63.24 20.59 15 2915.0 -17.32 121.94
110.00 1 4 40 2580.05 -33.49 64.30 20.41 82.72 1 47.20 1960.0 -34.14 55.11
110.00 20 0 59 3514.04 -7.93 125.44 10.40 58.64 20.59 33 2914.0 -12.26 119.03
   DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY_
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     TOE .8159 TRA -.7869 TC3-2.1135 BAU .6291
ROE .2869 RRA -.1852 RC3-1.5105 FAU .08000
                                                                                     SGT 2427.0 SGR [372.1 SG3 317.0

MRT .9243 MRF .9912 MTF .9378

SGB 2788.0 M23 .2396 M13 .9635

SG1 2749.4 SG2 462.1 THA 28.47
                                                                                                                                                      ST 1157.4 SR 397.4 SS 646.2
CRT .9937 CRS -.9961 CST -.9831
            .2869 RRA -.1858 RC3-1.5105 FAU .08080
     FOE 1.2035 FRA -.4374 FC3-3.8618 BSP 8336
                                                                                                                                                      LSA 1379.7 MSA 106.2 SSA 14.7
     BOE .8649 BRA .8064 BC3 2.5978 FSP -1023
                                                                                                                                                       ELI 1223.0 EL2 42.3 ALF 18.86
                                                                                                                                                                   ARRIVAL DATE NOV 11 1967
                                                                                          FLIGHT TIME 122.00
LAUNCH DATE JUL 12 1967
                                                                                          DISTANCE 352.637
    HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.265 GAL -7.21 AZL 86.56 MCA 163.79 SMA 132.46 ECC .19324 INC 3.4413 VI 29.294
RP 107.63 LAP .96 LOP 92.80 VP 38.264 GAP 2.74 AZP 93.31 TAL 213.28 TAP 17.07 RCA 106.87 APO 158.06 VZ 35.208
RC 104.596 GL 21.75 GP -52.12 ZAL 140.12 ZAP 110.94 ETS 332.23 ZAE 122.66 ETE 229.98 ZAC 118.35 ETC 347.88 CLP-125.59
    PLANETOCENTRIC CONIC
     C3 19.210 VML 4.383 DLA 34.12 RAL 154.06 RAD 6567.8 VEL 11.857 PTH 2.10 VMP 5.533 OPA -33.70 RAP 132.38 ECC 1.3162
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 161.99

109.88 22 47 1 3053.30 -23.68 99.04 23.70 64.69 23 37 54 2453.3 -26.89 91.35

109.88 22 47 1 3053.30 -23.68 99.04 23.70 64.69 23 37 54 2453.3 -26.89 91.35
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3100.04
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        110.00
                                                              -22.26
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 1505.0 SR 554.8 SS 741.1
CRT .9906 CRS -.9996 CST -.9878
                                                                                     SGT 2618.5 SGR 1393.5 SG3 263.4
     TOE 1.1229 TRA -.6902 TC3-2.1385 BAU .6634
     ROE .4219 RRA -.1000 RC3-1.4487 FAU .06600
FOE 1.1821 FRA -.2072 FC3-2.9745 85P 8923
BOE 1.1996 BRA .6974 BC3 2.5830 FSP -860
                                                                                    RRT .9215 RRF .9922 RTF .9411
SGB 2966.2 R23 .2419 R13 .9648
SGI 2926.4 SGZ 484.4 THA 26.92
                                                                                                                                                     LSA 1763.0 MSA 117.5 SSA 9.3
EL1 1602.4 EL2 71.1 ALF 20.10
LAUNCH DATE JUL 12 1967
                                                                                           FLIGHT TIME 124.00
                                                                                                                                                                    ARRIVAL DATE NOV 13 1967
                                                                                          DISTANCE 358.785
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.224 GAL -7.03 AZL 84.91 MCA 167.00 SMA 132.17 ECC .19322 INC 5.0865 VI 29.294
RP 107.61 LAP 1.14 LOP 96.04 VP 38.243 GAP 3.09 AZP 94.96 TAL 212.27 TAP 19.27 RCA 106.63 APO 157.71 VZ 35.216
RC 106.849 GL 30.62 GP -57.94 ZAL 134.11 ZAP 110.09 ETS 326.33 ZAE 116.81 ETE 228.93 ZAC 117.57 ETC 343.92 CLP-130.34
   PLANETOCENTRIC CONIC
     C3 22.126 VHL 4.704 DLA 41.57 RAL 160.47 RAD 6587.9 VEL 11.979 PTH 2.14 VHP 6.391 DPA -38.73 RAP 128.59 ECC 1.3641
    C3 22.126 VML 4.704 OLA 41.57 A
LNCH AZMTH LNCH TIME L-I TIME
58.19 17 14 3 4212.27
121.81 0 17 29 2909.04
58.19 17 14 3 4212.27
121.81 0 17 29 2909.04
58.19 17 14 3 4212.27
121.81 0 17 29 2909.04
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   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 1980.1 SR 719.9 SS 831.1
CRT .9894 CRS -.9998 CST -.9915
     TDE 1.6120 TRA -.5107 TC3-1.9672 BAU .6888
                                                                                      SGT 2823.4 SGR 1375.6 SG3 206.1
                                                                                    RRT .9125 RRF .9910 RTF .9449
5G8 3140.7 R23 .2422 R13 .9661
5G1 3098.6 SG2 512.7 THA 24.69
     RDE .5902 RRA .0269 RC3-1.2457 FAU .05031
     FDE 1.2348 FRA .0113 FC3-1.9684 BSP 9487
BDE 1.7166 BRA .5114 BC3 2.3265 FSP -681
                                                                                                                                                      LSA 2261.0 MSA 131.7 SSA 5.7
                                                                                                                                                      EL1 2104.6 EL2 98.6 ALF 19.83
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 15 1967

LAUNCH DATE JUL 12 1967

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DISTANCE 364.896
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 27.182 GAL -6.84 A7L 82.21 MCA 170.20 SMA 131.87 ECC .19324 INC 7.7863 VI 29.294 RP 107.59 LAP 1.32 LOP 99.28 VP 38.219 GAP 3.42 A7P 97.67 TAL 211.19 TAP 21.39 RCA 106.39 APO 157.35 V2 35.223 RC 109.101 GL 41.88 GP -65.26 7AL 125.47 7AP 107.78 ETS 318.84 7AE 109.64 ETE 226.58 7AC 116.35 ETC 338.14 CLP-136.87
  PLANETOCENTRIC CONIC
   C3 29.996 VML 5.477 DLA 50.40 RAL 171.10 RAD 6568.2 VEL 12.303 PTH 2.22 VMP 7.872 DPA -44.80 RAP 122.70 ECC 1.4937
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 46.40 17 12 53 4399.48 -28.55 207.85 54.36 46.53 18 26 12 3799.5 -33.87 201.28
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                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2566.1 SR 774.2 SS 879.0
CRT .9853 CRS -.9981 CST -.9939
                                                                  SCT 3058.6 SCR 1255.2 SC3 148.6
RRT .8843 RRF .9608 RTF .9512
SCB 3306.2 R23 .2383 R13 .9682
SCI 3260.1 SC2 549.9 TMA 20.56
   TOE 2.4513 TRA -. 1600 TC3-1.5029 BAU .6916
    RDE .7323 RRA .2200 RC3 -.8458 FAU .03438
                                                                                                                     LSA 2816.8 MSA 150.0 SSA 3.4
   FOE 1.2311 FRA .2077 FC3 -.9922 BSP 10024
                                                                                                                     EL1 2677.4 EL2 126.9 ALF 16.59
   BOE 2,5584 BRA .2720 BC3 1.7245 FSP -499
                                                                                                                                ARRIVAL DATE NOV 17 1967
                                                                       FLIGHT TIME 128.00
EAUNCH DATE JUL 12 1967
                                                                      DISTANCE 370.944
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 27.136 GAL -6.63 AZL 76.96 MCA 173.36 SMA 131.56 ECC .19324 INC13.0428 V1 29.294
RP 107.57 LAP 1.50 LOP 102.51 VP 36.194 GAP 3.73 AZP 102.96 TAL 210.04 TAP 23.40 RCA 106.13 APO 156.98 V2 35.230
                      54.63 GP -74.30 ZAL 114.34 ZAP 103.77 ETS 305.53 ZAE 100.25 ETE 218.23 ZAC 114.84 ETC 325.91 CLP-151.58
   RC 111.351 GL
  PLANETOCENTRIC CONIC
   C3 55.664 WHL 7.461 DLA 58.27 RAL 189.66 RAD 6569.0 VEL 13.305 PTH 2.45 VHP 10.917 DPA -51.55 RAP 111.95 ECC 1.9161 LNCH AZNITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 36.68 17 58 56 4615.03 -23.34 225.24 84.20 34.95 19 15 51 4015.0 -29.81 220.38
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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 3351.3 SGR 836.9 SG3 97.8
RRT .6851 RRF .8444 RTF .9668
SGB 3454.2 R23 .2197 R13 .9741
                                                                                                                     ST 3006.9 SR 323.1 SS 834.7
    TOE 3.8964 TRA .6720 TC3 -.7685 BAU
                                                     .6134
                                                                                                                     CRT .8449 CRS -.8942 CST -.9950
    RDE .3316 RRA .4529 RC3 -.2963 FAU .01689
                                                                                                                     LSA 3131.7 MSA 188.2 SSA
ELI 3019.3 EL2 172.1 ALF
                                                                                                                                                           1.4
    FDE 1.1297 FRA .3977 FC3 -.2936 BSP 10307
                                                                   $61 3401.6 $62 600.6 THA 10.02
    BOE 3.9105 BRA .8104 BC3 .8243 FSP -325
                                                                                                                                ARRIVAL DATE NOV 19 1967
                                                                       FLIGHT TIME 130.00
LAUNCH DATE JUL 12 1967
   RL 152.08 LAL -.00 LOL 288.99 VL 27.093 GAL -6.38 AZL 62.72 MCA 176.36 SMA 131.23 ECC .19303 INC27.2823 VI 29.294
RP 107.55 LAP 1.67 LOP 105.75 VP 38.168 GAP 3.99 AZP 117.24 TAL 208.75 TAP 25.11 RCA 105.90 APO 156.57 V2 35.236
RC 113.598 GL 63.61 GP -79.33 ZAL 102.37 ZAP 98.13 ETS 247.84 ZAE 85.58 ETE 164.69 ZAC 114.23 ETC 267.43 CLP 139.84
                                                                      DISTANCE 376.815
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 189.812 VHL 13.777 DLA 58.44 RAL 213.22 RAD 6571.0 VEL 17.639 PTH 2.98 VHP 19.486 DPA -56.03 RAP 87.97 ECC 4.1238
    LNCH ATRITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1662.9 SR 1967.5 SS 777.4
CRT -.9850 CRS ..9842 CST-1.0000
LSA 2680.7 MSA 233.8 SSA ...9
    TOE 3.7040 TRA 2.6285 TC3 -.0538 BAU .1410
RDE-4.6244 RRA-1.7428 RC3 -.0140 FAU .00184
                                                                   SCT 2599.3 SCR 2370.1 SC3 62.7
RRT -.9493 RRF -.9490 RTF ..9997
SCB 3517.6 R23 -.1442 R13 -.9892
    FOE 1.0267 FRA .7377 FC3 -.0084 BSP 10389
BOE 5.9250 BRA 3.1537 BC3 .0556 FSP -200
                                                                                                                      EL1 2566.7 EL2 220.2 ALF 130.13
                                                                   SG1 3473.2 SG2 557.4 THA 137.78
                                                                                                                                 ARRIVAL DATE NOV 21 1967
                                                                        FLIGHT TIME 132.00
LAUNCH DATE JUL 12 1967
                                                                       DISTANCE 365.236
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 27.046 GAL -6.63 AZL 179.74 MCA 181.83 SMA 130.91 ECC .19782 INC89.7154 VI 29.294
RP 107.53 LAP 1.83 LOP 109.00 VP 36.140 GAP 4.96 AZP .26 TAL 209.06 TAP 30.89 RCA 105.01 APO 156.80 V2 35.241
RC 115.842 GL -42.50 GP 48.70 ZAL 94.42 ZAP 93.85 ETS 178.65 ZAE 48.65 ETE 255.50 ZAC 97.48 ETC 151.37 CLP 95.83
   PLANETOCENTRIC CONIC
    C31581.467 VHL 39.768 DLA -43.29 RAL 170.77 RAD 6573.2 VEL 41.264 PTH 3.57 VHP 50.500 DPA 50.03 RAP 356.35 ECC27.0269
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                           6 24 36
                     5 46 58
                                  2257.22
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                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                   SGT 1197.7 SGR 2574.1 SG3 50.9
RRT -.8853 RRF .9993 RTF -.8728
                                                                                                                    ST 742.8 SR 2075.3 SS 2120.0
CRT -.9776 CRS-1.0000 CST .9764
LSA 3054.4 MSA 154.2 SSA 1.8
     TOE 5.0289 TRA 2.7276 TC3 -.0988 BAU 4.5556
     RO-14.3999 RRA - 2730 RC3 .1915 FAU-.07632
FOE-3.3716 FRA -.0194 FC3 .0418 BSP 8394
BOE15.2528 BRA 2.7412 BC3 .2155 FSP -157
                                                                   SGB 2839.1 R23 -.1042 R13 .9942
                                                                                                                    ELI 2199.2 ELZ 147.7 ALF 109.38
                                                                   SG1 2792.3 SG2 513.4 THA 113.22
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FLIGHT TIME 126.00

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LAUNCH DATE JUL 12 1967
                                                                                FLIGHT TIME 134.00
                                                                                                                                                ARRIVAL DATE NOV 23 1967
    HELIOCENTRIC CONIC
                                                                                DISTANCE 390.002
     RL 152.08 LAL -.00 LOL 288.99 VL 26.998 GAL -6.14 A7L 121.48 MCA 183.81 SMA 130.58 ECC .19565 INC31.4768 V1 29.294
RP 107.52 LAP 1.99 LOP 112.24 VP 38.110 GAP 4.91 A7P 58.58 TAL 207.02 TAP 30.83 RCA 105.03 APO 156.12 V2 35.246
RC 118.080 GL -63.46 GP 78.05 TAL 100.42 TAP 100.32 ETS 136.95 TAE 84.43 ETE 217.42 ZAC 87.71 ETC 109.42 CLP 149.94
    PLANETOCENTRIC CONIC
     C3 245.454 VHL 15.667 DLA -53.67 RAL 138.72 RAD 6571.4 VEL 19.151 PTH
                                                                                                            3.09 WHP 18.620 OPA 76.74 RAP 291.57 ECC 5.0395
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         42.29
                       2 53 3 2233.33
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    DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           367 1396.4 56R 3423.3 563 69.8
RRT .9321 RRF .9837 RTF .9814
SC8 3699.0 R23 -.1289 R13 .9914
                                                                                                                                    ST 1294.3 SR 2564.6 SS 1097.2
CRT .9883 CRS -.9968 CST -.9973
     TDE-3.5104 TRA -.8890 TC3 -.0086 BAU .2183
     RDE-6.7376 RRA-3.8394 RC3 .0660 FAU .00009
     FOE-1.8275 FRA -.7344 FC3 -.0003 BSP 11115
                                                                                                                                    LSA 3069.6 MSA 184.0 SSA 1.0
     BDE 7.5972 BRA 3.9410 BC3 .0665 FSP
                                                                            SG1 3668.7 SG2 472.1 THA 68.82
                                                                                                                                    EL1 2867.2 EL2 176.9 ALF 63.38
LAUNCH DATE JUL 12 1967
                                                                                FLIGHT TIME 136.00
                                                                                                                                                ARRIVAL DATE NOV 25 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 395.841
    RL 152.08 LAL -.00 LOL 288.99 VL 26.950 GAL -5.87 AZL 108.29 MCA 186.84 SMA 130.24 ECC .19570 INC18.2903 V1 29.294
RP 107.50 LAP 2.14 LOP 115.48 VP 38.079 GAP 5.15 AZP 71.83 TAL 205.64 TAP 32.48 RCA 104.75 APO 155.73 V2 35.250
RC 120.312 GL -60.84 GP 69.91 ZAL 106.27 ZAP 108.79 ETS 74.31 ZAE 98.82 ETE 157.32 ZAC 88.93 ETC 47.45 CLP-159.69
   PLANETOCENTRIC CONIC
     C3 92.816 VHL 9.634 DLA -48.37 RAL 134.79 RAD 6569.8 VEL 14.634 PTH
                                                                                                           2.65 WHP 10.815 OPA 75.05 RAP 221.96 ECC 2.5275
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 49.00 2 58 26 2010.27 14.92 49.13 31.47 136.66 3 31 57 1410.3 20.26 43.71
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11 8 16 5811.35
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2 58 26 2010.27
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   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                         SGT 3809.1 SGR 548.0 SG3 110.4
RRT .3527 RRF .1703 RTF .9810
                                                                                                                                    ST 2652.9 SR 278.9 SS 943.3
CRT -.6401 CRS .7106 CST -.9954
     TOE-4.2383 TRA-3.0794 TC3 -.3873 BAU .4811
    ROE .3975 RRA -.5508 RC3 .0188 FAU .01891
FOE-1.6559 FRA -.8255 FC3 -.1764 BSP 11839
                                                                          SGB 3848.3 R23 -.1946 R13 .9797
SGI 3814.1 SGZ 512.2 THA Z.96
                                                                                                                                    LSA 2820.1 MSA 228.3 SSA
                                                                                                                                                                              1.6
    BOE 4.2569 BRA 3.1283 BC3 .3877 FSP -351
                                                                                                                                    EL1 2658.9 EL2 213.8 ALF 176.12
LAUNCH DATE JUL 12 1967
                                                                               FLIGHT TIME 138.00
                                                                                                                                               ARRIVAL DATE NOV 27 1967
   HELIOCENTRIC CONIC
                                                                              DISTANCE 401.808
    RL 152.08 LAL -.00 LOL 288.99 VL 26.900 GAL -5.61 AZL 103.28 MCA 190.01 SMA 129.90 ECC .19610 INC13.2815 V1 29.294
RP 107.49 LAP 2.29 LOP 118.73 VP 38.047 GAP 5.43 AZP 76.91 TAL 204.31 TAP 34.32 RCA 104.43 APO 155.37 VZ 35.253
RC 122.538 GL -56.07 GP 59.13 ZAL 110.32 ZAP 116.82 ETS 60.15 ZAE 108.00 ETE 147.31 ZAC 91.37 ETC 33.67 CLP-151.56
   PLANETOCENTRIC CONIC
    C3 54.945 VHL 7.413 DLA -43.40 RAL 136.41 RAD 6569.0 VEL 13.278 PTH 2.43 VHP 8.100 CPA 66.65 RAP 195.91 ECC 1.9043 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 55.62 3 29 15 1824.75 18.80 36.01 25.30 129.87 3 59 40 1224.8 25.80 29.72 124.38 10 50 21 5750.93 18.81 269.05 25.31 129.87 12 26 12 5150.9 23.82 262.76 55.62 3 29 15 1824.75 18.80 36.01 25.30 129.87 3 59 40 1224.8 23.80 29.72 124.38 10 50 21 5750.93 18.81 269.05 25.31 129.87 12 26 12 5150.9 23.82 262.76 124.38 10 50 21 5750.93 18.81 269.05 25.31 129.87 12 26 12 5150.9 23.82 262.76
                                   1824.75
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        55.62
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                    10 50 21
                                     5750.93
                                                       18.81
                                                                      269.05
                                                                                       25.31
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                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SCT 3667.2 SCR 667.9 SC3 157.7
RRT -.7240 RRF -.6746 RTF .9641
SCB 3928.0 R23 .2407 R13 -.9680
SCI 3899.7 SCZ 470.6 THA 172.55
                                                                                                                                 ST 2461.9 SR 647.2 SS 968.8

CRT -.9465 CRS .9829 CST -.9898

LSA 2713.9 MSA 231.0 SSA 2.4

EL1 2537.5 EL2 202.5 ALF 165.94
    TOE-2.9909 TRA-2.6492 TC3 -.8708 BAU .6496
    ROE .8370 RRA .0450 RC3 .1544 FAU .03294
FOE-1.7521 FRA -.8934 FC3 -.5190 83P 12093
BDE 3.1058 BRA 2.6496 BC3 .8844 FSP -504
                                                                               FLIGHT TIME 140.00
                                                                                                                                               ARRIVAL DATE NOV 29 1967
                                                                               DISTANCE 407,798
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 26.850 GAL -5.36 AZL 100.67 MCA 193.21 SMA 129.56 ECC .19668 INCIO.6734 VI 29.294 RP 107.49 LAP 2.43 LOP 121.98 VP 38.014 GAP 5.72 AZP 79.60 TAL 202.98 TAP 36.19 RCA 104.08 APO 155.04 V2 35.256 RC 124.755 GL -51.83 GP 50.09 ZAL 112.89 ZAP 123.80 ETS 54.60 ZAE 114.47 ETE 146.98 ZAC 93.41 ETC 28.49 CLP-150.13
   PLANETOCENTRIC CONIC
    C3 39.659 VHL 6.298 DLA -39.58 RAL 138.88 RAD 6568.5 VEL 12.690 PTH
                                                                                                          2.31 WHP 6.882 OPA 58.45 RAP 185.70 ECC 1.6527
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    21.81
                      4 2 50 1677.64
10 36 28 5734.80
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   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         SGT 3934.6 SGR 733.6 SG3 199.2
RRT -.8091 RRF -.9390 RTF .9542
SG8 4002.4 R23 .2686 R13 -.9587
SG1 3979.6 SG2 426.3 THA 171.32
                                                                                                                                 ST 2368.7 SR 656.1 SS 998.6
CRT -.9559 CRS .9916 CST -.9859
    TOE-2.4367 TRA-2.3512 TC3-1.3435 BAU .7236
    RDE .7197 RRA .1135 RC3 .2401 FAU .04405
FDE-1.8125 FRA -,9011 FC3 -.9615 BSP 12322
                                                                                                                                  LSA 2643.0 MSA 230.8 SSA 3.2
    BDE 2.5408 BRA 2.3539 BC3 1.3648 FSP
                                                                                                                                   ELI 2450.8 ELZ 186.2 ALF 165.08
                                                          -639
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ARRIVAL DATE DEC 1 1967

LAUNCH DATE JUL 12 1967

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DISTANCE 413.790
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 26.799 GAL -5.09 ATL 99.07. MCA 196.43 SMA 129.22 ECC .19738 INC 9.0718 V1 29.294
RP 107.48 LAP 2.56 LOP 125.22 VP 37.980 GAP 6.01 AZP 81.29 TAL 201.64 TAP 38.07 RCA 103.71 APO 154.72 V2 35.258
RC 126.964 GL -48.36 GP 42.77 ZAL 114.35 ZAP 129.67 ETS 51.08 ZAE 119.03 ETE 149.05 ZAC 94.75 ETC 25.36 CLP-150.42
  PLANETOCENTRIC CONIC
    C3 31.717 VML 5.632 DLA -36.73 RAL 141.45 RAD 6568.5 VEL 12.375 PTH 2.23 VMP 6.271 DPA 51.37 RAP 180.87 ECC 1.5220
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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10 24 34 5742.65
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                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2322.6 SR 599.0 SS 1011.4

CRT -.9565 CRS ..9938 CST -.9830

LSA 2592.9 MSA 229.9 SSA 4.1

EL1 2392.6 EL2 169.7 ALF 166.07
                                                                      SGT 4026.5 SGR 683.6 SG3 229.9
RRT -.8220 RRF -.9474 RTF .9476
    TOE-2.1364 TRA-2.1446 TC3-1.7931 BAU .7691
   ROE .5876 RRA .0997 RC3 .2721 FAU .05178
FOE-1.8065 FRA -.8518 FC3-1.4134 BSP 12596
BDE 2.2157 BRA 2.1469 BC3 1.8137 FSP -741
                                                                      SGB 4084.2 R23 .2832 R13 -.9514
SG1 4065.9 SG2 385.5 THA 171.98
                                                                                                                                        APRIVAL DATE DEC 3 1967
                                                                           FLIGHT TIME 144.00
LAUNCH DATE JUL 12 1967
                                                                           DISTANCE 419.774
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 26.748 GAL -4.82 AZL 97.98 MCA 199.66 SMA 128.87 ECC .19819 INC 7.9840 V1 29.294 RP 107.48 LAP 2.68 LOP 128.47 VP 37.945 GAP 6.30 AZP 82.48 TAL 200.27 TAP 39.94 RCA 103.33 APO 154.41 V2 35.259 RC 129.165 GL -45.53 GP 36.90 ZAL 114.98 ZAP 134.54 ETS 48.34 ZAE 122.20 ETE 151.78 ZAC 95.40 ETC 23.02 CLP-151.29
   PLANETOCENTRIC CONIC
                                                                                                      2.19 WHP 5.954 OPA 45.43 RAP 178.45 ECC 1.4429
    C3 26.911 VHL 5.188 DLA -34.62 RAL 144,01 RAD 6568.1 VEL 12.177 PTH
    LNOW AZENTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                117.62
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       110.81
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                                   5761.93
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                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4142.7 SGR 617.5 SG3 251.6
RRT -.8193 RRF -.9420 RTF .9433
                                                                                                                             ST 2309.7 SR 540.5 SS 1015.4

CRT -.9561 CRS .9948 CST -.9809

LSA 2570.1 MSA 228.5 SSA 5.1
    TDE-1.9603 TRA-1.9897 TC3-2.2278 BAU .8074
    ROE .4885 RRA .0769 RC3 .2719 FAU .05690
FOE-1.7640 FRA -.7736 FC3-1.8306 BSP 13057
BOE 2.0203 BRA 1.9912 BC3 2.2443 FSP -826
                                                                       SGB 4188.4 R23 .2853 R13 -.9464
SG1 4173.7 SG2 351.5 TMA 172.99
                                                                                                                             EL1 2367.0 EL2 154.5 ALF 167.33
                                                                                                                                        ARRIVAL DATE DEC 5 1967
                                                                           FLIGHT TIME 146.00
LAUNCH DATE JUL 12 1967
                                                                          DISTANCE 425.752
    RL 152.08 LAL -.00 LOL 288.99 VL 26.697 GAL -4.54 AZL 97.19 MCA 202.90 SMA 128.53 ECC .19911 INC 7.1932 V1 29.294 RP 107.48 LAP 2.79 LOP 131.72 VP 37.909 GAP 6.59 AZP 83.37 TAL 198.89 TAP 41.78 RCA 102.94 APO 154.12 V2 35.259 RC 151.355 GL -43.21 GP 32.18 ZAL 114.99 ZAP 138.60 ETS 46.04 ZAE 124.39 ETE 154.55 ZAC 95.49 ETC 21.13 CLP-152.40
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.687 VHL 4.867 DLA -33.10 RAL 146.56 RAO 6568.0 VEL 12.044 PTH 2.15 VHP 5.796 OPA 40.46 RAP 177.35 ECC 1.3898
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.09 5 33 34 1389.84 21.56 .68 19.23 115.74 5 56 24 769.8 24.85 353.16
                                                                                                115.74 5 56 24
115.73 11 43 28
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120.78 9 25 55
110.85 12 57 16
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                                                                                   22.15
       110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RGT 4157.6 SGR 529.1 SG3 253.5
RRT -.7854 RRF -.9184 RTF ..9349
SGB 4191.1 R23 .2902 R13 -.9372
SG1 4178.4 SGZ 325.9 TMA 174.26
                                                                                                                             ST 2262.8 SR 476.3 SS 977.3
CRT -.9534 CRS .9953 CST -.9776
LSA 2500.1 MSA 226.9 SSA 6.1
    TDE-1.8079 TRA-1.8142 TC3-2.5695 BAU .8169
    RDE .4042 RRA .0439 RC3 .2290 FAU .05703
FDE-1.6422 FRA -.6183 FC3-2.0843 89P 12461
                                                                                                                             ELI 2308.1 ELZ 140.9 ALF 168.61
    BOE 1.8525 BRA 1.8147 BC3 2.5797 FSP -768
                                                                                                                                         ARRIVAL DATE DEC 7 1967
                                                                            FLIGHT TIME 148.00
LAUNCH DATE JUL 12 1967
                                                                            01STANCE 431.710
   HELIOCENTRIC CONIC
    RL 192.08 LAL -.00 LOL 288.99 VL 26.645 GAL -4.25 A7L 96.59 MCA 206.14 SMA 128.19 ECC .20015 INC 6.5891 V1 29.294
RP 107.48 LAP 2.90 LOP 134.97 VP 37.872 GAP 6.88 AZP 84.08 TAL 197.48 TAP 43.62 RCA 102.53 APO 153.84 V2 35.259
RC 133.557 GL -41.27 GP 28.35 ZAL 114.50 ZAP 142.03 ETS 44.08 ZAE 125.89 ETE 157.14 ZAC 95.13 ETC 19.54 CLP-153.60
   PLANETOCENTRIC CONIC
    C3 21.371 VHL 4.623 DLA -32.02 RAL 149.12 RAD 6567.9 VEL 11.948 PTH 2.13 VHP 5.732 DPA 36.25 RAP 177.04 ECC 1.3517 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                 L-I TIM
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4309.1 SGR 485.7 SG3 264.3
RRT -.7710 RRF -.8963 RTF .9341
SGB 4336.4 R23 .2707 R13 -.9358
                                                                                                                            ST 2299.9 SR 444.8 SS 982.2
CRT - .9558 CRS .9963 CST - .9772
LSA 2530.2 MSA 224.0 SSA '7.2
                                                          . # 551
     TOE-1.7534 TRA-1.7068 TC3-2.9858 BAU
     RDE .3587 RRA .0345 RC3 .2044 FAU .05899
     FDE-1.5883 FRA -.5313 FC3-2.3896 88P 13281
                                                                                                                              EL1 2339.0 EL2 128.7 ALF 169.49
                                                                        SG1 4325.4 SG2 308.2 THA 175.01
     BOE 1.7897 BRA 1.7071 BC3 2.9928 FSP -842
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FLIGHT TIME 142.00

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LAUNCH DATE JUL 12 1967
                                                                                  FLIGHT TIME 150.00
                                                                                                                                                    ARRIVAL DATE DEC 9 1967
   HELLOCENTRIC CONIC
                                                                                  DISTANCE 437.657
     RL 152.08 LAL -.00 LOL 288.99 VL 26.593 GAL -3.95 AZL 96.11 MCA 209.38 SMA 127.64 ECC .20130 INC 6.1099 V1 29.294
RP 107.48 LAP 2.99 LOP 138.22 VP 37.834 GAP 7.16 AZP 84.67 TAL 196.06 TAP 45.44 RCA 102.11 APO 153.58 V2 35.257
RC 135.709 GL -59.61 GP 25.23 ZAL 113.62 ZAP 144.96 ETS 42.41 ZAE 126.92 ETE 159.46 ZAC 94.42 ETC 18.19 CLP-154.84
   PLANETOCENTRIC CONIC
     C3 19.619 VHL 4.429 DLA -31.29 RAL 151.73 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 5.726 DPA 32.65 RAP 177.25 ECC 1.3229
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CET TIM INJ 2 LAT INJ 2 LONG
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113.10 11 37 59
113.11 6 41 36
113.10 11 37 59
122.02 9 7 7
104.36 13 55 46
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                        6 20 55
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       110.00
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   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             SGT 4414.7 SGR 443.9 SG3 266.1
RRT -.7397 RRF -.8606 RTF ..9316
SGB 4436.9 R23 .2502 R13 -.9329
SG1 4426.9 SG2 297.9 THA 175.73
                                                                                                                                        ST 2327.4 SR 417.3 SS 971.9
CRT -.9585 CRS .9972 CST -.9764
LSA 2546.9 MSA 220.5 SSA 8.4
     TOE-1.7096 TRA-1.5855 TC3-3.3560 BAU
                                                             .8813
    ROE .3225 RRA .0246 RC3 .1662 FAU .05869
FOE-1.5108 FRA -.4195 FC3-2.5898 88P 13656
ROE 1.7307 RRA 1.5847 RC3 3.3401 FRB .853
                                                                                                                                        EL1 2361.6 EL2 117.3 ALF 170.22
     BOE 1.7397 BRA 1.5857 BC3 3.3601 FSP
                                                              -853
LAUNCH DATE JUL 12 1967
                                                                                  FLIGHT TIME 152.00
                                                                                                                                                     ARRIVAL DATE DEC 11 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 443.590
    RL 152.08 LAL -.00 LOL 288.99 VL 26.541 GAL -3.64 A7L 95.72 MCA 212.62 SMA 127.50 ECC .20258 INC 5.7185 V1 29.294
RP 107.49 LAP 3.08 LOP 141.47 VP 37.796 GAP 7.45 A7P 85.18 TAL 194.62 TAP 47.24 RCA 101.68 APO 153.33 VZ 35.255
RC 137.871 GL -38.16 GP 22.65 ZAL 112.39 ZAP 147.51 ETS 41.00 ZAE 127.62 ETE 161.48 ZAC 93.43 ETC 17.03 CLP-156.06
   PLANETOCENTRIC CONIC
    C3 18.247 VHL 4.272 DLA -30.84 RAL 154.41 RAD 6567.7 VEL 11.816 PTH
                                                                                                               2.09 WHP 5.758 OPA 29.52 RAP 177.84 ECC 1.3003
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO EST TIM INJ Z LAT INJ Z LONG
                    6 39 46 1198.23
10 3 26 5831.27
6 39 46 1198.23
10 3 26 5831.27
         77.25
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                     12 44 47
       110.00
                                      5327.82
                                                          32.03
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                                                                                                                                                               33.44
                                                                                                                                                                              233.56
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                            SGT 4511.0 SGR 412.8 SG3 264.3
RRT -.7003 RRT -.8150 RTF .9290
SG8 4529.9 RZ3 .2264 R13 -.9300
SG1 4520.3 SG2 294.1 TMA 176.32
                                                                                                                                      ST 2362.9 SR 397.6 SS 960.5

CRT - .9625 CRS .9982 CST - .9760

LSA 2572.4 MSA 216.2 SSA 9.5

EL1 2393.8 EL2 106.5 ALF 170.78
     TOE-1.6845 TRA-1.4620 TC3-3.7067 BAU .9048
    ROE .2963 RRA .0182 RC3 .1261 FAU .05748
    FOE-1.4549 FRA -.3074 FC3-2.7270 BSP 15954
BOE 1.7104 BRA 1.4621 BC3 3.7089 FSP -847
                                                                                 FLIGHT TIME 154.00
                                                                                                                                                   ARRIVAL DATE DEC 13 1967
LAUNCH DATE JUL 12 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 449.508
    RL 152.08 LAL -.00 LOL 288.99 VL 26.489 GAL -3.32 AZL 95.89 MCA 215.86 SMA 127.17 ECC .20398 INC 5.3907 V1 29.294
RP 107.50 LAP 3.16 LOP 144.73 VP 37.757 GAP 7.73 AZP 85.63 TAL 193.16 TAP 49.02 RCA 101.23 APO 153.11 VZ 35.253
RC 140.023 GL -36.87 GP 20.49 ZAL 110.87 ZAP 149.76 ETS 39.81 ZAE 128.09 ETE 163.24 ZAC 92.23 ETC 16.01 CLP-157.27
   PLANETOCENTRIC CONIC
    C3 17.148 VHL 4.141 QLA -30.61 RAL 157.18 RAD 6567.7 VEL 11.770 PTM 2.08 VMP 5.817 DPA 26.75 RAP 178.70 ECC 1.2822
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.87 6 55 18 1169.57 22.06 345.71 23.91 111.77 7 14 48 569.6 24.82 337.94
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10 9 59 5831.06
6 55 18 1169.57
10 9 59 5831.06
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111.76 11 47 10
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101.50 14 27 57
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       110.00
                                        747.69
                                                         12.44
                     12 59 36 5300.95
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       110.00
                                                         32.41
                                                                        240.60
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 4605.1 SCR 392.2 SG3 260.8
RRT -.6569 RRF -.7630 RTF ..9269
SC8 4621.8 R23 .2010 R13 -.9276
SC1 4612.3 SG2 295.2 THA 176.78
                                                                                                                                      ST 2408.8 SR 384.7 SS 951.0

CRT -.9677 CRS .9990 CST -.9760

LSA 2609.6 MSA 211.1 SSA 10.6

EL1 2437.4 EL2 95.8 ALF 171.20
    TDE-1.6759 TRA-1.3363 TC3-4.0436 BAU .9272
    RDE .2760 RRA .0150 RC3 .0875 FAU .05560
    FOE-1.3649 FRA -.2008 FC3-2.8172 BSP 14264
BOE 1.6988 BRA 1.3364 BC3 4.0446 FSP -837
                                                                                                                                                    ARRIVAL DATE DEC 15 1967
                                                                                 FLIGHT TIME 156.00
LAUNCH DATE JUL 12 1967
                                                                                 DISTANCE 455.410
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 26.437 GAL -2.96 A7L 95.11 MCA 219.10 SMA 126.83 ECC .20552 INC 5.1106 V1 29.294
RP 107.51 LAP 3.22 LOR 147.98 VP 37.717 GAP 8.02 A7P 86.03 TAL 191.68 TAP 50.79 RCA 100.77 APO 152.90 V2 35.249
RC 142.165 GL -35.68 GP 18.68 ZAL 109.08 ZAP 151.77 ETS 38.84 ZAE 128.41 ETE 164.75 ZAC 90.84 ETC 15.13 CLP-158.45
   PLANETOCENTRIC CONIC
    C3 16.257 VHL 4.032 OLA -30.56 RAL 160.05 RAD 6567.7 VEL 11.732 PTH 2.07 VHP 5.895 DPA 24.27 RAP 179.77 ECC 1.2675
    LNCH AZMITH LNCH TIME L-| TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.01 7 7 90 1153.99 22.33 344.66 25.94 111.42 7 27 4 554.0 25.04 336.86 101.99 10 20 25 5822.15 22.35 276.89 25.95 111.40 11 57 27 5222.2 25.05 269.08 101.99 10 20 25 5822.15 22.35 276.89 25.95 111.40 11 57 27 5222.2 25.05 269.08 101.99 10 20 25 5822.15 22.35 276.89 25.95 111.40 11 57 27 5222.2 25.05 269.08
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                                                                                          29.29
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4698.3 SGR 380.3 SG3 256.4

RRT -.6132 RRF -.7083 RTF ..9253

SGB 4713.7 R23 .1754 R13 -.9258

SG1 4704.1 SG2 300.0 THA 177.15
                                                                                                                                      ST 2464.8 SR 377.3 SS 943.7
CRT -.9737 CRS .9994 CST -.9763
    TDE-1.6811 TRA-1.2071 TC3-4.3667 BAU .9491
    ROE .2655 RRA .0141 RC3 .0521 FAU .05389
FOE-1.3024 FRA -.1011 FC3-2.8696 BSP 14584
BOE 1.7019 BRA 1.2072 BC3 4.3670 FSP -825
                                                                                                                                      LSA 2658.2 MSA 205.1 SSA 11.8
                                                                                                                                      ELI 2492.1 EL2 85.1 ALF 171.51
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LAUNCH DATE JUL 12 1967
                                                                      FLIGHT TIME 158.00
                                                                                                                              ARRIVAL DATE DEC 17 1967
   HELIOCENTRÍC CONIC
                                                                     DISTANCE 461.296
    RL 152.08 LAL -.00 LOL 288.99 VL 26.385 GAL -2.64 AZL 94.87 MCA 222.34 SMA 126.50 ECC .20720 INC 4.8670 V1 29.294 RP 107.52 LAP 3.28 LOP 151.23 VP 37.677 GAP 8.31 AZP 86.40 TAL 190.19 TAP 52.54 RCA 100.29 APO 152.71 V2 35.245
    RC 144.295 GL -34.57 GP 17.14 TAL 107.07 TAP 153.59 ETS 38.06 TAE 128.63 ETE 166.06 TAC 89.32 ETC 14.35 CLP-159.60
   PLANETOCENTRIC CONIC
    C3 15.533 VML 3.941 DLA -30.65 RAL 163.06 RAD 6567.6 VEL 11.701 PTH
                                                                                              2.06 VHP 5.988 DPA 22.02 RAP 181.01 ECC 1.2556
    ENCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       77.76
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                                1149.42
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   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                SGT 4779.4 SGR 374.4 SG3 250.5
RRT -.5689 RRF -.6526 RTF .9234
                                                                                                                   ST 2523.6 SR 373.4 SS 934.9
CRT -.9797 CRS .9992 CST -.9768
    TOE-1.6937 TRA-1.0693 TC3-4.6639 BAU .9685
    ROE .2568 RRA .0143 RC3 .0191 FAU .05162
                                                                SGB 4794.0 R23 .1521 R13 -.9239
SG1 4784.1 SG2 307.6 THA 177.44
    FOE-1.2421 FRA -. 0036 FC3-2.8772 BSP 14818
                                                                                                                  LSA 2709.7 MSA 198.5 SSA 13.0
    BOE 1.7130 BRA 1.0694 BC3 4.6640 FSP
                                                                                                                   ELI 2550.0 EL2 74.1 ALF 171.75
LAUNCH DATE JUL 12 1967
                                                                      FLIGHT TIME 160.00
                                                                                                                              ARRIVAL DATE DEC 19 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 467.164
   RL 152.08 LAL -.00 LOL 288.99 VL 26.333 GAL -2.28 ATL 94.65 MCA 225.59 SMA 126.17 ECC .20903 INC 4.6520 V1 29.294
RP 107.53 LAP 3.32 LOP 154.48 VP 37.636 GAP 8.60 ATP 86.74 TAL 188.69 TAP 54.28 RCA 99.80 APO 152.55 V2 35.240
RC 146.414 GL -33.50 GP 15.82 TAL 104.84 TAP 155.25 ETS 37.47 TAE 128.77 ETE 167.20 TAC 87.67 ETC 13.67 CLP-160.72
  PLANETOCENTRIC CONIC
    C3 14.951 VHL 3.867 DLA -30.85 RAL 166.20 RAD 6567.6 VEL 11.676 PTH
                                                                                              2.05 WHP 6.093 DPA
                                                                                                                          19.96 RAP 182.37 ECC 1.2461
    ENCH ATRITH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJETTH INJ TIME PO CST TIM INJ 2 LAN INJ 2 LONG
                    7 26 39 1153.13
                                                 23.00
                                                                             30.87
                                                                                                                         553.1
       77.23
                                                              344.88
                                                                                          111.14
                                                                                                        7 45 52
                                                                                                                                     25.67
                  10 50 37
      102.77
                                5785.20
                                                 23.02
                                                              274.40
                                                                              30.87
                                                                                           111.12
                                                                                                      12 27 2
                                                                                                                        5185.2
                                                                                                                                       25.6A
                                                                                                                                                    266.53
                                                                                                        7 45 52
       77.23
                   7 26 39
                                1155.13
                                                 23.00
                                                                              30.87
                                                              344.88
                                                                                           111.14
                                                                                                                         553.1
                                                                                                                                       25.67
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                  10 50 37
                                5765.20
      102.77
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                                                                                           111.12 12 27 2
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                                                                                                                                       25.68
                                                                                                                                                    266.53
                   9 44 47
                                 703.62
                                                 14.02
                                                              307.45
                                                                             26.19
                                                                                           121.50
                                                                                                       9 56 30
                                                                                                                        103.6
                                                                                                                                       18.09
                                                                                                                                                    300.70
                  13 31 39
                                5282.70
                                                 32.65
                                                              239.23
                                                                             33.96
                                                                                           100.73 14 59 42
                                                                                                                       4682.7
                                                                                                                                       33.79
                                                                                                                                                    230.18
  DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                SGT 4866.3 SGR 374.3 SG3 244.9
RRT -.5311 RRF -.6025 RTF .9227
SG8 4880.7 R23 .1302 R13 -.9230
SG1 4870.4 SG2 316.9 TMA 177.65
    TOE-1.7177 TRA -.9284 TC3-4.9469 BAU .9688
                                                                                                                   $7 2592.9 $R 373.3 $S 929.8
CRT -.9855 CRS .9982 CST -.9778
    RDE .2519 RRA .0159 RC3 -.0089 FAU .04944
    FOE-1.1907 FRA .0841 FC3-2.8630 BSP 15124
BOE 1.7361 BRA .9285 BC3 4.9469 FSP -786
                                                                                                                   LSA 2773.1 MSA 191.3 SSA
                                                                                                                                                       14.1
                                                                                                                   EL1 2618.8 EL2 62.8 ALF 171.92
LAUNCH DATE JUL 12 1967
                                                                     FLIGHT TIME 162.00
                                                                                                                             ARRIVAL DATE DEC 21 1967
                                                                     DISTANCE 473.014
    RL 152.08 LAL -.00 LOL 288.99 VL 26.281 GAL -1.91 AZL 94.46 MCA 228.83 SMA 125.85 ECC .21102 INC 4.4597 VL 29.294
RP 107.55 LAP 3.36 LOP 157.73 VP 37.594 GAP 8.89 AZP 87.06 TAL 187.17 TAP 56.00 RCA 99.29 APO 152.40 VZ 35.234
RC 148.521 GL -32.44 GP 14.68 ZAL 102.41 ZAP 156.78 ETS 37.05 ZAE 128.86 ETE 168.17 ZAC 85.93 ETC 13.06 CLP-161.81
   PLANETOCENTRIC CONIC
    C3 14.494 VML 3.807 OLA -31.13 RAL 169.48 RAO 6567.6 VEL 11.657 PTM 2.05 VMP 6.208 OPA 18.04 RAP 183.85 ECC 1.2385
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         33.76
       76.50
                    7 34 32 1162.62
                                                23,38
                                                              345.75
                                                                                        111.17
                                                                                                       7 53 55
                                                                                                                        562.6
                                                                                                                                    26.04 337.86
                                                                                          7 55 55
111.15 12 44 56
111.17 7 53 55
      103.50
                  11 8 54
                                                 23.39
                                                              272.80
                                                                             33.76
                                5761.88
                                                                                                                       5161.9
                                                                                                                                       26.05
                                                                                                                                                   264.91
       76.50
                  7 34 32 1162.62
                                                              345.75
                                                                             33.76
                                                 23.36
                                                                                                                       562.6
                                                                                                                                       26.04
                                                                                                                                                   337.86
                 11 8 54
10 2 43
                                                                                          111.15 12 44 56
121.16 10 14 4
101.11 15 8 6
      103.50
                               5761.88
                                                                             33.76
                                                                                                                                       26.05
                                                 23.39
                                                              272.80
                                                                                                                                                   264.91
                                                                                                                       5161.9
      110.00
                                  680.86
                                                 14.82
                                                                             29.32
                                                                                                                                                   299.37
                                                              306.16
                                                                                                                        80.9
                                                                                                                                       18.84
      110.00
                 13 39 54
                                5291.64
                                                 32.54
                                                              239.90
                                                                                                                       4691.6
                                                                                                                                       33.73
                                                                             36.76
                                                                                                                                                   230.87
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 SCT 4948.4 SGR 377.8 SGS 239.0
RRT -.4963 RRF -.5578 RTF ..9221
SGB 4962.8 R23 .1111 R13 -.9224
SGI 4952.0 SGZ 327.3 THA 177.81
                                                                                                                  ST 2665.5 SR 375.8 SS 924.4

CRT -.9905 CRS ..9965 CST -.9788

LSA 2840.2 MSA 183.9 SSA 15.3

EL1 2691.4 EL2 51.2 ALF 172.05
    TOE-1.7482 TRA -.7793 TC3-5.2018 BAU 1.0080
   RDE .2496 RRA .0178 RC3 -.0330 FAU .04719
FDE-1.1428 FRA .1678 FC3-2.8187 83P 15413
80E 1.7659 8RA .7795 8C3 5.2019 FSP -769
LAUNCH DATE JUL 12 1967
                                                                     FLIGHT TIME 164.00
                                                                                                                              ARRIVAL DATE DEC 23 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 478.846
   RL 152.08 LAL -.00 LOL 288.99 VL 26.230 GAL -1.53 A7L 94.29 MCA 232.07 SMA 125.52 ECC .21318 INC 4.2855 V1 29.294
RP 107.57 LAP 3.38 LOP 160.98 VP 37.553 GAP 9.19 A7P 87.36 TAL 185.65 TAP 57.71 RCA 98.77 APO 152.28 V2 35.228
RC 150.615 GL -31.39 GP 13.69 ZAL 99.81 ZAP 158.20 ETS 36.79 ZAE 128.91 ETE 169.03 ZAC 84.10 ETC 12.52 CLP-162.87
  PLANETOCENTRIC CONIC
   C3 14.153 VML 3.762 DLA -31.47 RAL 172.91 RAD 6567.6 VEL 11.642 PTH 2.04 VMP 6.332 DPA 16.24 RAP 185.41 ECC 1.2329
   LNCM AZMTH LNCM TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.67 7 42 23 1175.70 23.75 346.89 36.93 111.28 8 1 59 575.7 26.43 338.99
                    7 42 23
                                                                                        111.28
                                                                                          111.28 8 1 59
111.26 13 4 3
                                                                             36.93
                                                 23.76
      104.33
                  11 28 25 5738.27
                                                              271.17
                                                                             36.93
                                                                                                                                                    263.26
                                                                                                                       5136.3
                                                                                                                                       26.44
                                                                                          111.28 8 1 59
111.26 13 4 3
120.76 10 33 26
101.73 15 15 54
       75.67
                    7 42 23
                                1175.70
                                                 23.75
                                                                                                                         575.7
                                                              346.89
                                                                             36.93
                                                                                                                                       26.43
                                                                                                                                                    338.99
      104.33
                 11 28 25 5738.27
                                                 23.76
                                                                             36.93
                                                              271.17
                                                                                                                       5138.3
                                                                                                                                       26.44
                                                                                                                                                    263.26
      110.00
                  10 22 31
                                  655.70
                                                 15.71
                                                              304.76
                                                                             32.76
                                                                                                                         55.7
                                                                                                                                       19.67
                                                                                                                                                    297.88
      110.00
                 13 47 28
                                5306.26
                                                              241.00
                                                                                                                       4706.3
                                                 32.34
                                                                             39.81
                                                                                                                                       33.62
                                                                                                                                                    232.00
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                SGT 5023.6 SGR 383.7 SG3 232.6

RRT -.4706 RRF -.5191 RTF .9217

SG8 5038.2 R23 .0945 R13 -.9220

SG1 5026.9 SG2 338.3 THA 177.93
   TOE-1.7824 TRA -.6218 TC3-5.4208 BAU 1.0257
                                                                                                                 ST 2737.7 SR 380.1 SS 917.3
CRT -.9944 CRS .9935 CST -.9798
LSA 2906.8 MSA 176.4 SSA 16.5
   ROE .2495 RRA .0196 RC3 -.0533 FAU .04486
   FOE-1.0967 FRA .2469 FC3-2.7440 BSP 15671
BOE 1.7998 BRA .6221 BC3 5.4210 FSP -749
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EL1 2763.7 EL2 39.7 ALF 172.14

ARRIVAL DATE DEC 25 1967

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FLIGHT TIME 166.00
LAUNCH DATE JUL 12 1967
                                                                                    DISTANCE 484.657
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 26.179 GAL -1.13 AZL 94.13 HCA 235.31 SMA 125.21 ECC .21552 INC 4.1282 VI 29.294 RP 107.59 LAP 3.39 LOP 164.22 VP 37.510 GAP 9.49 AZP 87.65 TAL 184.11 TAP 59.42 RCA 98.22 APO 152.19 V2 35.221 RC 152.696 GL -30.31 GP 12.82 TAL 97.05 ZAP 159.52 ETS 36.71 ZAE 128.94 ETE 169.77 TAC 82.20 ETC 12.05 CLP-163.90
   PLANETOCENTRIC CONIC
     C3 13.922 VHL 3.731 DLA -31.84 RAL 176.48 RAD 6567.5 VEL 11.632 PTH 2.04 VHP 6.465 DPA 14.54 RAP 187.04 ECC 1.2291 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             7 50 41 1190.76
11 48 37 5715.98
7 50 41 1190.76
11 48 37 5715.98
10 43 55 629.02
15 54 34 5325.72
                                                                                         40.36
                                                                                                                                                    590.8
                                                                                                                                                                    26.80
                                                           24.10
                                                                            348.19
         74.80
                                                                                                                                                                                      261.71
                                                                                               40.37
                                                                                                                                                   5116.0
                                                                                                                                                                      26.81
                                                             24.12
                                                                            269,64
        105.20
                                                                                                                111.46  8 10 31
111.44  13 23 53
120.31  10 54 24
102.54  15 23 19
                                                                                                                                                     590.8
                                                                                                                                                                      26.80
                                                                                                                                                                                      340.26
                                                           24.10
                                                                                               40.36
                                                                             348.19
         74.80
                                                                                                                                                   5116.0
                                                                                                                                                                                      261.71
                                                                                               40.37
                                                                                                                                                                      26.81
                                                           24.12
                                                                             269.64
       105.20
                                                                                                                                                                                      296.29
                                                                                                                                                     29.0
                                                                                                                                                                      20.53
                                                           16.63
                                                                             303.24
                                                                                               36.50
        110.00
                                                                                                                                                  4725.7
                                                                                                                                                                      33.46
                                                                                                                                                                                     233.49
                                                                            242.45
                                                                                                43.12
        110.00
                                                            32.06
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 867 5103.1 868 391.6 863 226.7

MRT -.4503 MRT -.4866 RTF .9223

868 5118.1 R23 .0798 R13 -.9225

861 5106.1 862 349.4 THA 178.01
                                                                                                                                              ST 2812.0 SR 386.4 SS 910.9
CRT -.9971 CRS .9898 CST -.9810
     TOE-1.8223 TRA -.4576 TC3-5.6100 BAU 1.0443
    ROE .2515 RRA .0218 RC3 -.0863 FAU .04270
FOE-1.0554 FRA .3199 FC3-2.6549 BBP 15963
BÔE 1.8396 BRA .4583 BC3 5.6104 FBP -739
                                                                                                                                             LSA 2976.2 MSA 169.1 SSA 17.7
                                                                                                                                              EL1 2838.3 EL2 28.9 ALF 172.20
                                                                                                                                                           ARRIVAL DATE DEC 27 1967
                                                                                      FLIGHT TIME 168.00
LAUNCH DATE JUL 12 1967
                                                                                      DISTANCE 490.448
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 26.128 GAL -.71 ATL 93.98 HCA 238.54 SMA 124.89 ECC .21806 INC 3.9789 VI 29.294
RP 107.62 LAP 3.39 LOP 167.47 VP 37.468 GAP 9.80 AZP 87.92 TAL 182.56 TAP 61.11 RCA 97.66 APO 152.13 VZ 35.214
RC 154.762 GL -29.21 GP 12.06 ZAL 94.14 ZAP 160.77 ETS 36.78 ZAE 128.96 ETE 170.41 ZAC 80.24 ETC 11.62 CLP-164.91
   PLANETOCENTRIC CONIC
                                                                                                                     2.04 WHP 6.605 DPA 12.92 RAP 188.75 ECC 1.2271
     C3 13.801 WHL 3.715 DLA -32.22 RAL 180.19 RAD 6567.5 VEL 11.627 PTH
     LNON AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             111.69
                                                                                            44.06
                                                                                                                                8 19 55
                                                                                                                                                      606.5
                                                             24.42
                                                                             349.53
         73.96
                         7 59 48
                                         1206.55
                                                                                                                 111.66
                                                                                                                              13 44 2
                                                                                                                                                    5096.4
                                                                                                                                                                       27.16
                                                                                                                                                                                       260.34
                      12 9 6
                                                             24.44
                                                                             246.28
                                                                                                44.06
                                         5696.35
        106.04
                                                                                                                 111.69
                                                                                                                                 8 19 55
                                                                                                                                                     606.5
                                                                                                                                                                       27.15
                                                                                                                                                                                       341.59
                                                                                                44.06
                         7 59 48
                                         1204.55
                                                             24.42
                                                                             349.53
          73.96
                                                                                                            111.66 13 44 2
119.81 11 16 41
103.51 15 30 35
                    12 9 6 5696.35
11 6 39 601.73
14 1 26 5349.17
                                                                                                                                                                                       260.34
                                                                                                44.04
                                                                                                                                                   5096.4
                                                                                                                                                                       27.16
                                                             24.44
                                                                             266.28
        104.04
                                                                                                                                                                                       294.64
                                                                                                40.51
                                                                                                                                                         1.7
                                                                                                                                                                       21.39
                                                                             301.67
                                                            17.56
        110.00
                                                                                                                              15 30 35
                                                                                                                                                    4749.2
                                                                                                                                                                       33.23
                                                                                                                                                                                       235.29
                                                                                               46.67
                                                             31.70
                                                                             244.18
        110.00
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5161.0 SCR 599.8 SG3 219.7
RRT -.4320 RRF -.4617 RTF .9218
SGB 5176.4 R23 .D662 R13 -.9220
SG1 5163.9 SG2 360.4 TMA 178.07
                                                                                                                                              ST 2872.3 SR 393.3 SS 898.1
CRT -.9986 CRS .9849 CST -.9818
     TOE-1.6579 TRA -.2788 TC3-5.7367 BAU 1.0586
     ROE .2549 RRA .0229 RC3 -.0809 FAU .04028
                                                                                                                                              LSA 3030.6 MSA 162.9 SSA 18.8
     FOE-1.0101 FRA .3946 FC3-2.3266 BSP 16110
BOE 1.8753 BRA .2797 BC3 5.7372 FSP -705
                                                                                                                                              EL1 2699.0 EL2 20.8 ALF 172.21
                                                                                                                                                           ARRIVAL DATE DEC 29 1967
                                                                                      FLIGHT TIME 170.00
LAUNCH DATE JUL 12 1967
                                                                                    DISTANCE 496.216
     RL 152.08 LAL -.00 LOL 288.99 VL 26.077 GAL -.29 ATL 93.84 MCA 241.78 SMA 124.58 ECC .22080 INC 3.8416 VI 29.294
RP 107.64 LAP 3.38 LOP 170.71 VP 37.425 GAP 10.11 APP 88.18 TAL 181.01 TAP 62.79 RCA 97.07 APO 152.09 V2 35.205
RC 156.813 GL -28.06 GP 11.39 TAL 91.12 TAP 161.94 ETS 37.03 TAE 128.96 ETE 170.98 TAC 78.23 ETC 11.25 CLP-165.89
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 13.790 VHL 3.713 DLA -32.58 RAL 184.03 RAD 6567.5 VEL 11.627 PTH 2.04 VMP 6.753 DPA 11.38 RAP 190.50 ECC 1.2269
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                  342.91
                                                                                                            111.96 8 30 20
111.95 14 4 12
111.96 8 30 20
                                                                                                                                                     622.3 27.45
                                                                                            47.99
                       8 9 56 1222.34
12 29 32 5680.21
                                                                             350.85
                                                            24.69
          73.18
                                                                                                                                                   5080.2
                                                                                                                                                                       27.46
                                                                                                                                                                                      259.22
                                                                                                48.00
                                                              24.70
                                                                             267,17
         106.62
                                                                                                                                                     622.3
                                                                                                                                                                      27.45
                                                                                                                                                                                      342.91
                       8 9 58 1222.34
12 29 32 5680.21
                                                                                                47.99
                                                                             350.85
                                                            24.69
          73.18
                                                                                                                 111.95 14 4 12
119.30 13 8 3
104.56 15 37 57
                                                                                                                                                                                      259.22
                                                                                                                                                    5080.2
                                                                                                                                                                      27.46
                                                            24.70
                                                                             267.17
                                                                                                48,00
         106.82
                                                                                                                                                                                       270.91
                                                                                                                                                    5263.0
                                                                                                                                                                     22.22
                      11 30 20 5863.00
14 8 21 5375.59
                                                              18.46
                                                                             278.03
                                                                                                44.78
         110.00
                                                                                                                                                                                       237.30
                                                                                                                                                    4775.6
                                                                                                                                                                       32.95
                                                                                                50.45
                                                             31.27
                                                                             246.12
         110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  NID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 RET -,4224 RRF -,4426 RTF .9236
868 5252.9 R23 .0556 R13 -.9236
861 5259.9 862 370.4 THA 178.10
                                                                                                                                               ST 2931.9 SR 401.7 SS 885.6
      TDE-1.8980 TRA -.0964 TC3-5.8410 BAU 1.0770
                                                                                                                                              CRT -.9987 CRS .9793 CST -.9829
LSA 3084.9 MSA 156.9 SSA 19.8
     NOE .2602 NRA .0240 RC3 -.0865 FAU .03836
FOE -.9605 FRA .4598 FC3-2.4081 BSP 16385
                                                                                                                                               EL1 2959.2 EL2 20.4 ALF 172.21
      BOE 1.9158 BRA .0994 BC3 5.8416 FSP -669
                                                                                                                                                            ARRIVAL DATE DEC 31 1967
                                                                                       FLIGHT TIME 172.00
 LAUNCH DATE JUL 12 1967
                                                                                     DISTANCE 501.900
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 26.027 GAL .18 AZL 93.71 MCA 245.02 3MA 124.28 ECC .22377 INC 3.7123 V1 29.294
RP 107.67 LAP 3.36 LOP 173.96 VP 37.381 GAP 10.43 AZP 88.43 TAL 179.45 TAP 64.46 RCA 96.47 APO 152.09 V2 35.197
RC 158.850 GL -26.88 GP 10.79 ZAL 88.01 ZAP 163.05 ETS 37.46 ZAE 128.96 ETE 171.47 ZAC 76.17 ETC 10.93 CLP-166.85
     PLANETOCENTRIC CONIC
     C3 13.893 WHL 3.727 DLA -32.90 MAL 187.97 MAD 6967.5 VEL 11.631 PTH 2.04 WHP 6.908 DPA 9.90 MAP 192.31 ECC 1.2286

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ MT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT DNJ 2 LONG

72.50 8 21 18 1237.58 24.88 352.11 52.15 112.26 8 41 55 637.6 27.68 344.16

107.50 12 49 39 5666.24 24.89 266.33 52.16 112.24 14 24 7 5066.2 27.69 258.39

72.50 8 21 18 1237.58 24.88 352.11 52.15 112.26 8 41 55 637.6 27.68 344.16

107.50 12 49 39 5666.24 24.89 266.33 52.16 112.26 8 41 55 637.6 27.68 344.16

107.50 12 49 39 5666.24 24.89 266.33 52.16 112.26 8 41 55 637.6 27.69 256.39

110.00 11 54 28 5638.11 19.28 276.96 49.27 118.79 13 31 46 5236.1 22.97 269.37

110.00 14 15 39 5403.75 30.76 248.16 54.44 105.69 15 45 42 4803.8 32.61 239.42
                                                                                                                                                         9.90 RAP 192.31 ECC 1.2286
      C3 13.893 WHL 3.727 DLA -32.90 RAL 187.97 RAD 6967.5 VEL 11.631 PTH 2.04 WHP 6.908 DPA
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                  HIO-COURSE EMECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                  SCT 5290.5 SCR 417.6 SC3 206.7 ST 2972.6 SR 409.8 SS 864.7 CAT -.9975 CR3 .9724 CST -.9834 SC8 5307.0 R23 .0471 R13 -.9236 LSA 5119.0 MSA 152.9 SSA 20.6 SC1 5293.3 SC2 360.3 TMA 178.13 EL1 3000.5 EL2 28.4 ALF 172.17
      TDE-1.9316 TRA .0959 TC3-5.8691 BAU 1.0903
      ROE .2849 RRA .0241 RC3 -.0918 FAU .03597
FDE -.9231 FRA .5238 FC3-2.2414 BSP 18517
BOE 1.9499 BRA .0969 BC3 5.6668 FSP -657
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ARRIVAL DATE JAN 2 1968
                                                                                FLIGHT TIME 174.00
LAUNCH DATE JUL 12 1967
                                                                               DISTANCE 507.679
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.977 GAL .62 AZL 93.59 MCA 248.25 SMA 123.98 ECC .22697 INC 3.5898 VI 29.294 RP 107.70 LAP 3.33 LOP 177.20 VP 37.338 GAP 10.76 AZP 88.67 TAL 177.88 TAP 66.13 RCA 95.84 APO 152.11 V2 35.187 RC 160.871 GL -25.65 GP 10.25 TAL 84.82 ZAP 164.10 ETS 38.07 ZAE 128.95 ETE 171.91 ZAC 74.07 ETC 10.65 CLP-167.79
   PLANETOCENTRIC CONIC
    C3 14.116 VHL 3.757 OLA -33.18 RAL 191.99 RAD 6567.6 VEL 11.641 PTH 2.04 VHP 7.072 DPA 8.47 RAP 194.16 ECC 1.2323 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.94 8 33 51 1251.90 24.99 353.26 56.51 112.57 8 54 43 651.9 27.82 345.32 108.06 13 9 12 5660.94 25.00 265.82 56.51 112.56 14 43 33 5060.9 27.83 257.88
                                                                                                        112.57 8 54 43
112.56 14 43 33
118.34 13 55 23
106.78 15 54 18
                                                                                                                                            651.9
                                                                                                                                                            27.82
                                                                                                                                                                           345.32
                                                                                         56.51
         71.94
                       8 33 51 1251.90
                                                       24.99
                                                                        353.26
                                                                                                                                                                           257.88
                                                                                                                                           5060.9
                                                                                                                                                            27.83
       108.06
                     13 9 12
                                     5660.94
                                                        25.00
                                                                        265.82
                                                                                         56.51
                                                                                                                                                                            268.04
                     12 18 26 5816.83
14 23 46 5432.04
                                                                                                                                          5216.8
                                                                                                                                                            23.60
                                                         19.97
                                                                        275.30
                                                                                         53.93
       110.00
                                                                                                                                                          32.22
                                                                                                                                          4832.0
                                                                                                                                                                           241.54
                                                         30.23
                                                                        250.19
                                                                                         58.62
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RET -,4081 RRF -,4172 RTF .9245

$68 5365.5 R23 .0414 R13 -,9247

$61 5351.3 $62 369.8 THA 176.12
                                                                                                                                      ST 3007.6 SR 419.7 SS 848.9
CRT -.9952 CRS .9648 CST -.9841
     TOE-1.9675 TRA .3031 TC3-5.8464 BAU 1.1035
    ROE .2751 RRA .0230 RC3 -.0918 FAU .03364
FOE -.8858 FRA .5879 FC3-2.0754 BSP 16795
BOE 1.9865 BRA .3040 BC3 5.8471 FSP -648
                                                                                                                                     LSA 3149.5 MSA 150.7 SSA 21.3
                                                                                                                                      EL1 3036.5 EL2 40.7 ALF 172.09
                                                                                                                                                  ARRIVAL DATE JAN 4 1968
                                                                                 FLIGHT TIME 176.00
LAUNCH DATE JUL 12 1967
                                                                                 DISTANCE 513.369
   HELIOCENTRIC CONIC
   #L 152.08 LAL -.00 LOL 288.99 VL 25.927 GAL 1.10 AZL 93.47 MCA 251.48 SMA 123.68 ECC .23044 INC 3.4728 V1 29.294

#P 107.73 LAP 3.29 LOP 180.44 VP 37.294 GAP 11.10 AZP 88.90 TAL 176.31 TAP 67.79 RCA 95.18 APO 152.18 V2 35.178

#RC 182.878 GL -24.38 GP 9.78 ZAL 81.58 ZAP 185.10 ETS 38.89 ZAE 128.95 ETE 172.29 ZAC 71.94 ETC 10.41 CLP-168.71
   PLANETOCENTRIC CONIC
                                                                                                                                               7.08 RAP 196.05 ECC 1.2381
    C3 14.468 WHL 3.804 DLA -53.36 RAL 196.07 RAD 6567.6 VEL 11.656 PTH
                                                                                                              2.05 WHP 7.245 DPA
    LNOW APRITH LNOW TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             665.2
                                                                                                                                                           27.86
                                                                                                                       9 8 39
                       8 47 33
                                     1265.17
                                                         24.99
                                                                        354.29
                                                                                        61.03
                                                                                                         112.89
        71.54
                                                                                                                                            5058.5
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                      13 28 0
                                                          25.00
                                                                        265.63
                                                                                          61.03
                                                                                                          112.87
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                                      5658.52
       106.46
                                                                                                         112.89 9 8 39
112.87 15 2 19
118.00 14 18 2
107.76 16 4 22
                                                                                                                                                                            346.36
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                       8 47 33
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                                      1265.17
                                                          Z4.99
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                     13 28 0
                                                                        265.63
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                                      5654.52
                                                         25.00
        104.46
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                     12 41 20
                                                                        274.39
                                                                                          50.69
       110.00
                                      5801.62
                                                         20.46
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                     14 33 24
                                                                        252.03
                                                                                          62.99
                                                                                                                                           4858.1
                                      5456.11
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5398.1 SGR 435.7 SGS 194.7
RRT -.4065 RRF -.4101 RTF .9261
SGB 5415.7 RZ3 .0348 R13 -.9261
SGI 5401.0 SGZ 397.9 THA 178.11
                                                                                                                                      ST 3017.7 SR 429.0 SS 825.2
CRT -.9916 CRS .9559 CST -.9845
    TOE-1.9927 TRA .5203 TC3-5.7673 BAU 1.1156
RDE .2847 RRA .0210 RC3 -.0886 FAU .03182
                                                                                                                                     LSA 3154.2 MSA 150.1 SSA 21.6
EL1 3047.6 EL2 54.8 ALF 171.97
     FOE -.8431 FRA .8480 FC3-1.9040 89P 16950
     BOE 2.0129 BRA .5207 BC3 5.7679 FSP -630
                                                                                                                                                  ARRIVAL DATE JAN 6 1968
                                                                                 FLIGHT TIME 178.00
LAUNCH DATE JUL 12 1967
                                                                                DISTANCE 519.029
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.878 GAL 1.61 AZL 93.36 MCA 254.71 SMA 123.39 ECC .23418 INC 3.3601 VI 29.294

RP 107.76 LAP 3.24 LOP 183.67 VP 37.250 GAP 11.45 AZP 89.11 TAL 174.73 TAP 69.45 RCA 94.49 APO 152.28 V2 35.167

RC 164.869 GL -23.08 GP 9.35 ZAL 78.33 ZAP 166.06 ETS 39.93 ZAE 128.93 ETE 172.63 ZAC 69.78 ETC 10.20 CLP-169.61
    PLANETOCENTRIC CONIC
                                                                                                                                              5.74 RAP 197.98 ECC 1.2462
     C3 14.957 VML 3.867 DLA -33.50 RAL 200.16 RAD 6567.6 VEL 11.677 PTH 2.05 VMP 7.427 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         27.79
                                                                                                       113.20 9 23 42
113.18 15 20 12
113.20 9 23 42
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                        9 2 25 1277.15
13 45 50 5661.35
                                                                                      65.68
                                                         24.88
                                                                        355.16
         71.30
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                                                                                                                                           5061.4
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                      13 45 50
                                                          24.89
                                                                         265.80
                                                                                          65,68
        108.70
                      9 2 25 1277.15
13 45 50 5661.35
13 2 5 5795.40
14 45 21 5479.14
                                                                                                                                             677.2
                                                                                                                                                             27.79
                                                                        355.16
                                                                                          65.68
                                                          24.88
         71.30
                                                                                                          113.18 15 20 12
117.86 14 38 40
108.53 16 16 40
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                                                          24.89
                                                                        265.80
                                                                                          65.68
        108.70
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                                                          20.66
                                                                         274.02
                                                                                          63.49
        110.00
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                                                                                                                                                             31.50
                      14 45 21
                                                                        253.51
                                                                                          67.55
        110.00
                                                          29.25
                                       5479.14
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 3011.9 SR 438.0 SS 798.7

CRT - 9870 CRS .9458 CST - 9848

LSA 3142.9 MSA 151.8 SSA 21.7

EL1 3042.8 EL2 69.8 ALF 171.83
     TOE-2.0133 TRA .7462 TC3-5.6362 BAU 1.1271

ROE .2956 RRA .0180 RC3 -.0833 FAU .02980

FDE -.8005 FRA .7049 FC3-1.7251 BSP 17144

BDE 2.0348 BRA .7464 BC3 5.6368 FSP -613
                                                                             SGT 5446.0 SGR 443.7 SG3 188.4
                                                                             RRT -,4066 RRF -,4064 RTF .9275
SGB 5464.0 R23 .0297 R13 -.9275
SG1 5449.0 SGZ 405.2 THA 178.09
                                                                                                                                                   ARRIVAL DATE JAN 8 1968
                                                                                  FLIGHT TIME 180.00
LAUNCH DATE JUL 12 1967
                                                                                 DISTANCE 524.655
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 25.829 GAL 2.13 ATL 93.25 MCA 257.94 SMA 123.10 ECC .23823 INC 3.2510 V1 29.294
RP 107.79 LAP 3.18 LOP 186.91 VP 37.206 GAP 11.82 ATP 89.32 TAL 173.16 TAP 71.10 RCA 93.77 APO 152.42 V2 35.156
RC 186.846 GL -21.76 GP 8.96 ZAL 75.08 ZAP 166.97 ETS 41.22 ZAE 128.92 ETE 172.93 ZAC 67.60 ETC 10.04 CLP-170.50
    PLANETOCENTRIC CONIC
     C3 15.597 WHL 3.949 DLA -33.53 RAL 204.25 RAD 6567.6 VEL 11.704 PTH 2.06 VHP 7.620 DPA 4.44 RAP 199.93 ECC 1.2567 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG
71,24 9 18 18 1287.79 24.64 355.87
                                                                                                                      9 39 46
15 37 1
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                      14 2 31
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                       9 18 18
                                       1287.79
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                      14 2 31
                                       5669.54
                                                          24.66
                                                                         266.32
        108.76
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                                                          20.48
                                                                         274.35
                                                                                           66.25
                      13 19 37
                                       5800.92
        110.00
                                                                                                                                            4892.4
                                                                                                                                                             31.28
                                                                         254.43
                      15 0 22
                                       5492.45
                                                          28.96
                                                                                           72.30
        110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2987.7 SR 446.4 SS 770.1
CRT -.9811 CRS .9344 CST -.9849
                                                                            SGT 5492,4 SGR 451.0 SG3 182.5
RRT -.4095 RRF -.4055 RTF .9293
SGB 5510.9 R23 .0249 R13 -.9293
     TOE-2.0267 TRA .9834 TC3-5.4590 BAU 1.1364
     ROE .3077 RRA .0137 RC3 -.0756 FAU .02794
FDE -.7580 FRA .7603 FC3-1.5509 BSP 17335
BDE 2.0500 BRA .9835 BC3 5.4595 FSP -597
                                                                                                                                      LSA 3113.5 MSA 155.9 SSA 21.5
                                                                                                                                      EL1 3019.7 EL2 85.5 ALF 171.65
                                                                             SG1 5495.6 SG2 411.2 THA 178.06
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LAUNCH DATE JUL 12 1967
                                                                                                                                      FLIGHT TIME 182,00
                                                                                                                                                                                                                                               ARRIVAL DATE JAN 10 1968
                                                                                                                                    DISTANCE 530.245
      HELIOCENTRIC CONIC
        RL 152.0R LAL -.00 LOL 288.99 VL 25.781 GAL 2.68 A7L 93.14 MCA 261.17 SMA 122.81 ECC .24261 INC 3.1445 V1 29.294
RP 107.83 LAP 3.11 LOP 190.14 VP 37.162 GAP 12.20 A7P 89.52 TAL 171.58 TAP 72.75 RCA 93.02 APO 152.61 V2 35.145
RC 168.808 GL -20.41 GP 8.62 TAL 71.86 TAP 167.83 ETS 42.80 TAE 128.91 ETE 173.19 TAC 65.39 ETC 9.92 CLP-171.38
       PLANETOCENTRIC CONIC
       PLANETOCENTRIC CONIC

C3 16.402 VHL 4.050 DLA -33.48 RAL 208.28 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 7.823 DPA 3.17 RAP 201.91 ECC 1.2699
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CET TIM INJ 2 LAT INJ 2 LONG
71.35 9 35 7 1297.04 24.29 356.42 75.22 113.77 9 56 44 697.0 27.29 348.60
108.65 14 17 55 5683.16 24.30 267.21 75.22 113.76 15 52 38 5083.2 27.30 259.38
71.35 9 35 7 1297.04 24.29 356.42 75.22 113.77 9 56 44 697.0 27.29 348.60
108.65 14 17 55 5683.16 24.30 267.21 75.22 113.77 9 56 44 697.0 27.29 348.60
108.65 14 17 55 5683.16 24.30 267.21 75.22 113.77 9 56 44 697.0 27.29 348.60
108.65 14 17 55 5683.16 24.30 267.21 75.22 113.76 15 52 38 5083.2 27.30 259.38
110.00 13 33 30 5819.22 19.90 275.44 72.90 118.39 15 10 29 5219.2 23.53 268.19
110.00 15 18 41 5497.01 28.86 254.75 77.23 109.17 16 50 18 4897.0 31.20 246.33
                                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                             SCT 5526.6 SCR 457.2 SC3 176.4
RRT -.4127 RRF -.4059 RTF .9305
SCB 5545.4 R23 .0215 R13 -.9306
SCI 5529.8 SC2 416.2 THA 178.03
                                                                                                                                                                                                                          ST 2940.1 SR 453.8 SS 738.3
CRT -.9738 CRS .9208 CST -.9848
LSA 3060.8 MSA 162.6 SSA 21.0
         TDE-2.0281 TRA 1.2366 TC3-5.2251 BAU 1.1458
        ROE .3207 RRA .0079 RC3 -.0673 FAU .02598
FOE -.7137 FRA .8164 FC3-1.3712 BSP 17419
BOE 2.0533 BRA 1.2366 BC3 5.2255 FSP -576
                                                                                                                                                                                                                          ELI 2973.2 EL2 102.1 ALF 171.44
LAUNCH DATE JUL 12 1967
                                                                                                                                     FLIGHT TIME 184.00
                                                                                                                                                                                                                                                ARRIVAL DATE JAN 12 1968
     HELIOCENTRIC CONIC
                                                                                                                                     DISTANCE 535.794
       RL 152.08 LAL -.00 LOL 288.99 VL 25.753 GAL 3.25 AZL 93.04 MCA 264.39 SMA 122.53 ECC .24734 INC 3.0399 VL 29.294
RP 107.86 LAP 3.03 LOP 193.37 VP 37.118 GAP 12.59 AZP 89.70 TAL 170.01 TAP 74.40 RCA 92.23 APO 152.84 V2 35.134
RC 170.755 GL -19.07 GP 8.30 ZAL 68.69 ZAP 168.66 ETS 44.69 ZAE 128.89 ETE 173.43 ZAC 63.17 ETC 9.83 CLP-172.24
     PLANETOCENTRIC CONIC
       C3 17.390 VHL 4.170 OLA -33.33 RAL 212.24 RAO 6567.7 VEL 11.780 PTH 2.08 VHP 8.038 OPA 1.94 RAP 203.92 ECC 1.2862 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.65 9 52 44 1304.63 23.82 356.80 80.04 114.03 10 14 28 704.8 26.86 349.02 108.35 14 31 50 5702.29 23.83 268.46 80.05 114.01 16 6 53 5102.3 26.87 260.68 71.65 9 52 44 1304.63 23.82 356.80 80.04 114.03 10 14 28 704.8 26.86 349.02 108.35 14 31 50 5702.29 23.83 268.46 80.05 114.01 16 6 53 5102.3 26.87 260.68 110.00 13 44 0 5849.06 18.92 277.21 77.42 119.01 15 21 29 5249.1 22.64 270.05 110.00 15 39 45 5494.09 28.93 254.55 82.29 109.06 17 11 19 4894.1 31.25 246.12 ORBIT DETERMINATION ACCURACY
        C3 17.390 VHL 4.170 OLA -33.33 RAL 212.24 RAD 6567.7 VEL 11.780 PTH
                                                                                                                                                                                    2.08 WHP 8.038 OPA
     DIFFERENTIAL CORRECTIONS
                                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          SGT 5563.1 SGR 462.7 SG3 170.7
RRT -.4184 RRF -.4090 RTF .9323
SGB 5582.4 R23 .0184 R13 -.9324
SG1 5566.5 SG2 420.0 TMA 178.00
                                                                                                                                                                                                                          ST 2881.0 SR 460.2 SS 706.9
CRT -.9651 CRS .9059 CST -.9846
        TOE-2.0247 TRA 1.4986 TC3-4.9637 BAU 1.1541
        RDE .3349 RRA .0010 RC3 -.0577 FAU .02420
        FDE -.6715 FRA .8694 FC3-1.2046 BSP 17581
BDE 2.0522 BRA 1.4986 BC3 4.9640 FSP -561
                                                                                                                                                                                                                          LSA 2997.0 MSA 171.0 SSA 20.4
                                                                                                                                                                                                                          ELI 2915.1 ELZ 119.0 ALF 171.22
                                                                                                                                    FLIGHT TIME 186.00
                                                                                                                                                                                                                                              ARRIVAL DATE JAN 14 1968
LAUNCH CATE JUL 12 1967
                                                                                                                                   DISTANCE 541.298
     HELIOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 288.99 VL 25.686 GAL 3.85 AZL 92.94 MCA 267.61 SMA 122.26 ECC .25247 INC 2.9365 V1 29.294 RP 107.90 LAP 2.93 LOP 196.60 VP 37.074 GAP 13.00 AZP 89.88 TAL 168.43 TAP 76.05 RCA 91.39 APO 153.13 VZ 35.122 RC 172.686 GL -17.73 GP 8.01 ZAL 65.60 ZAP 169.44 ETS 46.96 ZAE 128.87 ETE 173.64 ZAC 60.94 ETC 9.79 CLP-173.10
     PLANETOCENTRIC CONIC
        C3 18.583 VHL 4.311 DLA -33.09 RAL 216.08 RAO 6567.8 VEL 11.831 PTH 2.10 VMP 8.267 OPA
                                                                                                                                                                                                                                            .74 RAP 205.96 ECC 1.3058
       C3 18.583 VML 4.511 DLA -33.09 RAZ 216.08 RAD 6567.8 VEL 11.351 PM 2.10 VMP 8.267 DPA .74 RAP 205.96 ECC 1.5058 LDC 1.505
     DIFFERENTIAL CORRECTIONS
                                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                          SCT 5594.4 SCR 467.1 SC3 165.1

RRT -.4251 RRF -.4155 RTF .9342

SCB 5613.9 R23 .0157 R13 -.9342

SCI 5598.0 SC2 422.6 THA 177.96
                                                                                                                                                                                                                         ST 2807.5 SR 465.2 SS 675.3
CRT -.9549 CRS .8888 CST -.9843
       TOE-2.0125 TRA 1.7737 TC3-4.6720 BAU 1.1608
        RDE .3500 RRA -.0074 RC3 -.0479 FAU .02247
                                                                                                                                                                                                                         LSA 2919.1 MSA 181.2 SSA 19.6
EL1 2842.5 EL2 136.5 ALF 170.99
       FDE -.6298 FRA .9216 FC3-1.0469 BSP 17729
       BOE 2.0427 BRA 1.7738 BC3 4.6723 FSP -545
LAUNCH DATE JUL 12 1967
                                                                                                                                    FLIGHT TIME 188.00
                                                                                                                                                                                                                                               ARRIVAL DATE JAN 16 1968
     HELIOCENTRIC CONIC
                                                                                                                                   DISTANCE 546.751
      RL 152.08 LAL -.00 LOL 288.99 VL 25.639 GAL 4.48 AZL 92.83 MCA 270.83 SMA 121.99 ECC .25803 INC 2.8338 VI 29.294
RP 107.94 LAP 2.83 LOP 199.82 VP 37.030 GAP 13.44 AZP 90.04 TAL 166.87 TAP 77.70 RCA 90.51 APO 153.47 VZ 35.110
RC 174.603 GL -16.41 GP 7.76 ZAL 62.60 ZAP 170.17 ETS 49.66 ZAE 128.85 ETE 173.83 ZAC 58.70 ETC 9.78 CLP-173.95
     PLANETOCENTRIC CONIC
       C3 20.005 VHL 4.473 DLA -32.77 RAL 219.79 RAD 6567.6 VEL 11.691 PTH 2.11 VMP 8.510 OPA
                                                                                                                                                                                                                                        -.43 RAP 208.01 ECC 1.3292
                                                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.54 357.00 89.64 114.45 10 51 56 715.7 25.64 349.34 22.55 272.07 89.64 114.44 16 30 46 5157.3 25.65 264.40
       ENCH AZHTH ENCH TIME L-F TIME
                                10 30 0 1315.65
14 54 49 5757.26
10 30 0 1315.65
14 54 49 5757.26
              72.77 10 30 0
            107.23
                                                                                                                                                                             114.45 10 51 56
114.44 16 30 46
120.58 14 8 37
108.42 17 57 23
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              72.77
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           110.00
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            110.00
                                  16 26 7
                                                             5476.20
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                                                                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                           SGT 5620.7 SGR 470.5 SG3 159.7
RRT -.4327 RRF -.4194 RTF .9361
SGB 5640.3 R23 .0134 R13 -.9361
                                                                                                                                                                                                                         ST 2723.4 SR 468.6 SS 644.5
CRT -.9427 CRS .8694 CST -.9840
        TOE-1,9924 TRA 2,0632 TC3-4,3580 BAU 1,1656
        ROE .3658 RRA -.0172 RC3 -.0384 FAU .02079
       FDE -.5892 FRA .9737 FC3 -.8999 BSP 17860
BDE 2.0256 BRA 2.0633 BC3 4.3582 FSP -530
                                                                                                                                                                                                                         LSA 2830.9 MSA 193.1 55A 18.8
                                                                                                                             SG1 5624.4 SGZ 423.9 THA 177.91
                                                                                                                                                                                                                         EL1 2759.1 EL2 154.3 ALF 170.76
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ARRIVAL CATE JAN 18 1968

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EAUNCH DATE JUL 12 1967
                                                                         DISTANCE 552.147
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL .25.593 GAL 5.14 AZL 92.73 MCA 274.05 SNA 121.73 ECC .26405 INC 2.7308 V1 29.294
RP 107.97 LAP 2.72 LOP 203.04 VP 36.986 GAP 13.90 AZP 90.19 TAL 165.31 TAP 79.36 RCA 89.58 APO 153.87 V2 35.097
RC 176.504 GL -15.12 GP 7.52 ZAL 59.70 ZAP 170.86 ETS 52.86 ZAE 128.82 ETE 174.00 ZAC 56.44 ETC 9.82 CLP-174.80
   PLANETOCENTRIC CONIC
    C3 21.686 VHL 4.657 OLA -32.38 RAL 223.34 RAD 6567.9 VEL 11.961 PTM 2.13 VHP 8.770 DPA -1.56 RAP 210.09 ECC 1.3569
    LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              114.61 11 11 29
114.60 16 40 13
        75.59
                   10 49 31
                                  1318.47
                                                    21.74
                                                                  356.82
                                                                                  94.36
                                                                                                                               718.5
                                                                                                                                              24.88
                                                                                                                                                             349.23
                   15 3 40 5793.14
                                                                                  94.37
                                                                                                                               5193.1
                                                                                                                                               24.89
                                                                                                                                                             266.82
                                                    21.76
                                                                  274.42
      106.41
                                                                                               114.61 11 11 29
114.60 16 40 13
121.36 14 14 9
108.04 18 20 52
                 10 49 31
15 3 40
                                   1318.47
                                                    21.74
                                                                  356.82
                                                                                  94.36
                                                                                                                                718.5
                                                                                                                                               24.88
                                                                                                                                                             349.23
        73.59
                                                                                  94.37
                                5793.14
                                                                                                                               5193.1
                                                                                                                                               24.89
                                                                                                                                                             266.82
                                                    21.76
                                                                  274.42
      106.41
                 14 2 35
16 49 46
                                                                                                                                94.0
                                                                                                                                               18.41
                                                                                                                                                             300.14
      110.00
                                    693.99
                                                    14.36
                                                                  306.91
                                                                                  90.24
                                                                                  97.74
                                                                                                                              4865.6
                                                                                                                                               31.72
                                                                                                                                                             244.03
                                  5465.61
                                                                  252.56
      110.00
                                                    29.54
                                                                     NID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5638.8 SGR 472.6 SG3 154.5
RRT -.4405 RRF -.4255 RTF .937R
SGB 5658.5 R23 .0112 R13 -.9378
SGI 5642.6 SG2 424.0 THA 177.87
                                                                                                                           ST 2628.0 SR 470.1 SS 614.0
CRT -.9281 CRS .8465 CST -.9834
    TOE-1.9607 TRA 2.3710 TC3-4.0235 BAU 1.1665
   ROE .3819 RRA -.0287 RC3 -.0298 FAU .01910
FDE -.5480 FRA 1.0271 FC3 -.7623 BSP 17897
BDE 1.9976 BRA 2.3712 BC3 4.0236 FSP -512
                                                                                                                          LSA 2731.5 MSA 206.6 SSA 17.9
                                                                                                                           EL1 2664.1 EL2 172.7 ALF 170.53
                                                                                                                                      ARRIVAL DATE JAN 20 1968
                                                                          FLIGHT TIME 192.00
LAUNCH DATE JUL 12 1967
                                                                          DISTANCE 557.479
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 25.547 GAL 5.84 AZL 92.63 MCA 277.27 SMA 121.46 ECC .27060 INC 2.6272 V1 29.294
RP 108.01 LAP 2.61 LOP 206.26 VP 36.943 GAP 14.38 AZP 90.33 TAL 163.77 TAP 81.03 RCA 88.60 APO 154.33 VZ 35.084
RC 178.389 GL -13.86 GP 7.30 ZAL 56.92 ZAP 171.50 ETS 56.65 ZAE 128.78 ETE 174.15 ZAC 54.19 ETC 9.90 CLP-175.64
  PHANETOCENTRIC CONIC
    C3 23.662 VHL 4.864 OLA -31.94 RAL 226.73 RAD 6568.0 VEL 12.043 PTH
                                                                                                     2.15 WHP 9.048 OPA -2.56 RAP 212.18 ECC 1.3894
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             24.02
                                                                                                                                                             348.90
                 11 9 37 1319.09
                                                    20.86
                                                                  356.44
                                                                                  99.02
                                                                                               114.75 11 31 36
                                                                                                                                 719.1
       74.58
                  15 10 34
11 9 37
                                                     20.68
                                                                  277.17
                                                                                  99.02
                                                                                                  114.73
                                                                                                             16 47 49
                                                                                                                                5234.9
                                                                                                                                                24.03
                                                                                                                                                              269.64
      105.42
                                  5634.69
                                                                                                 114.75 11 31 36
114.73 16 47 49
122.08 14 18 48
107.67 18 43 56
                                                                                  99.02
                                                                                                                                 719.1
                                                                                                                                                24.02
                                                                                                                                                              348,90
                                  1319.09
                                                     20.86
                                                                  356.44
        74.58
                 15 10 34 5834.89
14 6 21 746.21
      105.42
                                                     20.88
                                                                  277.17
                                                                                  99.02
                                                                                                                                5234.9
                                                                                                                                                24.03
                                                                                                                                                              269.64
                                   746.21
                                                                  309.80
                                                                                  94.30
                                                                                                                                146.2
                                                                                                                                              16.64
                                                                                                                                                              303.15
      110.00
                                                    12.49
                                                    29.75
                                                                  251.87
                                                                                                                                4855.8
                                                                                                                                                31.87
                                                                                                                                                              243.30
                  17 13 0
                                  5455.76
                                                                                 102.83
      110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5655.9 SGR 473.7 SG3 149.5
RRT -.4496 RRF -.4335 RTF .9399
                                                                                                                           ST 2533.5 SR 470.1 SS 587.1
CRT -.9114 CRS .8222 CST -.9831
    TDE-1.9269 TRA 2.6908 TC3-3.6904 BAU 1.1674
    ROE .3988 RRA -.0414 RC3 -.0218 FAU .01753
FOE -.5106 FRA 1.0793 FC3 -.6415 BSP 18011
BOE 1.9678 BRA 2.6911 BC3 3.6904 FSP -496
                                                                      SG8 5675.7 R23 .0095 R13 -.9399
SG1 5659.9 SG2 422.8 TMA 177.83
                                                                                                                           LSA 2633.5 MSA 220.3 SSA 17.1
                                                                                                                           EL1 2569.6 EL2 190.7 ALF 170.35
                                                                          FLIGHT TIME 194.00
                                                                                                                                      ARRIVAL DATE JAN 22 1968
LAUNCH DATE JUL 12 1967
                                                                          DISTANCE 562.737
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.502 GAL 6.57 AZL 92.52 HCA 280.48 SMA 121.21 ECC .27773 INC 2.5221 V1 29.294
RP 108.05 LAP 2.48 LOP 209.48 VP 36.899 GAP 14.90 AZP 90.46 TAL 162.23 TAP 82.71 RCA 87.55 APO 154.87 V2 35.071
RC 180.257 GL -12.64 GP 7.11 ZAL 54.27 ZAP 172.07 ETS 61.09 ZAE 128.74 ETE 174.28 ZAC 51.93 ETC 10.03 CLP-176.48
   PLANETOCENTRIC CONTC
    C3 25.974 VML 5.096 DLA -31.44 RAL 229.93 RAD 6568.1 VEL 12.139 PTH 2.18 VMP 9.346 DPA -3.73 RAP 214.28 ECC 1.4275
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.74 11 30 21 1317.08 19.91 355.82 103.59 114.85 11 52 19 717.1 23.09 348.34
                                                                                              INJ AZMTM INJ TIME
114.85 11 52 19
114.85 11 52 19
114.84 16 53 27
122.72 14 22 47
107.36 19 6 17
                                                                                                                                               23.10
                                                                                                                                5282.8
                                                                                 103.59
       104.26
                    15 15 24 5882.76
                                                     19.92
                                                                  280.33
                                                                                                                                               23.09
                                                                                                                                717.1
                                                                  355.82
                                                                                 103.59
        75.74
                    11 30 21
                                  1317.08
                                                    19.91
                  15 15 24
                                                                                                                                                              272.86
                                  5882.76
                                                                                 103.59
                                                                                                                               5282.8
                                                                                                                                               23.10
       104.26
                                                    19.92
                                                                  280.33
                                                                                                                                               14.75
                                                                                                                                200.4
                                                                                                                                                              306.22
       110,00
                    14 9 26
                                   800.43
                                                    10.51
                                                                  312.76
                                                                                  98.25
      110.00 17 35 30 5447.42
                                                                                                                                               32.00
                                                                                                                                                              242.68
                                                                                                                               4847.4
                                                   29.92
                                                                  251.28
                                                                                 107.84
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5667.6 SGR 473.6 SG3 144.7

RRT -.4592 RRF -.4421 RTF .9421

SGB 5687.3 R23 .0000 R13 -.9422

SGI 5671.8 SG2 420.4 THA 177.79
                                                                                                                          ST 2437.6 SR 468.2 S5 562.6

CRT -.8922 CRS .7954 CST -.9830

LSA 2534.3 MSA 234.4 SSA 16.4
    TOE-1.8866 TRA 3.0281 TC3-3.3562 BAU 1.1654
    ROE .4160 RRA -.0556 RC3 -.0148 FAU .01601
    FOE -.4748 FRA 1.1321 FC3 -.5335 BSP 18100
BOE 1.9319 BRA 3.0286 BC3 3.3562 FSP -484
                                                                                                                           EL1 2473.4 EL2 208.4 ALF 170.21
                                                                                                                                       ARRIVAL DATE JAN 24 1968
LAUNCH DATE JUL 12 1967
                                                                          FLIGHT TIME 196.00
   HELIOCENTRIC CONIC
                                                                          DISTANCE 567.911
    RL 152.08 LAL -.00 LOL 288.99 VL 25.458 GAL 7.35 AZL 92.42 MCA 283.69 SMA 120.96 ECC .28549 INC 2.4150 V1 29.294
RP 108.09 LAP 2.35 LOP 212.69 VP 36.856 GAP 15.45 AZP 90.57 TAL 160.72 TAP 84.41 RCA 86.43 APO 155.49 V2 35.058
RC 182.108 GL -11.46 GP 6.93 ZAL 51.75 ZAP 172.58 ETS 66.28 ZAE 128.68 ETE 174.41 ZAC 49.68 ETC 10.21 CLP-177.33
   PLANETOCENTRIC CONIC
    C3 28.672 VHL 5.355 DLA -30.90 RAL 232.95 RAD 6568.2 VEL 12.249 PTH 2.20 VHP 9.666 DPA -4.77 RAP 216.40 ECC 1.4719
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               114.92
                                                                                 108.06
                                                                                                                                 711.7
                                                                                                                                                22.09
                                                     18.89
                                                                                                             12 13 46
        77.08
                                                                  354.91
                    11 51 55 1311.72
                    15 17 57
                                                                                                             15 28 46
                                                     18.90
                                                                  306.04
                                                                                 108.07
                                                                                                  114.91
                                                                                                                                  49.3
                                                                                                                                                22.10
       102.92
                                    649.25
                                                                                                 114.92 12 13 46
114.91 15 28 46
                                                                                                                                                22.09
                                                                                                                                 711.7
        77.08
                   11-51-55
                                  1311.72
                                                     14.49
                                                                  354.91
                                                                                 108.06
                                                                                                                                                              298.62
       102.92
                    15 17 57
                                    649.25
                                                     18.90
                                                                  306.04
                                                                                 108.07
                                                                                                                                  49.3
                                                                                                                                                22.10
                                                                                                 123.25 14 26 15
107.12 19 27 44
                                                                                                                                                12.77
                                                                                                                                                              309.31
                   14 11 59
17 57 3
                                    A55.99
                                                                                 102.10
                                                                                                                                 256.0
       110.00
                                                      8.45
                                                                  315.74
                                  5441.02
                                                                                                                                4841.0
                                                                                                                                                32.09
                                                                                                                                                              242.21
       110.00
                                                     30.05
                                                                  250.83
                                                                                 112.76
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2344.0 SR 464.6 SS 541.1
CRT -.8702 CRS .7665 CST -.9830
                                                                      SGT 5674.3 SGR 472.4 SG3 140.1
RRT -.4692 RRF -.4514 RTF .9445
SGB 5694.0 R23 .0066 R13 -.9445
    TDE-1.8415 TRA 3.3836 TC3-3.0276 BAU 1.1605
    RDE .4335 RRA -.0713 RC3 -.0091 FAU .01452
FDE -.4411 FRA 1.1862 FC3 -.4385 BSP 18176
BDE 1.8918 BRA 3.3843 BC3 3.0276 FSP -470
                                                                                                                         LSA 2437.4 MSA 248.4 SSA 15.7
                                                                                                                          EL1 2378.9 EL2 225.5 ALF 170.12
                                                                      SG1 5678.7 SG2 416.8 THA 177.75
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FLIGHT TIME 190.00

ARRIVAL DATE JAN 26 1968

JPL TM 33-99

LAUNCH DATE JUL 12 1967

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DISTANCE 572.987
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 25.414 GAL 8.18 AZE 92.30 HCA 286.90 SMA 120.71 ECC .29396 INC 2.3049 V1 29.294
RP 108.13 LAP 2.21 LOP 215.90 VP 36.813 GAP 16.04 AZE 90.67 TAL 159.23 TAP 86.13 RCA 85.23 APO 156.20 V2 35.045
RC 183.942 GL -10.33 GP 6.76 ZAL 49.36 ZAP 173.00 ETS 72.24 ZAE 128.61 ETE 174.52 ZAC 47.44 ETC 10.44 CLP-178.18
   PLANETOCENTRIC CONTC
    C3 31.819 VHL 5.541 DLA -30.33 RAL 235.79 RAD 6568.3 VEL 12.377 PTH 2.23 VHP 10.012 DPA -5.77 RAP 218.53 ECC 1.5237
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 112.44
                                                                                                 114.96 12 36 20
114.95 15 29 41
                                                                                                                                    701.6
                                                                    353.63
                                                      17.82
        78.65 12 14 38 1301.64
                                                                                                                                    111.6
                                                                                                                                                    21.05
                                                                                   112.45
       101.35
                    15 17 49
                                    711.57
                                                      17.84
                                                                    310.18
                                                                                                   114.96 12 36 20
114.95 15 29 41
123.66 14 29 17
106.96 19 48 10
                                                                                                                                     701.6
                                                                                                                                                    21.04
                                                                    353.63
                                                                                   112.44
        78.65
                   12 14 38
                                   1301.64
                                                     17.82
                                                                                                                                                    21.05
                                                     17.84
                                                                                                                                    111.6
       101.35
                    15 17 49
                                     711.57
                                                                    310.18
                                                                                   112.45
                                                                                   105.86
                                                                                                                                    312.4
                                                                                                                                                    10.72
                                                                                                                                                                   312.39
       110.00
                   14 14 5
                                    912.43
                                                       6.33
                                                                    318.74
                                                                                                                                  4836.8
                                                                                                                                                    32.16
                   18 17 33 5436.81
                                                                    250.53
                                                                                   117.59
                                                      30.13
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5675.8 SGR 469.7 SG3 135.8
RRT - .4792 RRF - .4608 RTF .9470
SG8 5695.2 R23 .0052 R13 - .9470
SG1 5680.3 SG2 412.0 THA 177.72
                                                                                                                               ST 2252.5 SR 459.0 SS 522.3
CRT -.8449 CRS .7345 CST -.9832
    TOE-1.7887 TRA 3.7623 TC3-2.7047 BAU 1.1505
   ROE .4509 RRA -.0886 RC3 -.0047 FAU .01302
FDE -.4081 FRA 1.2428 FC3 -.3542 BSP 18155
BDE 1.8447 BRA 3.7633 BC3 2.7047 FSP -453
                                                                                                                              LSA 2342.7 MSA 262.2 SSA 15.0
                                                                                                                               EL1 2286.0 EL2 242.0 ALF 170.12
                                                                                                                                           ARRIVAL DATE JAN 28 1968
                                                                             FLIGHT TIME 200.00
LAUNCH DATE JUL 12 1967
                                                                            DISTANCE 577.951
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 288.99 VL 25.371 GAL 9.06 A7L 92.19 MCA 290.10 SMA 120.47 ECC .30323 INC 2.1911 VI 29.294
RP 108.18 LAP 2.06 LOP 219.10 VP 36.771 GAP 16.68 A7P 90.75 TAL 157.76 TAP 87.87 RCA 83.94 APO 157.01 V2 35.032
RC 185.758 GL -9.25 GP 6.61 ZAL 47.11 ZAP 173.32 ETS 78.99 ZAE 128.53 ETE 174.63 ZAC 45.21 ETC 10.74 CLP-179.04
  PLANETOCENTRIC CONIC
                                                                                                        2.27 VHP 10.387 OPA
                                                                                                                                      -6.74 RAP 220.67 ECC 1.5840
    C3 35.487 VHL 5.957 DLA -29.74 RAL 238.43 RAD 6568.4 VEL 12.524 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                  114.96 13 0 39
                                                                                                                                                   19.94
                                                                                                                                                                   344.51
                                                                                 116.71
                                                                                                                                     684.4
                    12 39 14
                                   1284.39
                                                     16.71
                                                                    351.81
       80.51
                                                                                                   114.95 15 27 24
116.48 15 7 3
113.47 15 54 56
123.96 14 31 58
106.89 20 7 31
                                                                                                                                     183.8
                                                                                                                                                     19.95
                                                                                                                                                                   307.73
                   15 14 20
                                   783.84
                                                      16.73
                                                                    315.02
                                                                                   116.72
        99.49
                                                                                                                                     252.5
                                                                                                                                                     17.85
                                                                                                                                                                   311.86
                                                                                   115.56
       100.00
                    14 52 51
                                     852.53
                                                      14.41
                                                                    318.96
       100.00
                  15 43 25
                                                    19.06
                                                                                   117.82
                                                                                                                                      90.9
                                                                                                                                                    22.08
                                                                                                                                                                   301.73
                                     690.93
                                                                    309.23
                                                                                                                                     369.4
                                                                                                                                                     8.61
                                                                                   109.53
       110.00
                    14 15 49
                                     969.39
                                                       4.18
                                                                    321.74
                                                                                                                                   4834.9
                                                                                                                                                     32.18
                                                                                                                                                                   241.75
                   18 36 56 5434.87
                                                                    250.39
                                                                                   122.30
       110.00
                                                      30.17
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 5673.8 SGR 466.0 SG3 131.6
RRT - .4899 RRF - .4713 RTF .9498
SGB 5692.9 R23 .0042 R13 - .9498
SGI 5678.4 SG2 406.0 THA 177.68
                                                                                                                               ST 2170.2 SR 452.1 SS 507.4
CRT -.8178 CRS .7031 CST -.9839
    TOE-1.7375 TRA 4.1582 TC3-2.4009 BAU 1.1391
    RDE .4686 RRA -.1070 RC3 -.0011 FAU .01163
FDE -.3791 FRA 1.2997 FC3 -.2838 BSP 18229
                                                                                                                              LSA 2257.5 MSA 274.2 SSA 14.3
                                                                                                                               EL1 2201.9 EL2 256.5 ALF 170.20
    BOE 1.7996 BRA 4.1596 BC3 2.4009 FSP -441
                                                                                                                                          ARRIVAL DATE JAN 30 1968
                                                                             FLIGHT TIME 202.00
LAUNCH DATE JUL 12 1967
                                                                            DISTANCE 582.783
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.329 GAL 10.01 AZL 92.07 HCA 293.31 SMA 120.24 ECC .31339 INC 2.0726 V1 29.294 RP 108.22 LAP 1.90 LOP 222.31 VP 36.729 GAP 17.37 AZP 90.82 TAL 156.33 TAP 89.64 RCA 82.56 APO 157.92 V2 35.019 RC 187.557 GL -8.23 GP 6.47 ZAL 45.01 ZAP 173.53 ETS 86.43 ZAE 128.42 ETE 174.75 ZAC 42.99 ETC 11.10 CLP-179.92
   PLANETOCENTRIC CONIC
    C3 39.765 VML 6.306 DLA -29.14 RAL 240.90 RAC 6568.5 VEL 12.694 PTH 2.31 VMP 10.795 DPA -7.67 RAP 222.81 ECC 1.6544
    LNCH ATHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.84 13 7 21 1254.50 15.58 349.05 120.87 114.94 13 28 15 654.5 18.81 341.80
                                                                                                  INJ AZMTM INJ TIME
114.94 13 28 15
114.93 15 20 24
118.20 14 47 52
111.83 16 34 43
124.13 14 34 19
106.90 20 25 47
                                                                                                                                     271.3
                                                                                                                                                    18.82
                                                                                                                                                                   313.70
                                                                                   120.88
                                   871.26
         97.16
                   15 5 53
                                                       15.59
                                                                    320.94
                                                                                                                                                    14.05
                                                                                                                                     381.6
                   14 31 31
16 24 24
                                                                                   118.20
                                                      10.36
                                                                    326.41
       100.00
                                     961.59
                                                                                                                                                    23.72
                                                                                                                                      19.4
       100.00
                                    619.40
                                                    20.94
                                                                    304.74
                                                                                   123.31
                   14 17 13 1026.61
18 55 11 5435.18
                                                                                                                                                                   318.49
                                                                                                                                     426.6
                                                                                                                                                     6.46
                                                        1.99
                                                                     324.73
                                                                                    113.11
       110.00
                                                                                                                                                   32.18
                                                                                                                                   4835.2
                                                                    250.41
                                                                                   126.90
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5667.7 SGR 481.0 SG3 127.6
RRT -.5002 RRF -.4821 RTF ..9526
SGB 5686.5 R23 ..0037 R13 -.9526
SGI 5672.4 SG2 398.9 THA 177.66
                                                                                                                               ST 2093.1 SR 443.5 SS 495.6
CRT -.7878 CRS .6709 CST -.9849
LSA 2177.6 MSA 284.9 SSA 13.8
     TOE-1.6814 TRA 4.5777 TC3-2.1148 BAU 1.1243
    ROE .4862 RRA -.1267 RC3 .0013 FAU .01026
FDE -.3521 FRA 1.3591 FC3 -.2234 BSP 18308
                                                                                                                               ELI 2122.6 EL2 269.4 ALF 170.37
     BOE 1.7503 BRA 4.5795 BC3 2.1149 FSP
                                                        -428
                                                                                                                                           ARRIVAL DATE FEB 1 1968
                                                                             FLIGHT TIME 204.00
LAUNCH DATE JUL 12 1967
                                                                           DISTANCE 587.459
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.287 GAL 11.02 AZL 91.95 MCA 296.51 SMA 120.01 ECC .32456 INC 1.9484 VI 29.294
RP 108.28 LAP 1.74 LOP 225.51 VP 36.688 GAP 18.12 AZP 90.87 TAL 154.94 TAP 91.45 RCA 81.06 APO 158.96 V2 35.005
RC 189.337 GL -7.25 GP 6.35 ZAL 43.04 ZAP 173.60 ETS 94.35 ZAE 128.30 ETE 174.82 ZAC 40.79 ETC 11.54 CLP 179.19
   PLANETOCENTRIC CONIC
    C3 44.764 VML 6.691 DLA -28.52 RAL 243.18 RAD 6568.7 VEL 12.889 PTH 2.35 VMP 11.240 DPA -8.57 RAP 224.96 ECC 1.7367
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 86.43 13 45 44 1189.84 14.42 343.74 124.92 114.88 14 5 34 589.8 17.66 336.64
                                                                                                  114.88 14 5 34
114.87 15 2 17
                                                                                                                                     395.6
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                     14 45 41
                                     995.62
                                                      14.44
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         93.57
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111.00 16 30 50
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                                   1074.76
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       100.00
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                                                      21.77
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                                     5873.97
                    16 52 56
       100.00
                                                                                                    124.18 14 36 22
106.99 20 42 56
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                                   1083.84
                                                                     327.71
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                   14 16 18
                                                        -.19
       110.00
                                                                     250.59
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                                                       30.11
                    19 12 18
                                    5437.66
                                                                                    131.36
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2026.2 SR 433.5 SS 486.9
CRT -.7565 CRS .6387 CST -.9860
LSA 2108.1 MSA 293.4 SSA .13.1
                                                                        SCT 5655.6 SCR 454.8 SC3 123.7
RRT -.5113 RRF -.4931 RTF .9559
SCB 5673.9 R23 .0023 R13 -.9559
     TOE-1.6272 TRA 5.0243 TC3-1.8404 BAU 1.1014
    FDE -.3037 RRA -.1477 RC3 -.0027 FAU .00491
FDE -.3272 FRA 1.4216 FC3 -.1723 BSP 18307
BDE 1.7034 BRA 5.0264 BC3 1.8404 FSP -416
                                                                                                                             EL1 2053.0 EL2 279.8 ALF 170.63
                                                                        SG1 5660.4 SG2 390.5 THA 177.63
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FLIGHT TIME 198.00

JPL TM 33-99

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FLIGHT TIME 206.00
                                                                                                                                                                            ARRIVAL CATE FEB 3 1968
LAUNCH DATE JUL 12 1967
    HELIOCENTRIC CONIC
                                                                                               DISTANCE 591.952
     RL 152.08 LAL -.00 LOL 288.99 VL 25.246 GAL 12.11 A7L 91.82 MCA 299.70 SMA 119.79 ECC .33686 INC 1.8171 VI 29.294
RP 108.30 LAP 1.58 LOP 228.70 VP 36.647 GAP 18.93 AZP 90.90 TAL 153.60 TAP 93.31 RCA 79.44 APO 160.14 V2 34.992
RC 191.100 GL -6.32 GP 6.23 TAL 41.21 ZAP 173.54 ETS 102.48 ZAE 128.14 ETE 174.91 ZAC 38.62 ETC 12.05 CLP 178.28
    PLANETOCENTRIC CONIC
      C3 50.620 VHL 7.115 DLA -27.91 RAL 245.28 RAD 6568.9 VEL 13.114 PTH 2.39 VHP 11.728 DPA -9.42 RAP 227.09 ECC 1.8331
     C3 50.620 VHL 7.115 OLA -27.91 RAL 245.28 RAD 6568.9 VEL 13.114 PTH 2.39 VHP 11.728 DPA -9.42 RAP 227.09 ECC 1.8331 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 41 47 1261.04 9.34 346.42 126.91 116.85 14 2 48 661.0 12.87 339.52 90.00 15 6 26 985.96 17.26 330.12 130.67 112.80 15 22 52 386.0 20.20 322.68 100.00 14 14 11 1156.32 4.60 336.19 124.35 119.57 14 33 27 556.3 8.51 329.57 100.00 17 16 44 5853.95 22.25 279.22 132.78 110.49 18 54 18 5254.0 24.84 271.38 110.00 14 19 5 1140.89 -2.37 330.69 120.02 124.11 14 36 6 540.9 2.12 324.49 110.00 19 28 18 5442.15 30.03 250.91 135.73 107.16 20 59 1 4842.2 32.08 242.29
    DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                          SGT 5640.5 SGR 447.2 SG3 120.1
RRT -.5218 RRF -.5040 RTF .9591
                                                                                                                                                              ST 1964.3 SR 422.0 SS 481.0
CRT -.7225 CRS .6057 CST -.9874
      TDE-1.5662 TRA 5.5029 TC3-1.5836 BAU 1.0717
     RDE .5209 RRA -.1700 RC3 .0032 FAU .00750
FOE -.3032 FRA 1.4888 FC3 -.1283 BSP 18233
                                                                                          SGB 5658.2 R23 .0015 R13 -.9591
SG1 5645.4 SG2 381.1 THA 177.62
                                                                                                                                                              LSA 2044.0 MSA 300.1 SSA 12.6
      BOE 1.6505 BRA 5.5055 BC3 1.5836 FSP -401
                                                                                                                                                              EL1 1988.4 EL2 288.2 ALF 170.99
                                                                                                                                                                             ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUL 12 1967
                                                                                                FLIGHT TIME 208.00
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 596.224
     RL 152.08 LAL -.00 LOL 288.99 VL 25.207 GAL 13.28 AZL 91.68 MCA 302.90 SMA 119.57 ECC .35045 INC 1.6774 V1 29.294
RP 108.34 LAP 1.41 LOP 231.90 VP 36.807 GAP 19.82 AZP 90.91 TAL 152.32 TAP 95.22 RCA 77.67 APO 161.48 V2 34.979
RC 192.846 GL -5.43 GP 6.12 ZAL 39.53 ZAP 173.33 ETS 110.47 ZAE 127.96 ETE 174.99 ZAC 36.48 ETC 12.65 CLP 177.34
    PLANETOCENTRIC CONIC
     C3 57.501 VHL 7.503 DLA -27.29 RAL 247.21 RAD 6569.0 VEL 13.374 PTH 2.44 VMP 12.264 DPA -10.24 RAP 229.22 ECC 1.9463
     LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 24 59 1373.04 5.63 352.79 129.53 117.76 13 47 52 773.0 9.50 346.03 90.00 15 36 39 936.96 18.53 327.08 135.51 111.80 15 54 16 337.0 21.33 319.52
                                                                                                                            111.80 15 54 16
119.83 14 29 19
110.17 19 14 53
123.92 14 39 33
107.40 21 14 1
                         15 36 39
                                               936.96
                                                                    18.53
                                                                                      327.08
                                                                                                         135.51
                       14 8 47 1231.48
17 37 31 5841.79
14 19 35 1197.57
19 43 13 5448.48
         100.00
                                                                     2.07
                                                                                     340.32
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         100,00
                                                                    22.54
                                                                                     278.43
                                                                                                       137.15
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                                                                    -4.53
                                                                                     333.66
                                                                                                       123.35
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         110.00
                         19 43 13
                                             5448.46
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                                                                                                                                                                                                           242.76
    DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
      TOE-1.5102 TRA 6.0069 TC3-1.3495 BAU 1.0374
                                                                                          SGT 5620.7 SGR 438.4 SG3 116.6
RRT -.5325 RRF -.5155 RTF .9626
                                                                                                                                                            ST 1911.8 SR 409.5 55 478.4
CRT -.6889 CRS .5759 CST -.9890
     ROE .5380 RRA *.1930 RC3 .0032 FAU .00616
FOE -.2829 FRA 1.5588 FC3 -.0928 89P 18255
BOE 1.6031 BRA 6.0120 BC3 1.3495 FSP -390
                                                                                          SGB 5637.7 R23 .0006 R13 -.9626
SGI 5625.5 SGZ 370.7 THA 177.61
                                                                                                                                                              LSA 1989.7 MSA 303.7 SSA
                                                                                                                                                                                                                12.0
                                                                                                                                                           ELI 1933.0 EL2 293.5 ALF 171.41
                                                                                               FLIGHT TIME 210.00
                                                                                                                                                                            ARRIVAL DATE FEB 7 1968
LAUNCH DATE JUL 12 1967
                                                                                               DISTANCE 600.231
     RL 152.08 LAL -.00 LOL 288.99 VL 25.168 GAL 14.56 AZL 91.53 MCA 306.09 SMA 119.36 ECC .36552 INC 1.5272 V1 29.294
RP 108.38 LAP 1.23 LOP 235.09 VP 36.568 GAP 20.81 AZP 90.90 TAL 151.10 TAP 97.20 RCA 75.73 APO 162.99 VZ 34.966
RC 194.574 GL -4.60 GP 6.02 ZAL 37.99 ZAP 172.97 ETS 118.04 ZAE 127.74 ETE 175.08 ZAC 34.39 ETC 13.36 CLP 176.37
    PLANETOCENTRIC CONIC
     C3 65.619 VHL 8.101 DLA -26.68 RAL 248.97 RAD 6569.2 VEL 13.674 PTH 2.50 VHP 12.857 CPA -11.02 RAP 231.33 ECC 2.0799
     C3 65.619 WHL 8.101 DLA -26.68 RAL 248.97 RAD 6569.2 VEL 13.674 PTH 2.50 VMP 12.87 CPA -11.02 RAP 231.33 ECC 2.0799 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 14 28 1463.26 2.95 357.85 132.33 118.18 13 38 51 863.3 6.70 351.18 90.00 16 3 11 910.78 19.18 325.44 139.91 111.24 16 18 22 310.8 21.90 317.82 100.00 14 4 18 1302.32 -.34 344.21 130.51 119.89 14 26 0 702.3 3.64 337.68 100.00 17 56 3 5834.99 22.70 277.99 141.32 109.99 19 33 18 5235.0 25.22 270.09 110.00 14 19 47 1253.71 -6.66 336.62 126.59 123.61 14 40 40 653.7 2.19 330.37 110.00 19 57 3 5456.37 29.74 251.91 144.00 107.69 21 27 59 4456.4 31.86 243.35
    DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         SCT 5596.6 SCR 428.3 SC3 113.3
RRT -.5428 RRF -.5268 RTF .9661
SCB 5613.0 R23 .0002 R13 -.9661
SCI 5601.5 SCZ 359.4 THA 177.61
                                                                                                                                                            ST 1865.7 SR 395.7 SS 478.6

CRT -.6549 CRS .5475 CST -.9907

LSA 1942.5 MSA 304.9 SSA 11.5
     TOE-1.4537 TRA 6.5516 TC3-1.1328 BAU .9938
     ROE .5547 RRA -.2168 RC3 .0026 FAU .00478
FOE -.2643 FRA 1.6342 FC3 -.0631 BBP 18252
BOE 1.5559 BRA 6.5552 BC3 1.1328 FSP -379
                                                                                                                                                             EL1 1884.1 EL2 296.1 ALF 171.89
LAUNCH DATE JUL 12 1967
                                                                                               FLIGHT TIME 212.00
                                                                                                                                                                            ARRIVAL DATE FEB 9 1968
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 603.915
     RL 152.08 LAL -.00 LOL 288.99 VL 25.130 GAL 15.95 AZL 91.36 MCA 309.28 SMA 119.16 ECC .38226 INC 1.3644 V1 29.294
RP 108.42 LAP 1.06 LOP 238.28 VP 36.530 GAP 21.90 AZP 90.86 TAL 149.98 TAP 99.26 RCA 73.61 APO 164.71 V2 34.953
RC 196.285 GL -3.80 GP 5.93 ZAL 36.59 ZAP 172.47 ETS 124.99 ZAE 127.47 ETE 175.16 ZAC 32.34 ETC 14.17 CLP 175.36
   PLANETOCENTRIC CONIC
     C3 75.243 VHL 8.674 DLA -26.08 RAL 250.56 RAD 6569.5 VEL 14.021 PTH 2.56 VHP 13.515 DPA -11.75 RAP 233.41 ECC 2.2383
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           118.31 13 32 15
110.89 16 38 43
                        13 6 31 1543.51
16 23 48 895 17
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19 49 55
                        14 0 18 1369.84
18 12 43 5832.11
         100.00
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                                                                                                                            123.18 14 41 28
108.03 21 40 57
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                                             5465.60
                                                                   29.54
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   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5568.4 SGR 416.9 SG3 110.1

RRT -.5529 RRF -.5580 RTF ..9697

SGB 5584.0 R23 -.0003 R13 -.9697

SGI 5573.2 SG2 347.1 THA 177.62
                                                                                                                                                          ST 1825.8 SR 381.0 SS 481.6
CRT -.6216 CRS .5214 CST -.9923
LSA 1902.3 MSA 303.3 SSA 11.0
     TOE-1.3991 TRA 7.1342 TC3 -.9344 BAU .9399
     RDE .5711 RRA -.2412 RC3 .0015 FAU .00336
     FOE -.2479 FRA 1.7157 FC3 -.0386 BSP 18246
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ELI 1841.5 EL2 295.9 ALF 172.41

BOE 1.5112 BRA 7.1383 BC3 .9344 FSP -369

ARRIVAL DATE FER 11 1968

LAUNCH DATE JUL 12 1967

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DISTANCE 607.206
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.094 GAL 17.48 AZL 91.19 MCA 312.47 SNA 118.97 ECC .40093 INC 1.1863 VI 29.294 RP 108.46 LAP .87 LOP 241.46 VP 36.493 GAP 23.12 AZP 90.80 TAL 148.95 TAP 101.43 RCA 71.27 APO 166.66 VZ 34.941 RC 197.979 GL -3.05 GP 5.85 TAL 35.34 ZAP 171.84 ETS 131.23 TAE 127.15 ETE 175.25 TAC 30.35 ETC 15.10 CLP 174.30
    PLANETOCENTRIC CONIC
    C3 86.716 VHL 9.312 DLA -25.48 RAL 251.98 RAD 6569.7 VEL 14.424 PTH 2.62 VMP 14.249 DPA -12.44 RAP 235.46 ECC 2.4271 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              137.93
                                                                                                                  118.25 13 26 52
110.68 16 56 29
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         90.00 12 59 54 1617.51
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         90.00
                       16 41 43
                                          885.96
                                                                                                                   119.54 14 20 28 834.6
109.91 20 4 57 5232.2
122.65 14 41 54 763.6
108.41 21 52 53 4875.9
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                                       1434.57
5832.17
1363.63
5475.88
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                     13 56 34
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        100.00
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                                                             -10.75
                                                                                342.50
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                       14 19 10
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                               253.28
                                                                                                  151.61
        110.00
                       20 21 36
                                          5475.88
                                                           29.32
                                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 1790.5 SR 365.2 SS 487.5
CRT -.5882 CRS .4959 CST -.9937
                                                                                    SGT 5537.5 SGR 404.1 SG3 107.1
RRT -.5623 RRF -.5486 RTF ..9733
SGB 5552.2 R23 -.0008 R13 -.9733
    TDE-1.3421 TRA 7.7669 TC3 -.7511 BAU .8708
    RDE .5870 RRA -.2661 RC3 .0001 FAU .00179
FDE -.2323 FRA 1.8058 FC3 -.0178 BSP 18110
BDE 1.4649 BRA 7.7715 BC3 .7511 FSP -356
                                                                                                                                                    LSA 1867.4 MSA 299.5 SSA 10.4
                                                                                                                                                     EL1 1803.7 EL2 293.2 ALF 172.97
                                                                                     SG1 5542.2 SG2 333.9 THA 177.64
                                                                                                                                                                   ARRIVAL DATE FEB 13 1968
                                                                                          FLIGHT TIME 216.00
LAUNCH DATE JUL 12 1967
                                                                                         DISTANCE 610.008
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 288.99 VL 25.060 GAL 19.17 ATL 90.99 MCA 315.66 SMA 118.78 ECC .42182 INC .9891 V1 29.294
RP 108.50 LAP .69 LOP 244.65 VP 36.458 GAP 24.48 ATP 90.71 TAL 148.06 TAP 103.71 RCA 68.68 APO 168.89 V2 34.929
RC 199.655 GL -2.34 GP 5.76 ZAL 34.25 ZAP 171.07 ETS 136.75 ZAE 126.76 ETE 175.34 ZAC 28.43 ETC 16.17 CLP 173.17
   PLANETOCENTRIC CONIC
    C3 100.480 VHL 10.024 OLA -24.90 RAL 253.22 RAO 6569.9 VEL 14.894 PTH 2.69 VHP 15.073 OPA -13.08 RAP 237.47 ECC 2.6537 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT. ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 57 31 881.02 19.90 323.55 151.52 110.57 17 12 12 281.0 22.53 315.86 100.00 13 52 53 1496.77 -6.88 354.93 139.18 119.16 14 17 50 896.8 -2.94 348.36 100.00 18 41 19 5834.40 22.72 277.95 152.65 109.97 20 18 33 5234.4 25.23 270.05 110.00 14 18 18 1417.03 -12.70 345.41 135.70 122.01 14 15 817.0 -8.38 338.98 110.00 20 32 23 5486.90 29.08 254.05 155.12 108.81 22 3 50 4886.9 31.37 245.59 ORBIT DETERMINATION ACCURACY
     C3 100 480 VHL 10.024 DLA -24.90 RAL 253.22 RAD 6569.9 VEL 14.894 PTH 2.69 VMP 15.073 DPA -13.08 RAP 237.47 ECC 2.6537
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 1760.1 SR 348.9 SS 496.4

CRT -.5579 CR5 .4746 CST -.9951

LSA 1838.5 MSA 293.0 SSA 9.9

EL1 1771.1 EL2 287.7 ALF 173.52
                                                                                   SGT 5500.9 SGR 390.2 SG3 104.2
RRT -.5712 RRF -.5589 RTF .9768
SG8 5514.7 R23 -.0012 R13 -.9768
SG1 5505.4 SG2 320.0 THA 177.67
    TOE-1.2941 TRA 8.4460 TC3 -.5871 BAU .7886
     RDE .6027 RRA -.2906 RC3 -.0015 FAU .00015
    FOE -. 2201 FRA 1.9031 FC3 -. 0013 BSP 18091
     BOE 1.4276 BRA 8.4510 BC3 .5871 FSP -347
                                                                                                                                                                  ARRIVAL DATE FEB 15 1968
                                                                                          FLIGHT TIME 218.00
LAUNCH DATE JUL 12 1967
                                                                                         OISTANCE 612.202
    RL 152.08 LAL -.00 LOL 288.99 VL 25.027 GAL 21.04 A7L 90.77 MCA 318.84 SMA 118.61 ECC .44528 INC .7683 V1 29.294
RP 108.53 LAP .51 LOP 247.83 VP 36.424 GAP 26.02 A7P 90.58 TAL 147.31 TAP 106.15 RCA 65.79 APO 171.42 V2 34.917
RC 201.315 GL -1.66 GP 5.69 7AL 33.33 ZAP 170.17 ETS 141.61 ZAE 126.29 ETE 175.43 ZAC 26.60 ETC 17.37 CLP 171.98
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 117.111 VHL 10.822 DLA -24.32 RAL 254.27 RAD 6570.2 VEL 15.442 PTH 2.76 VHP 16.001 CPA -13.68 RAP 239.41 ECC 2.9274
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 48 27 1752.44 -6.34 14.05 143.20 117.66 13 17 39 1152.4 -2.59 7.36 90.00 17 11 30 879.01 19.95 323.43 154.89 110.52 17 26 9 279.0 22.57 315.73
                                                                                                                 117.66 13 17 39 1152.4

110.52 17 26 9 279.0

118.67 14 15 4 956.6

110.07 20 30 49 5238.2

121.28 14 41 29 869.1

109.22 22 13 46 4898.3
         90,00 12 48 40 00 00 00 00 17 11 30
                                                                                                154.89
141.84
        90.00 17 11 30 879.01
100.00 13 49 7 1556.57
100.00 18 53 31 5838.16
110.00 14 17 0 1469.14
110.00 20 42 8 5498.35
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                                                                -B.85
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                                                              -14.56
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                                                                                254.84
                                                                                                 158.41
                                                         28.83
                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5460.2 SGR 374.9 SG3 101.4
RRT -.5792 RRF -.5682 RTF ..9801
SGB 5473.0 R23 -.0015 R13 -.9801
SGI 5464.5 SG2 305.4 THA 177.72
                                                                                                                                                     ST 1732.7 SR 331.8 SS 508.4
CRT -.5297 CRS .4557 CST -.9962
     TOE-1.2511 TRA 9.1837 TC3 -.4387 BAU .6869
     RDE .6181 RRA -.3145 RC3 -.0031 FAU-.00168
FDE -.2101 FRA 2.0109 FC3 .0124 BSP 18049
BDE 1.3955 BRA 9.1891 BC3 .4388 FSP -338
                                                                                                                                                     LSA 1813.8 MSA 284.3 SSA 9.4
                                                                                                                                                     ELI 1741.8 ELZ 280.0 ALF 174.05
                                                                                                                                                                    ARRIVAL DATE FEB 17 1968
                                                                                           FLIGHT TIME 220.00
LAUNCH DATE JUL 12 1967
                                                                                          DISTANCE 613.630
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 288.99 VL 24.997 GAL 23.13 AZL 90.52 MCA 322.02 SMA 118.45 ECC .47169 INC .5177 V1 29.294
RP 108.57 LAP .32 LOP 251.01 VP 36.392 GAP 27.77 AZP 90.41 TAL 146.75 TAP 108.77 RCA 62.58 APO 174.32 V2 $4.905
RC 202.957 GL -1.02 GP 5.62 ZAL 32.58 ZAP 169.14 ETS 145.87 ZAE 125.73 ETE 175.53 ZAC 24.87 ETC 18.72 CLP 170.69
    PLANETOCENTRIC CONIC
     C3 137.364 VHL 11.720 DLA -23.76 RAL 255.14 RAD 6570.5 VEL 16.084 PTH 2.83 VHP 17.054 DPA -14.23 RAP 241.27 ECC 3.2607
     LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   INJ AZMTH INJ TIME P
117.17 13 13 13
110.52 17 38 32
118.08 14 12 2
110.20 20 41 47
120.46 14 40 30
109.62 22 22 40
                                                                                               145.61
                                                                                                                                                          1214.6
          90.00 12 42 58 1814.64
90.00 17 23 53 A78.95
                                                                -8.29
                                                                                  17.56
                       53 878.95
13 45 8 1613.98
19 4 24 5842.88
14 15 11 1510
                                                                                                                                                                                               315.73
                                                                                                                                                                               22.57
                                                                                                                                                            278.9
                                                                19.95
                                                                                 323.42
                                                                                                  157.98
                                                                                                                                                                                               354.84
                                                                                                                                                           1014.0
                                                                                                                                                                               -6.87
                                                                                   1.53
                                                                                                144,33
                                                              -10.71
         100.00
                                                                                                                                                                          25.06
                                                                                                                                                                                               270.63
                                                                                                                                                           5242.9
                                                                                 278.50
                                                                                                  159.00
                                                              22.52
         100.00
                                                                                                                                                                                               344.52
                                                                                                                                                             919.7
                                                                                                                                                                            -12.16
                                                                                 351.16
                                                                                                  141.09
                                                              -16.33
         110.00
                                                                                                                                                                           30.97
                                                                                                                                                                                               247.26
                                                                                                                                                           4909.9
                                                               26.57
                                                                                 255.64
                                                                                                   161.43
         110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 1707.2 SR 314.2 SS 523.9
CRT -.5039 CRS .4391 CST -.9972
                                                                                    SGT 5415.2 SGR 358.3 SG3 98.8
RRT -.5858 RRF -.5763 RTF .9833
SGB 5427.1 R23 -.0018 R13 -.9833
      TOE-1.2150 TRA 9.9877 TC3 -.3052 BAU .5606
      ROE .6332 RRA -.3371 RC3 -.0047 FAU-.00378
FOE -.2023 FRA 2.1311 FC3 .0238 BSP 17985
BOE 1.3701 BRA 9.9933 BC3 .3053 FSP -329
                                                                                                                                                     LSA 1792.4 MSA 273.8 SSA 8.8
                                                                                                                                                     EL1 1714.8 EL2 270.2 ALF 174.57
                                                                                   SG1 5419.3 SG2 290.1 THA 177.77
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FI IGHT TIME 214.00

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FLIGHT TIME 70.00
                                                                                                                                                                                  ARRIVAL DATE SEP 21 1967
LAUNCH DATE JUL 13 1967
    HELIOCENTRIC CONIC.
                                                                                                   DISTANCE 184.599
     RL 152.08 LAL -.00 LOL 289.94 VL 26.513 GAL -9.59 AZL 93.13 MCA 81.04 SMA 127.32 ECC .25402 INC 3.1252 V1 29.295
RP 108.58 LAP -3.09 LOP 10.97 VP 37.447 GAP -12.08 AZP 90.49 TAL 211.39 TAP 292.43 RCA 94.97 APO 159.66 VZ 34.903
RC 51.950 GL -14.80 GP -8.82 ZAL 141.22 ZAP 15.27 ETS 33.90 ZAE L49.48 ETE 3.41 ZAC 89.27 ETC 13.81 CLP -12.52
    PLANETOCENTRIC CONIC
      C3 31.149 VHL 5.581 OLA -1.16 RAL 143.48 RAD 6568.2 VEL 12.350 PTH 2.23 VHP 7.912 CPA -4.37 RAP 176.27 ECC 1.5126
     C3 31.149 VML 5.581 OLA -1.16 RAL 143.48 RAD 0568.2 VEL 12.330 PIR 2.23 VMP 1.912 UPR -4.31 MAP 110.2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 143.40 2287.21 -21.26 46.13 11.87 109.15 2 21.47 1687.2 -18.45 38.59 90.00 13 24 28 5003.33 22.80 219.82 12.58 72.73 14 47 51 4403.3 20.22 212.09 12.58 72.73 14 47 51 4403.3 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 20.22 212.09 12.58 72.73 14 47 51 4403.5 
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71.60 16 5 20
                            3 4 28 2026.56
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         100.00
                                                                    -22.44
                                                                                         26.51
                                                                                                              11.42
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                         14 46 21
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         100.00
                                               4739.21
                                                                     23.99
                                                                                                              12.16
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                                                                                       199.98
                                            1816.82
4521.71
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                                                                    -25.59
                                                                                           9.21
                                                                                                              10.03
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24.00
         110.00
                            4 11 28
                                                                                                                                 113.46
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         110.00
                         15 55 50
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                                                                     27.18
                                                                                        182.18
                                                                                                              10.67
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                            SGT 633.6 SGR 426.6 SG3 118.9
RRT -.1859 RRF .2470 RTF -.6149
SGB 763.8 R23 -.0482 R13 .6277
                                                                                                                                                                  ST 275.5 SR 397.2 SS 155.6

CRT -.8849 CRS -.8761 CST .5755

LSA 488.0 MSA 138.1 SSA 25.9

EL1 471.1 EL2 108.2 ALF 123.55
     TOE .2510 TRA -.3132 TC3 .4311 BAU .1795
RDE -.3839 RRA -.1589 RC3 -.0022 FAU .04178
     FDE -.1805 FRA -.4105 FC3-1.1613 BSP 1646
BDE .4587 BRA .3512 BC3 .4311 FSP --297
                                                                                             SG1 642.2 SG2 413.5 THA 167.70
                                                                                                   FLIGHT TIME 72.00-
LAUNCH DATE JUL 13 1967
                                                                                                                                                                                   ARRIVAL DATE SEP 23 1967
    HELIOCENTRIC CONIC
                                                                                                   DISTANCE 191.399
     RL 152.08 LAL -.00 LOL 289.94 VL 26.679 GAL -9.52 AZL 93.02 MCA 84.22 SMA 128.40 ECC .24578 INC 3.0193 VI 29.295 RP 108.54 LAP -3.00 LOP 14.16 VP 37.575 GAP -11.15 AZP 90.30 TAL 212.76 TAP 296.99 RCA 96.84 APO 159.96 V2 34.914 RC 53.515 GL -14.67 GP -9.41 ZAL 142.60 ZAP 17.93 ETS 30.09 ZAE 149.26 ETE 1.69 ZAC 89.06 ETC 13.85 CLP -15.33
    PLANETOCENTRIC CONIC
     C3 29.930 VHL 5.471 DLA -.58 RAL 142.18 RAD 6568.2 VEL 12.301 PTH 2.22 VHP 7.412 DPA -5.07 RAP 176.37 ECC 1.4926 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               108.95 2 12 26
71.98 14 46 29
110.10 3 29 9
70.84 16 3 43
113.32 4 33 15
67.62 17 8 59
                          1 34 11 2295.14
13 23 34 4975.36
                                                                                                         10.04
                                                                                                                                                                     1695.1
                                                                                                                                                                                           -18.65
          90.00
                                                                    -21.44
                                                                                         46.65
                                                                                                                                                                                                                    39. DA
           90.00
                                                                     22.22
                                                                                        217.97
                                                                                                              10.39
                                                                                                                                                                          4375.4
                                                                                                                                                                                              19.55
                                                                                                                                                                                                                  210.31
                          2 55 15 2033.63
14 45 11 4712.10
         100.00
                                                                    -22.60
                                                                                         26.97
                                                                                                                9.60
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         100.00
                                                                      23.39
                                                                                         198.18
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         110.00
                            4 2 53 1821.96
                                                                    -25.73
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         110.00
                          15 54 3
                                               4496.54
                                                                      26.54
                                                                                         180.50
                                                                                                                8.65
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                                                                                                                                                                                             23.27
                                                                                                                                                                                                                   172.47
    DIFFERENTIAL CORRECTIONS
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
     TOE .2453 TRA -.2934 TC3 .4616 BAU .1849
                                                                                             SGT 644.7 SGR 432.1 SG3 134.8
RRT -.2140 RRF .2857 RTF -.6252
SG8 776.1 R23 -.0579 R13 .6417
                                                                                                                                                                   ST 273.4 SR 400.1 SS 160.6

CRT -.8892 CRS -.8408 CST .5241

LSA 489.2 MSA 143.5 SSA 26.7
     RDE -.3789 RRA -.1623 RC3 -.0180 FAU .04613
FDE -.1840 FRA -.4914 FC3-1.3345 BSP 1731
BDE .4514 BRA .3353 BC3 .4620 FSP -346
                                                                                             SG1 655.9 SG2 414.9 THA 166.24
                                                                                                                                                                   EL1 472.9 EL2 105.8 ALF 123.16
LAUNCH DATE JUL 13 1967
                                                                                                   FLIGHT TIME 74.00
                                                                                                                                                                                  ARRIVAL DATE SEP 25 1967
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 198.185
     RL 152.08 LAL -.00 LOL 289.94 VL 26.826 GAL -9.46 AZL 92.91 MCA 87.41 SMA 129.39 ECC .23859 INC 2.9145 V1 29.295 RP 108.50 LAP -2.91 LOP 17.35 VP 37.691 GAP -10.26 AZP 90.13 TAL 214.08 TAP 301.49 RCA 98.52 APO 160.26 V2 34.926 RC 55.163 GL -14.49 GP -10.07 ZAL 143.89 ZAP 20.78 ETS 27.17 ZAE 149.29 ETE 359.85 ZAC 89.00 ETC 13.89 CLP -18.27
    PLANETOCENTRIC CONIC
     C3 28.899 VHL 5.376 DLA
                                                        .01 RAL 140.99 RAD 6568.2 VEL 12.259 PTH 2.21 VHP 6.944 CPA -5.77 RAP 176.31 ECC 1.4756
      ENCH AZMTH. ENCH TIME. E-I TIME. INJ. EAT. INJ. EONG. INJ. AZMTH. INJ. TIME. PO. CST. TIM. INJ. Z. EAT. INJ. 2. EONG
                         1 25 4 2304.76
13 23 14 4948.20
2 46 25 2042.36
                                                                                                                               108.71 2 3 29
71.27 14 45 42
109.87 3 20 27
                                                                                                                                                                     1704.8
                                                                    -21.65
                                                                                        47.28
                                                                                                           8.42
                                                                                                                                                                                          -18.90
                                                                                                                                                                                                                  39.68
                                                                                                                                                                         4348.2
                                                                                                                                                                                                                  208.60
           90.00
                                                                      21.64
                                                                                        216.19
                                                                                                               8.42
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         100.00
                                                                     -22.81
                                                                                         27.54
                                                                                                               7.98
                                                                                                                                                                                            -19.89
                                                                                                                                                                                                                  19.96
                         14 44 34 4685.83
3 54 40 1828.71
15 52 48 4472.24
                                                                                                                                 70.12 16 2 40
113.12 4 25 9
66.87 17 7 21
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         100,00
                                                                      22.79
                                                                                       196.46
                                                                                                                7.98
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                                                                     -25.91
                                                                                           9.98
                                                                                                                6.64
                                                                                                                                                                         1228.7
         110.00
                                                                     25.90
                                                                                        178.90
                                                                                                                6.64
                                                                                                                                                                         3872.2
                                                                                                                                                                                             22.54
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                             SCT 650.6 SCR 438.4 SC3 152.6
RRT -.2413 RRF .3286 RTF -.6288
SCB 784.5 R23 -.0729 R13 .6506
                                                                                                                                                                 ST 268.5 SR 402.1 SS 165.3
CRT -.8898 CRS -.8001 CST .4619
LSA 487.6 MSA 150.4 SSA 27.2
      TOE .2373 TRA -.2777 TC3 .4848 BAU .1878
     ROE -.3739 RRA -.1672 RC3 -.0370 FAU .05100
     FOE -.1852 FRA -.5813 FC3-1.5279 BSP 1764
BOE .4429 BRA .3242 BC3 .4862 FSP -399
                                                                                             SG1 665.0 SG2 416.2 THA 164.61
                                                                                                                                                                   EL1 472.1 EL2 104.4 ALF 122.50
LAUNCH DATE JUL 13 1967
                                                                                                   FLIGHT TIME 76.00
                                                                                                                                                                                   ARRIVAL DATE SEP 27 1967
                                                                                                   DISTANCE 204.954
     RL 152.08 LAL -.00 LOL 289.94 VL 26.956 GAL -9.41 A7L 92.81 MCA 90.59 SMA 130.28 ECC .23234 INC 2.8101 V1 29.295 RP 108.46 LAP -2.81 LOP 20.54 VP 37.795 GAP -9.40 A7P 89.97 TAL 215.31 TAP 305.90 RCA 100.01 APO 160.55 V2 34.938 RC 56.885 GL -14.26 GP -10.60 ZAL 145.10 ZAP 23.83 ETS 24.85 ZAE 149.59 ETE 357.83 ZAC 89.09 ETC 13.91 CLP -21.37
    PLANETOCENTRIC CONIC
     C3 28.021 VHL 5.293 OLA
                                                          .61 RAL 139.93 RAD 6568.1 VEL 12.223 PTH 2.20 VHP 6.508 DPA -6.47 RAP 176.09 ECC 1.4611
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          1 16 21 2315.73
13 23 27 4921.80
                                                                                                                                 108.43 1 54 57
70.61 14 45 29
                                                                    -21.89
                                                                                         47.99
                                                                                                               7.00
                                                                                                                                                    1 54 57
                                                                                                                                                                       1715.7
                                                                                                                                                                                                                   40.37
          90.00
                                                                                                                                                                          4321.8
                                                                                                                                                                                                                  206.95
                                                                     21.05
          90.00
                                                                                        214.48
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                                           2052.43
4660.34
                           2 37 59
                                                                     -23.04
                                                                                                                6.57
                                                                                                                                                 3 12 11
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         100.00
                                                                                         28.20
                                                                                                                                  109.59
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         100.00
                          14 44 31
                                                                    22.19
                                                                                       194.80
                                                                                                                6.20
                                                                                                                                   69.44
                                                                                                                                                                          4060.3
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                         3 46 53 1836.77
15 52 6 4448.76
        110.00
                                                                    -26.12
                                                                                          10.51
                                                                                                                5.25
                                                                                                                                 112.67
                                                                                                                                                  4 17 29
                                                                                                                                                                         1236.8
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                                                                                                                                   66.16 17 6 15
         110.00
                                                                                                                                                                                            21.82
                                                                    25.26
                                                                                        177.38
                                                                                                                4.83
                                                                                                                                                                         3848.A
    DIFFERENTIAL CORRECTIONS
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                                                 ST 262.3 SR 403.3 SS 170.5
CRT -.8879 CRS -.7548 CST .3921
LSA 484.4 MSA 158.6 SSA 27.6
     TOE .2285 TRA -.2649 TC3 .5020 BAU .1894
                                                                                             SCT 652.6 SGR 445.9 SC3 172.8
                                                                                           RRT - .2699 RRF .3764 RTF - .6281
SGB 790.4 R23 - .0912 R13 .6576
     ROE -.3689 RRA -.1737 RC3 -.0599 FAU .05649
     FOE -.1844 FRA -.6818 FC3-1.7453 BSP 1786

EDG -.4339 RRA .3168 BC3 .5056 FSP -459
                                                                                                                                                                   EL1 469.8 EL2 103.6 ALF 121.73
                                                                                             SG1 671.1 SG2 417.5 THA 162.66
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ARRIVAL CATE SEP 29 1967

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LAUNCH CATE JUL 13 1967
                                                                                                DISTANCE 211.703
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 27.070 GAL -9.37 AZL 92.71 MCA 93.78 SMA 131.07 ECC .22693 INC 2.7055 V1 29.295
RP 108.43 LAP -2.70 LOP 23.73 VP 37.887 GAP -8.59 AZP 89.82 TAL 216.45 TAP 310.23 RCA 101.32 APO 160.81 V2 34.951
RC 58.673 GL -13.97 GP -11.61 ZAL 146.21 ZAP 27.08 ETS 22.94 ZAE 150.14 ETE 355.56 ZAC 89.37 ETC 13.91 CLP -24.64
    PLANETOCENTRIC CONIC
                                                      1.22 RAL 138.99 RAO 6568.1 VEL 12.192 PTH 2.19 VHP 6.103 OPA -7.18 RAP 175.69 ECC 1.4487
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 8 5 2327.78 -22.14 48.78 5.77 108.11 1 46 53 1727.8 -19.46 41.13 90.00 13 24 13 4896.11 20.46 212.82 5.08 69.99 14 45 49 4296.1 17.55 205.36
     C3 27.263 VHL 5.221 DLA
                                                                                           8.93 5.35 109.29 3 4 24

3.21 4.62 68.81 16 2 15

1.11 4.05 112.59 4 10 19

5.91 3.23 65.51 17 5 42

MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        -20.45
                       2 30 0 2063,57
14 45 0 4635,55
3 39 33 1845,88
15 51 56 4426,00
                                                                                                                                                                                                                21.29
                                                                                                                                                                     1463.6
                                                                   -23.29
                                                                                        28.93
         100.00
                                                                                   193.21
                                                                                                                                                                                           18.52
                                                                                                                                                                       4035.5
                                                                   21.59
         100.00
                                                                                                                                                                                       -23.07
21.11
                                                                   -26.36
                                                                                         11.11
                                                                                                                                                                     1245.9
         110.00
                                                                                                                                                                       3826.0
                                                                                   175.91
                                                                  24.63
         110.00
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ST 255.1 SR 403.5 SS 176.2
CRT -.8827 CRS -.7060 CST .3143
LSA 479.5 MSA 168.1 SSA 27.8
                                                                                            $67 649.6 $68 455.3 $63 195.3

RRT -.2984 RRF .4292 RTF -.6216

$68 793.3 R23 -.1139 R13 .6623
     TDE .2189 TRA - .2558 TC3 .5116 BAU .1891
     TOE -.3636 RRA -.1820 RC3 -.0869 FAU .06262
FOE -.1813 FRA -.7932 FC3-1.9866 B3P 1796
BDE .4244 BRA .3139 BC3 .5189 FSP -528
                                                                                            SG1 673.5 SG2 419.2 THA 160.28 - EL1 465.9 EL2 103.8 ALF 120.86
                                                                                                                                                                                 ARRIVAL DATE OCT 1 1967
                                                                                                  FLIGHT TIME 80.00
LAUNCH DATE JUL 13 1967
                                                                                                 DISTANCE 214.430
   HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 289.94 VL 27.169 GAL -9.32 AZL 92.60 MCA 96.97 SMA 131.77 ECC .22224 INC 2.6001 VI 29.295
RP 108.39 LAP -2.58 LOP 26.92 VP 37.970 GAP -7.82 AZP 89.68 TAL 217.48 TAP 314.46 RCA 102.48 APO 161.05 V2 34.964
RC 60.521 GL -13.64 GP -12.50 ZAL 147.23 ZAP 30.54 ETS 21.33 ZAE 150.94 ETE 352.95 ZAC 89.85 ETC 13.87 CLP -28.10
    PLANETOCENTRIC CONIC
     COLUMN 22 THE 2.138 ULA 1.83 FAL 138.17 FAO 6568.1 VEL 12.165 PTH 2.18 VHP 5.728 OPA -7.88 FAP 175.07 ECC 1.4378 NCH AZRITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZRITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 0 18 2340.66 -22.42 49.63 4.72 107.77 1 39 19 1740.7 -19.78 41.95 90.00 13 25 31 4871.00 19.87 211.22 3.70 69.40 14 46 42 4271.0 16.89 203.81 100.00 2 22 30 2075.53 -23.56 29.72 4.31 108.95 2 57 5 1475.5 -20.75 22.05
                                                                                         29.72 4.31 108.95 2.57 5 1475.5 -20.75 22
191.66 3.23 68.21 16 2.52 4011.4 17.85 184
11.77 3.03 112.28 4 3.38 1255.8 -23.36 4
174.50 1.82 64.89 17 5.42 3803.9 20.41 167
MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                         14 46 1 4611.36
3 32 42 1855.80
15 52 18 4403.86
                                                                                       191.66
                                                                   20.99
         100.00
                                                                                                                                                                                                                   4.12
                                                                   -26.62
         110.00
                                                                                       174.50
                                                                 23.99
         110,00
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 248.4 SR 402.9 SS 183.3
CRT -.8753 CR5 -.6578 CST .2351
LSA 474.2 MSA 178.9 SSA 27.9
     TOE .2102 TRA -.2496 TC3 .5151 BAU .1880
                                                                                             SGT 643.3 SGR 467.9 SG3 220.8
                                                                                             RRT -.3281 RRF .4872 RTF -.6106
568 795.5 R23 -.1395 R13 .6675
     RDE -.3581 RRA -.1923 RC3 -.1189 FAU .06955
     FOE -.1772 FRA -.9173 FC3-2.2634 BSP 1624
BOE .4152 BRA .3151 BC3 .5267 FSP -609
                                                                                                                                                                   EL1 461.6 EL2 104.9 ALF 120.07
                                                                                             SG1 674.6 SG2 421.5 THA 157.31
                                                                                                                                                                                ARRIVAL DATE OCT 3 1967
                                                                                                  FLIGHT TIME 82.00
LAUNCH DATE JUL 13 1967
                                                                                                 DISTANCE 225.133
     RL 152.08 LAL -.00 LOL 289.94 VL 27.254 GAL -9.29 AZL 92.49 MCA 100.17 SMA 132.38 ECC .21820 INC 2.4931 VI 29.295 RP 108.35 LAP -2.45 LOP 30.12 VP 38.043 GAP -7.07 AZP 89.56 TAL 218.40 TAP 318.57 RCA 103.49 APO 161.26 V2 34.977 RC 62.420 GL -13.26 GP -13.48 ZAL 148.15 ZAP 34.23 ETS 19.91 ZAE 151.97 ETE 349.87 ZAC 90.55 ETC 13.79 CLP -31.77
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 26.011 VHL 5.100 DLA 2.45 RAL 137.48 RAD 6568.1 VEL 12.140 PTH 2.18 VHP 5.384 DPA -8.58 RAP 174.24 ECC 1.4281
     C3 26.011 VHL 5.100 DLA 2.45 RAL 137.48 RAD 6568.1 VEL 12.140 PTH 2.18 VHP 5.384 DPA -8.58 RAP 174.24 ECC 1.4281 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG BER RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 52 59 2354.19 -22.69 50.52 3.84 107.41 1 32 14 1754.2 -20.10 42.81 90.00 13 27 21 4846.38 19.27 209.66 2.49 68.84 14 48 7 4246.4 16.22 202.31 100.00 2 15 28 2088.13 -23.83 30.56 3.43 108.60 2 50 16 1488.1 -21.07 22.85 100.00 14 47 33 4587.66 20.38 190.17 2.02 67.65 16 4 0 3987.7 17.17 182.84 110.00 3 26 20 1866.34 -26.89 12.47 2.18 111.94 3 57 26 1266.3 -25.67 4.78 110.00 15 53 10 4382.22 23.36 173.14 .59 64.31 17 6 13 3782.2 19.71 165.90
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 629.2 SGR 483.9 SG3 248.5
RRT - 3480 RRF . 5469 RTF - 5865
SGB 793.8 R23 - 1725 R13 .6693
SG1 669.6 SG2 426.3 THA 153.68
                                                                                                                                                                  ST 239.8 SR 401.1 SS 190.0
CRT -.8602 CRS -.6049 CST .1378
LSA 466.1 MSA 191.0 SSA 27.9
      TOE .1994 TRA -.2501 TC3 .5063 BAU .1842
      ROE -.3517 RRA -.2044 RC3 -.1558 FAU .07707
      FOE -.1674 FRA-1.0492 FC3-2.5650 BSP 1802
BOE .4043 BRA .3229 BC3 .5297 FSP -695
                                                                                                                                                                  EL1 454.7 EL2 107.9 ALF 119.01
                                                                                                                                                                                 ARRIVAL DATE OCT 5 1967
                                                                                                   FLIGHT TIME 84.00
 LAUNCH DATE JUL 13 1967
                                                                                                  DISTANCE 231.811
     RL 152.08 LAL -.00 LOL 289.94 VL 27.327 GAL -9.25 AZL 92.38 MCA 103.36 SMA 132.90 ECC .21472 INC 2.3839 V1 29.295 RP 108.31 LAP -2.32 LOP 33.31 VP 38.107 GAP -6.36 AZP 89.45 TAL 219.20 TAP 322.56 RCA 104.36 APO 161.44 V2 34.990 RC 64.367 GL -12.84 GP -14.55 ZAL 148.98 ZAP 38.15 ETS 18.62 ZAE 153.22 ETE 346.19 ZAC 91.47 ETC 13.65 CLP -35.66
     PLANETOCENTRIC CONIC
      C3 25.477 VHL 5.048 DLA 3.07 RAL 136.92 RAD 6568.0 VEL 12.118 PTH 2.17 VMP 5.071 DPA -9.27 RAP 173.17 ECC 1.4193
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                          3.11
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                                           2368.24
4822.07
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68.31 14 50 4

108.22 2 43 56

67.11 16 5 41

111.59 3 51 44

63.75 17 7 15
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                                                                     18.67
                                                                                         208.13
                                                                                                               1.45
                           13 29 42
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                          2 8 55 2101.26
14 49 36 4564.29
3 20 27 1877.36
15 54 34 4360.93
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                                                                   -24.12
                                                                                          31.43
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19.01
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                                                                     -27.17
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                                                                                        171.61
                                                                     22.73
          110.00
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 231.3 SR 398.1 SS 197.1
CRT -.8375 CRS -.5503 CST .0277
LSA 456.3 MSA 204.4 SSA 27.8
EL1 446.4 EL2 112.7 ALF 117.88
                                                                                           SCT 609.4 SGR 504.6 SG3 278.7
RRT -.3560 RRF .6075 RTF -.5483
SGB 791.1 R23 -.2092 R13 .6720
       TDE .1882 TRA -.2563 TC3 .4861 BAU .1788
      RDE -.3445 RRA -.2184 RC3 -.1983 FAU .08522
FDE -.1527 FRA-1.1894 FC3-2.8959 BSP 1768
BDE .3925 BRA .3367 BC3 .5250 FSP -790
                                                                                           SG1 661.1 SG2 434.6 THA 149.04
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FLIGHT TIME 78.00

ARRIVAL DATE OCT 7 1967 FLIGHT TIME 86.00 LAUNCH DATE JUL 13 1967 CISTANCE 238.461 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 27.388 GAL -9.21 AZL 92.27 MCA 106.56 SMA 133.34 ECC .21173 INC 2.2717 V1 29.295
RP 108.27 LAP -2.18 LOP 36.51 VP 38.162 GAP -5.68 AZP 89.35 TAL 219.87 TAP 326.43 RCA 105.11 APO 161.58 V2 35.003
RC 66.356 GL -12.38 GP -15.70 ZAL 149.71 ZAP 42.30 ETS 17.38 ZAE 154.62 ETE 341.70 ZAC 92.63 ETC 13.42 CLP -39.80 PLANETOCENTRIC CONIC C3 24.984 VML 4.998 DLA 3.69 RAL 136.48 RAD 6568.0 VEL 12.098 PTH 2.17 VMP 4.789 CPA -9.95 RAP 171.85 ECC 1.4112 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 106.62 1 19 27 67.81 14 52 32 107.82 2 38 3 66.60 16 7 53 111.21 3 46 30 63.22 17 8 49 1782.8 -20.77 0 39 45 2382.76 13 32 34 4797.90 2 2 49 2114.83 2.54 44.64 -23.26 52.43 90.00 4197.9 14.88 199.38 90.00 18.05 206.63 . 56 -21.73 24.55 -24.40 32.34 2.15 1514.8 100.00 180.04 14 52 11 4541.06 3 15 1 1888.85 19.15 187.25 .08 3941.1 15.82 100.00 .95 1288.9 -24.32 6.21 -27.46 13.98 110.00 170.51 3739.8 18.31 163.41 110.00 15 56 29 4339.81 22.08 358.61 ORBIT DETERMINATION ACCURACY HIB-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 223.2 SR 393.7 SS 204.4 CRT -.8042 CRS -.4944 CST -.0967 TDE .1767 TRA -.2689 TC3 .4531 BAU .1724 \$6T 584.5 \$6R 530.9 \$63 311.1 RRT -.3440 RRF .6668 RTF -.4898 \$6B 789.6 R23 -.2433 R13 .6800 LSA 444.8 MSA 219.1 SSA 27.7 SG1 650.1 SG2 448.2 THA 142.82 EL1 436.5 EL2 119.7 ALF 116.67 ARRIVAL DATE OCT 9 1967 FLIGHT TIME 88.00 LAUNCH DATE JUL 13 1967 DISTANCE 245.083 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 27.438 GAL -9.16 A7L 92.16 MCA 109.76 SMA 133.71 ECC .20915 INC 2.1556 VI 29.295
RP 108.22 LAP -2.03 LOP 39.71 VP 38.210 GAP -5.03 A7P 89.27 TAL 220.42 TAP 330.18 RCA 105.75 APO 161.68 V2 35.016
RC 68.382 GL -11.87 GP -16.95 7AL 150.36 ZAP 46.69 ETS 16.15 ZAE 156.12 ETE 336.16 ZAC 94.03 ETC 13.10 CLP -44.18 PLANETOCENTRIC CONIC 4.31 RAL 136.16 RAD 6568.0 VEL 12.079 PTH 2.16 WHP 4.538 DPA -10.62 RAP 170.28 ECC 1.4035 C3 24.518 VHL 4.952 DLA INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH ATHTH LNCH TIME L-I TIME 0 33 45 2397.75 13 36 0 4773.66 1 57 7 2128.85 106.19 1 13 43 1797.7 -21.11 45.61 -23.55 53.43 2.10 90.00 67.32 14 55 34 4173.7 197.93 205.13 359.82 14.20 17.42 90.00 107.41 2 32 36 66.10 16 10 37 110.82 3 41 41 62.71 17 10 54 -22.07 25.46 -24.69 33.28 1.72 1528.9 100.00 15.13 3917.8 178.66 18.51 185.82 359.33 14 55 19 4517.79 100.00 -24.66 17.60 1500. 3718.7 1300.7 6.97 3 10 0 1900.73 15 58 55 4318.67 -27.75 14.78 110.00 .54 357.84 162.18 169.22 110.00 21.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 558.1 SGR 564.4 SG3 345.5 RRT -.3056 RRF .7233 RTF -.4056 SGB 793.8 R23 -.2575 R13 .7032 SG1 641.4 SG2 467.6 THA 133.96 TDE .1666 TRA -.2875 1C3 .4077 BAU .1664 ST 217.6 SR 388.3 SS 212.7 RDE -.3268 RRA -.2523 RC3 -.3027 FAU .10314 CRT -. 7602 CRS -. 4435 CST -. 2238 LSA 432.9 MSA 235.0 SSA 27.6 FOE -. 1076 FRA-1.4849 FC3-3.6418 BSP 1722 BOE .3664 BRA .3825 BC3 .5078 FSP -1008 EL1 426.1 EL2 128.8 ALF 115.58 ARRIVAL DATE OCT 11 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 13 1967 DISTANCE 251.677 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 27.478 GAL -9.12 AZ 92.03 MCA 112.96 SMA 134.01 ECC .20693 INC 2.0347 VI 29.295
RP 108.18 LAP -1.87 LOP 42.92 VP 38.251 GAP -4.41 AZP 89.21 TAL 220.84 TAP 333.81 RCA 106.28 APO 161.74 VZ 35.029
RC 70.443 GL -11.32 GP -18.29 7AL 150.91 ZAP 51.30 ETS 14.89 ZAE 157.61 ETE 329.30 ZAC 95.66 ETC 12.67 CLP -48.81 PLANETOCENTRIC CONIC C3 24.070 VHL 4.906 CLA 4.95 RAL 135.95 RAC 6568.0 VEL 12.060 PTH 2.16 VHP 4.319 CPA -11.28 RAP 168.46 ECC 1.3961 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMIN 105.75 1 8 20 66.84 14 59 9 106.97 2 27 31 65.62 16 13 55 110.40 3 37 16 62.21 17 13 32 -21.45 1813.2 90.00 1.79 0 28 7 2413.24 -23.84 54.47 4149.1 196.48 203.62 359.21 90.00 13 40 0 4749.11 16.77 1 51 47 2143.35 14 59 1 4494.24 34.26 1543.3 -22.42 26.39 100,00 -24.98 1.43 358.71 3894.2 177.27 17.86 184.38 100.00 1313.0 -25.01 .27 3 5 23 1913.03 -28.04 15.61 110.00 3697.3 16.88 357.21 16 1 55 4297.32 20.76 167.93 110,00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 532.5 SGR 604.1 SG3 3A0.2 RRT -.2195 RRF .7734 RTF -.2779 SGB 805.3 R23 -.2143 R13 .7513 ST 213.2 SR 380.9 SS 220.4 CRT -.6971 CRS -.3864 CST -.3719 TOE .1558 TRA -.3148 TC3 .3444 BAU .1614 RDE -.3156 RRA -.2713 RC3 -.3645 FAU .11234 FDE -.0721 FRA-1.6277 FC3-4.0405 BSP 1715 BDE .3520 BRA .4156 BC3 .5015 FSP -1122 LSA 418.1 MSA 252.1 SSA 27.5 561 637.0 562 492.7 THA 120.02 EL1 413.1 EL2 141.0 ALF 114.33 ARRIVAL CATE OCT 13 1967 FLIGHT TIME 92.00 LAUNCH DATE JUL 13 1967 DISTANCE 258.241 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 27.509 GAL -9.06 A7L 91.91 MCA 116.17 SMA 134.24 ECC .20501 INC 1.9078 V1 29.295 RP 108.14 LAP -1.71 LOP 46.12 VP 38.286 GAP -3.81 A7P 89.16 TAL 221.14 TAP 337.31 RCA 106.72 APO 161.76 V2 35.042 RC 72.534 GL -10.72 GP -19.70 7AL 151.39 7AP 56.11 ETS 13.55 7AE 158.93 ETE 320.87 7AC 97.50 ETC 12.11 CLP -53.68 PLANETOCENTRIC CONIC C3 23.631 VHL 4.861 OLA 5.61 RAL 135.86 RAD 6568.0 VEL 12.042 PTH 2.15 VHP 4.132 CPA -11.92 RAP 166.40 ECC 1.3889 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.28 1 3 16 66.38 15 3 21 106.51 2 77 105.2A 1829.4 90.00 0 22 47 2429.36 -24.13 55.56 1.61 4124.0 12.76 13 44 37 358.73 90.00 4723.99 16.09 202.09 155A.4 -22.77 106.51 100.00 1 46 46 2158.44 -25.28 35.2A 1.26 65.15 16 17-48 109.96 3 33 11 61.72 17 16 44 3870.1 13.68 175.86 100.00 15 3 IA 4470.14 17.17 182.91 358.23 1325.9 -25.36 110.00 3 1 6 1925.85 -26.34 16.49 .12 16.13 3675.5 110.00 16 5 28 4275.50 20.06 166.62 356.70 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 517.0 SGR 651.6 SG3 415.1 RRT -.0837 RRF .8174 RTF -.1055 SGB 831.8 R23 -.0732 R13 .8149 ST 213.2 SR 372.0 SS 228.7 CRT -.6197 CRS -.3348 CST -.5135 TOE .1470 TRA -.3487 TC3 .2657 BAU .1607 RDE -.3030 RRA -.2916 RC3 -.4337 FAU .12149 FOE -.0316 FRA-1.7630 FC3-4.4509 BSP 1778 BDE .3368 BRA .4546 BC3 .5086 FSP -1242 LSA 402.7 MSA 270.6 55A 27.3

SG1 655.3 SG2 512.3 THA 99.87

EL1 399.5 EL2 155.8 ALF 113.30

ARRIVAL DATE OCT 15 1967

LAUNCH CATE JUL 13 1967

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HELIOCENTRIC CONIC
                                                                                      CISTANCE 264.777
     RL 152.08 LAL -.00 LOL 289.94 VL 27.531 GAL -9.00 AZL 91.77 HCA 119.38 SMA 134.41 ECC .20336 INC 1.7736 V1 29.295
RP 108.10 LAP -1.55 LOP 49.33 VP 38.314 GAP -3.23 AZP 89.13 TAL 221.32 TAP 340.69 RCA 107.07 APO 161.74 V2 35.056
RC 74.652 GL -10.06 GP -21.17 ZAL 151.77 ZAP 61.09 ETS 12.09 ZAE 159.90 ETE 310.79 ZAC 99.54 ETC 11.41 CLP -58.77
    PLANETOCENTRIC CONIC
     C3 23.195 VHL 4.816 CLA 6.29 RAL 135.89 RAD 6567.9 VEL 12.024 PTH 2.15 VMP 3.977 DPA -12.55 RAP 164.14 ECC 1.3817
    C3 25.195 VHL 4.816 CLA 6.29 RAL 135.89 RAO 6567.9 VEL 12.024 PTM 2.15 VHP 3.977 DPA -12.55 RAP 164.14 ECC 1.3817 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 17 41 2446.30 -24.43 56.71 1.56 104.78 0 58 27 1846.3 -22.17 48.78 90.00 13 49 54 4697.96 15.37 200.51 358.37 65.92 15 8 12 40.98.0 11.99 193.47 100.00 1 42 1 2174.29 -25.58 36.36 1.21 106.02 2 18 15 1574.3 -23.14 28.41 100.00 15 8 15 4445.19 16.45 181.41 357.86 64.69 16 22 20 3845.2 12.91 174.41 110.00 2 57 6 1939.31 -28.65 17.41 .10 109.50 3 29 25 1339.3 -25.72 9.46 110.00 16 9 39 4252.85 19.33 165.28 356.32 61.24 17 20 32 3652.8 15.34 15.84 3
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 521.8 SGR 704.0 SG3 447.4 g
RRT .1069 RRF .8534 RTF .1127
SGB 876.4 R23 .0838 R13 .8496
SG1 708.8 SG2 515.4 THA 80.31
    TOE .1389 TRA -.3912 TC3 .1669 BAU .1658
ROE -.2877 RRA -.3115 RC3 -.5081 FAU .12980
FOE .0225 FRA-1.8747 FC3-4.8446 BSP 1896
BOE .3195 BRA .5000 BC3 .5348 FSP -1349
                                                                                                                                               ST 216.9 SR 360.4 SS 236.4
CRT -.5234 CRS -.2750 CST -.6585
                                                                                                                                              LSA 384.3 MSA 290.5 SSA 27.3
                                                                                                                                               EL1 383.0 EL2 173.9 ALF 112.32
                                                                                       FLIGHT TIME 96.00
                                                                                                                                                             ARRIVAL DATE OCT 17 1967
LAUNCH DATE JUL 13 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 271.283
    RL 152.08 LAL -.00 LOL 289.94 VL 27.546 GAL -8.94 A7L 91.63 MCA 122.58 SMA 134.52 ECC .20193 INC 1.6305 V1 29.295
RP 108.06 LAP -1.37 LOP 52.54 VP 38.337 GAP -2.68 AZP 89.12 TAL 221.38 TAP 343.96 RCA 107.36 APO 161.68 VZ 35.069
RC 76.795 GL -9.34 GP -22.69 ZAL 152.08 ZAP 66.19 ETS 10.50 ZAE 160.29 ETE 299.34 ZAC 101.71 ETC 10.55 CLP -64.05
   PLANETOCENTRIC CONIC
    C3 22.757 VHL 4.770 DLA 7.01 RAL 136.02 RAD 6567.9 VEL 12.006 PTH 2.14 VHP 3.855 DPA -13.16 RAP 161.71 ECC 1.3745 LNCH AFMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               104.23
                      0 12 43 2464.32
13 55 56 4670.65
1 37 25 2191.16
15 13 55 4419.04
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        100.00
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108.99 3 25 53
60.76 17 25 0
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163.89
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16 14 31 4229.35
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        110:00
                                                            18.55
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 558.3 SGR 761.0 SG3 475.9
RRT .3169 RRF .8827 RTF .3396
SGB 943.9 R23 .1644 R13 .8695
SG1 797.0 SG2 505.6 THA 67.40
    TOE .1333 TRA -.4403 TC3 .0495 BAU .1794
                                                                                                                                                ST 226.3 SR 346.1 SS 244.4
    RDE -.2700 RRA -.3305 RC3 -.5874 FAU .13697
FDE .0865 FRA-1.9585 FC3-5.2106 BSP 2110
                                                                                                                                                CRT -.4184 CRS -.2131 CST -.7833
                                                                                                                                               LSA 364.6 MSA 311.5 SSA 27.3
     BDE .3011 BRA .5505 BC3 .5895 FSP -1444
                                                                                                                                               EL1 364.6 EL2 195.1 ALF 111.84
                                                                                                                                                            ARRIVAL CATE OCT 19 1967
                                                                                      FLIGHT TIME 98.00
LAUNCH DATE JUL 13 1967
                                                                                     CISTANCE 277.759
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 27.554 GAL -8.87 AZL 91.48 MCA 125.80 SMA 134.58 ECC .20070 INC 1.4767 VI 29.295
RP 108.02 LAP -1.20 LOP 55.75 VP 38.354 GAP -2.14 AZP 89.14 TAL 221.32 TAP 347.12 RCA 107.57 APO 161.59 V2 35.082
RC 78.958 GL -8.54 GP -24.25 ZAL 152.31 ZAP 71.35 ETS 8.75 ZAE 159.96 ETE 287.30 ZAC 103.98 ETC 9.54 CLP -69.47
   PLANETOCENTRIC CONIC
     C3 22.314 VHL 4.724 DLA 7.77 RAL 136.27 RAC 6567.9 VEL 11.987 PTH 2.14 VHP 3.765 OPA -13.78 RAP 159.17 ECC 1.3672
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                              103.63
                                                                                                1.81
                                                                                                                               0 49 12
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         an, ne
                       0 7 49 2483.83
                                                            -25.06
                                                                            59.28
                                                                                                                65.02 15 20 11
104.90 2 9 43
63.76 16 33 36
                                                                                                                                                    4041.6
                       14 2 49
                                                                                               358.01
                                                                                                                                                                      10.30
         90.00
                                        4641.60
                                                            13.78
                                                                            197.14
                      1 32 53 2209.41
15 20 25 4391.25
7 49 40 1969.13
16 20 8 4204.29
                                                                              38.77
                                                                                                                                                    1679.4
                                                                                                                                                                    -23.91
                                                                                                1.48
        100.00
                                                            -26.22
                                                                        178.20
                                                                                                                                                    3791.2
                                                                                                                                                                                       171.31
                                                                                              357,47
                                                                                                                                                                     11.21
        100,00
                                                            14.86
                                                                                                                 108.43 3 22 29
60.27 17 30 12
                                                                                                                                                                   -26.51
                                                                                                                                                    1369.1
                                                                                                                                                                                         11.42
                                                            -29.31
                                                                              19.48
                                                                                                  . 44
        110,00
                                                                                               355.90
                                                                                                                                                    3604.3
                                                                                                                                                                       13.62
                                                           17.71
                                                                             162.44
        110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 631.1 SCR 822.6 SG3 500.2
RRT .5019 RRF .9065 RTF .5316
SGB 1036.8 R23 .1945 R13 .8898
SG1 912.6 SG2 492.1 TMA 59.05
                                                                                                                                               ST 242.0 SR 329.8 SS 253.2
     TOE .1318 TRA -.4944 TC3 -.0851 BAU .2020
                                                                                                                                               CRT -.3164 CRS -.1593 CST -.8731
     ROF -.2502 RRA -.3483 RC3 -.6718 FAU .14282
FDE .1539 FRA-2.0126 FC3-5.5411 BSP 2434
BDE .2828 BRA .6048 BC3 .6772 FSP -1534
                                                                                                                                              LSA 350.5 MSA 328.4 SSA 27.3
                                                                                                                                               EL1 345.4 EL2 219.2 ALF 112.57
                                                                                                                                                            ARRIVAL DATE OCT 21 1967
                                                                                       FLIGHT TIME 100.00
LAUNCH CATE JUL 13 1967
                                                                                     DISTANCE 284.208
    RL 152.08 LAL -.00 LOL 289.94 VL 27.555 GAL -8.79 A7L 91.31 MCA 129.01 SMA 134.59 ECC .19963 INC 1.3098 V1 29.295
RP 107.98 LAP -1.02 LOP 58.96 VP 38.367 GAP -1.63 A7P 89.18 TAL 221.17 TAP 350.18 RCA 107.72 APO 161.45 V2 35.094
RC 81.139 GL -7.65 GP -25.82 ZAL 152.45 ZAP 76.50 ETS 6.83 ZAE 158.83 ETE 275.69 ZAC 106.27 ETC 8.39 CLP -74.97
   PLANETOCENTRIC CONIC
     C3 21.864 VHL 4.676 OLA 8.59 RAL 136.63 RAD 6567.9 VEL 11.968 PTH 2.13 VHP 3.708 OPA -14.41 RAP 156.56 ECC 1.3598
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 10 43 4610.24 12.87 195.29 358.00 64.56 15 27 33 4010.2 9.34 188.39
                     1 28 19 2229.50
15 27 53 4361.28
2 46 5 1986.18
16 26 37 4177.36
                                                                                                                               2 5 29
                                                                                                                                                                                        32.07
                                                            -26.56
                                                                              40.17
                                                                                                1.82
                                                                                                                 104.24
                                                                                                                                                    1629.5
                                                                                                                                                                     -24.34
        100.00
                                                                                                                   63.29 16 40 34
                                                                                                                                                                      10.25
                                                                                                                                                                                      169.60
                                                                                                                                                     3761.3
                                                            13.95
                                                                          176.44
                                                                                               357.46
                                                                                                                                                1386.2
                                                                                                                 107,81 3 19 11
59,78 17 36 14
        110.00
                                                            -29.67
                                                                              20.68
                                                                                                   .80
                                                                                                                                                                      -26.95
                                                                                                                                                                                         12.55
                                                                                                                                                    3577.4
                                                                                                                                                                        12.65
                                                                            160.89
                                                                                               355 86
                                                                                                                                                                                        154.22
                                                           16.79
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 739.6 SGR 883.5 SG3 516.8

RRT .6434 RRF .9248 RTF .6727

SGB 1152.2 R23 .2062 R13 .9072

SGI 1048.8 SG2 476.9 THA 52.76
                                                                                                                                              ST 263.5 SR 309.5 SS 262.9

CRT -.2189 CRS -.0985 CST -.9382

LSA 368.2 MSA 313.0 SSA 27.4

EL1 323.7 EL2 245.8 ALF 116.78
     TDE .1342 TRA -.5532 TC3 -.2388 BAU .2321
     RDE -. 2267 RRA -. 3624 RC3 -. 7574 FAU .14648
     FDE .2341 FRA-2.0213 FC3-5.8000 BSP 2831
BDE .2635 BRA .6614 BC3 .7942 FSP -1592
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FLIGHT TIME 94.00

ELI 417.3 EL2 193.7 ALF 4.68

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LAUNCH CATE JUL 13 1967
                                                                        FLIGHT TIME 102.00
                                                                                                                               ARRIVAL CATE OCT 23 1967
     HELIOCENTRIC CONIC
                                                                       DISTANCE 290.627
      RL 152.08 LAL -.00 LOL 289.94 VL 27.550 GAL -8.70 A7L 91.13 MCA 132.23 SMA 134.55 ECC .19870 INC 1.1268 VI 29.295
RP 107.94 LAP -.83 LOP 62.17 VP 38.375 GAP -1.14 AZP 89.24 TAL 220.91 TAP 353.13 RCA 107.82 APO 161.29 V2 35.107
RC 83.336 GL -6.65 GP -27.42 ZAL 152.50 ZAP 81.57 ETS 4.72 ZAE 156.98 ETE 265.36 ZAC 108.52 ETC 7.10 CLP -80.49
     PLANETOCENTRIC CONIC
      C3 21.405 VHL 4.627 DLA 9.49 RAL 137.11 RAD 6567.9 VEL 11.949 PTH 2.13 VHP 3.682 DPA -15.08 RAP 153.96 ECC 1.3523
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00 23 53 38 2529.46
                                                  -25.75
                                                                62.44
                                                                               2.59
                                                                                          102.19 24 35 47
                                                                                                                                    -23.82
                                                                                                                     1929.5
                                                                                                                                                      54.31
          90.00
                    14 19 48 4575.86
                                                  11.86
                                                                193.27
                                                                                             64,10 15 36 4
                                                                              358.12
                                                                                                                         3975.9
                                                                                                                                        8.28
                                                                                                                                                    186.42
                   1 23 34 2252.08
15 36 29 4328.47
2 42 24 2005.35
16 34 8 4147.97
        100.00
                                                  -26.93
                                                                 41.75
                                                                               2.29
                                                                                            103.49
                                                                                                        2 1 6
                                                                                                                        1652.1
                                                                                                                                      -24.H1
        100.00
                                                                                                                                                     33.59
                                                  12.94
                                                               174.53
                                                                             357.57
                                                                                              62.81 16 48 38
                                                                                                                        3728.5
                                                                                                                                        9.19
                                                                                                                                                    167.74
        110.00
                                                 -30.06
                                                                22.04
                                                                               1.32
                                                                                            107.09
                                                                                                       3 15 50
                                                                                                                        1405.4
                                                                                                                                      -27.43
                                                                                                                                                     13.83
        110.00
                                                15.78
                                                               159.21
                                                                                             59.28 17 43 16
                                                                             355.95
                                                                                                                        3548.0
                                                                                                                                                    152.61
                                                                                                                                      11.59
    DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT CETERMINATION ACCURACY
     TOE .1428 TRA -.6137 TC3 -.4079 BAU .2685 ROE -.2007 RRA -.3731 RC3 -.8451 FAU .14813
                                                                 SGT 876.0 SGR 944.8 SG3 526.5
RRT .7396 RRF .9395 RTF .7658
SG8 1288.5 R23 .2092 R13 .9219
SG1 1202.3 SG2 463.3 THA 47.92
                                                                                                                    ST 291.2 SR 286.5 SS 274.1
CRT -.1341 CRS -.0497 CST -.9733
     FOE .3153 FRA-1.9912 FC3-5.9910 BSP 3309
                                                                                                                   LSA 397.8 MSA 288.2 SSA 27.6
ELI 307.8 EL2 268.7 ALF 138.49
     BDE .2463 BRA .7182 BC3 .9384 FSP -1636
 LAUNCH DATE JUL 13 1967
                                                                      FLIGHT TIME 104.00
                                                                                                                               ARRIVAL CATE OCT 25 1967
    HELIOCENTRIC CONTC
                                                                      DISTANCE 297.019
    RL 152.08 LAL -.00 LOL 289.94 VL 27.540 GAL -8.61 AZL 90.92 MCA 135.44 SMA 134.48 ECC .19790 INC .9240 VI 29.295 RP 107.91 LAP -.65 LOP 65.39 VP 38.379 GAP -.66 AZP 89.34 TAL 220.55 TAP 355.99 RCA 107.86 APO 161.09 V2 35.119 RC 85.546 GL -5.51 GP -29.04 ZAL 152.47 ZAP 86.48 ETS 2.42 ZAE 154.55 ETE 256.70 ZAC 110.66 ETC 5.68 CLP -85.97
    PLANETOCENTRIC CONIC
     C3 20.940 VML 4.576 OLA 10.50 RAL 137.72 RAD 6567.9 VEL 11.930 PTH
                                               RAL 137.72 RAD 6567.9 VEL 11.930 PTH 2.12 VHP 3.687 DPA -15.81 RAP 151.41 ECC 1.3446
INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
        90.00
                  23 47 55 2557.22
                                                 -26.14
                                                               64.39
                                                                              3.22
                                                                                          101.29 24 30 32
63.63 15 46 1
                                                                                                                       1957.2
                                                                                                                                    -24.32
        90.00
                  14 30 23
                                 4537.53
                                                  10.71
                                                               191.04
                                                                             358.38
                  1 18 25 2278.02
15 46 30 4291.96
                                                                                                                        3937.5
                                                                                                                                       7.08
       100.00
                                                 -27.33
                                                                43.57
                                                                              2.94
                                                                                            102.61
                                                                                                        1 56 23
                                                                                           102.61 1 56 23
62.33 16 58 2
106.25 3 12 18
58.76 17 51 29
                                                                                                                        1678.0
                                                                                                                                      -25.32
                                                                                                                                                     35.35
       100.00
                                                 11.79
                                                               172.43
                                                                             357.82
                  2 38 31 2027.37
16 42 53 4115.39
                                                                                                                        3692.0
                                                                                                                                        7.99
                                                                                                                                                    165.69
       110.00
                                                 -30.49
                                                               23.61
                                                                              2.01
                                                                                                                        1427.4
                                                                                                                                      -27.96
       110.00
                                                                           356.17
                                                 14.64
                                                               157.38
                                                                                                                       3515.4
                                                                                                                                      10.39
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
     TOE .1581 TRA -.6741 TC3 -.5919 BAU .3088
                                                                  SGT 1034.1 SGR 1001.8 SG3 527.1
    ROE -.1705 RRA -.3784 RC3 -.9309 FAU .14720
                                                                                                                    ST 325.2 SR 259.1 SS 288.5
                                                                 RRT .8040 RRF .9508 RTF .8257
5GB 1439.8 R23 .2107 R13 .9329
                                                                                                                    CRT -.0546 CRS -.0067 CST -.9897
    FOE .4056 FRA-1.9139 FC3-6.0858 BSP 3826
BOE .2325 BRA .7730 BC3 1.1031 FSP -1643
                                                                                                                  LSA 433.7 MSA 259.2 SSA 28.0
                                                                  561 1367.5 SG2 450.5 THA 43.87
                                                                                                                  EL1 326.0 EL2 258.0 ALF 173.30
LAUNCH DATE JUL 13 1967
                                                                      FLIGHT TIME 106.00
                                                                                                                             ARRIVAL DATE OCT 27 1967
   HELIOCENTRIC CONIC
                                                                     DISTANCE 303.384
    RL 152.08 LAL -.00 LOL 289.94 VL 27.525 GAL -8.51 AZL 90.70 MCA 138.66 SMA 134.36 ECC .19721 INC .6963 VI 29.295
RP 107.87 LAP -.46 LOP 68.61 VP 38.379 GAP -.20 AZP 89.48 TAL 220.10 TAP 358.77 RCA 107.87 APO 160.86 V2 35.131
RC 87.767 GL -4.19 GP -30.71 ZAL 152.32 ZAP 91.15 ETS 359.92 ZAE 151.71 ETE 249.69 ZAC 112.64 ETC 4.16 CLP -91.34
   PLANETOCENTRIC CONIC
    C3 20.472 VML 4.525 CLA 11.65 RAL 138.47 RAC 6567.8 VEL 11.910 PTH 2.12 VMP 3.724 CPA -16.66 RAP 148.96 ECC 1.3369
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
        90.00 23 41 26 2589.90
                                                                                         100.21 24 24 36
63.16 15 57 43
                                                -26.55
                                                              66.69
                                                                              4.03
                                                                                                                    1989.9
                   14 42 49 4494.02
1 12 37 2308.54
                                                                                                                                                    58.42
        90.00
                  14 42 49
                                                 9.38
                                                              188.54
                                                                            358.81
                                                                                                                       3894.0
                                                                                                                                                  181.78
      100.00
                                                -27.76
                                                               45.73
                                                                             3.77
                                                                                          101.55
                                                                                                      1 51 5
                                                                                                                       1708.5
                                                                                                                                                    37.43
                                                                                                                                     -25.89
      100,00
                  15 58 16
                               4250.60
                                                10.47
                                                              170.06
                                                                           358.24
                                                                                                     17 9 6
                                                                                            61.84
                                                                                                                       3650.6
                                                                                                                                      6.63
                                                                                                                                                   163.39
                   2 34 12 2053.24
      110.00
                                                                                           105.25 3 8 25
58.23 18 1 9
                                               -30.97
                                                               25.47
                                                                              2.90
                                                                                          105.25
                                                                                                                      1453.2
                                                                                                                                     -28.57
                                                                                                                                                   17.09
                  16 53 10
      110.00
                                4078.67
                                                13.33
                                                              155.33
                                                                            356.55
                                                                                                                      3478.7
                                                                                                                                       9.03
                                                                                                                                                   148.87
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE .1821 TRA -.7315 TC3 -.7871 BAU .3520
                                                                 SGT 1206.2 SGR 1037.0 SG3 520.4
RRT .8462 RRF .9601 RTF .8641
SGB 1603.8 R23 .2120 R13 .9414
                                                                                                                  ST 366.3 SR 229.3 SS 306.2
CRT .0263 CRS .0057 CST -.9921
    ROE -.1373 RRA -.3790 RC3-1.0170 FAU .14423
   FOE .4931 FRA-1.8014 FC3-6.0993 BSP 4392
BOE .2281 BRA .8238 BC3 1.2860 FSP -1634
                                                                                                                  LSA 476.5 MSA 229.4 55A 28.4
                                                                 SG1 1542.1 SG2 440.6 THA 40.55
                                                                                                                  EL1 366.3 EL2 229.2 ALF 1.55
LAUNCH DATE JUL 13 1967
                                                                     FLIGHT TIME INS.OR
                                                                                                                             ARRIVAL DATE OCT 29 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 309.722
   RL 152.08 LAL -.00 LOL 289.94 VL 27.506 GAL -8.40 AZL 90.44 HCA 141.88 SMA 134.22 ECC .19662 INC .4376 V1 29.295
RP 107.83 LAP -.27 LOP 71.83 VP 38.376 GAP .24 AZP 89.66 TAL 219.57 TAP 1.46 RCA 107.83 APO 160.61 V2 35.143
RC 89.996 GL -2.66 GP -32.45 ZAL 152.06 ZAP 95.51 ETS 357.23 ZAE 148.59 ETE 244.13 ZAC 114.41 ETC 2.54 CLP -96.54
  PLANETOCENTRIC CONIC
   C3 20.007 VHL 4.473 DLA 12.97 RAL 139.37 RAD 6567.8 VEL 11.891 PTH 2.11 VHP 3.792 DPA -17.65 RAP 146.65 ECC 1.3293
   LNCH AZHTH LNCH TIME L-I TIME
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                              2629.35
       90.00
                 23 33 47
                                               -27.00
                                                              69.49
                                                                             5.08
                                                                                        98.88 24 17 37
                                                                                                                     2029.3
                                                                                                                                   -25.50
                 14 57 41
                                                                                                                                                   61.15
       90.00
                               4443.61
                                                7.82
                                                             185.66
                                                                           359.45
                                                                                           62.70 16 11 44
                                                                                                                      3843.6
                                                                                                                                       4.10
                                                                                                                                                  178.95
      100.00
                   1 5 47
                               2345.32
                                               -28.24
                                                              48.36
                                                                             4.85
                                                                                          100.24
                                                                                                      1 44 53
                                                                                                                      1745.3
                                                                                                                                    -26.53
                                                                                                                                                   39.98
      100.00
                 16 12 18
                               4202.87
                                                8.93
                                                             167.36
                                                                           358.85
                                                                                           61.35 17 22 20
                                                                                                                      3602.9
                                                                                                                                      5.03
                                                                                                                                                  160.74
     110.00
                  2 29 11
                             2084.38
4036.57
                                               -31.51
                                                              27.74
                                                                             4.04
                                                                                          104.00
                                                                                                     3 3 55
                                                                                                                      1484.4
                                                                                                                                    -29.26
                 17 5 23
                                                                                                                                                   19.25
     110.00
                                                                                          57.69 18 12 40
                                               11.81
                                                             153.02
                                                                           357.13
                                                                                                                     3436.6
                                                                                                                                      7.46
  DIFFERENTIAL CORRECTIONS
                                                                                                                                                  146.63
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   TOE .2167 TRA - .7836 TC3 - .9916 BAU
                                                                SGT 1387.4 SGR 1105.7 SG3 504.9
                                                   . 3959
                                                                                                                 ST 416.2 SR 196.1 SS 330.1
CRT .1363 CRS -.0262 CST -.9874
LSA 530.0 MSA 197.2 SSA 29.1
   RDE - .0987 RRA - .3727 RC3-1.0991 FAU .13884
                                                               RRT .8746 RRF .9674 RTF .8891
SGB 1774.1 R23 .2149 R13 .9474
SGI 1720.7 SGZ 432.3 THA 37.67
  FOE .5877 FRA-1.6485 FC3-6.0078 BSP 4964
BOE .2381 BRA .8677 BC3 1.4803 FSP -1587
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ARRIVAL DATE OCT 31 1967
                                                                                      FLIGHT TIME 110.00
LAUNCH DATE JUL 13 1967
    RL 152.08 LAL -.00 LOL 289.94 VL 27.482 GAL -8.28 AZL 90.14 MCA 145.11 SMA 134.04 ECC .19611 INC .1379 VI 29.295
RP 107.80 LAP -.08 LOP 75.05 VP 38.369 GAP .67 AZP 89.89 TAL 218.96 TAP 4.07 RCA 107.75 APO 160.33 V2 35.154
RC 92.232 GL -.85 GP -34.32 ZAL 151.64 ZAP 99.51 ETS 354.31 ZAE 145.28 ETE 239.79 ZAC 115.92 ETC .85 CLP-101.54
                                                                                      DISTANCE 316.034
   HELIOCENTRIC CONIC
     C3 19.556 VHL 4.422 QLA 14.54 RAL 140.46 RAD 6567.8 VEL 11.872 PTH 2.11 VHP 3.893 DPA -18.85 RAP 144.47 ECC 1.3218
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 24 20 2678.32 -27.47 73.00 6.43 97.18 24 8 58 2078.3 -26.19 64.57
90.00 15 15 47 4383.83 5.94 182.27 .35 62.26 16 28 51 3783.8 2.18 175.61
   PLANETOCENTRIC CONIC
                                                                                                                 98.58 1 37 15
60.88 17 38 27
102.42 2 58 27
57.14 18 26 37
                      0 57 24 2390.87
16 29 20 4146.51
2 23 4 2122.82
17 20 9 3987.33
                                                                                                  6.22
                                                            -28.74
                                                                              51.66
                                                                                                                                                                                       157.63
                                                                                                                                                                         3.14
        100.00
                                                                                                                                                     3546.5
                                                                                              359.73
                                                                              164.20
                                                               7.07
                                                                                                                                                                      -30.06
                                                                                                                                                                                         21.96
        100.00
                                                                                                                                                     1522.8
                                                                               30.56
                                                             -32.10
                                                                                                                                                                                        144.02
                                                                                                                                                                        5.60
        110.00
                                                                                                                                                     3387.3
                                                                              150.35
                                                                                               357.95
                                                             10.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 478.1 SR 165.1 SS 359.6
CRT .3093 CRS -.1538 CST -.9815
     TOE .2641 TRA -.8277 TC3-1.2025 BAU .4407

ROE -.0559 RRA -.3612 RC3-1.1812 FAU .13185

FOE .6769 FRA-1.4736 FC3-5.8370 BSP .5569

BOE .2700 BRA .9031 BC3 1.6856 FSP -1531
                                                                                  SGT 1573.4 SGR 1153.4 SG3 483.5
                                                                                 RRT .8937 RRF .9735 RTF .9059
SG8 1950.9 R23 .2166 R13 .9520
SG1 1903.5 SG2 427.7 THA 35.28
                                                                                                                                                LSA 597.3 MSA 166.0 S5A 29.8
EL1 481.2 EL2 156.0 ALF 6.82
                                                                                                                                                              ARRIVAL DATE NOV 2 1967
                                                                                        FLIGHT TIME 112.00
LAUNCH DATE JUL 13 1967
     RL 152.08 LAL -.00 LOL 289.94 VL 27.455 GAL -8.15 AZL 89.79 MCA 148.33 SMA 133.84 ECC 19569 INC .2121 V1 29.295
RP 107.77 LAP .11 LOP 78.27 VP 36.359 GAP 1.08 AZP 90.18 TAL 218.27 TAP 6.60 RCA 107.65 APO 160.03 V2 35.165
RC 94.474 GL 1.32 GP -36.38 ZAL 151.01 ZAP 103.08 ETS 351.15 ZAE 141.83 ETE 236.45 ZAC 117.15 ETC 359.01 CLP-106.33
                                                                                       DISTANCE 322.321
   HELIOCENTRIC CONIC
     C3 19.140 VHL 4.375 DLA 16.42 RAL 141.76 RAD 6567.8 VEL 11.854 PTH 2.10 VHP 4.030 DPA -20.31 RAP 142.43 ECC 1.3150 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    PLANETOCENTRIC CONIC
                                                                                            8.15
                       23 12 4 2741.09
                                                             -27.92
          90.00
                                                                                                                                                                           -.18
                                                                                                                                                                                          171.54
                                                                                                                                                      3710.9
                                                                                                                     61.90 16 50 18
                                                                                                   1.63
                                                                               178.17
                       15 38 28
                                          4310.66
                                                                3.61
                                                                                                                                                                                           47.30
                                                                                                                                                                        -28.07
           90.00
                                                                                                                                                      1849.0-
                                                                                                                                  1 27 23
                                                                                                                     96.40
                                                                                                   8.00
                                                                                55.90
                                        2449.00
                                                             -29.26
                                                                                                                                                                                          153.88
                          0 46 34
                                                                                                                                                                           .82
                                                                                                                     60.46 17 58 32
                                                                                                                                                      3478.2
                                                                                                     .98
                                                                4.79
                                                                               160.41
                                          4078.19
                                                                                                                                                                                           25.46
         100.00
                       16 50 34
                                                                                                                   100.36 2 51 26
56.62 18 43 51
                                                                                                                                                                        -30.99
                                                                                                                                                      1571.5
                                                                                                    7.40
                         2 15 15 2171.54
17 36 23 3928.41
                                                             -32.76
                                                                                34.23
                                                                                                                                                                                          140.93
         110.00
                                                                                                                                                      3328.4
                                                                                                                                                                           3.37
                                                                                                359.12
                                                                               147.20
                                                                 7.81
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
         110.00
                       17 36 23
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ST 557.7 SR 143.9 55 399.4
CRT .5926 CRS -.4277 CST -.9762
                                                                                   SGT 1759.9 SGR 1194.5 SG3 454.6
RRT .9066 RRF .9785 RTF .9171
SGB 2126.9 R23 .2241 R13 .9552
SGI 2083.9 SG2 425.6 THA 33.17
     DIFFERENTIAL CORRECTIONS
     TOE .3288 TRA -.8804 TC3-1.4145 BAU .4842

ROE -.0053 RRA -.3415 RC3-1.2568 FAU .12287

FOE .7726 FRA-1.2700 FC3-5.5577 BSP 6149

BOE .3288 BRA .9257 BC3 1.8922 FSP -1441
                                                                                                                                                  LSA 686.8 MSA 136.3 SSA 30.2
                                                                                                                                                  EL1 564.4 EL2 114.5 ALF 9.07
                                                                                                                                                              ARRIVAL DATE NOV 4 1967
                                                                                        FLIGHT TIME 114.00
  LAUNCH DATE JUL 13 1967
      RL 152.08 LAL -.00 LOL 289.94 VL 27.424 GAL -8.01 A7L 89.36 MCA 151.56 SMA 133.61 ECC .19534 INC .6353 V1 29.295
RP 107.73 LAP .30 LOP 81.50 VP 38.347 GAP 1.48 A7P 90.56 TAL 217.52 TAP 9.07 RCA 107.51 APO 159.71 V2 35.175
RC 96.719 GL 3.98 GP -38.73 7AL 150.09 7AP 106.15 ETS 347.71 7AE 138.23 ETE 233.92 7AC 118.07 ETC 357.08 CLP-110.88
                                                                                       DISTANCE 328.582
     HELIOCENTRIC CONIC
       C3 18.791 VHL 4.335 DLA 18.72 RAL 143.35-RAD 6567.8 VEL 11.839 PTH 2.10 VHP 4.210 DPA -22.12 RAP 140.47 ECC 1.3092
      PLANETOCENTRIC CONIC
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 55 10 2824.97 -28.26 83.65 10.38 91.90 23 42 15 2225.0 -27.70 75.03
                         22 55 10 2824.97
16 8 0 4218.31
0 31 48 2526.04
                                                                               173.00
                                                                  .63
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            90.00
                                                                                                                      93.45
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                                                                                                  10.30
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                         17 17 59 3992.48
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           100.00
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18 1 32 3856.00
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           110.00
                                                                                                      .79
                                                                                143.37
                                                                5.08
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           110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ST 661.7 SR 153.2 SS 447.4
CRT .8702 CRS -.7557 CST -.9748
                                                                                   SGT 1946.6 SGR 1236.0 SG3 421.2
RRT .9151 RRF .9628 RTF .9250
SGB 2305.9 R23 .2298 R13 .9576
SGI 2265.8 SG2 428.3 THA 31.41
      DIFFERENTIAL CORRECTIONS
        TOE .4148 TRA -.8793 TC3-1.6242 BAU .5273
       ROE .0526 RRA -.3154 RC3-1.3298 FAU .11276
FOE .8622 FRA-1.0568 FC3-5.1952 BSP 6757
BDE .4181 BRA .9342 BC3 2.0992 FSP -1344
                                                                                                                                                 LSA 804.9 MSA 113.2 SSA 29.5
                                                                                                                                                  ELI 675.2 EL2 74.0 ALF 11.53
                                                                                                                                                                ARRIVAL DATE NOV 6 1967
                                                                                          FLIGHT TIME 116.00
   LAUNCH DATE JUL 13 1967
        RL 152.08 LAL -.00 LOL 289.94 VL 27.391 GAL -7.87 AZL 88.84 MCA 154.78 SMA 133.37 ECC .19506 INC 1.1564 V1 29.295
RP 107.70 LAP .49 LOP 84.73 VP 38.332 GAP 1.87 AZP 91.05 TAL 216.69 TAP 11.48 RCA 107.35 ÅPO 159.38 V2 35.185
RC 98.967 GL 7.30 GP -41.45 ZAL 148.74 ZAP 108.63 ETS 343.93 ZAE 134.46 ETE 232.07 ZAC 118.68 ETC 354.97 CLP-115.23
                                                                                          DISTANCE 334.819
       HELIOCENTRIC CONIC
        C3 18.568 VHL 4.309 DLA 21.59 RAL 145.31 RAD 6567.8 VEL 11.830 PTH 2.10 VMP 4.445 DPA -24.36 RAP 138.54 ECC 1.3056
       PLANETOCENTRIC CONIC
        LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 29 52 2944.22 -28.22 92.37 13.25 87.53 23 18 56 2344.2 -28.26 83.70
                                                                                                                   87.53 23 18 56
61.87 17 57 10
89.25 0 54 1
60.16 18 59 58
93.64 2 28 27
55.85 19 34 54
                         22 29 52 2944.22
16 48 57 4093.45
                                                                                                     6.26
                                                                                 166.03
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             90.00
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                          0 10 7 2633.62
17 55 16 3679.28
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            100.00
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                                                                -1.94
                                                                                 149.48
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            100.00
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                                                                                                    13.18
                             1 49 45 2321.92
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            110.00
                                                                                 138.54
                                                                                                      3.26
                                                                 1.57
                           18 32 10 3763.75
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                      MIO-COURSE EXECUTION ACCURACY
            110.00
                                                                                                                                                  ST 803.1 SR 206.3 SS 509.0
CRT .9837 CRS -.9351 CST -.9762
LSA 967.4 MSA 100.9 SSA 25.7
        DIFFERENTIAL CORRECTIONS
                                                                                     SGT 2130.4 SGR 1272.6 SG3 382.0
         TOE .5322 TRA -.8788 TC3-1.8195 BAU .5683

ROE .1236 RRA -.2785 RC3-1.3894 FAU .10118

FOE .9559 FRA -.8286 FC3-4.7174 BSP 7328

BOE .5463 BRA .9218 BC3 2.2893 FSP -1221
                                                                                   RRT .9201 RRF .9862 RTF .9304
SGB 2461.6 R23 .2362 R13 .9593
SGI 2443.2 SG2 434.7 THA 29.83
                                                                                                                                                    EL1 828.4 EL2 35.9 ALF 14.21
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ARRIVAL DATE NOV 8 1967
LAUNCH DATE JUL 13 1967
                                                                                                  FLIGHT TIME 118.00
                                                                                                 DISTANCE 341.032
   HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 289.94 VL 27.354 GAL -7.71 AZL 88.18 MCA 158.01 SMA 133.10 ECC .19485 INC 1.8192 V1 29.295 RP 107.67 LAP .68 LOP 87.96 VP 38.315 GAP 2.24 AZP 91.69 TAL 215.81 TAP 13.82 RCA 107.17 APO 159.03 V2 35.195 RC 101.218 GL 11.52 GP -44.70 ZAL 146.74 ZAP 110.43 ETS 339.75 ZAE 130.41 ETE 230.74 ZAC 118.94 ETC 352.64 CLP-119.42
    PLANETOCENTRIC CONIC
     C3 18.585 VHL 4.311 DLA 25.25 RAL 147.80 RAD 6567.8 VEL 11.831 PTH 2.10 VHP 4.756 DPA -27.14 RAP 136.52 ECC 1.3059 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                          -27.67
                                                                                                                                 80.65 22 37 0
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                         21 44 42 3136.15
17 54 1 3899.95
                                                                    -26.85
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          90.00
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18 51 37 3713.97
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         110.00
                         19 15 24
                                              3639.41
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                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 997.1 SR 299.0 SS 581.7
CRT .9967 CRS -.9860 CST -.9801
                                                                                            SGT 2313.5 SGR 1308.4 SG3 338.8
RRT .9221 RRF .9890 RTF .9345
SGB 2657.9 R23 .2416 R13 .9608
     TOE .6937 TRA -.8536 TC3-1.9850 BAU .6078
     RDE .2097 RRA -.2304 RC3-1.4297 FAU .08866
                                                                                                                                                                  LSA 1188.1 MSA 100.2 SSA 19.4
     FOE 1.0433 FRA -.5999 FC3-4.1301 BSP 7913
                                                                                                                                                                  EL1 1040.7 EL2 23.4 ALF 16.65
                                                                                            SG1 2620.0 SG2 446.9 THA 28.45
     BDE .7247 BRA .8841 BC3 2.4463 FSP -1091
                                                                                                                                                                                 ARRIVAL DATE NOV 10 1967
                                                                                                  FLIGHT TIME 120.00
LAUNCH DATE JUL 13 1967
                                                                                                  DISTANCE 347,220
     RL 152.08 LAL -.00 LOL 289.94 VL 27.316 GAL -7.55 AZL 8Z.30 MCA 161.23 SMA 132.82 ECC .19470 INC 2.6976 V1 29.295 RP 107.65 LAP .87 LOP 91.19 VP 38.295 GAP 2.60 AZP 92.55 TAL 214.87 TAP 16.09 RCA 106.96 APO 158.68 V2 35.204 RC 103.470 GL 16.97 GP -48.64 ZAL 143.74 ZAP 111.41 ETS 335.10 ZAE 125.96 ETE 229.80 ZAC 118.84 ETC 349.95 CLP-123.54
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 19.072 VHL 4.367 OLA 29.97 RAL 151.12 RAD 6567.8 VEL 11.851 PTH 2.10 VHP 5.183 DPA -30.59 RAP 134.23 ECC 1.3139
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
79.75 18 39 24 3793.42 -21.02 152.71 19.37 68.13 19 42 37 3193.4 -23.80 145.01
                         18 39 24 3793.42
                                                                                                                                  68.11 22 20 4
68.13 19 42 37
68.11 22 20 4
78.83 1 27 28
57.24 21 22 28
                          21 25 47 3256.85
18 39 24 3793.42
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                                                                                        113.23
                                                                                                             19.36
         100.25
                                                                    -21.00
                                                                                                                                                                        3193.4
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                                                                                                             19.37
                                                                    -21.02
                                                                                        152.71
           79.75
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                         21 25 47 3256.85
                                                                    -21.00
                                                                                       113.23
                                                                                                             19.36
         100.25
                                                                                                                                                                        2049.1
                                                                                                                                                                                            -33.72
                                                                                                                                                                                                                  62.03
                                                                   -32.52
                                                                                                            23.18
         110.00
                           0 43 19
                                              2649.12
                                                                                         71.06
                                                                                                                                                                        2849.1
                                                                                                                                                                                           -14.59
                                                                                                                                                                                                                115.44
                                                                                        121.96
                                                                                                             13.65
         110.00
                         20 24 59
                                             3449.15
                                                                   -10.34
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            RRI .9212 RRF .9908 RTF .9376
SCB 2830.6 R23 .2462 R13 .9619
SCI 2792.3 SC2 464.3 THA 27.03
                                                                                                                                                                  ST 1268.0 SR 427.7 SS 667.7
CRT .9927 CRS -.9977 CST -.9846
      TDE .9258 TRA -.7921 TC3-2.0850 BAU .6436
      RDE .3196 RRA -.1632 RC3-1.4230 FAU .07495
                                                                                                                                                                  LSA 1491.5 MSA 108.6 SSA 12.9
      FOE 1.1273 FRA -.3687 FC3-3.4021 BSP 8461
BDE .9795 BRA .8087 BC3 2.5243 FSP -940
                                                                                                                                                                  EL1 1337.3 EL2 49.0 ALF 18.54
                                                                                                                                                                                 ARRIVAL DATE NOV 12 1967
                                                                                                  FLIGHT TIME 122.00
 LAUNCH DATE JUL 13 1967
                                                                                                  DISTANCE 353.381
      RL 152.08 LAL -.00 LOL 289.94 VL 27.275 GAL -7.37 AZL 86.07 MCA 164.45 SMA 132.52 ECC .19461 INC 3.9252 VI 29.295 RP 107.62 LAP 1.05 LOP 94.42 VP 38.274 GAP 2.95 AZP 93.78 TAL 213.87 TAP 18.31 RCA 106.73 APO 158.31 VZ 35.212 RC 105.723 GL 24.11 GP -53.51 ZAL 139.23 ZAP 111.38 ETS 329.84 ZAE 120.88 ETE 228.98 ZAC 118.35 ETC 346.73 CLP-127.81
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 20.550 VML 4.533 DLA 36.08 RAL 155.80 RAD 6567.8 VEL 11.913 PTH 2.12 VMP 5.802 DPA -34.86 RAP 131.34 ECC 1.3382
     C3 20.550 VHL 4.533 DLA 36.08 RAL 155.80 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 5.80Z DPA -34.86 RAP 131.34 ECC 1.3382 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 66.65 17 32 33 4076.50 -24.46 176.11 27.20 62.61 18 40 30 3476.5 -27.92 168.49 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 66.65 17 32 33 4076.50 -24.46 176.11 27.20 62.61 18 40 30 3476.5 -27.92 168.49 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 66.65 17 32 33 4076.50 -24.46 176.11 27.20 62.61 18 40 30 3476.5 -27.92 168.49 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 66.65 17 32 33 4076.50 -24.46 176.11 27.20 62.61 18 40 30 3476.5 -27.92 168.49 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35 23 9 59 3009.25 -24.44 95.98 27.19 62.60 24 0 8 2409.3 -27.91 88.36 113.35
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            RET 2685.9 SGR 1345.1 SG3 239.2
RET .9164 RRF .9913 RTF .9409
SGB 3003.9 R23 .2482 R13 .9632
SG1 2964.0 SG2 488.0 THA 25.39
                                                                                                                                                                  ST 1641.7 SR 580.7 SS 757.6
      TOE 1.2736 TRA -.6764 TC3-2.0646 BAU .6753
                                                                                                                                                                  CRT .9901 CRS -.9998 CST -.9889
      ROE .4578 RRA -.0698 RC3-1.3340 FAU .06048
                                                                                                                                                                  LSA 1895.2 MSA 120.1 SSA 8.2
      FOE 1.1932 FRA -.1480 FC3-2.5477 BSP 9041
                                                                                                                                                                  EL1 1739.7 EL2 76.9 ALF 19.34
      BOE 1.3534 BRA .6800 BC3 2.4581 FSP
                                                                        -784
                                                                                                                                                                                  ARRIVAL DATE NOV 14 1967
 LAUNCH DATE JUL 13 1967
                                                                                                   FLIGHT TIME 124.00
                                                                                                  DISTANCE 359.511
    HELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 289.94 VL 27.232 GAL -7.18 AZL 84.23 MCA 167.66 SMA 132.21 ECC .19456 INC 5.7741 V1 29.295

RP 107.60 LAP 1.23 LOP 97.66 VP 38.251 GAP 3.29 AZP 95.64 TAL 212.61 TAP 20.47 RCA 106.49 APO 157.94 V2 35.220

RC 107.975 GL 33.41 GP -59.60 ZAL 132.57 ZAP 110.09 ETS 323.67 ZAE 114.86 ETE 227.79 ZAC 117.43 ETC 342.52 CLP-132.76
    PLANETOCENTRIC CONIC
                                                                                                                                     2.16 VHP 6.777 OPA -40.09 RAP 127.24 ECC 1.4011
      C3 24.372 VHL 4.937 OLA 43.77 RAL 162.98 RAD 6568.0 VEL 12.073 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   54.48 18 18 37
54.47 1 24 34
           55.11 17 7 27
124.89 0 36 16
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                                               4270.23
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          124.89
                                               2896.25
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                                               4270.23
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                                                                                             MID-COURSE EXECUTION ACCURACY
SGT ENGN & FF
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                                                                                         88.70
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          124.89
                                                                     -27.47
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                           SGT 2890.8 SGR 1305.2 SG3 184.6
RRT .9031 RRF .9885 RTF .9451
SG8 3171.8 R23 .2478 R13 .9647
SG1 3129.2 SG2 517.9 THA 22.84
                                                                                                                                                                   ST 2142.3 SR 721.4 SS 837.1
       TOE 1.8353 TRA -.4623 TC3-1.8308 BAU
                                                                           . 6954
                                                                                                                                                                   CRT .9884 CRS -- .9996 CST - .9922
      RDE .6203 RRA .0700 RC3-1.0967 FAU .04522
FDE 1.2309 FRA .0802 FC3-1.6063 BSP 9572
BDE 1.9373 BRA .4676 BC3 2.1341 FSP -612
                                                                                                                                                                   LSA 2406.8 MSA 134.6 SSA 5.0
                                                                                                                                                                    EL1 2258.1 EL2 103.8 ALF 18.45
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LAUNCH DATE JUL 13 1967
                                                                                                                                                             ARRIVAL DATE NOV 16 1967
    HELIOCENTRIC CONIC
                                                                                       01STANCE 365.601
     RL 152.08 LAL -.00 LOL 289.94 VL 27.187 GAL -6.98 A7L 81.11 MCA 170.85 SMA 131.90 ECC .19455 INC 8.8925 V1 29.295
RP 107.58 LAP 1.41 LOP 100.89 VP 38.225 GAP 3.62 A7P 98.78 TAL 211.70 TAP 22.54 RCA 106.24 APO 157.56 V2 35.227
RC 110.226 GL 44.97 GP -67.23 ZAL 123.29 ZAP 107.30 ETS 315.44 ZAE 107.39 ETE 224.72 ZAC 116.11 ETC 335.94 CLP-140.23
    PLANETOCENTRIC CONIC
     C3 34.839 VML 5.902 OLA 52.48 RAL 175.04 RAD 6568.4 VEL 12.498 PTM 2.26 VMP 8.510 OPA -46.30 RAP 120.63 ECC 1.5734 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       17 16 32 4455.86
2 3 26 2891.10
          43.77
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                                                                             212.71
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                       17 16 32 4455.86
2 3 26 2891.10
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                                                                             212.71
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                                                                                  HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 RIT 1329.8 SGR 1135.7 SG3 131.1
RRT .8573 RRF .9683 RTF .9529
SGB 3329.5 R23 .2417 R13 .9675
SGI 3282.5 SG2 557.5 THA 17.81
     TOE 2.8036 TRA -.0360 TC3-1.3086 BAU .6858

ROE .6972 RRA .2783 RC3 -.6750 FAU .02995

FOE 1.2076 FRA .2475 FC3 -.7441 BSP 10066

BDE 2.8889 BRA .2807 BC3 1.4724 FSP -441
                                                                                                                                               ST 2721.9 SR 690.2 SS 866.5
CRT .9798 CRS -.9956 CST -.9943
                                                                                                                                               LSA 2934.6 MSA 155.2 SSA 3.0
                                                                                                                                               EL1 2804.8 EL2 133.9 ALF 13.98
LAUNCH DATE JUL 13 1967
                                                                                       FLIGHT TIME 128.00
                                                                                                                                                             ARRIVAL DATE NOV 18 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 371.614
     RL 152.08 LAL -.00 LOL 289.94 VL 27.141 GAL -6.76 AZL 74.74 MCA 173.98 SMA 131.57 ECC .19449 INC15.2645 V1 29.295 RP 107.56 LAP 1.58 LOP 104.13 VP 38.199 GAP 3.92 AZP 105.18 TAL 210.50 TAP 24.49 RCA 105.98 APO 157.16 V2 35.233 RC 112.475 GL 57.37 GP -76.36 ZAL 111.81 ZAP 102.83 ETS 298.41 ZAE 97.37 ETE 212.48 ZAC 114.69 ETC 319.78 CLP-160.32
   PLANETOCENTRIC CONIC
     C3 71.005 VHL 8.426 DLA 59.15 RAL 195.48 RAD 6569.4 VEL 13.869 PTH 2.53 VMP 12.241 DPA -52.88 RAP 108.05 ECC 2.1686
    C3 71.005 WHL 8,426 DLA 59.15 RAL 195.48 RAD 6569.4 VEL 13.869 PTH 2.53 WHP 12.241 DPA -52.88 RAP 108.05 ECC 2.1686 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 35.62 18 15 29 4679.03 -20.24 228.41 92.77 33.13 19 33 28 4079.0 -26.87 223.94 144.38 3 47 34 3020.54 -20.23 92.89 92.75 33.13 4 37 55 2420.5 -26.86 88.42 144.38 3 47 34 3020.54 -20.23 92.89 92.75 33.13 19 33 28 4079.0 -26.87 223.94 144.38 3 47 34 3020.54 -20.23 92.89 92.75 33.13 4 37 55 2420.5 -26.86 88.42 35.62 18 15 29 4679.03 -20.24 228.41 92.77 33.13 19 33 28 4079.0 -26.87 223.94 144.38 3 47 34 3020.54 -20.23 92.89 92.75 33.13 4 37 55 2420.5 -26.86 88.42 35.62 18 15 29 4679.03 -20.24 228.41 92.77 33.13 19 33 28 4079.0 -26.87 223.94 144.38 3 47 34 3020.54 -20.23 92.89 92.75 33.13 4 37 55 2420.5 -26.86 88.42
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
     TOE 4.3603 TRA 1.0268 TC3 -.5726 BAU .5654
ROE -.1679 RRA .4277 RC3 -.1639 FAU .01521
FOE 1.0888 FRA .4424 FC3 -.1854 BSP 10390
                                                                                 SGT 3402.2 SGR 641.1 SG3 86.0
RRT .3211 RRF .5245 RTF .9735
                                                                                                                                               ST 2992.9 SR 205.0 SS 804.9
CRT -.4378 CRS .3491 CST -.9953
                                                                                                                                               LSA 3099.6 MSA 199.5 SSA 1.6
EL1 2994.3 EL2 184.3 ALF 178.28
                                                                                  SGB 3462.1 R23 .2129 R13 .9759
SG1 3408.6 SG2 606.0 THA 3.58
     BOE 4.3635 BRA 1.1123 BC3 .5956 FSP -286
LAUNCH DATE JUL 13 1967
                                                                                      FLIGHT TIME 130.00
                                                                                                                                                           ARRIVAL DATE NOV 20 1967
                                                                                      DISTANCE 377.375
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 27.094 GAL -6.49 AZL 55.70 MCA 176.90 SMA 131.24 ECC .19407 INC34.2966 V1 29.295 RP 107.34 LAP 1.75 LOP 107.37 VP 38.170 GAP 4.14 AZP 124.26 TAL 209.12 TAP 26.01 RCA 105.77 APO 156.71 V2 35.239 RC 114.720 GL 63.19 GP -76.15 ZAL 100.15 ZAP 96.92 ETS 223.29 ZAE 80.40 ETE 141.31 ZAC 114.97 ETC 242.90 CLP 120.22
   PLANETOCENTRIC CONTC.
     C3 288.865 VHL 16.996 DLA 55.94 RAL 216.48 RAD 6571.7 VEL 20.253 PTH 3.15 VHP 23.690 DPA -55.05 RAP 79.41 ECC 5.7540 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            122.95
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                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.7867 TRA 2.3159 TC3 -.0033 BAU .3469 ROE-6.5811 RRA-3.6329 RC3 -.0898 FAU-.00469
                                                                                 SGT 1518.6 SGR 3130.0 SG3 57.3
RRT -.9217 RRF -.9804 RTF ..9993
SGB 3478.9 R23 -.1243 R13 -.9919
                                                                                                                                              ST 733.3 SR 2313.5 SS 830.9
CRT -.9494 CRS ..9916 CST -.9820
LSA 2554.5 MSA 234.4 SSA 1.0
    FOE 1.1011 FRA .9103 FC3 .0141 BSP 9961
BOE 6.8193 BRA 4.3082 BC3 .0898 FSP -177
                                                                                 SG1 3437.3 SG2 536.4 THA 114.74
                                                                                                                                              EL1 2416.9 EL2 220.4 ALF 106.89
                                                                                                                                                            ARRIVAL DATE NOV 22 1967
LAUNCH DATE JUL 13 1967
                                                                                      FLIGHT TIME 132.00
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 385.432
    RL 152.08 LAL -.00 LOL 289.94 VL 27.046 GAL -6.66 AZL 160.51 HCA 182.03 SMA 130.90 ECC .19821 INCTO.5043 V1 29.295 RP 107.52 LAP 1.91 LOP 110.62 VP 38.141 GAP 5.02 AZP 19.50 TAL 209.16 TAP 31.19 RCA 104.95 APO 156.84 V2 35.244 RC 116.961 GL -50.93 GP 59.03 ZAL 95.40 ZAP 94.78 ETS 176.23 ZAE 59.28 ETE 254.23 ZAC 94.16 ETC 147.38 CLP 99.32
   PLANETOCENTRIC CONIC
     C31064.028 VHL 32.619 DLA -49.60 RAL 162.48 RAD 6573.0 VEL 34.428 PTH 3.51 VHP 40.995 DPA 59.61 RAP 347.83 ECC18.5112
     LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                      4 59 40 2319.93
13 0 6 807.36
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                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 1112.7 SGR 2966.1 SG3 52.3
                                                                                                                                              ST 703.0 SR 2577.1 SS 1910.4
     TOE 3.8240 TRA 2.5452 TC3 -.0855 BAU 3.1891
                                                                                                                                              CRT -.9739 CRS -.9999 CST .9714
LSA 3280.3 MSA 159.4 SSA 1.7
                                                                                RRT -.8774 RRF .9988 RTF -.8576
SGB 3167.9 R23 -.0938 R13 .9952
    RO-14.6342 RRA-2.2207 RC3 .2072 FAU-.04824
FDE-3.0650 FRA -.3931 FC3 .0392 BSP 8269
BDE15.1255 BRA 3.3778 BC3 .2242 FSP -142
                                                                                 SG1 3127.2 SG2 506.3 THA 108.73
                                                                                                                                              EL1 2666.9 EL2 154.1 ALF 104.93
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FLIGHT TIME 126.00

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ARRIVAL DATE NOV 24 1967
                                                                        FLIGHT TIME 134.00
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 390.627
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 289.94 VL 26.996 GAL -6.26 AZL 117.82 MCA 184.43 SMA 130.55 ECC .19685 INC27.8208 V1 29.295 RP 107.51 LAP 2.07 LOP 113.86 VP 38.110 GAP 5.08 AZP 62.25 TAL 207.38 TAP 31.81 RCA 104.85 APO 156.25 V2 35.248 RC 119.197 GL -63.43 GP 77.55 ZAL 101.86 ZAP 102.08 ETS 120.13 ZAE 87.80 ETE 200.57 ZAC 87.85 ETC 91.73 CLP 165.97
   PLANETOCENTRIC CONIC
    C3 196.081 VHL 14.003 DLA -52.90 RAL 137.33 RAQ 6571.1 VEL 17.816 PTH 2.99 VHP 16.464 DPA 77.98 RAP 275.32 ECC 4.2270
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43,25 2 46 23 2194,21 7.94 60.19 41.26 142,48 3 22 58 1594.2 14.25 55.59
                    2 46 23 2194.21
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      136.75
                   11 32 41
                                  622.03
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      136.75
                                  622.03
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                   SGT 2369.9 SGR 2873.7 SG3 74.9
RRT .9638 RRF .9678 RTF .9995
                                                                                                                      ST 1984.6 SR 1962.6 SS 1017.9
CRT .9906 CRS -.9919 CST-1.0000
    TOE-4.7476 TRA-1.9955 TC3 -.0370 BAU .1057
    RDE-4.5172 RRA-3.2433 RC3 .0159 FAU .00455
                                                                                                                      LSA 2964.3 MSA 198.9 SSA .9
ELI 2784.6 EL2 190.9 ALF 44.68
                                                                    SGB 3724.9 R23 -.1440 R13 .9892
    FOE-1.7083 FRA -.7521 FC3 -.0201 BSP 11233
    BOE 6.5532 BRA 3.8080 BC3 .0403 FSP
                                                                    $61 3692.3 $62 492.0 THA 50.69
                                                    -232
                                                                        FLIGHT TIME 136.00
                                                                                                                                  ARRIVAL DATE NOV 26 1967
LAUNCH DATE JUL 13 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 396.496
   RL 152.08 LAL -.00 LOL 289.94 VL 26.946 GAL -5.99 A7L 107.23 MCA 187.50 SMA 130.21 ECC .19696 INC17.2309 V1 29.295 RP 107.50 LAP 2.22 LOP 117.11 VP 38.077 GAP 5.33 A7P 72.91 TAL 206.00 TAP 33.49 RCA 104.56 APO 155.85 V2 35.252 RC 121.426 GL -59.87 GP 67.81 ZAL 107.41 ZAP 110.51 ETS 71.20 ZAE 100.61 ETE 154.47 ZAC 89.38 ETC 43.34 CLP-158.05
  PLANETOCENTRIC CONIC
    C3 84.244 VHL 9.178 OLA -47.42 RAL 135.29 RAD 6569.6 VEL 14.338 PTH 2.61 VHP 10.266 DPA 73.62 RAP 214.75 ECC 2.3864 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          3 33 42
                                                                                                                        1378.3
                   3 0 43 1978.29
                                                  15.34
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                                  5800.22
                                                                270.28
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                                                                                                                                           20.97
                                                                                                                                                        264.69
   DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 3816.4 SGR 503.1 SG3 115.6
RRT .0518 RRF -.1559 RTF .9769
                                                                                                                       ST 2582.1 SR 363.2 SS 925.6
CRT -.8066 CRS .8661 CST -.9941
    TOE-3.9099 TRA-3.0434 TCS -.4636 BAU .5238
    RDE .5559 RRA -.3879 RC3 .0373 FAU .02130
    FOE-1.6301 FRA -.8351 FC3 -.2189 BSP 11777
BOE 3.9492 BRA 3.0680 BC3 .4651 FSP -367
                                                                    SG8 3849.4 R23 -. 2077 R13 .9767
                                                                                                                       LSA 2757.4 MSA 230.2 SSA
                                                                    SG1 3816.5 SG2 502.5 THA .40
                                                                                                                      EL1 2598.8 EL2 213.3 ALF 173.48
                                                                        FLIGHT TIME 138.00
                                                                                                                                 ARRIVAL DATE NOV 28 1967
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 402.460
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 289.94 VL 26.895 GAL -5.73 A7L 102.83 MCA 190.67 SMA 129.86 ECC .19737 INC12.8333 V1 29.295
RP 107.49 LAP 2.36 LOP 120.35 VP 38.044 GAP 5.61 A7P 77.38 TAL 204.65 TAP 35.32 RCA 104.23 APO 155.49 V2 35.255
RC 123.648 GL -55.16 GP 57.45 TAL 111.20 ZAP 118.33 ETS 59.77 ZAE 109.11 ETE 147.36 ZAC 91.64 ETC 32.25 CLP-151.89
  PLANETOCENTRIC CONIC
    C3 52.450 VHL 7.242 DLA -42.67 RAL 137.15 RAD 6568.9 VEL 13.184 PTH 2.41 VHP 7.935 DPA 65.08 RAP 193.72 ECC 1.8632
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           25.17
                                                                                            128.94 4 2 29
128.94 12 21 4
                                                                                                                        1202.1
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                   3 32 27 1802.07
10 45 14 5750.62
3 32 27 1802.07
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       56.64
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128.94 12 21 4
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                    3 32 27 1602.07
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      123.36
                   10 45 14
                                 5750.62
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                                                                269.22
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 3874.4 SGR 669.8 SG3 160.2
RRT -.7214 RRF -.8768 RTF .9613
SGB 3931.8 R23 .2505 R13 -.9651
SGI 3904.8 SG2 460.3 TMA 172.79
    TOE-2.8579 TRA-2.6367 TC3 -.9391 BAU .6680
                                                                                                                       ST 2416.2 SR 626.4 SS 951.3
                                                                                                                       CRT -.9439 CRS .9830 CST -.9885
   RDE .7915 RRA .0458 RC3 .1606 FAU .03445
FDE-1.7157 FRA -.8892 FC3 -.5686 85P 12087
BDE 2.9655 BRA 2.6371 BC3 .9527 FSP -512
                                                                                                                       LSA 2661.1 MSA 232.3 SSA
                                                                                                                                                            2.6
                                                                                                                       EL1 2488.0 EL2 200.8 ALF 166.16
                                                                                                                                  ARRIVAL DATE NOV 30 1967
                                                                        FLIGHT TIME 140.00
LAUNCH DATE JUL 13 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 408.442
   RL 152.08 LAL -.00 LOL 289.94 VL 26.844 GAL -5.47 AZL 100.44 MCA 193.88 SMA 129.51 ECC .19793 INC10.4423 V1 29.295
RF 107.48 LAP 2.49 LOP 123.60 VP 38.010 GAP 5.90 AZP 79.86 TAL 203.30 TAP 37.18 RCA 103.87 APO 155.14 V2 35.257
RC 125.861 GL -51.07 GP 48.83 ZAL 115.59 ZAP 125.09 ETS 54.73 ZAE 115.14 ETE 147.55 ZAC 93.44 ETC 27.57 CLP-150.83
  PLANETOCENTRIC CONIC
    C3 38.762 WHL 6.226 DLA -39.03 RAL 139.64 RAD 6566.5 VEL 12.654 PTH 2.30 WHP 6.850 DPA 57.09 RAP 185.07 ECC 1.6379
   LNOW AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.93 4 5 50 1660.79 20.57 23.29 22.05 123.93 4 35 31 1060.8 24.88 16.40
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      118.07
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                   10 31 42
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      118.07
                                                                269.53
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                                                                                                                                           24.89
                                 5740.09
                                                   20.59
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SCT 3949.0 SCR 695.6 SG3 198.0
RRT -.7937 RRF -.9330 RTF .9517
SCB 4009.8 R23 .2759 R13 -.9559
SCI 3988.0 SC2 417.2 THA 171.93
                                                                                                                      ST 2333.6 SR 622.2 SS 975.1
CRT -.9519 CRS .9908 CST -.9846
    TOE-2.3657 TRA-2.3590 TC3-1.4011 BAU .7361
   ROE .6750 RRA .0986 RC3 .2332 FAU .04463
FOE-1.7570 FRA -.8841 FC3 -.9968 83P 12347
                                                                                                                      LSA 2594.2 MSA 232.1 55A 3.4
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EL1 2408.0 EL2 184.7 ALF 165.67

BOE 2.4601 BRA 2.3611 BC3 1.4204 FSP -636

ARRIVAL DATE DEC 2 1967

LAUNCH DATE JUL 13 1967

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DISTANCE 414.424
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL -26.792 GAL -5.20 ATL 98.94 MCA 197.10 SMA 129.15 ECC .19862 INC 8.9369 VI 29.295
RP 107.48 LAP 2.62 LOP 126.85 VP 37.974 GAP 6.19 AZP 81.45 TAL 201.93 TAP 39.04 RCA 103.50 APO 154.81 V2 35.258
RC 128.066 GL -47.72 GP 41.84 ZAL 114.93 ZAP 130.75 ETS 51.38 ZAE 119.41 ETE 149.69 ZAC 94.55 ETC 24.60 CLP-151.18
   PLANETOCENTRIC CONIC
                                                                                                                       2.23 WHP 6.295 DPA 50.25 RAP 180.89 ECC 1.5165
     C3 31.386 VHL 5.602 OLA -36.32 RAL 142.21 RAD 6568.3 VEL 12.360 PTH
     LNCH AZNTH LNCH TIME L-I TIME
                                                         INJ LAT INJ CONG INJ AT ASC INJ AZNTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
                     4 37 56 1543.76
10 20 4 5750.58
4 37 56 1543.76
10 20 4 5750.58
4 37 56 1543.76
10 20 4 5750.58
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        113.76
                                                                              270.76
                                                             21.17
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  RIG-COURSE EXECUTION ACCOUNTS

RRT -,8074 RRF -,9401 RTF .,9452

SCB 4095.5 R25 .2885 R13 -,9487

SG1 4077.9 SG2 378.4 THA 172.58
                                                                                                                                                 ST 2292.2 SR 569.0 SS 983.7
CRT -.9524 CRS .9930 CST -.9816
     TOE-2.0909 TRA-2.1611 TC3-1.8413 BAU .7801
     ROE .5554 RRA .0863 RC3 .2582 FAU .05163
    FDE-1.7407 FRA -.8280 FC3-1.4241 BSP 12640
BDE 2.1634 BRA 2-1629 BC3 1.8593 FSP -728
                                                                                                                                                LSA 2547.9 MSA 231.3 SSA 4.3
                                                                                                                                                 EL1 2355.7 EL2 168.8 ALF 166.63
                                                                                                                                                               ARRIVAL DATE DEC 4 1967
                                                                                        FLIGHT TIME 144.00
LAUNCH DATE JUL 13 1967
                                                                                       DISTANCE 420.397
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.739 GAL -4.92 AZL 97.90 MCA 200.34 SMA 128.80 ECC .19942 INC 7.8975 V1 29.295
RP 107.48 LAP 2.74 LOP 130.10 VP 37.938 GAP 6.47 AZP 82.59 TAL 200.55 TAP 40.88 RCA 103.12 APO 154.49 V2 35.259
RC 130.261 GL -44.98 GP 36.23 ZAL 115.48 ZAP 135.45 ETS 48.73 ZAE 122.38 ETE 152.37 ZAC 95.02 ETC 22.36 CLP-152.06
   PLANETOCENTRIC CONIC
    C3 26.813 VHL 5.178 DLA -34.32 RAL 144.76 RAD 6568.1 VEL 12.173 PTH 2.18 VHP 6.005 DPA 44.51 RAP 178.81 ECC 1.4413 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 69.74 5 7 58 1444.75 21.35 6.38 19.81 117.53 5 32 2 844.8 24.86 358.98 10.26 10 10 24 5770.87 21.37 272.50 19.82 117.52 11 46 35 5170.9 24.88 265.10 69.74 5 7 58 1444.75 21.35 6.38 19.81 117.53 5 32 2 844.8 24.86 358.98 110.26 10 10 24 5770.87 21.37 272.50 19.82 117.52 11 46 35 5170.9 24.88 265.10 69.74 5 7 58 1444.75 21.35 6.36 19.81 117.52 11 46 35 5170.9 24.88 265.10 69.74 5 7 58 1444.75 21.35 6.36 19.81 117.53 5 32 2 844.8 24.86 358.98 110.26 10 10 24 5770.87 21.37 272.50 19.82 117.52 11 46 35 5170.9 24.88 265.10 10.26 10 10 24 5770.87 21.37 272.50 19.82 117.52 11 46 35 5170.9 24.88 265.10
                                                                                                                       2.18 WHP 6.005 DPA
     C3 26.813 VHL 5.178 DLA -34.32 RAL 144.76 RAD 6568.1 VEL 12.173 PTH
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 2279.7 SR 516.2 SS 984.7
CRT -.9522 CRS .9942 CST -.9794
                                                                                   SGT 4156.9 SGR 585.6 SG3 244.8
RRT -.8033 RRF -.9332 RTF .9409
     TOE-1.9259 TRA-2.0077 TC3-2.2652 BAU .8171
    RDE .4658 RRA .0664 RC3 .2542 FAU .05612
FDE-1.6929 FRA -.7460 FC3-1.8121 83P 13075
BDE 1.9814 BRA 2.0088 BC3 2.2794 FSP -803
                                                                                  SGB 4198.0 R23 .2890 R13 -.9436
SGI 4183.6 SG2 346.5 THA 173.50
                                                                                                                                                LSA 2525.9 MSA 229.9 SSA 5.3
                                                                                                                                                EL1 2332.3 EL2 154.2 ALF 167.78
                                                                                                                                                              ARRIVAL DATE DEC 6 1967
                                                                                        FLIGHT TIME 146.00
LAUNCH DATE JUL 13 1967
                                                                                       DISTANCE 426,365
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.687 GAL -4.63 AZL 97.13 HCA 203.57 SHA 128.45 ECC .20032 INC 7.1331 V1 29.295 RP 107.48 LAP 2.85 LOP 133.35 VP 37.901 #AF 6.75 AZP 83.46 TAL 199.14 TAP 42.71 RCA 102.72 APO 154.18 V2 35.259 RC 132.447 GL -42.73 GP 31.70 ZAL 115.42 ZAP 139.38 ETS 46.50 ZAE 124.45 ETE 155.04 ZAC 94.96 ETC 20.53 CLP-153.14
    PLANETOCENTRIC CONIC
     C3 23.696 VHL 4.868 DLA -32.88 RAL 147.31 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 5.860 OPA 39.68 RAP 177.91 ECC 1.3900
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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115.55 11 39 46
115.55 5 58 11
115.55 11 39 46
115.55 11 39 46
1121.09 9 18 59
110.18 13 2 17
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                      5 35 30 1361.00
10 3 12 5793.64
5 35 30 1361.00
10 3 12 5793.68
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          72.55
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         107.45
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                      11 30 10 5526.15
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                                                                                                 23.05
                                                          28.19
                                                                              256.76
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                  RID-COURSE EXECUTION ACCOUNTS

SGT 4156.1 SGR 501.7 SG3 244.1

RRT -.7632 RRF -.9052 RTF ..9315

SG8 4186.3 R23 ..2941 R13 -.9335

SG1 4173.8 SG2 322.6 THA 174.70
                                                                                                                                                ST 2226.2 SR 456.2 SS 941.6

CRT -.9491 CRS .9948 CST -.9760

LSA 2449.1 MSA 228.3 SSA 6.4
     TOE-1.7740 TRA-1.8267 TC3-2.5901 BAU .8232
     RDE .3874 RRA .0353 RC3 .2089 FAU .05563
FDE-1.5652 FRA -.5849 FC3-2.0323 BSP 12334
BDE 1.8158 BRA 1.8270 BC3 2.5985 FSP -727
                                                                                                                                                 EL1 2268.0 EL2 141.1 ALF 168.95
                                                                                                                                                               ARRIVAL DATE DEC 8 1967
                                                                                        FLIGHT TIME 148.00
LAUNCH DATE JUL 13 1967
                                                                                       DISTANCE 432.313
    HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.634 GAL -4.34 AZL 96.54 MCA 206.81 SMA 128.10 ECC .20136 INC 6.5441 V1 29.295 RP 107.48 LAP 2.95 LOP 136.60 VP 37.863 GAP 7.04 AZP 84.15 TAL 197.72 TAP 44.53 RCA 102.31 APO 153.90 V2 35.258 RC 134.624 GL -40.83 GP 28.02 ZAL 114.89 ZAP 142.71 ETS 44.61 ZAE 125.88 ETE 157.53 ZAC 94.48 ETC 19.00 CLP-154.32
    PLANETOCENTRIC CONIC
     C3 21.430 VHL 4.629 DLA -31.86 RAL 149.87 RAD 6567.9 VEL 11.950 PTH 2.13 VHP 5.803 DPA 35.58 RAP 177.72 ECC 1.3527 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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114.09 11 35 45

114.09 11 35 45

114.09 11 35 45

121.03 9 6 21

106.57 13 34 34
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                        6 0 20 1291.22
9 58 51 5814.65
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         105.24
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                                         5814.65
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         105.24
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                                           727.39
                                                               13.17
                                                                               308.77
         110.00
                                                                                                                                                      4826.5
                                                                                                                                                                         32.30
                                                                                                                                                                                          241.13
                                                                               249.79
                       12 4 8
                                                                                                  24.16
         110.00
                                          5426.48
                                                               30.33
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 ST 2272.3 SR 451.3 SS 951.7
CRT -.9525 CRS .9960 CST -.9757
LSA 2490.8 MSA 225.3 SSA 7.5
      TOE-1.7305 TRA-1.7255 TC3-3.0121 BAU .8646
     ROE .3483 RRA .0298 RC3 .1879 FAU .05774
FDE-1.5221 FRA -.5084 FC3-2.3327 88P 13318
                                                                                                                                                EL1 2309.2 EL2 129.2 ALF 169.72
      BOE 1.7652 BRA 1.7256 BC3 3.0180 FSP -814
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 10 1967

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FLIGHT TIME 150.00
LAUNCH DATE JUL 13 1967
                                                                      DISTANCE 438.250
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 289.94 VL 26.581 GAL -4.03 ATL 96.07 HCA 210.05 SHA 127.75 ECC .20250 INC 6.0739 V1 29.295 RP 107.48 LAP 3.04 LOP 139.85 VP 37.824 GAP 7.32 AZP 84.74 TAL 196.27 TAP 46.32 RCA 101.88 APO 153.62 V2 35.256
   RC 136.791 GL -39.21 GP 25.00 TAL 113.96 TAP 145.57 ETS 42.99 TAE 126.86 ETE 159.75 TAC 93.68 ETC 17.69 CLP-155.51
   PLANETOCENTRIC CONIC
                                                                                               2.11 VHP 5.800 OPA 32.06 RAP 178.04 ECC 1.3242
    C3 19.700 VHL 4.438 OLA -31.17 RAL 152.49 RAD 6567.8 VEL 11.878 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      24.53
                                                               350.46
                                                                             21.60
                                                                                            113.04
                                                                                                         6 42 41
                                                                                                                         635.6
                                                                                                                                                    342.79
                  6 22 5 1235.57
9 57 59 5830.04
                                                 21.60
        76.39
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                    8 51 47
                                  748.95
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      110.00
                                                                                            104.14 13 56 52
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                  12 27 28
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                                                  31.45
                                                               245.32
      110.00
                                 5364.65
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 4426.2 SGR 429.9 SG3 257.1

RRT'--7191 RRF -.8446 RTF .9289

SGB 4447.0 RZ3 .2498 R13 -.9301

SG1 4437.0 SG2 298.0 THA 175.99
                                                                                                                    ST 2299.9 SR 407.5 SS 941.8
CRT -.9557 CRS .9970 CST -.9749
    TOB-1.6893 TRA-1.6023 TC3-3.3780 BAU .8905
    ROE .3154 RRA .0214 RC3 .1512 FAU .05732
                                                                                                                    LSA 2508.7 MSA 221.7 SSA
                                                                                                                                                          8.6
   FOE-1.4482 FRA -.3986 FC3-2.5191 BSF 13681
BDE 1.7185 BRA 1.6025 BC3 3.3813 FSP -823
                                                                                                                     EL1 2332.7 EL2 118.1 ALF 170.37
                                                                                                                                ARRIVAL DATE DEC 12 1967
                                                                      FLIGHT TIME 152.00
                                                                      DISTANCE 444.172
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 289.94 VL 26.528 GAL -3.71 AZL 95.69 MCA 213.29 SMA 127.41 ECC .20377 INC 5.6874 VI 29.295 RP 107.49 LAP 3.12 LOP 143.10 VP 37.784 GAP 7.60 AZP 85.24 TAL 194.81 TAP 48.10 RCA 101.45 APO 153.37 V2 35.254 RC 138.949 GL -37.78 GP 22.50 ZAL 112.69 ZAP 148.06 ETS 41.62 ZAE 127.54 ETE 161.70 ZAC 92.61 ETC 16.56 CLP-156.71
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.46 6 40 30 1194.42 21.76 347.44 23.03 119.90 7 0 94
  PLANETOCENTRIC CONIC
                   6 40 30 1194.42
10 1 3 5637.36
6 40 30 1194.42
10 1 3 5637.36
8 55 25 755.28
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                                                  21.78
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                                                                                             112.27
       102.54
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                                                                                             122.19
                                                  12.16
                                                               310.30
                                                                              17.87
      110.00
                                                                                            102.49 14 14 3
                                                                                                                         4724.5
                                                                                                                                         33.47
                                                                                                                                                      233.40
                  12 45 18 5324.50
                                                   32.08
                                                               242.36
                                                                              26.65
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 4521.1 SCR 403.1 SC3 255.5
RRT -.6795 RRF -.7975 RTF .9264
SCB 4539.0 R23 .2254 R13 -.9273
SCI 4529.4 SC2 295.2 THA 176.52
                                                                                                                    ST 2335.6 SR 390.5 SS 931.5
CRT -.9604 CRS ..9981 CST -.9745
    TDE-1.6662 TRA-1.4769 TC3-3.7259 BAU
                                                     .9134
    RDE .2918 RRA .0163 RC3 .1132 FAU .05610
                                                                                                                     LSA 2535.4 MSA 217.2 SSA
    FOE-1.3764 FRA -. 2901 FC3-2.6489 BSP 13983
                                                                                                                     EL1 2365.6 EL2 107.5 ALF 170.86
    BOE 1.6915 BRA 1.4770 BC3 3.7276 FSP -619
                                                                                                                               ARRIVAL DATE DEC 14 1967
                                                                       FLIGHT TIME 154.00
LAUNCH DATE JUL 13 1967
                                                                      DISTANCE 450.080
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.475 GAL -3.38 AZL 95.36 HCA 216.53 SMA 127.07 ECC .20517 INC 5.3625 V1 29.295
RP 107.50 LAP 3.19 LOP 146.35 VP 37.744 GAP 7.89 AZP 85.69 TAL 193.34 TAP 49.87 RCA 101.00 APO 153.14 V2 35.251
RC 141.095 GL -36.50 GP 20.40 ZAL 111.14 ZAP 150.26 ETS 40.49 ZAE 128.01 ETE 163.39 ZAC 91.34 ETC 15.58 CLP-157.88
   PLANETOCENTRIC CONIC
    C3 17.238 VML 4.152 DLA -30.56 RAL 157.97 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 5.894 DPA 26.26 RAP 179.61 ECC 1.2837
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            24.78
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111.75 11 45 26
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                  6 55 38 1167.39
10 8 10 5835.67
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101.44 14 28 1
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                   12 59 42
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                                  5299.39
                                                  32.43
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2382.9 SR 380.0 SS 923.5

CRT - .9662 CRS .9990 CST - .9745

LSA 2574.9 MSA 211.9 SSA 10.9
                                                                   SCT 4616.0 SCR 386.0 SC3 252.4

RRT -.6371 RRF -.7451 RTF .9243

SCB 4632.1 R23 .1995 R13 -.9250

SCI 4622.6 SC2 297.1 THA 176.94
    TOE-1.6599 TRA-1.3495 TC3-4.0632 BAU .9366
    ROE .2753 RRA .0140 RC3 .0772 FAU .05450
FOE-1.3116 FRA -.1871 FC3-2.7373 BSP 14302
                                                                                                                     ELI 2411.0 EL2 96.9 ALF 171.23
    BDE 1.6826 BRA 1.3496 BC3 4.0639 FSP -810
                                                                                                                                ARRIVAL DATE DEC 16 1967
                                                                       FLIGHT TIME 156.00
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 455.972
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.422 GAL -3.04 AZL 95.08 MCA 219.77 SMA 126.73 ECC .20671 INC 5.0837 V1 29.295 RP 107.51 LAP 3.25 LOP 149.60 VP 37.704 GAP 8.17 AZP 86.09 TAL 191.85 TAP 51.62 RCA 100.53 APO 152.92 V2 35.247 RC 143.232 GL -35.33 GP 18.64 ZAL 109.33 ZAP 152.23 ETS 39.56 ZAE 128.34 ETE 164.85 ZAC 89.90 ETC 14.73 CLP-159.03
   PLANETOCENTRIC CONIC
    C3 16.345 VHL 4.043 OLA -30.53 RAL 160.88 RAD 6567.7 VEL 11.736 PTH 2.07 VHP 5.972 DPA 23.81 RAP 180.73 ECC 1.2690
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
22.28 344.59 26.84 111.43 7 27 0 553.4 24.99 336.79
    LNOH AZMTH LNCH TIME L-I TIME
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111.41 11 56 17
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                                                  32.61
                                                                239.46
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                                                                                             100.85
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2438.1 SR 374.2 SS 916.5
CRT -.9726 CRS .9994 CST -.9750
LSA 2623.3 MSA 205.7 SSA 12.1
                                                                   SGT 4706.5 SGR 376.4 SG3 248.1
RRT -.5942 RRF -.6906 RTF .9227
SGB 4721.5 R23 .1741 R13 -.9232
     TDE-1.6656 TRA-1.2176 TC3-4.3840 BAU .9580
     RDE .2640 RRA .0137 RC3 .0435 FAU .05259
     FOE-1.2521 FRA -. 0896 FC3-2.7854 BSP 14606
                                                                                                                      EL1 2465.1 EL2 86.1 ALF 171.50
     BOE 1.8864 BRA 1.2177 BC3 4.3842 FSP -797
                                                                    SG1 4711.8 SG2 302.4 THA 177.27
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LAUNCH DATE JUL 13 1967
                                                                                                          FLIGHT TIME 158.00
                                                                                                                                                                                              ARRIVAL DATE DEC 18 1967
                                                                                                          DISTANCE 461.847
     MELIOCENTRIC CONIC
       RL 152.08 LAL -.00 LOL 289.94 VL 26.369 GAL -2.69 AZL 94.84 MCA 223.01 SMA 126.39 ECC .20839 INC 4.8405 V1 29.295 RP 107.53 LAP 3.30 LOP 152.85 VP 37.662 GAP 8.46 AZP 86.46 TAL 190.34 TAP 53.35 RCA 100.05 APO 152.73 V2 35.243 RC 145.356 GL -34.22 GP 17.13 ZAL 107.28 ZAP 154.01 ETS 38.82 ZAE 128.56 ETE 166.12 ZAC 88.33 ETC 13.98 CLP-160.16
     PLANETOCENTRIC CONIC
       C3 15.618 VHL 3.952 DLA -30.64 RAL 163.91 RAD 6567.6 VEL 11.705 PTH
                                                                                                                                                2.06 VHP 6.065 OPA 21.58 RAP 181.99 ECC 1.2570
       LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.78 7 17 39 1150.11 22.62 344.49 29.20 111.24 7 36 49 550.1 25.30 336.66
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                                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                   SGT 4785.8 SGR 372.5 SG3 242.5
RRT -.5521 RRF -.6354 RTF ..9209
SGB 4800.2 R23 .1509 R13 -.9213
SGI 4790.2 SG2 310.3 THA 177.53
                                                                                                                                                                              ST 2496.9 SR 371.6 SS 908.8
CRT -.9790 CRS .9991 CST -.9756
      TOE-1.6790 TRA-1.0774 TC3-4.6799 BAU .9771
      ROE .2563 RRA .0143 RC3 .0123 FAU .05038
FOE-1.1954 FRA .0050 FC3-2.7928 BSP 14838
                                                                                                                                                                             LSA 2675.6 MSA 198.9 SSA 13.2
                                                                                                                                                                             ELI 2523.3 EL2 75.0 ALF 171.70
       BOE 1.6985 BRA 1.0775 BC3 4.6799 FSP
                                                                                                          FLIGHT TIME 160.00
                                                                                                                                                                                               ARRIVAL DATE DEC 20 1967
 LAUNCH DATE JUL 13 1967
    HELIOCENTRIC CONIC
                                                                                                          DISTANCE 467.706
      RL 152.08 LAL -.00 LOL 289.94 VL 26.316 GAL -2.33 AZL 94.63 MCA 226.26 SMA 126.06 ECC .21022 INC 4.6252 V1 29.295 RP 107.54 LAP 3.34 LOP 156.10 VP 37.621 GAP 8.75 AZP 86.80 TAL 188.82 TAP 55.08 RCA 99.56 APO 152.56 V2 35.237 RC 147.469 GL -33.15 GP 15.84 ZAL 105.01 ZAP 155.64 ETS 38.27 ZAE 128.71 ETE 167.21 ZAC 86.65 ETC 13.31 CLP-161.25
    PLANETOCENTRIC CONIC
      C3 15.032 VHL 3.877 DLA -30.86 RAL 167.08 RAD 6567.6 VEL 11.680 PTH
                                                                                                                                                2.05 VHP 6.169 DPA 19.52 RAP 183.39 ECC 1.2474
      LNCM AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.20 7 26 5 1154.85 22.98 345.00 31.84 111.18 7 45 20 554.9 25.65 337.14 102.80 10 50 23 5785.89 22.99 274.44 31.85 111.16 12 26 49 5185.9 25.66 266.58
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111.16 12 26 49
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    DIFFERENTIAL CORRECTIONS
                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                                                                             ST 2566.7 SR 372.7 SS 904.7
CRT -.9851 CRS .9980 CST -.9766
                                                                                                  SCT 4872.0 SGR 373.8 SG3 237.4
RRT -,5170 RRF -,5884 RTF .9202
      TDE-1.7041 TRA -.9337 TC3-4.9630 BAU .9974
      ROE .2522 RRA .0161 RC3 -.0139 FAU .04828
FDE-1.1472 FRA .0908 FC3-2.7805 BSP .15146
                                                                                                   SGB 4886.3 R23 .1292 R13 -.9205
SG1 4875.8 SG2 319.7 THA 177.72
                                                                                                                                                                             LSA 2740.1 MSA 191.5 SSA 14.4
                                                                                                                                                                            ELI 2592.8 EL2 63.5 ALF 171.85
      BOE 1.7227 BRA .9339 BC3 4.9630 FSP -762
                                                                                                                                                                                             ARRIVAL DATE DEC 22 1967
                                                                                                         FLIGHT TIME 162.00
LAUNCH DATE JUL 13 1967
    HELIOCENTRIC CONIC
                                                                                                        DISTANCE 473.546
     RL 152.08 LAL -.00 LOL 289.94 VL 26.264 GAL -1.95 AZL 94.43 MCA 229.50 SMA 125.73 ECC .21222 INC 4.4321 VI 29.295
RP 107.56 LAP 3.37 LOP 159.35 VP 37.578 GAP 9.04 AZP 87.12 TAL 187.29 TAP 56.79 RCA 99.05 APO 152.41 V2 35.231
RC 149.570 GL -32.10 GP 14.72 ZAL 102.56 ZAP 157.14 ETS 37.89 ZAE 128.81 ETE 168.16 ZAC 84.87 ETC 12.73 CLP-162.32
    PLANETOCENTRIC CONIC
      C3 14.571 VHL 3.817 DLA -31.15 RAL 170.40 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 6.284 DPA 17.61 RAP 184.89 ECC 1.2398.
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT 'INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.44 7 33 54 1165.00 23.36 345.92 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.87 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.97 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.97 23.37 272.79 34.77 111.20 12 45 4 5161.9 26.04 264.91 103.56 11 9 2 5761.97 23.37 272.79 23.37 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.79 23.47 272.
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                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SCT 4951.2 SCR 378.2 SC3 231.7

RRT -,4865 RRF -.5456 RTF .9196

SCB 4965.7 R23 .1102 R13 -.9199

SCI 4954.7 SC2 330.2 THA 177.86
                                                                                                                                                                             ST 2638.2 SR 376.0 SS 899.3
CRT -.9903 CRS .9960 CST -.9777
      TDE-1.7344 TRA -.7817 TC3-5.2161 BAU 1.0162
      RDE .2504 RRA .0181 RC3 -.0365 FAU .04606
     FOE-1.1011 FRA .1727 FC3-2.7368 BSP 15413
BOE 1.7523 BRA .7619 BC3 5.2163 FSP -744
                                                                                                                                                                             LSA 2806.5 MSA 183.9 SSA 15.6
                                                                                                                                                                             EL1 2664.4 EL2 51.8 ALF 171.96
LAUNCH DATE JUL 13 1967
                                                                                                         FLIGHT TIME 164.00
                                                                                                                                                                                              ARRIVAL DATE DEC 24 1967
   HELIOCENTRIC CONIC
                                                                                                        DISTANCE 479.368
     RL 152.08 LAL -.00 LOL 289.94 VL 26.211 GAL -1.56 A7L 94.26 MCA 232.74 SMA 125.40 ECC .21439 INC 4.2568 VI 29.295 RP 107.58 LAP 3.39 LOP 162.60 VP 37.536 GAP 9.33 AZP 87.42 TAL 185.75 TAP 58.48 RCA 98.52 APO 152.29 VZ 35.225 RC 151.657 GL -31.04 GP 13.74 ZAL 99.92 ZAP 158.54 ETS 37.68 ZAE 128.87 ETE 168.99 ZAC 83.01 ETC 12.21 CLP-163.35
    PLANETOCENTRIC CONIC
     C3 14.228 VHL 3.772 DLA -31.50 RAL 173.87 RAD 6567.6 VEL 11.645 PTH 2.04 VHP 6.407 DPA 15.82 RAP 186.47 ECC 1.2342 LNCH AFNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.59 7 41 45 1178.55 25.74 347.11 37.98 111.33 8 1 23 578.6 26.43 339.20 104.41 11 28 51 5737.75 23.75 271.13 37.98 111.32 13 4 29 5137.7 26.44 263.23
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11 28 51 5737.75
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    DIFFERENTIAL CORRECTIONS
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                                                                                                  SGT 5027.9 SGR 384.9 SG3 225.9
RRT -.4620 RRF -.5097 RTF .9194
SGB-5042.6 R23 .0936 R13 -.9197
                                                                                                                                                                             ST 2711.4 SR 381.1 SS 893.6

CRT -.9943 CRS .9930 CST -.9789

LSA 2874.7 MSA 176.2 SSA 16.8
      TDE-1.7697 TRA -.6218 TC3-5.4374 BAU 1.0343
      ROE .2508 RRA .0202 RC3 -.0549 FAU .04386
     FDE-1.0382 FRA .2499 FC3-2.6687 8SP 15690
BDE 1.7874 BRA .6222 BC3 5.4377 FSP -728
                                                                                                  SG1 5031.0 SG2 341.1 THA 177.97
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ARRIVAL DATE DEC 26 1967
                                                                      "FLIGHT TIME 166.00
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 485.170
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.160 GAL .-1.16 AZL 94.10 HCA 235.97 SMA 125.08 ECC .21674 INC 4.0961 V1 29.295
RP 107.60 LAP 3.39 LOP 165.85 VP 37.493 GAP 9.63 AZP 87.71 TAL 184.20 TAP 60.17 RCA 97.97 APO 152.19 V2 35.217
    RC 153.730 GL -29.96 GP 12.89 ZAL 97.12 ZAP 159.84 ETS 37.64 ZAE 128.92 ETE 169.71 ZAC 81.08 ETC 11.75 CLP-164.36
   PLANETOCENTRIC CONIC
    C3 13.996 VHL 3.741 DLA -31.88 RAL 177.48 RAD 6567.6 VEL 11.635 PTH 2.04 VHP 6.539 DPA 14.12 RAP 188.13 ECC 1.2303
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                   13 53 49
                                  5329.47
      110.00
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                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2777.8 SR 387.3 $5 883.8
CRT -.9971 CRS .9889 CST -.9799
                                                                   SCT 5092.7 SCR 392.6 SC3 219.6
RRT - .4414 RRF - .4789 RTF .9191
SCB 5107.8 R23 .0794 R13 -.9193
SCI 5095.6 SC2 352.1 THA 178.04
    TOE-1.8049 TRA -.4505 TC3-5.6124 BAU 1..0503
    RDE .2528 RRA .0218 RC3 -.0698 FAU .04156
F0E-1.0143 FRA .3254 FC3-2.5707 BSP 15870
                                                                                                                       LSA 2935.7 MSA 169.1 SSA 18.0
EL1 2804.5 EL2 29.1 ALF 172.08
                                                                                                                                                            18.0
    BDE 1.8225 BRA .4510 BC3 5.6128 FSP -704
                                                                                                                                  ARRIVAL DATE DEC 28 1967
                                                                        FLIGHT TIME 168.00
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 490.950
   HELIOCENTRIC CONIC
   RL 152.08 LAL -.00 LOL 289.94 VL 26.108 GAL -.74 AZL 93.95 MCA 239.21 SMA 124.76 ECC .21929 INC 3.9473 VI 29.295 RP 107.63 LAP 3.39 LOP 169.09 VP 37.449 GAP 9.94 AZP 87.98 TAL 182.64 TAP 61.85 RCA 97.40 APO 152.12 V2 35.210 RC 155.789 GL -28.85 GP 12.14 ZAL 94.19 ZAP 161.06 ETS 37.77 ZAE 128.94 ETE 170.34 ZAC 79.10 ETC 11.34 CLP-165.35
   PLANETOCENTRIC CONIC
                                                                                                 2.04 VHP 6.679 OPA 12.51 RAP 189.85 ECC 1.2284
    C3 13.876 VHL 3.725 DLA -32.26 RAL 181.24 RAD 6567.5 VEL 11.630 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            111.75 8 19 35
111.74 13 44 53
                                                                                                                            609.7
                                                                                                                                          27.16
                                                                                                                                                         341.83
                                                                                                          8 19 35
                     7 59 25 1209.67
                                                   24.43
                                                                349.77
                                                                             45.20
        73.86
                                                                                                                                                         260.29
                                                                                                                            5095.6
                                                                                                                                            27.17
                                  5695.60
                                                   24.44
                                                                268.23
                                                                                45.20
       106.14
                   12 9 57
                                                                                              111.75 8 19 35
111.74 13 44 53
119.78 12 45 59
103.69 15 29 56
                                                                                                                                                         341.83
                                                                                                                             609.7
                                                                                                                                            27.16
                                                                349.77
                                                                                45.20
                                                   24.43
        73.86
                     7 59 25
                                  1209.67
                                                                                                                                                         260.29
                                                                                                                            5095.6
                                                                                                                                           27.17
                   12 9 57
11 7 51
                                  5695.60
                                                   24.44
                                                                268.23
                                                                                45.20
       106.14
                                                                                                                                                         272.43
                                                                                                                           5287.9
                                                                                                                                           21.45
                                  5887.88
                                                   17.62
                                                                279.47
                                                                                41.68
      110.00
                                                                244.50
                                                                                47.80
                                                                                                                           4753-4
                                                                                                                                           33.19
      110.00
                   14 0 42
                                  5353.43
                                                   31.63
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2844.3 SR 395.2 SS 874.5
CRT -.9986 CRS .9840 CST -.9811
LSA 2997.4 MSA 162.1 SSA 19.1
                                                                    SGT 5164.5 SGR 401.6 SG3 213.8
RRT -.4280 RRF -.4559 RTF .9202
    TOE-1.8447 TRA -.2745 TC3-5.7534 BAU 1.0674
    RDE .2568 RRA .0233 RC3 -.0796 FAU .03946
FDE -.9746 FRA .3929 FC3-2.4621 BSP 16142
BDE 1.8625 BRA .2755 BC3 5.7539 FSP -689
                                                                    SGB 5180.1 R23 .0665 R13 -.9203
SG1 5167.4 SG2 362.8 THA 178.08
                                                                                                                       EL1 2871.5 EL2 21.1 ALF 172.10
                                                                                                                                  ARRIVAL DATE DEC 30 1967
                                                                        FLIGHT TIME 170.00
LAUNCH DATE JUL 13 1967
                                                                       DISTANCE 495.708
    RL 152.08 LAL -.00 LOL 289.94 VL 26.057 GAL -.31 AZL 93.81 MCA 242.45 SMA 124.45 ECC .22205 INC 3.8083 VI 29.295 RP 107.65 LAP 3.38 LOP 172.33 VP 37.406 GAP 10.25 AZP 88.24 TAL 181.07 TAP 63.52 RCA 96.82 APO 152.09 V2 35.201 RC 157.834 GL -27.69 GP 11.47 ZAL 91.13 ZAP 162.21 ETS 38.07 ZAE 128.96 ETE 170.89 ZAC 77.07 ETC 10.98 CLP-166.32
    PLANETOCENTRIC CONIC
    C3 13.868 VHL 3.724 OLA -32.62 RAL 185.11 RAD 6567.5 VEL 11.630 PTH 2.04 VHP 6.826 OPA 10.97 RAP 191.62 ECC 1.2282
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.03 8 30 12
112.02 14 5 13
                                                                                                                            625.5
                                                   24.69
                                                                351.09
                                                                             49.18
        73.08
                     8 9 46
                                  1225.47
                                                                                                                           5079.5
                                                                                                                                           27.47
                                                                                                                                                         259.17
                                                    24.70
                                                                267.11
                                                                                49.19
       106.92
                                                                                                         8 30 12
                                                                                                                             625.5
                                                                                                                                           27.46
                                                                                                                                                         343.15
                                                                                              112.03
                                                    24.69
                                                                351.09
                                                                                49.18
        73.08
                     8 9 46
                                  1225.47
                                                                                              112.02 14 5 13
119.25 13 9 31
104.77 15 37 20
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                                                                                                                                           27.47
       106.92
                   12 30 33
                                   5679.55
                                                    24.70
                                                                267.11
                                                                                49.19
                                                                                                                                                         270.77
                                                                                                                           5260.8
                   11 31 50
                                   5860.78
                                                    18.53
                                                                277.90
                                                                                46.01
       110.00
                                                                                                                                                         237.65
                                                                                                                           4780.3
                                                                                                                                            32.90
                    14 7 40
                                                                 246.46
                                                                                51.63
                                  5380.27
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5233.9 SGR 411.7 SG3 208.1

RRT -.4190 RRF -.4403 RTF ..9216

SGB 5250.0 R23 .0575 R13 -.9217

SGI 5236.7 SG2 375.6 THA 178.10
                                                                                                                       ST 2906.1 SR 404.5 SS 865.6
     TDE-1.8866 TRA -. 0895 TC3-5.8434 BAU 1.0835
                                                                                                                       CRT -.9986 CRS .9784 CST -.9823
LSA 3055.0 MSA 156.0 SSA 20.1
    RDE .2628 RRA .0242 RC3 -.0856 FAU .03735
FDE -.9393 FRA .4566 FC3-2.3317 8SP 16440
BDE 1.9048 BRA .0928 BC3 5.8440 FSP -678
                                                                                                                       EL1 2934.0 EL2 20.9 ALF 172.09
                                                                                                                                   ARRIVAL DATE JAN 1 1968
                                                                         FLIGHT TIME 172.00
LAUNCH DATE JUL 13 1967
                                                                        DISTANCE 502.442
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 26.006 GAL .15 AZL 93.68 MCA 245.68 SMA 124.14 ECC .22504 INC 3.6773 V1 29.295
RP 107.68 LAP 3.35 LOP 175.58 VP 37.362 GAP 10.57 AZP 88.48 TAL 179.50 TAP 65.18 RCA 96.21 APO 152.08 V2 35.192
RC 159.863 GL -26.50 GP 10.88 ZAL 87.98 ZAP 165.30 ETS 38.56 ZAE 128.97 ETE 171.38 ZAC 74.99 ETC 10.67 CLP-167.26
    PLANETOCENTRIC CONIC
                                                                                                                               9.49 RAP 193.44 ECC 1.2300
    C3 13.976 VHL 3.738 DLA -32.95 RAL 189.10 RAD 6567.6 VEL 11.635 PTH 2.04 VHP 6.982 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.33 8 42 1
112.31 14 25 15
8 42 1
                                                                                                                             640.6
                                                                                                                                           27.68
                    8 21 20 1240.58
12 50 47 5667.85
                                                                                53.39
                                                    24.88
                                                                 352.34
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        107.59
                                   5667.85
                                                    24.89
                                                                 266.30
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                                                                                               112.33 8 42 1
112.31 14 25 15
118.74 13 33 29
105.89 15 45 13
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                                   1240.58
                                                    24.88
                                                                 352.34
                                                                                 53.39
                     8 21 20
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                                                                                                                                            27.69
                                                    24.89
                                                                 266.30
                                                                                 53.40
        107.59
                     12 50 47
                                   5667.85
                                                                                                                                                          269.22
                                                                                                                            5235.8
                                                                                                                                            23.04
                                   5835.78
                                                    19.36
                                                                 276.43
                                                                                 50.55
       110.00
                    11 56 13
                                                                                                                            4808.7
                                                                                                                                            32.54
                                                                                                                                                         239.80
                    14 15 5
                                   5408.69
                                                    30.67
                                                                 248.51
                                                                                 55.66
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2938.9 SR 412.1 SS 840.6
CRT -.9974 CRS .9708 CST -.9826
                                                                    SGT 5275.8 SGR 419.6 SG3 200.4
RRT -.4077 RRF -.4216 RTF .9206
SGB 5292.4 R23 .0485 R13 -.9207
     TOE-1.9152 TRA .1116 TC3-5.8568 BAU 1.0945
     RDE .2687 RRA .0236 RC3 -.0909 FAU .03486
FOE -.8892 FRA .5242 FC3-2.1593 BSP 16538
                                                                                                                       LSA 3080.5 MSA 152.7 SSA 21.0
                                                                                                                        EL1 2967.5 EL2 29.4 ALF 172.04
                                                                     SG1 5278.5 SG2 383.0 THA 178.13
     BOE 1.9340 BRA .1140 BC3 5.8575 FSP -646
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LAUNCH DATE JUL 13 1967

ARRIVAL DATE JAN 3 1968

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DISTANCE 508.150
   MELIOCENTRIC CONIC
     RL 152.08 LAL -.00 LOL 289.94 VL 25.955 GAL .62 AZL 93.55 MCA 248.91 SMA 123.84 ECC .22827 INC 3.5528 V1 29.295
RP 107.71 LAP 3.31 LOP 178.82 VP 37.317 GAP 10.90 AZP 88.72 TAL 177.92 TAP 66.83 RCA 95.57 APO 152.11 V2 35.183
RC 161.876 GL -25.26 GP 10.36 ZAL 84.76 ZAP 164.34 ETS 39.24 ZAE 128.97 ETE 171.80 ZAC 72.88 ETC 10.40 CLP-168.18
    PLANETOCENTRIC CONIC
     C3 14.207 VHL 3.769 DLA -33.21 RAL 193.17 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 7.146 DPA
                                                                                                                                                             8.06 RAP 195.31 ECC 1.2338
                                                          INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                       8 34 9 1254.74
13 10 26 5660.91
                                                               24.97
                                                                                                   57.60
                                                                                                                  112.64
                                                                                                                                    8 55 3
                                                                                                                                                          654.7
                                                                                                                                                                                              345.54
                                                                                353.47
                                                                                                                                                                             27.82
         71.47
                                                                                                                     112.63 14 44 47
                                                                                                                                                         5060.9
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                                                                                                   57.60
        108.13
                                                               24.99
                                                                                265.81
                       8 34 9 1254.74
13 10 26 5660.91
                                                                                                                                    8 55 3
                                                                                                                                                          654.7
                                                               24.97
                                                                                                   57.60
                                                                                                                     112.64
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                                                                                353:47
          71.87
                                                                                                                    112.63 14 44 47
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                                                                                                                                                                                           257.88
                                                                                                   57.80
        108.13
                                                               24.99
                                                                                265.81
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                                                                                                                    118.29 13 57 14
106.97 15 54 2
                                                                                                                                                         5214.8
                                                                                                                                                                             23.66
                                                                                                                                                                                              267.91
        110.00
                       12 20 19
                                       5814.77
5436.92
                                                               20.04
                                                                                275.18
                                                                                                   55.25
                                                                               250.53
                                                                                                                                                         4636.9
                                                                                                                                                                             32.15
                                                                                                                                                                                              241.91
        110.00
                       14 23 25
                                                               30.13
                                                                                                   59.89
                                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    CORIT DETERMINATION ACCURACY
                                                                                    RET - 4061 RRF - .4136 RTF . .9220
SGB 5352.3 R23 .0406 R13 - .9221
SGI 5337.9 SGZ 391.0 THA 178.12
                                                                                                                                                    ST 2967.8 SR 421.9 SS 823.7
CRT -.9949 CRS .9627 CST -.9832
     TOE-1.9470 TRA .32: TC3-5.8370 BAU 1.1088
    RDE .2774 RRA .0221 RC3 -.0891 FAU .03298
FDE -.8514 FRA .5878 FC3-2.0096 8SP 16700
BDE 1.9667 BRA .3223 BC3 5.8377 FSP -628
                                                                                                                                                    LSA 3105.0 MSA 150.9 SSA 21.6
                                                                                                                                                    EL1 2997.3 EL2 41.9 ALF 171.95
LAUNCH DATE JUL 13 1967
                                                                                         FLIGHT TIME 176.00
                                                                                                                                                                 ARRIVAL DATE JAN 5 1968
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 513.829
    RL 152.08 LAL -.00 LOL 289.94 VL 25.905 GAL 1.10 AZL 93.43 MCA 252.14 SMA 123.54 ECC .23177 INC 3.4338 V1 29.295 RP 107.74 LAP 3.27 LOP 182.05 VP 37.273 GAP 11.24 AZP 88.95 TAL 176.33 TAP 68.48 RCA 94.91 APO 152.17 VZ 35.172 RC 163.875 GL -23.98 GP 9.88 ZAL 81.49 ZAP 165.32 ETS 40.13 ZAE 128.97 ETE 172.18 ZAC 70.73 ETC 10.18 CLP-169.09
   PLANETOCENTRIC CONIC
     C3 14,569 VHL 3.617 DLA -33.41 RAL 197.28 RAD 6567.6 VEL 11,660 PTH
                                                                                                                          2.05 VHP 7.319 DPA
                                                                                                                                                              6.67 RAP 197.21 ECC 1.2398
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.49 8 48 10 1267.70 24.96 354.47 62.36 112.95 9 9 18 667.7 27.85 346.55 71.49 8 48 10 1267.70 24.96 354.47 62.36 112.95 9 9 18 667.7 27.86 257.75 71.49 8 48 10 1267.70 24.96 354.47 62.36 112.95 9 9 18 667.7 27.85 346.55
                                                                                                                    112.94 15 3 34
112.95 9 9 18
112.94 15 3 34
117.97 14 19 51
107.92 16 4 27
                       13 29 15 5659.08
12 43 11 5800.34
14 33 25 5462.48
                                                               24.98
                                                                               265.66
                                                                                                   62.37
                                                                                                                                                         5059.1
                                                                                                                                                                             27.86
                                                                                                                                                                                              257.75
        108.51
                                                               20.50
                                                                               274.32
                                                                                                   60.06
                                                                                                                                                         5200.3
                                                                                                                                                                             24.08
                                                                                                                                                                                              267.00
        110.00
                                                                                                                                                                                              243.80
                                                                               252.34
                                                                                                   64.31
                                                                                                                                                         4862.5
                                                                                                                                                                             31.77
        110.00
                                                               29.61
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5391.9 SGR 437.8 SG3 189.7
RRT - .4063 RRF - .4091 RTF . .9240
SGB 5409.7 R23 .0346 R13 - .9241
SGI 5394.9 SG2 399.8 THA 178.10
                                                                                                                                                   ST 2981.4 SR 431.6 SS 802.7
CRT -.9913 CRS .9538 CST -.9837
LSA 3113.9 MSA 150.5 SSA 21.9
EL1 3012.0 EL2 56.2 ALF 171.83
    TOE-1.9747 TRA .5382 TC3-5.7622 BAU 1.1224
ROE .2874 RRA .0199 RC3 -.0849 FAU .03108
    FOE -.8127 FRA .6454 FC3-1.8467 8SP 16939
BOE 1.9955 BRA .5386 BC3 5,7628 FSP -614
                                                                                         FLIGHT TIME 178.00
                                                                                                                                                                 ARRIVAL DATE JAN 7 1968
LAUNCH DATE JUL 13 1967
                                                                                        DISTANCE 519.477
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 25.856 GAL 1.61 AZL 93.32 MCA 255.37 SMA 123.24 ECC .23555 INC 3.3190 VI 29.295 RP 107.78 LAP 3.21 LOP 185.29 VP 37.229 GAP 11.59 AZP 89.16 TAL 174.75 TAP 70.12 RCA 94.21 APO 152.27 V2 35.162 RC 185.860 GL -22.67 GP 9.46 ZAL 78.21 ZAP 166.25 ETS 41.25 ZAE 128.97 ETE 172.51 ZAC 68.56 ETC 9.99 CLP-169.98
   PLANETOCENTRIC CONIC
     C3 15.072 VHL 3.882 DLA -53.51 RAL 201.42 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 7.502 DPA
    C3 15.072 VHL 3.882 DLA -33.51 RAL 201.42 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 7.502 DPA 5.33 RAP 199.14 ECC 1.2480 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.28 9 3 20 1279.36 24.84 355.31 67.06 113.26 9 24 39 679.4 27.77 347.42 108.72 13 47 5 5662.57 24.85 265.87 67.06 113.24 15 21 27 5062.6 27.78 257.98 108.72 13 47 5 5662.57 24.85 265.87 67.06 113.26 9 24 39 679.4 27.77 347.42 108.72 13 47 5 5662.57 24.85 265.87 67.06 113.26 9 24 39 679.4 27.77 347.42 108.72 13 47 5 5662.57 24.85 265.87 67.06 113.24 15 21 27 5062.6 27.78 257.98 110.00 13 3 40 5795.54 20.66 274.03 64.89 117.86 14 40 15 5195.5 24.22 266.69 110.00 14 45 55 5482.42 29.18 253.78 68.92 108.65 16 17 17 4882.4 31.45 245.26 245.26
                                                                                                                                                            5.33 RAP 199.14 ECC 1.2480
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ST 2972.9 SR 440.6 SS 776.7

CRT -.9865 CRS .9434 CST -.9840

LSA 3100.3 MSA 152.4 SSA 21.9

EL1 3004.5 EL2 71.5 ALF 171.68
                                                                                   RT - 4077 RRF - 4062 RTF .9258
SGB 5458.4 R23 .0292 R13 - .9259
SGI 5443.3 SG2 406.7 THA 178.08
     TOE-1.9934 TRA .7670 TC3-5.6283 BAU 1.1342
     ROE .2985 RRA .0166 RC3 -.0789 FAU .02917
    FOE -.7713 FRA .7015 FC3-1.6753 BSP 17124
BOE 2.0156 BRA .7671 BC3 5.6289 FSP -598
                                                                                                                                                                 ARRIVAL DATE JAN 9 1968
                                                                                         FLIGHT TIME 180.00
                                                                                        DISTANCE 525.092
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 25.807 GAL 2.14 AZL 93.21 MCA 258.60 SMA 122.95 ECC .23964 INC 3.2077 V1 29.295 RP 107.81 LAP 3.14 LOP 188.52 VP 37.184 GAP 11.95 AZP 89.37 TAL 173.16 TAP 71.76 RCA 93.49 APO 152.42 V2 35.151 RC 167.829 GL -21.34 GP 9.08 ZAL 74.93 ZAP 167.14 ETS 42.63 ZAE 128.97 ETE 172.81 ZAC 66.36 ETC 9.84 CLP-170.86
   PLANETOCENTRIC CONIC
    C3 15.729 VHL 3.966 DLA -33.53 RAL 205.53 RAD 6567.6 VEL 11.710 PTH 2.06 VHP 7.695 DPA
                                                                                                                                                            4.03 RAP 201.11 ECC 1.2589
                                                          INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                              71.84
                                                                                                                                                                                          348.14
                        9 19 32 1289.64
14 3 43 5671.51
9 19 32 1289.64
                                                                                                                  113.55
                                                                                                                                    9 41 1
                                                                                                                                                          689.6
                                                                                                                                                                            27.56
                                                              24.59
                                                                               355.99
                                                                                                                    113.54 15 38 14
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        108.76
                       14 3 43
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109.07 16 33 13
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                      13 20 46
                                         5803.03
                                                               20.42
                                                                               274.48
                                                                                                   69.66
                                       5494.16
                                                                                                                                                         4894.2
                                                                                                                                                                            31.25
                                                                                                                                                                                             246.12
                       15 1 39
                                                              28.92
                                                                               254.55
                                                                                                   73.73
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2945.3 SR 448.9 SS 748.5
CRT -.9804 CRS .9314 CST -.9841
                                                                                  SGT 5484.1 SGR 452.8 SG3 178.1
RRT -.4108 RRF -.4059 RTF .9275
SGB 5502.8 R23 .0250 R13 -.9276
     TOE-2.0042 TRA 1.0078 TC3-5.4433 BAU 1.1447
    ROE .3107 RRA .0119 RC3 -.0711 FAU .02729
FDE -.7297 FRA .7567 FC3-1.5023 89P 17300
BDE 2.0281 BRA 1.0079 BC3 5.4437 FSP -582
                                                                                                                                                  LSA 3067.8 MSA 156.9 SSA Z1.6
                                                                                    SG1 5487.3 SG2 412.6 THA 178.05
                                                                                                                                                  EL1 2978.0 EL2 87.6 ALF 171.49
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FLIGHT TIME 174.00

ARRIVAL DATE JAN 11 1968 FLIGHT TIME 182.00 LAUNCH DATE JUL 13 1967 HELIOCENTRIC CONTC DISTANCE 530.669. RL 152.08 LAL -.00 LOL 289.94 VL 25.758 GAL 2.70 AZL 93.10 HCA 261.83 SMA 122.67 ECC .24406 INC 3.0990 V1 29.295 RP 107.84 LAP 3.07 LOP 191.75 VP 37.140 GAP 12.33 AZP 89.56 TAL 171.58 TAP 73.40 RCA 92.73 APO 152.61 V2 35.139 RC 169.783 GL -19.99 GP 8.73 ZAL 71.69 ZAP 167.99 ETS 44.30 ZAE 128.96 ETE 173.07 ZAC 64.15 ETC 9.73 CLP-171.72 PLANETOCENTRIC CONIC C3 16.556 VHL 4.069 DLA -33.46 RAL 209.60 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 7.899 DPA 2.77 RAP 203.11 ECC 1.2725 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.82 9 58 18 113.80 15 53 46 113.82 9 58 18 113.82 9 58 18 113.80 15 53 46 118.48 15 11 11 109.17 16 52 19 698.5 27.23 348.68 9 36 40 1298.47 24.22 356.50 76.68 71.39 259.58 14 19 0 5686.00 24.23 267.39 76.68 5086.0 27.24 698.5 348.68 27.23 71.39 9 36 40 1298.47 24.22 356.50 76.68 108.61 14 19 0 5686.00 24.23 267.39 76.68 5086.0 27.24 259.58 13 34 8 19.76 275.70 74.31 5223.5 23.40 268.46 110.00 5823,50 5497.01 254.75 78.72 4897.0 31.20 246.33 110.00 15 20 42 28.86 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGB 5537.1 R23 .0210 R13 -.9291 SGI 5521.4 SGZ 417.3 THA 178.01 ST 2894.8 SR 455.9 SS 716.7 CRT -.9727 CRS .9171 CST -.9839 LSA 3012.3 MSA 164.1 SSA 21.1 TOE-2.0029 TRA 1.2634 TC3-5.2060 BAU 1.1524 RDE .3237 RRA .0057 RC3 -.0626 FAU .02541 FDE -.6859 FRA .8119 FC3-1.3288 BSP 17395 EL1 2928.6 EL2 104.5 ALF 171.28 BOE 2.0289 BRA 1.2634 BC3 5.2064 FSP -563 FLIGHT TIME 184.00 ARRIVAL DATE JAN 13 1968 DISTANCE 536.205 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 25.710 GAL 3.28 AZL 92.99 MCA 265.05 SMA 122.39 ECC .24885 INC 2.9920 V1 29.295 RP 107.88 LAP 2.98 LOP 194.98 VP 37.095 GAP 12.73 AZP 89.74 TAL 169.99 TAP 75.04 RCA 91.93 APO 152.84 V2 35.128 RC 171.722 GL -18.64 GP 8.42 ZAL 68.50 ZAP 168.80 ETS 46.31 ZAE 128.95 ETE 173.30 ZAC 61.92 ETC 9.66 CLP-172.58 PLANETOCENTRIC CONIC C3 17.570 WHL 4.192 OLA -33.29 RAL 213.57 RAD 6567.7 VEL 11.788 PTH 2.08 VHP 8.115 OPA 1.54 RAP 205.13 ECC 1.2892 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.06 10 16 22 114.05 16 7 53 114.06 10 16 22 114.05 16 7 53 119.14 15 21 45 109.01 17 13 56 23.73 356.83 81.53 705.8 26.77 349.06 71.72 9 54 36 1305.79 14 32 47 5706.11 23.74 5106.1 26.78 260.94 108.28 268.71 81.54 356.83 23.73 81.53 705.8 26.77 349.06 71.72 9 54 36 1305.79 14 32 47 5706.11 23.74 81.54 5106.1 26.78 260.94 108.28 268.71 13 44 10 5855.30 18.71 277.58 5255.3 22.45 270.44 110.00 78.84 4892.6 15 42 24 31.27 246.71 110.00 5492.64 254.45 83.83 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5554.0 SGR 464.2 SG3 166.9 RRT -.4205 RRF -.4101 RTF .9311 ST 2833.0 SR 462.0 SS 686.2 CRT -.9637 CRS .9014 CST -.9837 TDE-1.9966 TRA 1.5263 TC3-4.9403 BAU 1.1605 RDE .3380 RRA -.0017 RC3 -.0529 FAU .02368 SGB 5573.4 R23 .0180 R13 -.9311 SG1 5557.4 SG2 420.9 THA 177.98 FDE -.6449 FRA .8645 FC3-1.1669 BSP 17565 LSA 2946.1 MSA 172.9 SSA 20.4 EL1 2867.8 EL2 121.9 ALF 171.05 BOE 2.0250 BRA 1.5283 BC3 4.9406 FSP -549 ARRIVAL DATE JAN 15 1968 FLIGHT TIME 186.00 LAUNCH DATE JUL 13 1967 DISTANCE 541.695 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 25.662 CAL 3.89 AZL 92.89 MCA 268.27 SMA 122.11 ECC .25403 INC 2.8862 VI 29.295
RP 107.92 LAP 2.88 LOP 198.21 VP 37.051 CAP 13.14 AZP 89.91 TAL 168.41 TAP 76.68 RCA 91.09 APO 153.13 V2 35.116
RC 173.647 GL -17.30 GP 8.13 ZAL 65.40 ZAP 169.56 ETS 48.70 ZAE 128.94 ETE 173.51 ZAC 59.67 ETC 9.63 CLP-173.43 PLANETOCENTRIC CONIC .35 RAP 207.17 ECC 1.3093 C3 18.795 VHL 4.335 DLA -33.03 RAL 217.44 RAD 6567.8 VEL 11.840 PTH 2.10 VHP 8.345 DPA C3 18.795 VHC 4.335 OLA -33.03 RAL 217.44 RAD 6567.8 VEL 11.840 PTH 2.10 VMP 8.345 OPA .35 RAP 207.17 ECC 1.3095 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.24 10 13 15 1311.51 23.12 356.97 86.37 114.28 10 35 7 711.5 26.20 349.26 72.24 10 13 15 1311.51 23.12 356.97 86.38 114.26 16 20 28 5131.9 26.21 262.69 107.76 14 44 56 5731.87 23.13 270.40 86.38 114.28 10 35 7 711.5 26.20 349.26 107.76 14 44 56 5731.87 23.13 270.40 86.38 114.26 16 20 28 5131.9 26.21 262.69 110.00 13 51 42 607.56 17.36 302.01 83.24 119.92 14 1 49 7.6 21.21 294.99 110.00 16 5 40 5483.82 29.15 253.84 89.02 108.70 17 37 4 4883.8 31.42 245.37 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5583.4 SGR 488.4 SG3 161.5 RRT - .4273 RRF - .4148 RTF . .9329 SGB 5603.0 R23 .0153 R13 - .9330 SGI 5587.0 SG2 423.2 THA 177.94 ST 2756.5 SR 466.6 SS 655.0 CRT -.9529 CRS .8832 CST -.9833 TDE-1.9808 TRA 1.8071 TC3-4.6429 BAU 1.1667 RDE .3530 RRA -.0105 RC3 -.0433 FAU .02198 FDE -.6037 FRA .9169 FC3-1.0123 BSP 17701 BDE 2.0120 BRA 1.8071 BC3 4.6431 FSP -534 LSA 2865.5 MSA 183.8 SSA 19.6 EL1 2792.2 EL2 139.8 ALF 170.81 ARRIVAL DATE JAN 17 1968 FLIGHT TIME 188.00 LAUNCH DATE JUL 13 1967 DISTANCE 547.133 HELIOCENTRIC CONTC RL 152.08 LAL -.00 LOL 289.94 VL 25.615 GAL 4.52 AZL 92.78 HCA 271.49 SMA 121.84 ECC .25966 INC 2.7808 V1 29.295
RP 107.96 LAP 2.78 LOP 201.43 VP 37.006 GAP 13.58 AZP 90.07 TAL 166.84 TAP 78.33 RCA 90.20 APO 153.48 V2 35.103
RC 175.555 GL -15.98 GP 7.88 ZAL 62.38 ZAP 170.27 ETS 51.54 ZAE 128.92 ETE 173.69 ZAC 57.42 ETC 9.64 CLP-174.27 PLANETOCENTRIC CONIC C3 20.255 VHL 4.501 DLA -32.70 RAL 221.16 RAD 6567.8 VEL 11.901 PTH 2.11 VHP 8.590 DPA -.82 RAP 209.23 ECC 1.3333 C3 20.255 VHL 4.501 DLA -32.70 RAL 221.16 RAD 6567.8 VEL 11.901 PTH 2.11 VMP 8.590 DPA -.82 RAP 293.25 ECC 1.3535 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.93 10 32 31 1315.54 22.40 356.93 91.18 114.46 10 54 27 715.5 25.51 349.27 107.07 14 55 21 5763.30 22.42 272.46 91.19 114.45 16 31 24 5163.3 25.52 264.81 107.07 14 55 21 5763.30 22.42 272.46 91.19 114.45 16 31 24 5163.3 25.52 264.81 110.00 13 57 27 653.79 15.77 304.65 87.51 120.73 14 8 21 53.8 19.73 297.77 110.00 16 29 35 5473.03 29.38 253.08 94.21 108.31 18 0 48 4873.0 31.60 244.58 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5608.3 SGR 471.4 SG3 156.4 RRT -.4349 RRF -.4205 RTF .9349 SGB 5628.1 R23 .0128 R13 -.9349 SGI 5612.1 SG2 424.2 THA 177.89 ST 2669.7 SR 469.5 SS 624.6 CRT - .9400 CRS .8623 CST - .9829 LSA 2774.7 MSA 196.3 SSA 18.7 TOF-1.9567 TRA 2.1005 TC3-4.3244 BAU 1.1710 RDE .3687 RRA -.0208 RC3 -.0341 FAU .02032 FDE -.5632 FRA .9692 FC3 -.8687 8SP 17824 BDE 1.9911 BRA 2.1006 BC3 4.3245 FSP -519 EL1 2706.1 EL2 158.1 ALF 170.58

ARRIVAL CATE JAN 19 1968

LAUNCH DATE JUL 13 1967

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HELIOCENTRIC CONIC
                                                                              DISTANCE 552.513
    RL 152.08 LAL -.00 LOL 289.94 VL 25.558 GAL 5.20 AZL 92.68 MCA 274.71 SMA 121.58 ECC .26576 INC 2.6751 V1 29.295
RP 107.99 LAP 2.67 LOP 204.65 VP 36.962 GAP 14.04 AZP 90.22 TAL 165.27 TAP 79.98 RCA 89.27 APO 153.89 V2 35.091
RC 177.448 GL -14.68 GP 7.64 ZAL 59.48 ZAP 170.94 ETS 54.88 ZAE 128.90 ETE 173.86 ZAC 55.16 ETC 9.69 CLP-175.11
   PLANETOCENTRIC CONIC
    C3 21.981 VHL 4.688 DLA -32.29 RAL 224.71 RAD 6567.9 VEL 11.973 PTH 2.13 VHP 8.852 DPA -1.94 RAP 211.32 ECC 1.3618
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    24.73
                                                                                   95.92
                                                                                                    114.61 11 14 22
114.60 16 40 32
        73.79 10 52 24 1317.54
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                                                                     356.68
                                  5800.60
1317.54
5800.60
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                   15 3 52
10 52 24
                                                        21.60
                                                                      274.92
                                                                                       95.93
       106.21
                                                                                                      114.61 11 14 22
114.60 16 40 32
121.51 14 13 43
107.91 18 24 29
                                                                                       95.92
                                                                                                                                        717.5
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                                                                      356.68
                                                        21.59
        73.79
                                                                      274.92
                                                                                       95.93
                                                                                                                                       5200.6
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                                                        21.60
       106.21
                    15 3 52
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                                                                                                                                                                       300.72
                                                                      307.47
                                                                                       91.68
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                                                       14.00
                                      704.06
       110.00
                    14 1 59
                                   5462.07
                                                                                                                                     4862.1
                                                                                                                                                        31.77
                                                                                                                                                                       243.77
                    16 53 27
                                                       29.62
                                                                      252.31
                                                                                       99.38
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          RET - .4428 RRF - .4269 RTF .9367
SGB 3646.0 R23 .0108 R13 - .9368
SGI 5630.1 SG2 424.1 THA 177.85
                                                                                                                                  ST 2573.8 SR 470.5 SS 595.4

CRT -.9245 CRS .8382 CST -.9823

LSA 2675.0 MSA 210.3 SSA 17.9
    TDE-1.9222 TRA 2.4116 TC3-3.9877 BAU 1.1719
    RDE .3848 RRA -.0328 RC3 -.0259 FAU .01867
FDE -.5232 FRA 1.0227 FC3 -.7353 BSP 17861
BDE 1.9603 BRA 2.4118 BC3 3.9877 FSP -502
                                                                                                                                  EL1 2610.5 EL2 176.9 ALF 170.36
                                                                               FLIGHT TIME 192.00
                                                                                                                                               ARRIVAL DATE JAN 21 1968
LAUNCH DATE JUL 13 1967
  HELIOCENTRIC CONIC
                                                                               DISTANCE 557.827
    RL 152.08 LAL -.00 LOL 289.94 VL 25.522 GAL 5.90 AZL 92.57 MCA 277.92 SMA 121.31 ECC .27240 INC 2.5686 VI 29.295 RP 108.03 LAP 2.54 LOP 207.87 VP 36.918 GAP 14.53 AZP 90.35 TAL 163.72 TAP 81.64 RCA 88.27 APO 154.36 V2 35.078 RC 179.325 GL -13.43 GP 7.43 ZAL 56.69 ZAP 171.54 ETS 58.80 ZAE 128.86 ETE 174.01 ZAC 52.90 ETC 9.79 CLP-175.95
   PLANETOCENTRIC CONIC
    C3 24.010 VHL 4.900 DLA -31.82 RAL 228.10 RAD 6568.0 VEL 12.058 PTH 2.16 VHP 9.132 DPA -3.04 RAP 213.42 ECC 1.3951 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   11 12 54 1317.22
15 10 22 5843.91
11 12 54 1317.22
15 10 22 5843.91
14 5 34 787.04
                                                                                                     114.73 11 34 51
114.72 16 47 46
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                                                        20.69
                                                                      356.21
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        74.83
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                                                                                                                                       5243.9
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                                                        20.70
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       105.17
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100.60 114.72 16 47 46
95.74 122.22 14 18 15
104.49 107.53 18 47 41
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        74.83
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15 10 22
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       105.17
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                                      757.08
                                                        12.10
                                                                      310.40
       110.00
                    14 5 36
                                                                                                                                      4852.0
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                                                                                                                                                                       243.03
                    17 16 49
                                                                      251.61
       110.00
                                   5452.05
                                                       29.82
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          SCT 5641.4 SCR 474.1 SC3 146.6
RRT -.4518.RRF -.4347 RTF .9389
SCB 5661.3 R23 .0091 R13 -.9390
SCI 5645.5 SC2 422.7 THA 177.81
                                                                                                                                   ST 2477.9 SR 469.9 SS 569.2
CRT -.9067 CRS .8121 CST -.9820
    TOE-1.8840 TRA 2.7352 TC3-3.6512 BAU 1.1720
    RDE .4016 RRA -.0460 RC3 -.0182 FAU .01712
FDE -.4861 FRA 1.0751 FC3 -.6174 BSP 17970
                                                                                                                                  LSA 2575.6 MSA 224.6 SSA 17.1
                                                                                                                                   EL1 2514.4 EL2 195.3 ALF 170.18
    BOE 1.9263 BRA 2.7356 BC3 3.6512 FSP -488
                                                                                                                                              ARRIVAL DATE JAN 23 1968
                                                                               FEIGHT TIME 194.00
LAUNCH DATE JUL 13 1967
                                                                              DISTANCE $63.066
  HELIOCENTRIC CONIC
   RL 152.08 LAL -.QD LOL 289.94 VL 25.477 GAL 6.65 AZL 92.46 MCA 281.13 SMA 121.06 ECC .27962 INC 2.4604 V1 29.295
RP 108.07 LAP 2.41 LOP 211.08 VP 36.874 GAP 15.05 AZP 90.48 TAL 162.18 TAP 83.31 RCA 87.21 APO 154.91 V2 35.065
RC 181.185 GL -12.21 GP 7.23 ZAL 54.04 ZAP 172.09 ETS 63.39 ZAE 128.82 ETE 174.15 ZAC 50.64 ETC 9.94 CLP-176.78
   PLANETOCENTRIC CONIC
    C3 26.385 VHL 5.137 DLA -31.31 RAL 231.30 RAD 6568.1 VEL 12.156 PTH 2.18 VHP 9.433 DPA -4.10 RAP 215.54 ECC 1.4342
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG, INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    INJ AZMYH INJ TIME PO CS1 TIM

114.83 11 55 57 714.2

114.83 11 55 57 714.2

114.81 15 24 51 5.4

122.83 14 22 9 212.0

107.22 19 10 6 4843.7
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                                                       19.72
                                                                                    105.17
                                                                      355.50
        76.05 11 34 3 1314.17
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                                                                      303.14
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       103.95
                    15 14 46
                                      605.42
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                                                                      355.50
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        76.05
                    11 34 3 1314.17
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                                                                      303.14
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811.95
       103.95
                    15 14 46
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       110.00
                                                                      313.36
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                    14 8 37
                                   5443.68
                                                                                                                                                                      242.41
                                                                      251.01
                                                                                      109.52
       110.00
                    17 39 22
                                                       -29.99
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RRT - .4613 RRF - .4434 RTF .9413
SGB 5671.9 R23 .0075 R13 - .9413
SGI 5656.3 SGZ 420.0 THA 177.77
                                                                                                                                  ST 2382.3 SR 467.6 $$ 545.9

CRT -.8862 CRS .7837 CST -.9819

LSA 2476.8 MSA 239.1 SSA 16.3
    TOE-1.8403 TRA 3.0760 TC3-3.3160 BAU 1.1697
    RDE .4186 RRA -.0606 RC3 -.0117 FAU .01563
FDE -.4510 FRA 1.1282 FC3 -.5128 BSP 18065
BDE 1.8873 BRA 3.0765 BC3 3.3161 FSP -474
                                                                                                                                  EL1 2418.4 EL2 213.4 ALF 170.06
                                                                               FLIGHT TIME 196.00
                                                                                                                                               ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUL 13 1967
   HELIOCENTRIC CONIC
                                                                              DISTANCE 568.218
    TELLICENTRIC CONT.

RL 152.08 LAL -.00 LOL 289.94 VL 25.432 GAL 7.44 AZL 92.35 HCA 284.34 SMA 120.81 ECC .28750 INC 2.3499 VI 29.295

RP 108.11 LAP 2.28 LOP 214.29 VP 36.831 GAP 15.61 AZP 90.58 TAL 160.66 TAP 85.00 RCA 86.08 APO 155.54 V2 35.052

RC 183.028 GL -11.04 GP 7.05 TAL 51.52 ZAP 172.56 ETS 68.69 ZAE 128.77 ETE 174.27 ZAC 48.39 ETC 10.14 CLP-177.63
   PLANETOCENTRIC CONIC
    C3 29.159 VHL 5.400 DLA -30.76 RAL 234.31 RAD 6568.2 VEL 12.269 PTH 2.21 VHP 9.757 DPA -5.13 RAP 217.67 ECC 1.4799
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
77.46 11 56 9 1307.25 18.69 354.48 109.66 114.88 12 17 56 707.3 21.89 347.07
                                                                                                     114.88 12 17 56
114.87 15 27 44
        77.46 11 56 9 1307.25
                   15 16 42
                                                        18.70
                                                                      306.91
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       102.54
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        77.46
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                                                                       306.91
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                                      662.14
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                     15 16 42
       102.54
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106.98 19 31 34
                                                                      316.39
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                                                         8.00
                                                                                      103.56
       110.00
                     14 11 5
                                      868.06
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                    18 0 56 5437.37
                                                                      250.57
                                                                                      114.45
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                                                                                                                                                                       241.94
       110.00
                                                        30.12
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2289.4 SR 463.4 SS 525.6
CRT -.8627 CRS .7530 CST -.9820
LSA 2380.7 MSA 253.4 SSA 15.6
     TDE-1.7913 TRA 3.4356 TC3-2.9866 BAU 1.1643
                                                                           SGT 5657.8 SGR 472.2 SG3 137.6
                                                                          RRT -.4712 RRF -.4526 RTF .9439
SGB 5677.5 R23 .0062 R13 -.9439
SGI 5662.2 SG2 416.2 THA 177.74
    ROE .4359 RRA -.0767 RC3 -.0063 FAU .01418
FDE -.4179 FRA 1.1825 FC3 -.4209 BSP 18135
BDE 1.8436 BRA 3.4365 BC3 2.9866 FSP --461
                                                                                                                                   EL1 2324.4 EL2 230.8 ALF 170.00
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FLIGHT TIME 190.00

ARRIVAL DATE JAN 27 1968

LAUNCH CATE JUL 13 1967

DISTANCE 573.271 HELIOCENTRIC CONIC RL 152.08 LAL -.00 LOL 289.94 VL 25.388 GAL 8.28 ATL 92.24 MCA 287.55 SMA 120.56 ECC .29610 INC 2.2364 VI 29.295
RP 108.16 LAP 2.13 LOP 217.50 VP 36.788 GAP 16.21 AZP 90.67 TAL 159.16 TAP 86.71 RCA 84.86 APO 156.26 V2 .35.039
RC 184.853 GL -9.92 GP 6.89 ZAL 49.14 ZAP 172.95 ETS 74.74 ZAE 128.70 ETE 174.39 ZAC 46.14 ETC 10.40 CLP-178.47 PLANETOCENTRIC CONIC C3 32.395 VHL 5.692 OLA -30.17 RAL 237.14 RAO 6568.3 VEL 12.400 PTH 2.24 VHP 10.108 OPA -6.12 RAP 219.80 ECC 1.5331 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.91 12 41 10 114.90 15 27 55 114.91 12 41 10 114.90 15 27 55 123.74 14 28 33 106.83 19 51 58 114.04 79.11 12 19 35 1295.07 17.61 353.04 695.1 20.82 345.69 100.89 15 15 48 727.17 17.62 311.24 114.05 127.2 20.83 303.90 345.69 79.11 12 19 35 1295.07 17.61 353.04 114.04 695.1 20.82 100.89 15 15 48 727.17 17.62 311.24 114.05 127.2 20.83 303.90 110.00 14 13 8 924.95 5.86 319.40 107.32 325.0 10.25 313.06 18 21 25 5433.32 30.20 250.28 119.28 4833.3 32.21 241.64 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 5658.4 SCR 469.2 SC3 133.4 RRT -.4810 RRF -.4619 RTF .9464 SCB 5677.8 R23 .0049 R13 -.9464 SCI 5662.9 SC2 411.1 THA 177.70 ST 2199.5 SR 457.4 SS 507.9 CRT -.8356 CRS .7191 CST -.9822 TDE-1.7349 TRA 3.8188 TC3-2.6637 BAU 1.1536 RDE .4531 RRA -.0944 RC3 -.0024 FAU .01269 FDE -.3855 FRA 1.2398 FC3 -.3393 BSP 18111 BDE 1.7931 BRA 3.8199 BC3 2.6637 FSP -445 LSA 2287.6 MSA 267.4 SSA 14.9 EL1 2232.9 EL2 247.5 ALF 170.02 FLIGHT TIME 200.00 ARRIVAL DATE JAN 29 1968 HELIOCENTRIC CONIC DISTANCE 578.207 RL 152.08 LAL -.00 LOL 289.94 VL 25.345 GAL 9.18 AZL 92.12 MCA 290.75 SMA 120.32 ECC .30552 INC 2.1187 VI 29.295 RP 108.20 LAP 1.98 LOP 220.70 VP 36.746 GAP 16.85 AZP 90.75 TAL 157.70 TAP 88.45 RCA 83.56 APO 157.08 V2 35.025 RC 186.660 GL -8.85 GP 6.74 ZAL 46.89 ZAP 173.23 ETS 81.50 ZAE 128.62 ETE 174.49 ZAC 43.91 ETC 10.73 CLP-179.33 PLANETOCENTRIC CONIC C3 36.169 VML 6.014 DLA -29.57 RAL 239.77 RAD 6568.4 VEL 12.551 PTH 2.27 VMP 10.488 DPA -7.08 RAP 221.95 ECC 1.5952 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.90 13 6 29 114.89 15 24 32 117.10 14 57 41 112.76 16 7 16 124.01 14 31 11 106.76 20 11 16 12 45 14 1274.48 16.49 350.96 118.31 674.5 19.71 81.10 15 11 9 803.37 16.50 316.36 203.4 309.07 98,90 118.32 19.72 100.00 14 42 41 15 56 17 14 42 47 894.10 13.13 321.39 294.1 314.38 116.62 16.66 100.00 658.98 19.92 307.24 119.91 59.0 299.65 22.83 110.00 14 14 48 982.29 3.69 322.41 382.3 111.00 8.12 316.14 123.99 18 40 45 5431.59 4831.6 110.00 30.24 250.15 32.23 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5655.1 SCR 465.2 SC3 129.3 RRT -.4914 RRF -.4722 RTF .9494 SCB 5674.2 R23 .0038 R13 -.9494 SCI 5659.7 SC2 404.8 THA 177.67 ST 2119.0 SR 449.9 SS 494.2 CRT -.8066 CRS .6860 CST -.9830 TDE-1.6796 TRA 4.2193 TC3-2.3600 BAU 1.1412 ROE .4706 RRA -.1131 RC3 .0007 FAU .01133 FOE -.3570 FRA 1.2972 FC3 -.2711 BSP 18178 LSA 2204.2 MSA 279.6 SSA 14.3 BOE 1.7443 BRA 4.2209 BC3 2.3600 FSP -433 EL1 2150.4 EL2 262.0 ALF 170.13 ARRIVAL DATE JAN 31 1968 LAUNCH DATE JUL 13 1967 FLIGHT TIME 202.00 HELIOCENTRIC CONIC **DISTANCE 583.008** RL 152.08 LAL -.00 LOL 289.94 VL 25.302 GAL 10.14 AZL 92.00 HCA 293.95 SMA 120.09 ECC .31585 INC 1.9961 V1 29.295 RP 108.24 LAP 1.82 LOP 223.91 VP 36.704 GAP 17.55 AZP 90.81 TAL 156.26 TAP 90.22 RCA 82.16 APO 158.02 V2 35.012 RC 188.449 GL -7.83 GP 6.60 ZAL 44.80 ZAP 173.40 ETS 88.87 ZAE 128.51 ETE 174.59 ZAC 41.69 ETC 11.12 CLP 179.80 PLANETOCENTRIC CONIC C3 40.574 VHL 6.370 DLA -28.96 RAL 242.22 RAD 6568.6 VEL 12.726 PTH 2.31 VHP 10.901 DPA -8.00 RAP 224.10 ECC 1.6677 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.86 13 36 4 114.85 15 15 26 118.46 14 43 20 111.46 16 42 6 124.15 14 33 30 106.79 20 29 27 340.47 637.9 18.57 83.68 13 15 26 1237.87 15.34 347.71 122.47 298.0 15 0 28 898.05 15.36 322.80 122.48 18.58 315.56 407.1 321.06 14 26 33 1007.11 9.54 327.86 119.49 13.27 16 32 2 604.04 21.33 303.77 125.17 4.0 24.05 296.03 14 16 10 1039.81 18 58 55 5432.15 110.00 1.49 325.42 114.58 439.8 5.96 319.19 4832.1 32.22 30.22 250.19 128.59 241.55 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT - 5018 RRF - 4828 RTF . 9525 SGB 5666.6 R23 .0029 R13 - .9525 SGI 5652.7 SGZ 397.4 THA 177.65 ST 2045.8 SR 440.9 SS 483.6 TOE-1.6214 TRA 4.6446 TC3-2.0730 BAU 1.1245 RDE .4880 RRA -.1332 RC3 .0028 FAU .00998 FDE -.3303 FRA 1.3575 FC3 -.2129 BSP 18182 CRT - .7751 CRS .6521 CST - .9841 LSA 2128.2 MSA 290.0 SSA 13.7 BDE 1.6933 BRA 4.6465 BC3 2.0730 FSP -421 EL1 2074.6 EL2 274.7 ALF 170.35 LAUNCH DATE JUL 13 1967 FLIGHT TIME 204.00 ARRIVAL DATE FEB 2 1968 HELIOCENTRIC CONIC DISTANCE 587.648 RL 152.08 LAL -.00 LOL 289.94 VL 25.261 GAL 11.17 AZL 91.87 HCA 297.15 SMA 119.86 ECC .32721 INC 1.8674 V1 29.295 RP 108.28 LAP 1.66 LOP 227.11 VP 36.662 GAP 18.31 AZP 90.85 TAL 154.87 TAP 92.03 RCA 80.64 APO 159.08 VZ 34.999 RC 190.221.GL -6.86 GP 6.47 ZAL 42.84 ZAP 173.44 ETS 96.63 ZAE 128.39 ETE 174.69 ZAC 39.49 ETC 11.59 CLP 178.91 PLANETOCENTRIC CONIC C3 45.724 VHL 6.762 DLA -28.34 RAL 244.48 RAD 6568.7 VEL 12.926 PTH 2.36 VHP 11.353 DPA -8.88 RAP 226.25 ECC 1.7525 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 88.94 14 7 58 1127.28 14.18 339.04 126.52 114.79 14 26 46 527.3 17.41 331.65 91.06 14 26 0 1068.85 14.20 334.78 126.53 114.78 14 43 49 468.9 17.42 327.58 100.00 14 17 27 1096.51 6.60 332.87 122.60 119.22 14 35 44 496.5 10.45 326.19 100.00 16 59 12 5862.89 22.04 279.80 129.98 110.72 18 36 55 5262.9 24.66 271.98 110.00 14 17 13 1097.28 -.71 328.41 118.08 124.18 14 35 30 497.3 3.78 322.21 110.00 19 15 56 5434.89 30.17 250.39 133.06 106.89 20 46 31 4834.9 32.18 241.75 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY 9GT 5635.1 SGR 453.2 9G3 121.8 RRT -.5122 RRF -.4936 RTF .9557 SGB 5653.2 R23 .0021 R13 -.9557 TDE-1.5612 TRA 5.0956 TC3-1.8024 BAU 1.1018 ST 1980.1 SR 430.4 SS 476.1 CRT -.7415 CRS .6186 CST -.9855 LSA 2060.0 MSA 298.4 SSA 13.1 RDE .5033 RRA -.1544 RC3 .0039 FAU .00864 FDE -.3058 FRA 1.4208 FC3 -.1636 BSP 18252 BDE 1.6409 BRA 5.0979 BC3 1.8024 FSP -409 EL1 2006.2 EL2 285.1 ALF 170.65 SG1 5639.9 SG2 388.9 THA 177.63

FLIGHT TIME 198.00

ARRIVAL DATE FEB 4 1968

LAUNCH DATE JUL 13 1967

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HELIOCENTRIC CONIC
                                                                                   DISTANCE 592:099
    RL 152.08 LAL -.00 LOL 289.94 VL 25.220 GAL 12.28 AZL 91.73 HCA 300.35 SHA 119.64 ECC .33973 INC 1.7311 V1 29.295
RP 108.32 LAP 1.49 LOP 230.30 VP 36.622 GAP 19.13 AZP 90.88 TAL 153.53 TAP 93.88 RCA 78.99 APO 160.28 V2 34.986
RC 191.975 GL -5.94 GP 6.36 ZAL 41.03 ZAP 173.34 ETS 104.49 ZAE 128.23 ETE 174.77 ZAC 37.33 ETC 12.15 CLP 178.00
   PLANETOCENTRIC CONIC
    C3 51.763 VHL 7.195 DLA -27.71 RAL 246.57 RAD 6568.9 VEL 13.158 PTH 2.40 VHP 11.849 DPA -9.72 RAP 228.39 ECC 1.8519
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         117.18 13 55 33 112.32 15 32 42 119.66 14 30 39 110.26 18 59 41 124.08 14 37 13 107.07 21 2 29
                                                                                       128.09
                                                                                                                                                             11.83
                                                                                                                                                                              341.58
                                                           B.25
                                                                                                                                                 696.2
         90.00 13 33 57 1296.15
                                                                          348.43
                                                                           328.64
                                                                                          132.64
                                                                                                                                                 362.0
                                                                                                                                                                  20.76
                                                                                                                                                                                 321.14
         90.00
                      15 16 40
                                        961.96
                                                           17.89
                    15 16 40 961.96
14 11 2 1176.27
                                                            3.93
                                                                           337.29
                                                                                         125.74
                                                                                                                                                 576.3
                                                                                                                                                                   7.85
                                                                                                                                                                                 330.69
       100.00
                     17 22 16 5845.11
14 17 58 1154.50
19 31 49 5439.65
                                                                           278.65
                                                                                          134.54
                                                                                                                                                5245.1
                                                                                                                                                                  25.02
                                                                                                                                                                                 270.78
                                                          22.46
       100.00
                                                                                                                                                554.5
                                                                                                                                                                   1.60
                                                                                                                                                                                 324 20
                                                           -2.89
                                                                           331.40
                                                                                         121.50
       110.00
                                                                                                                                               4839.6
                                                                                                                                                                 32.11
                                                                                                                                                                                 242.11
                                                          30.08
                                                                          250.73
                                                                                           137.40
       110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RRT - .5223 RRF - .5043 RTF . .9591
SGB 5636.8 R23 .0013 R13 - .9591
SGI 5624.0 SG2 379.3 THA 177.62
                                                                                                                                          ST 1921.5 SR 418.5 SS 471.3

CRT -.7055 CRS .5844 CST -.9870

LSA 1999.2 MSA 304.7 SSA 12.5

EL1 1944.6 EL2 293.1 ALF 171.06
    TOE-1.4964 TRA 5.5801 TC3-1.5475 BAU 1.0709
    ROE .5221 RRA -.1768 RC3 .0040 FAU .00725
FOE -.2822 FRA 1.4890 FC3 -.1213 BSP 18174
BOE 1.5849 BRA 5.5829 BC3 1.5475 FSP -395
                                                                                                                                                        ARRIVAL DATE FEB 6 1968
                                                                                    FLIGHT TIME 208.00
LAUNCH DATE JUL 13 1967
                                                                                   DISTANCE 596.321
  HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 25.180 GAL 13.47 A7L 91.59 MCA 303.54 SMA 119.42 ECC .35357 INC 1.5858 V1 29.295
RP 108.36 LAP 1.32 LOP 233.49 VP 36.582 GAP 20.04 A7P 90.88 TAL 152.25 TAP 95.79 RCA 77.20 APO 161.64 V2 34.973
RC 193.712 GL -5.07 GP 6.25 ZAL 39.36 ZAP 173.10 ETS 112.18 ZAE 128.04 ETE 174.86 ZAC 35.19 ETC 12.80 CLP 177.06
   PLANETOCENTRIC CONIC
    C3 58:865 VHL 7.672 DLA -27.09 RAL 248.48 RAO 6569.1 VEL 13.425 PTH 2.45 VMP 12.394 DPA -10.53 RAP 230.52 ECC 1.9688 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 45 58 922.17 18.90 326.15 137.34 111.49 16 1 20 322.2 21.65 318.56 100.00 14 6 0 1250.34 1.43 341.36 128.85 119.86 14 26 50 650.3 5.39 334.81 10.00 17 42 32 5834.41 22.72 277.95 138.88 109.97 19 19 47 5234.4 25.23 270.06 110.00 14 18 26 1211.29 -5.05 334.38 124.83 123.85 14 38 37 611.3 -.57 328.16 110.00 19 46 36 5446.22 29.94 251.19 141.60 107.32 21 17 22 4846.2 32.02 242.60
    C3 58.865 VHL 7.672 DLA -27.09 RAL 248.48 RAD 6569.1 VEL 13.425 PTH
                                                                                                                  2.45 VHP 12.394 OPA -10.53 RAP 230.52 ECC 1.9688
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT -.5325 RRF -.5154 RTF .9627
SGB 5615.4 R23 .0006 R13 -.9627
SGB 5603.3 SG2 368.7 THA 177.61
                                                                                                                                           ST 1872.0 SR 405.6 SS 469.8
CRT -.6700 CRS .5535 CST -.9888
    TDE-1.4359 TRA 6.0929 TC3-1.3151 BAU 1.0349
    ROE .5390 RRA -.1999 RC3 .0037 FAU .00592
FOE -.2620 FRA 1.5602 FC3 -.0871 BSP 18192
                                                                                                                                          LSA 1948.0 MSA 307.8 SSA 12.0
                                                                                                                                           EL1 1892.1 EL2 297.9 ALF 171.53
    BOE 1.5337 BRA 6.0962 BC3 1.3151 FSP -384
                                                                                                                                                      ARRIVAL DATE FEB 8 1968
                                                                                   FLIGHT TIME 210.00
LAUNCH DATE JUL 13 1967
                                                                                   DISTANCE 600.268
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 25.141 GAL 14.78 AZL 91.43 MCA 306.74 SMA 119.21 ECC .36893 INC 1.4293 V1 29.295
RP 108.40 LAP 1.15 LOP 236.68 VP 36.543 GAP 21.04 AZP 90.86 TAL 151.04 TAP 97.78 RCA 75.23 APO 163.19 V2 34.960
RC 195.431 GL -4.24 GP 6.15 ZAL 37.83 ZAP 172.71 ETS 119.42 ZAE 127.82 ETE 174.95 ZAC 33.10 ETC 13.56 CLP 176.09
   PLANETOCENTRIC CONIC
    C3 67.254 VML 8.201 OLA -26.48 RAL 250.22 RAD 6569.3 VEL 13.733 PTH 2.51 VHP 12.998 DPA -11.29 RAP 232.64 ECC 2.1068
    LNCH AZHTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           118.24 13 35 11
110.99 16 24 18
119.88 14 23 44
109.82 19 37 49
                                                                                                                                                886.1
299.7
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141.68
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         90.00 13 10 25 1486.14
                                                           2.21
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                                                                          324.74
         90.00
                      16 9 18
                                       899.66
                                                           19.45
                                                                                                                                                 720.4
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       100.00 14 1 44 1320.40
100.00 18 0 40 5828.68
                                                           -.95
                                                                          345.20
                                                                                          131.92
                                                                                         143.03
                                                          22.85
                                                                          277.58
                                                                                                                                               5228.7
                                                                                                                                                                 25.34
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                                                                                                             123.51 14 39 43
107.62 21 31 12
                     14 18 36 1267.47
20 0 17 5454.37
                                                                          337.34
                                                                                          128.07
                                                                                                                                                667.5
                                                                                                                                                                 -2.72
                                                                                                                                                                                 331.09
                                                           -7.18
       110.00
                                                                                                                                                              31.89
                                                                                           145.65
                                                                                                                                             4854.4
                                                                                                                                                                                 243.20
                                                                          251.77
       110.00
                                                          29.78
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RIT -- 5424 RRF -- 3264 RTF -- 9663
SGB 5589.7 R23 .0001 R13 -- 9663
SGI 5578.3 SGZ 357.2 THA 177.62
                                                                                                                                           ST 1829.0 SR 391.6 SS 471.0
    TOE-1.3752 TRA 6.6426 TC3-1.1007 BAU .9897
                                                                                                                                          CRT -.6343 CRS .5243 CST -.9906
LSA 1904.0 MSA 308.3 SSA 11.4
    ROE .5554 RRA -.2236 RC3 .0029 FAU .00455
FOE -.2436 FRA 1.6370 FC3 -.0586 BSP 18190
BOE 1.4831 BRA 6.6463 BC3 1.1007 FSP -374
                                                                                                                                          EL1 1846.3 EL2 299.9 ALF 172.06
                                                                                    FLIGHT TIME 212.00
                                                                                                                                                        ARRIVAL DATE FEB 10 1968
LAUNCH DATE JUL 13 1967
                                                                                   DISTANCE 603.880
   HELIOCENTRIC CONIC
    RL 152.08 LAL -.00 LOL 289.94 VL 25.104 GAL 16.20 AZL 91.26 MCA 309.92 SMA 119.01 ECC .38601 INC 1.2595 V1 29.295
RP 108.44 LAP .97 LOP 239.87 VP 36.505 GAP 22.16 AZP 90.81 TAL 149.93 TAP 99.85 RCA 73.07 APO 164.95 V2 34.947
RC 197.134 GL -3.46 GP 6.06 ZAL 36.45 ZAP 172.20 ETS 126.07 ZAE 127.54 ETE 175.04 ZAC 31.06 ETC 14.44 CLP 175.07
   PLANETOCENTRIC CONIC
    C3 77.210 VHL 8.787 DLA -25.87 RAL 251.78 RAD 6569.5 VEL 14.091 PTH 2.57 VHP 13.669 DPA -12.00 RAP 234.72 ECC 2.2707
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 3 2 1564.47 -.31 3.50 136.52 118.32 13 29 6 964.5 3.47 356.87
                                                                                                           118.32 13 29 6
110.68 16 43 56
                     16 29 10 886.18
13 57 54 1387.29
                                                                           323.88
                                                                                           145.75
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                                                           19.78
         90.00
                    16 29 10
                                                                                                             119.74 14 21 1
109.76 19 54 6
123.06 14 40 29
107.97 21 44 0
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                                                                                          134.91
                                                           -3.21
                                                                           348.88
        100.00
                                                                                                                                                5226.6
                                                                                                                                                                  25.38
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                                                                           277.44
                                                                                           146.98
                                                           22.90
                     18 16 59 5826.63
        100.00
                                                                                                                                                722.9
                                                                                                                                                                  -4.83
                                                                                                                                                                                 333.99
                                                           -9.25
                                                                           340.30
                                                                                           131.21
                    14 18 26 1322.85
20 12 56 5463.83
       110.00
                                                           29.58
                                                                           252.44
                                                                                           149.52
                                                                                                                                                4863.8
                                                                                                                                                                  31.75
                                                                                                                                                                                 243.90
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5544.3 SGR 413.7 SG3 108.6
RRT -.5519 RRF -.5371 RTF .9700
                                                                                                                                          ST 1792.1 SR 376.6 SS 475.0
CRT -.5995 CRS .4974 CST -.9923
LSA 1866.8 MSA 306.1 SSA 10.9
     TOE-1.3159 TRA 7.2332 TC3 -.9044 BAU .9335
     RDE .5715 RRA -.2479 RC3 .0017 FAU .00312
FDE -.2271 FRA 1.7202 FC3 -.0349 BSP 18172
BOE 1.4347 BRA 7.2375 BC3 .9044 FSP -363
                                                                              568 5559.7 R23 -.0004 R13 -.9700
                                                                                                                                           ELI 1806.6 EL2 299.0 ALF 172.62
                                                                              5G1 5549.0 SG2 344.7 THA 177.63
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FLIGHT TIME 206.00

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ARRIVAL DATE FEB 12 1968
                                                                                               FLIGHT TIME 214.00
LAUNCH DATE JUL 13 1967
                                                                                               DISTANCE 607.083
    HELFOCENTRIC CONIC
      RL 152.08 LAL -.00 LOL 289.94 VL 25.068 GAL 17.76 AZL 91.07 MCA 313.11 SMA 118.82 ECC .40507 INC 1.0732 V1 29.295 RP 108.48 LAP .78 LOP 243.06 VP 36.468 GAP 23.40 AZP 90.73 TAL 148.92 TAP 102.03 RCA 70.69 APO 166.95 V2 34.935 RC 198.819 GL -2.72 GP 5.97 ZAL 35.23 ZAP 171.54 ETS 132.05 ZAE 127.21 ETE 175.13 ZAC 29.08 ETC 15.45 CLP 174.00
    PLANETOCENTRIC CONIC
      C3 89.095 VHL 9.439 OLA -25.28 RAL 253.17 RAD 6569.7 VEL 14.507 PTH 2.63 VMP 14.419 OPA -12.68 RAP 236.77 ECC 2.4663
     C3 89.095 VHL 9.439 OLA -25.28 RAL 253.17 RAD 6569.7 VEL 14.507 PTH 2.63 VHP 14.419 OPA -12.68 RAP 236.77 ECC 2.4665 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 46 32 878.40 19.97 323.39 149.57 110.51 17 1 10 278.4 22.58 315.69 100.00 13 54 16 1451.45 -5.37 352.42 137.84 119.45 14 18 27 851.5 -1.41 345.87 100.00 18 31 43 5827.35 22.88 277.49 150.72 109.78 20 8 50 5227.3 25.37 269.58 110.00 14 17 55 1377.26 -11.25 343.23 134.25 122.49 14 40 52 777.3 -6.88 336.86 110.00 20 24 33 547.31 29.36 253.17 153.21 108.35 21 55 47 4874.3 31.56 244.67
                                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5512.7 SGR 400.6 SG3 105.7
RRT -.5607 RRF -.5472 RTF .9736
SGB 5527.2 R23 -.0008 R13 -.9736
                                                                                                                                                             ST 1759.7 SR 360.6 SS 481.9

CRT -.5648 CRS .4715 CST -.9938

LSA 1835.2 MSA 301.5 SSA 10.4
      TOE-1.2546 TRA 7.8749 TC3 -.7235 BAU .8618
     ROE .5871 RRA -.2724 RC3 .0001 FAU .00154
FOE -.2115 FRA 1.8120 FC3 -.0150 8SP 18043
BOE 1.3852 BRA 7.8796 BC3 .7235 FSP -351
                                                                                          SG1 5517.3 SG2 331.4 THA 177.66
                                                                                                                                                             ELI 1771.8 ELZ 295.5 ALF 173.21
                                                                                                                                                                            ARRIVAL DATE FEB 14 1968
LAUNCH DATE JUL 13 1967
                                                                                               FLIGHT TIME 216,00
    HELIOCENTRIC CONIC
                                                                                               DISTANCE 609.776
     RL 152.08 LAL -.00 LOL 289.94 VL 25.033 GAL 19.48 AZL 90.87 MCA 316.29 SMA 118.63 ECC .42642 INC .8664 V1 29.295
RP 108.51 LAP .60 LOP 246.24 VP 36.433 GAP 24.79 AZP 90.63 TAL 148.03 TAP 104.33 RCA 68.05 APO 169.22 V2 34.923
RC 200.487 GL -2.01 GP 5.89 ZAL 34.16 ZAP 170.76 ETS 137.36 ZAE 126.81 ETE 175.22 ZAC 27.18 ETC 16.61 CLP 172.87
    PLANETOCENTRIC CONIC
     C3 103.373 VH 10.167 OLA -24.69 RAL 254.38 RAD 6570.0 VEL 14.990 PTH 2.70 VHP 15.260 DPA -13.30 RAP 238.77 ECC 2.7013 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 51 5 1705.43 -4.84 11.38 142.00 117.93 13 19 31 1105.4 -1.07 4.74 90.00 17 1 52 874.52 20.06 323.14 153.15 110.41 17 16 27 274.5 22.66 315.43
                                                                                                                         117.93 13 19 31
110.41 17 16 27
119.04 14 15 53
109.86 20 22 9
                         13 50 40 1513.11
18 44 59 5830.11
         100.00
                                                                    -7.42
                                                                                                        140.59
                                                                                                                                                                     913.1
                                                                                     355.84
                                                                                                                                                                                        -3.49
                                                                                                                                                                                                          349.26
                        18 44 59
         100.00
                                                                   22.81
                                                                                                                                                                                        25.31
                                                                                     277.67
                                                                                                        154.24
                                                                                                                                                                   5230.1
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                                                                                                                            121.83 14 40 51
108.76 22 6 33
                          14 17 0
         110.00
                                             1430.48
                                                                 -13.18
                                                                                     346.15
                                                                                                        137.16
                                                                                                                                                                    830.5
                                                                                                                                                                                        -8.88
                                                                                                                                                                                                          339.70
                         20 35 8
         110.00
                                             5485.50
                                                                                    253.95
                                                                                                                                                                   4885.5
                                                                                                                                                                                        31.39
                                                                 29.11
                                                                                                       156.69
                                                                                                                                                                                                          245.49
                                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     TOE-1.2017 TRA 8.5641 TC3 -.5618 BAU .7764
                                                                                         SGT 5475.2 SGR 386.1 SG3 102.9
RRT -.5689 RRF -.5568 RTF .9771
SGB 5488.8 R23 -.0012 R13 -.9771
                                                                                                                                                             ST 1731.8 SR 344.0 SS 491.7
CRT -.5335 CRS .4499 CST -.9952
     RDE .6026 RRA -.2964 RC3 -.0015 FAU-.00012
FDE -.1992 FRA 1.9115 FC3 .0010 85P 18016
BDE 1.3443 BRA 8.5692 BC3 .5618 FSP -342
                                                                                                                                                             LSA 1809.0 MSA 294.3 SSA 9.8
                                                                                          SG1 5479.7 SG2 317.3 THA 177.69
                                                                                                                                                             EL1 1741.8 EL2 289.3 ALF 173.78
                                                                                                                                                                           ARRIVAL DATE FEB 16 1968
LAUNCH DATE JUL 13 1967
                                                                                               FLIGHT TIME 218.00
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 611.835
     RL 152.08 LAL -.00 LOL 289.94 VL 25.001 GAL 21.39 AZL 90.63 MCA 319.48 SMA 118.46 ECC .45041 INC .6342 V1 29.295 RP 108.55 LAP .41 LOP 249.42 VP 36.399 GAP 26.37 AZP 90.48 TAL 147.31 TAP 106.79 RCA 65.11 APO 171.82 VZ 34.911
     RC 202.138 GL -1.35 GP 5.81 ZAL 33.26 ZAP 169.84 ETS 142.05 ZAE 126.33 ETE 175.32 ZAC 25.37 ETC 17.91 CLP 171.66
    PLANETOCENTRIC CONIC
     C3 120.652 VHL 10.984 DLA -24.12 RAL 255.41 RAD 6570.3 VEL 15.556 PTH 2.77 VHP 16.211 DPA -13.88 RAP 240.70 ECC 2.9856
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         117.53 13 15 12
110.39 17 30 1
118.52 14 13 9
109.97 20 34 8
121.07 14 40 21
109.17 22 16 18
                         12 45 42 1770.06
                                                                                                                                                              1170.1
                                                                                                                                                                                    -3.15
           90.00
                                                                   -6.89
                                                                                     15.03
                                                                                                    144.56
                                                                                                                                                                                                           8.34
          90.00
                         17 15 2A
                                              873.31
                                                                   20.09
                                                                                     323.06
                                                                                                       156.48
                                                                                                                                                                   273.3
                                                                                                                                                                                       22.68
                                                                                                                                                                                                         315.35
                       17 15 28 675.31
13 46 57 1572.34
18 56 54 5834.31
14 15 39 1482.34
20 44 41 5497.08
         100.00
                                                                   -9.37
                                                                                    359.17
                                                                                                       143.23
                                                                                                                                                                    972.3
                                                                                                                                                                                       -5.49
                                                                                                                                                                                                         352.53
         100.00
                                                                   22.72
                                                                                     277.95
                                                                                                       157.51
                                                                                                                                                                  5234.3
                                                                                                                                                                                     25.23
                                                                                                                                                                                                         270.05
                                                                                                                                                                                  -10.80
         110.00
                                                                  -15.02
                                                                                     349.04
                                                                                                       139.92
                                                                                                                                                                   882.3
                                                                                                                                                                                                         342.49
         110.00
                                                                28.86
                                                                                    254.76
                                                                                                       159.94
                                                                                                                                                                   4897.1
                                                                                                                                                                                      31.20
                                                                                                                                                                                                         246.33
                                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5433.7 SGR 370.4 SG3 100.2
RRT -.5760 RRF -.5654 RTF .9805
SGB 5446.4 R23 -.0015 R13 -.9805
                                                                                                                                                             ST 1706.6 SR 326.8 SS 504.7

CRT -.5044 CRS .4307 CST -.9963

LSA 1786.9 NSA 285.0 SSA 9.3
     TOE-1.1536 TRA 9.3132 TC3 -.4156 BAU .6703
     RDE .6177 RRA -.3195 RC3 -.0032 FAU-.00198
FDE -.1888 FRA 2.0218 FC3 .0142 BSP 17968
                                                                                         SG1 5437.9 SG2 302.6 THA 177.74
     BDE 1.3086 BRA 9.3187 BC3 .4156 FSP -333
                                                                                                                                                             ELI 1714.8 EL2 280.9 ALF 174.33
LAUNCH DATE JUL 13 1967
                                                                                               FLIGHT TIME 220.00
                                                                                                                                                                            ARRIVAL DATE FEB 18 1968
   HELIOCENTRIC CONIC
                                                                                              DISTANCE 613.093
    RL 152.08 LAL -.00 LOL 289.94 VL 24.970 GAL 23.53 AZL 90.37 HCA 322.65 SMA 118.30 ECC .47744 INC .3701 V1 29.295 RP 108.59 LAP .22 LOP 252.60 VP 36.367 GAP 28.16 AZP 90.29 TAL 146.78 TAP 109.44 RCA 61.82 APO 174.78 V2 34.899 RC 203.771 GL -.71 GP 5.74 ZAL 32.54 ZAP 168.79 ETS 146.20 ZAE 125.76 ETE 175.43 ZAC 23.66 ETC 19.38 CLP 170.35
   PLANETOCENTRIC CONIC
     C3 141.729 VHL 11.905 DLA -23.56 RAL 256.24 RAD 6570.5 VEL 16.219 PTH 2.85 VHP 17.290 DPA -14.41 RAP 242.55 ECC 3.3325
    C3 141.729 VHL 11.905 OLA -23.56 RAL 256.24 RAO 6570.5 VEL 16.219 PTH 2.85 VMP 17.290 OPA -14.41 RAP 242.55 ELC 3.3325 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 40 19 1831.38 -8.81 18.52 146.96 117.02 13 10 51 1231.4 -5.11 11.78 90.00 17 27 27 873.88 20.08 323.10 159.52 110.40 17 42 1 273.9 22.67 315.39 100.00 13 42 58 1629.15 -11.19 2.40 145.70 117.90 14 10 8 1029.1 -7.37 355.69 100.00 19 7 29 5839.39 22.60 278.28 160.52 110.10 20 44 48 5239.4 25.13 .270.39 110.00 14 13 46 1532.60 -16.77 351.89 142.51 120.23 14 39 18 932.6 -12.63 345.23 110.00 20 53 11 5508.70 28.60 255.56 162.92 109.58 22 25 0 4908.7 30.99 247.18
    DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5387.8 SGR 353.4 SG3 97.7
RRT - .5817 RRF - .5725 RTF .9837
SGB 5399.4 R23 - .0017 R13 - .9837
                                                                                                                                                           ST 1683.1 SR 309.2 SS 521.1

CRT -.4781 CRS .4140 CST -.9973

LSA 1767.8 MSA 273.8 SSA 8.7

EL1 1689.8 EL2 270.5 ALF 174.85
     TDE-1.1130 TRAID.1294 TC3 -.2844 BAU .5390
     RDE .6326 RRA -.3410 RC3 -.0048 FAU-.00413
    FOE -.1809 FRA 2.1448 FC3 .0252 BSP 17907
BOE 1.2802 BRA10.1351 BC3 .2845 FSP -325
                                                                                         SG1 5391.8 SG2 287.2 THA 177.81
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ARRIVAL DATE SEP 22 1967

LAUNCH DATE JUL 14 1967

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DISTANCE 185.656
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 26.654 GAL -9.93 AZL 93.08 HCA 81.68 SMA 128.23 ECC .25158 INC 3.0791 V1 29.297

RP 108.56 LAP -3.05 LOP 12.56 VP 37.551 GAP -11.64 AZP 90.45 TAL 213.35 TAP 295.03 RCA 95.97 APO 160.49 V2 34.908

RC 52.722 GL -14.45 GP -9.32 ZAL 143.17 ZAP 16.84 ETS 32.11 ZAE 149.53 ETE 2.20 ZAC 89.38 ETC 13.81 CLP -14.09
   PLANETOCENTRIC CONIC
    C3 31.937 VHL 5.651 DLA -.50 RAL 142.62 RAD 6568.3 VEL 12.382 PTH 2.24 VHP 7.699 DPA -4.84 RAP 176.08 ECC 1.5256
LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 31 25 2314.01 -21.85 47.88 11.64 108.47 2 9 59 1714.0 -19.13 40.27
90.00 13 22 1 4989.09 22.51 218.87 11.95 72.35 14 45 10 4389.1 19.88 211.18
100.00 2 52 31 2052.38 -23.04 28.20 11.20 109.59 3 26 44 1452.4 -20.15 20.59
100.00 14 43 36 4725.96 23.70 199.10 11.53 71.23 16 2 22 4126.0 20.92 191.41
110.00 4 0 14 1840.43 -26.22 10.75 9.84 112.76 4 30 54 1240.4 -22.91 3.16
110.00 15 52 23 4510.67 26.90 181.44 10.21 68.07 17 7 33 3910.7 23.68 173.76
     C3 31.937 VHL 5.651 DLA -.50 RAL 142.62 RAD 6568.3 VEL 12.382 PTH 2.24 VHP 7.699 DPA -4.84 RAP 176.08 ECC 1.5256
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 621.7 SGR 427.9 SG3 123.3
RRT -1954 RRF .2650 RTF -.6049
SGB 754.7 R23 -.0538 R13 .6208
SGI 631.6 SG2 413.0 THA 166.46
                                                                                                                                                        ST 265.0 SR 396.9 SS 147.9

CRT -.8830 CRS -.8277 CST .4926

LSA 478.7 MSA 140.4 SSA 26.0
    TOE .2443 TRA -.3056 TC3 .4235 BAU .1809
     RDE -.3883 RRA -.1650 RC3 -.0116 FAU .04368
    FOE -.1653 FRA -.4620 FC3-1.1840 BSP 1618
BOE -.4588 BRA .3473 BC3 .4236 FSP -311
                                                                                                                                                         EL1 465.2 EL2 106.1 ALF 122.41
     BOE .4588 BRA .3473 BC3 .4236 FSP
                                                                                                                                                                        ARRIVAL DATE SEP 24 1967
                                                                                            FLIGHT TIME 72.00
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 192.456
    RL 152.07 LAL -.00 LOL 290.89 VL 26.811 GAL -9.86 AZL 92.97 HCA 84.86 SMA 129.28 ECC .24388 INC 2.9708 V1 29.297 RP 108.52 LAP -2.96 LOP 15.75 VP 37.673 GAP -10.72 AZP 90.27 TAL 214.72 TAP 299.58 RCA 97.75 APO 160.80 V2 34.920 RC 54.330 GL -14.29 GP -9.95 ZAL 144.49 ZAP 19.62 ETS 28.76 ZAE 149.46 ETE .41 ZAC 89.27 ETC 13.85 CLP -16.99
   PLANETOCENTRIC CONIC
                                                      .09 RAL 141.40 RAD 6568.2 VEL 12.335 PTH
                                                                                                                             2.22 VHP 7.211 DPA
     C3 30.770 VHL 5.547 OLA
    LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          2 0 55
                                                                                                                                                            1722.9
                                                                                                                                                                               -19.34
                       1 22 12 2322.87
13 21 31 4961.51
                                                                                   48.46
                                                                                                        9.95
                                                                                                                        108.24
         90.00
                                                                -22.04
                                                                                                                           71.62 14 44 13
                                                                                                                                                               4361.5
                                                                                                                                                                                 19.21
                                                                                                                                                                                                     209.44
                                                                                  217.06
                                                                                                        9.90
                                                                 21.93
         90.00
                                                                                                                         109.38
                                                                                                                                          3 17 55
                                                                                                                                                               1460.4
                                                                                                                                                                                 -20.36
                                                                                                                                                                                                      21.09
                                                                                    28.72
                                                                                                        9.51
                                                               -23.22
        100.00
                         2 43 35 2060.35
                                                                                                                         70.48 16 1 9
112.57 4 22 42
67.29 17 5 44
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                                                                                   197.34
                                                                                                        9.46
        100.00
                       14 42 49
                                         4699.26
                                                               23.10
                                                                                                                                                               1246.4
                                                                                                                                                                                -23.09
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                                                                                    11.15
                                                                                                        8.18
        110.00
                        3 51 55 1846.45
                                                               -26.38
                                                                                                                                                               3885.9
                                                                                                                                                                                 22.95
                                                                                                                                                                                                     172.21
                                                                                  179.80
                                                                                                        8.12
                                                                26.26
                       15 50 58
                                          4485.93
        110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 629.1 SGR 434.0 SG3 139.8
RRT -.2206 RRF .3049 RTF -.6101
SGB 764.3 R23 -.0674 R13 .6310
                                                                                                                                                         ST 260.8 SR 399.4 S5 152.5
CRT -.8842 CRS -.7826 CST .4259
     TDE .2367 TRA -.2893 TC3 .4478 BAU .1846
     RDE -.3833 RRA -.1694 RC3 -.0285 FAU .04825
FDE -.1652 FRA -.5472 FC3-1.3575 BSP 1654
BOE .4505 BRA .3352 BC3 .4487 FSP -359
                                                                                                                                                         LSA 478.1 MSA 146.8 SSA 26.6
                                                                                       SG1 641.9 SG2 414.9 THA 164.93
                                                                                                                                                         EL1 465.4 EL2 104.6 ALF 121.79
                                                                                                                                                                       ARRIVAL DATE SEP 26 1967
                                                                                            FLIGHT TIME 74.00
LAUNCH DATE JUL 14 1967
                                                                                            DISTANCE 199.239
    HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 26.950 GAL -9.79 AZL 92.86 MCA 88.05 SMA 130.22 ECC .23718 INC 2.8635 VI 29.297 RP 108.48 LAP -2.86 LOP 18.94 VP 37.783 GAP -9.84 AZP 90.10 TAL 216.01 TAP 304.06 RCA 99.33 APO 161.11 V2 34.932 RC 56.016 GL -14.07 GP -10.65 ZAL 145.72 ZAP 22.59 ETS 26.14 ZAE 149.64 ETE 358.45 ZAC 89.31 ETC 13.88 CLP -20.04
    PLANETOCENTRIC CONIC
                                                     .69 RAL 140.30 RAD 6568.2 VEL 12.294 PTH 2.21 VHP 6.756 DPA -6.23 RAP 175.92 ECC 1.4901
     C3 29.778 VHL 5.457 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           1733.2
                                                                                                                                                                             -19.60
                                                                                                                       107.97
                                                                                                                                        1 52 16
                                                                                                      8.46
                        1 13 23 2333.19
13 21 34 4934.76
                                                                                   49.14
          90.00
                                                               -22.26
                                                                                                                         70.93 14 43 49
109.11 3 9 32
69.79 16 0 29
112.34 4 14 55
66.56 17 4 28
                                                                                                                                                                                                    207.76
                                                                                   215.32
                                                                                                        8.05
                                                                                                                                                               4334.8
                                                                                                                                                                                  18.54
                                                                 21.34
          90.00
                                                                                                                                                                                                    21.68
                       2 35 3 2069.78
14 42 36 4673.40
3 44 1 1853.88
15 50 6 4462.06
                                                                                                                                                               1469.8
                                                                                                                                                                                 -20.61
                                                                                                        8.03
                                                                                    29.34
                                                               -23.43
                                                                                                                                                                                                    188.10
                                                                                                        7.61
                                                                                                                                                               4073.4
                                                                                                                                                                                  19.55
                                                                                   195.65
                                                                22.50
                                                                                                                                                               1253.9
                                                                                                                                                                                 -23.31
                                                                                                                                                                                                       4.00
                                                                                                        6.72
                                                                -26.57
                                                                                    11.64
                                                                                                                                                                                                    170.73
                                                                                                                                                               3862.1
                                                                                                                                                                                22.23
                                                                                   178.24
                                                                                                        6.24
                                                                25.62
        110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ST 255.5 SR 401.1 SS 157.7

CRT -.8830 CRS -.7328 CST .3524

LSA 475.8 MSA 154.5 SSA 27.1

EL1 464.1 EL2 103.6 ALF 121.08
                                                                                       SGT 632.8 SGR 441.1 SG3 158.3
RRT -.2474 RRF .3498 RTF -.6109
SGB 771.3 R23 -.0841 R13 .6389
      TDE .2284 TRA -.2757 TC3 .4664 BAU .1867
     RDE -.3784 RRA -.1754 RC3 -.0488 FAU .05339
FDE -.1634 FRA -.6429 FC3-1.5523 BSP 1683
BDE .4419 BRA .3267 BC3 .4690 FSP -414
                                                                                       SG1 649.2 SG2 416.6 THA 163.07
                                                                                             FLIGHT TIME 74.00
                                                                                                                                                                        ARRIVAL DATE SEP 28 1967
LAUNCH DATE JUL 14 1967
                                                                                            DISTANCE 206.004
    RL 152.07 LAL 1-.00 LOL 290.89 VL 27.071 GAL -9.73 AZL 92.76 MCA 91.24 SMA 131.07 ECC .23138 INC 2.7565 VI 29.297 RP 108.45 LAP -2.76 LOP 22.13 VP 37.881 GAP -9.00 AZP 89.94 TAL 217.21 TAP 308.45 RCA 100.74 APO 161.39 VZ 34.945 RC 57.772 GL -13.80 GP -11.43 ZAL 146.85 ZAP 25.77 ETS 24.03 ZAE 150.08 ETE 356.27 ZAC 89.53 ETC 13.88 CLP -23.25
    PLANETOCENTRIC CONIC
     C3 28.928 VHL 5.378 DLA 1.29 RAL 139.33 RAD 6568.2 VEL 12.260 PTH 2.21 VHP 6.332 DPA -6.93 RAP 175.57 ECC 1.4761
     C3 28.928 VHL 5.378 DLA 1.29 RAL 139.33 RAD 6568.2 VEL 12.260 PTH 2.21 VHP 6.332 DPA -6.93 RAP 175.57 ECC 1.4761
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 5 0 2344.68 -22.50 49.90 7.16 107.66 1 44 5 1744.7 -19.87 42.21
100.00 13 22 9 4908.76 20.75 213.64 6.41 70.29 14 43 58 4508.8 17.88 206.14
100.00 2 26 57 2080.37 -23.66 30.04 6.75 108.82 3 1 37 1480.4 -20.88 22.35
100.00 14 42 54 4648.31 21.90 194.03 5.95 69.13 16 0 22 4048.3 18.87 186.55
110.00 3 36 34 1862.45 -26.79 12.21 5.46 112.07 4 7 36 1262.5 -23.56 4.54
110.00 15 49 46 4438.99 24.99 176.75 4.56 65.88 17 3 45 3639.0 21.52 169.32
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 633.9 SGR 450.0 SG3 179.3

RRT -.2779 RRF .4009 RTF -.6091

SGB 777.4 R23 -.1030 R13 .6470

SGI 655.4 SG2 418.1 THA 160.75
                                                                                                                                                         ST 250.4 SR 402.0 SS 164.4
      TOE .2209 TRA -.2641 TC3 .4806 BAU .1880
                                                                                                                                                       CRT -.8806 CRS -.6823 CST .2790
LSA 473.2 MSA 163.5 SSA 27.3
EL1 462.3 EL2 103.2 ALF 120.43
      RDE -.3733 RRA -.1833 RC3 -.0731 FAU .05926
      FOE -.1611 FRA -.7509 FC3-1.7734 BSP 1735
BDF .4338 BRA .3214 BC3 .4862 FSP -481
      BOE .4338 BRA .3214 BC3 .4862 FSP
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FLIGHT TIME 70.00

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LAUNCH DATE JUL 14 1967
                                                                                    FLIGHT TIME 78.00
                                                                                                                                                        ARRIVAL DATE SEP 30 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 212.747
    RL 152.07 LAL -.00 LOL 290.89 VL 27.177 GAL -9.68 AZL 92.65 MCA 94.43 SMA 131.81 ECC .22637 INC 2.6492 VI 29.297 RP 108.41 LAP -2.64 LOP 25.32 VP 37.969 GAP -8.20 AZP 89.80 TAL 218.31 TAP 312.73 RCA 101.98 APO 161.65 V2 34.957 RC 59.590 GL -13.49 GP -12.29 ZAL 147.90 ZAP 29.15 ETS 22.25 ZAE 150.78 ETE 353.78 ZAC 89.93 ETC 13.85 CLP -26.64
   PLANETOCENTRIC CONIC
     C3 28.188 VHL 5.309 OLA - 1.90 RAL 138.47 RAD 6568.1 VEL 12.230 PTH
                                                                                                                  2.20 VHP 5.940 CPA
                                                                                                                                                  -7.63 RAP 175.04 ECC 1.4639
    C3 28.188 VHL 5.309 OLA 1.90 RAL 138.47 RAD 6568.1 VEL 12.230 PTH 2.20 VHP 5.940 DPA -7.63 RAP 175.U4 ECC 1.4639 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 57 6 2357.06 -22.75 50.71 6.05 107.33 1 36.23 1757.1 -20.17 43.00 90.00 13 23 16 4883.45 20.16 212.01 4.96 69.69 14 44 39 4283.4 17.22 204.58 100.00 2 19 19 2091.84 -23.91 30.80 5.64 108.49 2 54 11 1491.8 -21.16 23.08 100.00 14 43 43 4623.90 21.30 192.46 4.50 68.52 16 0 47 4023.9 18.20 185.05 110.00 3 29 35 1871.89 -27.03 12.84 4.38 111.77 4 0 47 1271.9 -23.84 5.13 110.00 15 49 56 4416.62 24.36 175.33 3.08 65.24 17 3 33 3816.6 20.82 167.96
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SGT 628.5 SGR 460.9 SG3 202.6
RRT -.3035 RRF .4553 RTF -.5976
                                                                                                                                          ST 243.2 SR 401.8 SS 170.9

CRT -.8726 CRS -.6265 CST .1903

LSA 467.7 MSA 174.0 SSA 27.5
    TOE .2112 TRA -.2581 TC3 .4852 BAU .1868
    ROE - 3678 RRA - .1928 RC3 - .1015 FAU .06572
FOE - .1542 FRA - .6681 FC3-2.0183 BSP 1732
BOE .4241 BRA .3222 BC3 .4957 FSP -551
                                                                               SG8 779.4 R23 -.1287 R13 .6506
SG1 656.1 SG2 420.7 THA 158.04
                                                                                                                                           EL1 457.9 EL2 104.2 ALF 119.53
LAUNCH DATE JUL 14 1967
                                                                                    FLIGHT TIME 80.00
                                                                                                                                                        ARRIVAL DATE OCT 2 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 219.467
    RL 152.07 LAL -.00 LOL 290.89 VL 27.269 GAL -9.64 AZL 92.54 HCA 97.62 SMA 132.47 ECC .22204 INC 2.5408 VI 29.297 RP 108.37 LAP -2.52 LOP 28.52 VP 38.046 GAP -7.44 AZP 89.66 TAL 219.29 TAP 316.91 RCA 103.06 APO 161.88 V2 34.970 RC 61.464 GL -13.13 GP -13.22 ZAL 148.84 ZAP 32.75 ETS 20.72 ZAE 151.71 ETE 350.89 ZAC 90.55 ETC 13.78 CLP -30.24
   PLANETOCENTRIC CONIC
    C3 27.535 VHL 5.247 DLA
                                              2.51 RAL 137.75 RAD 6568.1 VEL 12.203 PTH
                                                                                                                  2.19 VHP 5.579 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 49 40 2370.14 -23.01 51.58 5.11 106.97 1 29 10 1770.1 -20.47 43.83
                                                                                                                                                   -8.32 RAP 174.28 ECC 1.4532
                                                                                                              69.12 14 45 52
108.14 2 47 15
67.94 16 1 44
111.44 3 54 28
64.64 17 3 53
         90.00
                     13 24 53
                                        4858.69
                                                           19.57
                                                                           210.44
                                                                                                                                                 4258.7
                                                                                                                                                                                   203.06
                                                                                               3.69
                                                                                                                                                                  16.56
        100.00
                        2 12 11
                                       2104.00
                                                           -24.17
                                                                             31.61
                                                                                               4.71
                                                                                                                                                1504.0
                                                                                                                                                                  -21.47
                                                                                                                                                                                    23.86
        100.00
                     14 45 4
                                        4600.07
                                                           20.70
                                                                           190.95
                                                                                               3.22
                                                                                                                                                4000.1
                                                                                                                                                                 17.53
                                                                                                                                                                                   183.59
                       3 23 6 1882.00
                                                          -27.29
                                                                            13.52
                                                                                                                                                1282.0
                                                                                               3.47
                                                                                                                                                                -24.13
                                                                                                                                                                                     5.77
        110.00
                      15 50 36
                                       4394.82
                                                           23.73
                                                                           173.93
                                                                                               1.78
                                                                                                                                                3794.8
                                                                                                                                                                   20.12
                                                                                                                                                                                   166.65
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SGT 617.7 SGR 475.0 SG3 228.4
RRT -.3243 RRF .5131 RTF -.5770
                                                                                                                                          ST 235.4 SR 400.4 SS 178.0

CRT -.8593 CRS -.5688 CST ..0921

LSA 460.7 MSA 185.7 SSA 27.6

EL1 452.1 EL2 106.7 ALF 118.53
    TOE .2008 TRA -.2568 TC3 .4809 BAU .1838
    TOE -.3616 RRA -.2043 RC3 -.1345 FAU .07285
FOE -.1437 FRA -.9956 FC3-2.2904 BSP 1720
ROF .4136 BRA .3282 BC3 .4993 FSP -631
                                                                               SGB 779.2 R23 -.1595 R13 .6529
                                                                               SG1 653.1 SG2 425.0 THA 154.66
LAUNCH DATE JUL 14 1967
                                                                                    FLIGHT TIME 82.00
                                                                                                                                                       ARRIVAL DATE OCT 4 1967
                                                                                    DISTANCE 226.161
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.347 GAL -9.59 A7L 92.43 MCA 100.81 SMA 133.04 ECC .21831 INC 2.4308 V1 29.297 RP 108.33 LAP -2.39 LOP 31.72 VP 38.114 GAP -6.71 A7P 89.54 TAL 220.15 TAP 320.96 RCA 103.99 APO 162.08 VZ 34.983 RC 63.388 GL -12.73 GP -14.25 ZAL 149.70 ZAP 36.58 ETS 19.34 ZAE 152.87 ETE 347.44 ZAC 91.38 ETC 13.66 CLP -34.05
   PLANETOCENTRIC CONTC
                                              3.12 RAL 137.14 RAD 6568.1 VEL 12.179 PTH 2.19 VHP 5.250 DPA -9.01 RAP 173.30 ECC 1.4435
    C3 26.949 VHL 5.191 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             106.59 1 22 26
68.58 14 47 36
107.77 2 40 47
67.39 16 3 12
                     0 42 43 2383.77
13 27 2 4834.36
2 5 30 2116.70
                                                                                                                                            1783.8
                                                                                                                                                               -20.79
                                                                                          4.34
         90.00
                                                          -23.28
                                                                           52.49
                                                                                                                            1 22 26
                                                                                                                                                                                   44.71
                                                                                                                                                                                  201.58
         90.00
                                                           18.97
                                                                          208.91
                                                                                              2.59
                                                                                                                                                4234.4
                                                                                                                                                                 15.90
                                                                                                                                                1516.7
                                                                                                                                                                                   24.67
       100.00
                                                          -24.44
                                                                           32.46
                                                                                               3.94
                                                                                                                                                                -21.78
                     14 46 55 4576.66
3 17 5 1892.66
15 51 50 4373.47
                                                                                                                                                                16.86
       100.00
                                                          20.10
                                                                          189.47
                                                                                              2.11
                                                                                                                                                3976.7
                                                                                                                                                                                  182.18
                                                                                                             111.09 3 48 38
64.08 17- 4 43
                                                                                                                                                               -24.43
19.43
       110.00
                                                          -27.55
                                                                            14.23
                                                                                              2.72
                                                                                                                                                1292.7
                                                                                                                                                                                    6.45
       110.00
                                                          23.10
                                                                          172.59
                                                                                                .65
                                                                                                                                                3773.5
                                                                                                                                                                                  165.39
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    TDE .1917 TRA -.2596 TC3 .4683 BAU .1799
RDE -.3548 RRA -.2181 RC3 -.1732 FAU .08077
                                                                               SCT 602.9 SCR 493.7 SC3 257.1
RRT -.3396 RRF .5742 RTF -.5466
SCB 779.3 R23 -.1926 R13 .6575
                                                                                                                                          ST 228.9 SR 398.3 SS 186.6
CRT -.8415 CRS -.5157 CST -.0054
                                                                                                                                         LSA 453.4 MSA 198.7 SSA 27.5
EL1 445.9 EL2 110.5 ALF 117.65
    FDE -.1315 FRA-1.1349 FC3-2.5946 BSP 1725
BDE .4033 BRA .3390 BC3 .4993 FSP -725
                                                                               SG1 649.0 SG2 431.4 THA 150.32
LAUNCH DATE JUL 14 1967
                                                                                    FLIGHT TIME 84.00
                                                                                                                                                        ARRIVAL DATE OCT 6 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 232.828
   RL 152.07 LAL -.00 LOL 290.89 VL 27.413 GAL -9.54 AZL 92.32 MCA 104.01 SNA 133.52 ECC .21510 INC 2.3183 VI 29.297
RP 108.29 LAP -2.25 LOP 34.91 VP 38.173 GAP -6.01 AZP 89.44 TAL 220.88 TAP 324.89 RCA 104.80 APO 162.24 V2 34.996
RC 65.357 GL -12.29 GP -15.37 ZAL 150.46 ZAP 40.64 ETS 18.05 ZAE 154.20 ETE 343.26 ZAC 92.45 ETC 13.46 CLP -38.10
   PLANETOCENTRIC CONTC
    C3 26.412 VHL 5.139 DLA
                                              3.73 RAL 136.66 RAD 6568.1 VEL 12.157 PTH 2.18 VHP 4.952 DPA -9.68 RAP 172.08 ECC 1.4347
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            106.19 1 16 10
68.06 14 49 52
                                                                                                                                             1797.8
                                                                                                                                                               -21.11
                      0 36 13 2397.85
13 29 41 4810.28
                                                                                               3.71
                                                                                                                            1 16 10
        90.00
                                                          -23.55
                                                                           53.44
                                                                                                                                                                                   45.62
         90.00
                                                                          207.40
                                                           18.37
                                                                                               1.65
                                                                                                                                                4210.3
                                                                                                                                                                 15.23
                                                                                                                                                                                   200.13
                                                                                                                        2 34 48
16 5 11
                       1 59 18 2129.85
14 49 17 4553.51
                                                                            33.34
                                                                                                                                                                                   25.52
       100.00
                                                          -24.71
                                                                                               3.33
                                                                                                              107.38
                                                                                                                                                1529.9
                                                                                                                                                                -22.10
       100.00
                      14 49 17
                                                           19.48
                                                                          188.03
                                                                                              1.16
                                                                                                               66.87
                                                                                                                                                3953.5
                                                                                                                                                                 16.19
                                                                                                                                                                                   180.79
                                                                                                              110.72 3 43 16
63.53 17 6 4
                       3 11 33 1903.73
15 53 32 4352.40
       110.00
                                                          -27.82
                                                                                                                                                                                    7.16
                                                                            14.98
                                                                                              2.13
                                                                                                                                                1303.7
                                                                                                                                                                -24.75
       110.00
                      15 53 32
                                                                                                                                                3752.4
                                                          22.47
                                                                          171.29
                                                                                            359.68
                                                                                                                                                                  18.73
                                                                                                                                                                                  164.14
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 581.5 SGR 517.0 SG3 287.5
RRT -.3344 RRF .6338 RTF -.4952
SGB 778.1 R23 -.2283 R13 .6633
                                                                                                                                        ST 221.4 SR 394.5 SS 194.7
CRT -.8121 CRS -.4573 CST -.1248
LSA 443.2 MSA 213.0 SSA 27.4
    TOE .1808 TRA -.2702 TC3 .4420 BAU .1739
    RDE -.3468 RRA -.2334 RC3 -.2170 FAU .08914
FDE -.1113 FRA-1.2782 FC3-2.9220 BSP 1689
BDE .3911 BRA .3571 BC3 .4924 FSP -821
                                                                               SG1 639.8 SG2 442.9 THA 144.71
                                                                                                                                        FL1 437.1 EL2 116.6 ALF 116.53
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ARRIVAL DATE OCT 8 1967

LAUNCH DATE JUL 14 1967

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DISTANCE 239.468
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.467 GAL -9.50 A7L 92.20 HCA 107.21 SMA 133.92 ECC .21233 INC 2.2025 V1 29.297 RP 108.25 LAP -2.10 LOP 38.11 VP 38.225 GAP -5.33 A7P 89.35 TAL 221.49 TAP 328.70 RCA 105.49 APO 162.36 V2 35.009 RC 67.365 GL -11.80 GP -16.57 ZAL 151.13 ZAP 44.93 ETS 16.79 ZAE 155.66 ETE 338.14 ZAC 93.76 ETC 13.17 CLP -42.38
   PLANETOCENTRIC CONIC
     C3 25.909 VHL 5.090 DLA 4.35 RAL 136.30 RAD 6568.0 VEL 12.136 PTH 2.18 VHP 4.685 DPA -10.35 RAP 170.61 ECC 1.4264
    C3 25.909 VHL 5.090 DLA 4.35 RAL 136.30 RAD 6568.0 VEL 12.136 PTH 2.18 VHP 4.685 DPA -10.35 RAP 170.61 ECC 1.4264
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 30 8 2412.35 -23.82 54.41 3.22 105.77 1 10 21 1812.4 -21.43 46.56
90.00 13 32 52 4786.26 17.75 205.91 .85 67.57 14 52 38 4186.3 14.56 198.69
100.00 1 53 31 2143.40 -24.98 34.26 2.85 106.97 2 29 15 1543.4 -22.42 26.40
100.00 14 52 10 4530.44 18.86 186.60 .36 66.37 16 7 41 3930.4 15.51 179.41
110.00 3 6 26 1915.18 -28.09 15.76 1.68 110.33 3 38 22 1315.2 -25.06 7.89
110.00 15 55 44 431.44 21.83 170.00 358.86 63.02 17 7 56 3731.4 18.03 162.92
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 556.9 SGR 546.0 SG3 319.8
RRT -.3031 RRF .6909 RTF -.4182
SGB 780.0 R23 -.2522 R13 .6795
SGI 629.7 SG2 460.2 THA 136.87
                                                                                                                                                                  ST 215.0 SR 389.4 SS 203.1
CRT - .2704 CRS - .3985 CST - .2559
     TOE .1699 TRA -.2878 TC3 .4027 BAU .1673
     RDE_-.3375 RRA -.2505 RC3 -.2669 FAU .09796
                                                                                                                                                                  LSA 431.4 MSA 228.4 SSA 27.3
EL1 426.8 EL2 125.0 ALF 115.38
                                                                       1654
-924
     FOE -. 0844 FRA-1.4242 FC3-3.2732 BSP
     BDE .3779 BRA .3815 BC3 .4831 FSP
                                                                                                                                                                                 ARRIVAL DATE OCT 10 1967
                                                                                                  FLIGHT TIME 88.00
LAUNCH DATE JUL 14 1967
                                                                                                DISTANCE 246.078
    RL 152.07 LAL -.00 LOL 290.89 VL 27.511 GAL -9.44 AZL 92.08 HCA 110.41 SMA 134.25 ECC .20995 INC 2.0826 V1 29.297 RP 108.20 LAP -1.95 LOP 41.31 VP 38.268 GAP -4.69 AZP 89.27 TAL 221.96 TAP 332.37 RCA 106.06 APO 162.43 V2 35.023 RC 69.409 GL -11.28 GP -17.86 ZAL 151.72 ZAP 49.45 ETS 15.52 ZAE 157.15 ETE 331.81 ZAC 95.29 ETC 12.78 CLP -46.92
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                     2.17 VHP 4.450 OPA -11.00 RAP 168.89 ECC 1.4185
    C3 25.430 VHL 5.043 DLA 4.97 RAL 136.05 RAD 6568.0 VEL 12.116 PTH 2.17 VHP 4.450 DPA -11.00 RAP 168.89 ECC 1.4185 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 24 27 2427.30 -24.10 55.42 2.87 105.34 1 4 54 1827.3 -21.76 47.53 90.00 13 36 36 4762.09 17.12 204.42 .20 67.09 14 55 58 4162.1 13.87 197.25 100.00 1 48 8 2157.39 -25.26 35.21 2.50 106.54 2 24 5 1557.4 -22.75 27.31 100.00 14 55 36 4507.24 78.22 185.17 359.69 65.89 16 10 43 3907.2 14.81 178.04
                                                       4.97 RAL 136.05 RAD 6568.0 VEL 12.116 PTH
                                                                                                                                67.09 14 55 58
106.54 2 24 5
65.89 16 10 43
109.92 3 33 51
62.51 17 10 19
                                                                                                                                                                       1327.0
                         3 1 44 1927.01
15 58 29 4310.38
                                                                   -28.37
                                                                                         16.57
                                                                                                             1.36
         110.00
                                                                                                                                                                         3710.4
                                                                                                                                                                                           17.32
                                                                                                                                                                                                                 161.70
                                                                    21.17
                                                                                        168.72
                                                                                                           358.18
         110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 211.6 SR 383.0 SS 212.4
CRT -.7170 CRS -.3459 CST -.3856
                                                                                            SGT 533.4 SGR 582.2 SG3 353.6
RRT -.2384 RRF .7443 RTF -.3094
     TOE .1607 TRA -.3114 TC3 .3507 BAU .1622
     RDE -. 3270 RRA -. 2695 RC3 -. 3234 FAU .10714
                                                                                           SGB 789.6 R23 -.2334 R13 .7197
SG1 625.0 SG2 482.6 THA 124.90
                                                                                                                                                                 LSA 419.2 MSA 245.2 SSA 27.2
     FOE -. 0533 FRA-1.5721 FC3-3.6475 BSP 1663
                                                                                                                                                                 EL1 415.9 EL2 135.8 ALF 114.38
      BDE .3644 BRA .4118 BC3 .4771 FSP -1038
                                                                                                                                                                                 ARRIVAL DATE OCT 12 1967
                                                                                                  FLIGHT TIME 90.00
LAUNCH DATE JUL 14 1967
                                                                                                DISTANCE 252.658
     RL 152.07 LAL -.00 LOL 290.89 VL 27.546 GAL -9.39 AZL 91.96 MCA 113.61 SMA 134.51 ECC .20789 INC 1.9574 V1 29.297 RP 108.16 LAP -1.79 LOP 44.52 VP 38.305 GAP -4.08 AZP 89.22 TAL 222.31 TAP 335.93 RCA 106.54 APO 162.47 V2 35.036 RC 71.485 GL -10.71 GP -19.22 ZAL 152.22 ZAP 54.18 ETS 14.18 ZAE 158.54 ETE 324.01 ZAC 97.05 ETC 12.26 CLP -51.70
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                       5.61 RAL 135.92 RAD 6568.0 VEL 12.097 PTH 2.17 VHP 4.248 DPA -11.63 RAP 166.93 ECC 1.4109
     C3 24.965 VML 4.996 DLA 5.6F RAL 135.92 RAD 6568.0 VEL 12.097 PTH 2.17 VMP 4.248 DPA -11.63 RAP 166.93 ECC 1.4109
LNCR AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 19 5 2442.77 -24.37 56.47 2.64 104.88 0 59 48 1842.8 -22.09 48.54
90.00 13 40 54 4737.52 16.46 202.91 359.67 66.63 14 59 51 4137.5 13.16 195.79
100.00 14 35 2171.85 -25.53 36.19 2.29 106.10 2 19 17 1571.9 -23.08 28.25
100.00 14 59 35 4483.67 17.56 183.73 359.15 65.41 16 14 19 3883.7 14.10 176.65
110.00 2 57 24 1939.26 -28.65 17.41 1.16 109.50 3 29 43 1339.3 -25.72 9.46
110.00 16 1 45 4289.02 20.49 167.41 357.62 62.02 17 13 14 3689.0 16.59 160.48
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 515.5 SGR 624.2 SG3 387.0
RRT -1198 RRF .7908 RTF -1522
SGB 809.6 R23 -1193 R13 .7839
                                                                                                                                                                  ST 210.2 SR 374.4 55 221.3
CRT -.6436 CRS -.2871 CST -.5294
      TOE .1510 TRA -.3439 TC3 .2809 BAU .1592
      ROE -.3144 RRA -.2892 RC3 -.3857 FAU .11611
                                                                                                                                                                 LSA 404.1 MSA 263.2 SSA 27.1
      FOE - 0106 FRA-1.7085 FC3-4.0267 BSP 1685
                                                                                            SG1 633.0 SG2 504.7 THA 105.95
                                                                                                                                                                 EL1 402.4 EL2 149.7 ALF 113.27
      BDE .3488 BRA .4494 BC3 .4771 FSP -1148
                                                                                                                                                                                  ARRIVAL DATE OCT 14 1967
                                                                                                   FLIGHT TIME 92.00
 LAUNCH DATE JUL 14 1967
                                                                                                 DISTANCE 259.210
     RL 152.07 LAL -.00 LOL 290.89 VL 27.571 GAL -9.33 AZL 91.83 MCA 116.82 SMA 134.70 ECC .20611 INC 1.8259 V1 29.297 RP 108.12 LAP -1.63 LOP 47.72 VP 38.336 GAP -3.49 AZP 89.18 TAL 222.54 TAP 339.36 RCA 106.94 APO 162.46 V2 35.049 RC 73.590 GL -10.09 GP -20.65 ZAL 152.63 ZAP 59.09 ETS 12.76 ZAE 159.66 ETE 314.57 ZAC 99.01 ETC 11.61 CLP -56.70
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 24.505 VHL 4.950 DLA 6.26 RAL 135.90 RAD 6568.0 VEL 12.078 PTH 2.16 VHP 4.078 DPA -12.25 RAP 164.76 ECC 1.4033
                                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      ENCH APMTH LNCH TIME L-I TIME
90.00 0 14 0 2458.90
90.00 13 45 49 4712.25
100.00 1 38 19 2186.94
                                                                                                                                104.40 0 54 59
66.17 15 4 21
                                                                                                                                                                         1858.9
                                                                                                                                                                                            -22.43
                                                                                                                                                                                                                  49.60
                                                                                                              2.53
                                                                     -24,65
                                                                                         57.57
                                                                                                                                                                                             12.42
                                                                                                                                                                                                                 194.30
                                                                                                                                                                         4112.3
                                                                      15.77
                                                                                         201.38
                                                                                                            359.26
                                                                                                                                105.62 2 14 40

64.95 16 18 30 3859.4

109.05 3 25 55 1352.1 -26.07 10.

61.54 17 16 44 3667.1 15.83 159

ORBIT DETERMINATION ACCURACY

213.1 SR 363.7 SS 2
                                                                                                                                                                                                                  29.25
                                                                                         37.23
                                                                                                              2.19
                                                                    -25.81
                                                                                                                                                                                                                 175.24
                                                                                         182.27
                                                                                                            358.74
                                               4459.44
                                                                      16.87
                          15 4 11
          100.00
                          15 4 11 4459.44
2 53 23 1952.05
16 5 37 4267.10
                                                                                                                                                                                                                  10.29
                                                                                                              1.09
                                                                    -28.94
                                                                                          18.30
          110.00
                                                                                                                                                                                                                 159.23
                                                                                                            357.19
                                                                      19.79
                                                                                         166.12
          110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                            SGT 514.1 SGR 672.2 SG3 419.2
RRT .0495 RRF .8305 RTF .0485
SGB 846.2 R23 .0496 R13 .8290
                                                                                                                                                                 ST 213.1 SR 363.7 SS 230.4

CRT -.5552 CRS -.2290 CST -.6653

LSA 387.7 MSA 282.4 SSA 27.0
       TDE .1430 TRA -.3839 TC3 .1944 BAU .1617
       ROE - .2998 RRA - .3093 RC3 - .4536 FAU .12462
       FOE .0406 FRA-1.8291 FC3-4.4028 BSP 1776
BOE .3322 BRA .4930 BC3 .4935 FSP -1253
                                                                                           SG1 673.3 SG2 512.6 THA 84.83
                                                                                                                                                                 EL1 387.3 EL2 166.5 ALF 112.37
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FLIGHT TIME 86.00

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ARRIVAL DATE OCT 16 1967
                                                                             FLIGHT TIME 94.00
LAUNCH DATE JUL 14 1967
                                                                             DISTANCE 265.731
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.589 GAL -9.26 AZL 91.69 MCA 120.03 SMA 134.63 ECC .20456 INC 1.6866 VI 29.297
RP 108.08 LAP -1.46 LOP 50.93 VP 38.360 GAP -2.92 AZP 89.16 TAL 222.64 TAP 342.67 RCA 107.25 APO 162.41 V2 35.062
RC 75.721 GL -9.41 GP -22.12 ZAL 152.97 ZAP 64.14 ETS 11.20 ZAE 160.29 ETE 303.62 ZAC 101.12 ETC 10.82 CLP -61.91
   PLANETOCENTRIC CONIC
    C3 Z4.047 VHL 4.904 OLA 6.95 RAL 135.99 RAO 6568.0 VEL 12.059 PTH 2.16 VHP 3.940 DPA -12.84 RAP 162.41 ECC 1.3958
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 9 6 2475.93 -24.93 58.74 2.55 103.88 0 50 22 1875.9 -22.78 50.73
90.00 13 51 25 4685.96 15.04 199.79 358.97 65.72 15 9 31 4086.0 11.64 192.77
100.00 1 33 46 2202.87 -26.10 38.32 2.21 105.11 2 10 29 1602.9 -23.77 30.30
100.00 15 9 26 4434.25 16.14 180.76 358.44 64.49 16 23 20 3834.3 12.57 173.78
110.00 2 49 36 1965.55 -29.23 19.23 1.14 108.56 3 22 22 1365.5 -26.42 11.18
110.00 16 10 6 4244.34 19.04 164.77 356.87 61.06 17 20 50 3644.3 15.04 157.95
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 221.7 SR 351.4 SS 240.0
CRT -.4599 CRS -.1792 CST -.7760
                                                                         SGT 539.2 SGR 726.4 SG3 449.3
RRT .2461 RRF .8638 RTF .2669
    TOE .1381 TRA -.4304 TC3 .0917 BAU .1721
    RDE -. 2835 RRA -. 3293 RC3 -. 5275 FAU .13245
                                                                         SGB 904.6 R23 .1472 R13 .8531
SG1 749.6 SG2 506.5 THA 70.43
                                                                                                                                 LSA 371.4 MSA 302.5 SSA 27.0
    FOE .0957 FRA-1.9302 FC3-4.7684 BSP 1969
BOE .3153 BRA .5419 BC3 .5354 FSP -1361
                                                                                                                                 EL1 371.4 ELZ 186.3 ALF 111.97
                                                                                                                                             ARRIVAL DATE OCT 18 1967
                                                                              FLIGHT TIME 96.00
LAUNCH DATE JUL 14 1967
                                                                             DISTANCE 272.222
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.599 GAL -9.19 AZL 91.54 HCA 123.24 SMA 134.91 ECC .20322 INC 1.5379 V1 29.297
RP 108.04 LAP -1.29 LOP 54.14 VP 38.379 GAP -2.37 AZP 89.16 TAL 222.63 TAP 345.87 RCA 107.49 APO 162.32 V2 35.075
RC 77.874 GL -8.66 GP -23.63 ZAL 153.22 ZAP 69.27 ETS 9.50 ZAE 160.25 ETE 291.73 ZAC 103.34 ETC 9.87 CLP -67.27
   PLANETOCENTRIC CONIC
                                           7.67 RAL 136.19 RAD 6568.0 VEL 12.040 PTH 2.15 VHP 3.836 OPA -13.43 RAP 159.93 ECC 1.3881
    C3 23.585 VHL 4.856 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    -23.14
                                                                                                                    0 45 53
                                                                                                                                    1894.1
                                                                                                                                                                      51.94
                     0 4 19 2494.15
13 57 47 4658.24
                                                      -25.22
                                                                      59.99
                                                                                       2.68
                                                                                                      103.31
        90.00
                                                                                                                                                      10.80
                                                                                                                                                                      191.16
                                                                                     358.79
                                                                                                       65.27
                                                                                                                  15 15 26
                                                                                                                                      4058.2
                                                                      198.13
        90.00
                                                       14.26
                     1 29 21 2219.90
15 15 27 4407.72
                                                                      39.50
                                                                                       2.35
                                                                                                      104.56
                                                                                                                                      1619.9
                                                                                                                                                     -24.14
                                                                                                                                                                      31.43
       100.00
                                                      -26.40
                                                                                                                 16 28 54
                                                                                     358.26
                                                                                                       64.03
                                                                                                                                      3807.7
                                                                                                                                                      11.73
                                                                                                                                                                     172.25
                                                      15.35
                                                                      179.18
       100.00
                                                                                                                                                     -26.79
                                                                                                                                      1380.0
                                                                                                                                                                      12.14
                                                                                                      108.04
                                                                                                                    3 19 1
       110.00
                                                                                        1.31
                    2 46 1 1979.97
16 15 16 4220.41
                                                      -29.54
                                                                       20.24
                                                                                                       60.58 17 25 36
                                                                                                                                      3620.4
                                                                                                                                                     14.19
                                                                                                                                                                     156.61
                                                                                     356.67
       110.00
                                                                      163.37
                                                       18.25
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 598.4 SGR 782.5 SG3 474.2
RRT .4392 RRF .8902 RTF .4703
SGB 985.1 R23 .1893 R13 .8743
                                                                                                                                 ST 235.2 SR 335.6 SS 249.7
    TOE .1353 TRA -.4838 TC3 -.0303 BAU .1908
                                                                                                                                 CRT -.3580 CRS -.1206 CST -.8705
    RDE -.2639 RRA -.3472 RC3 -.6043 FAU .13868
                                                                                                                                 LSA 356.7 MSA 319.9 SSA 27.0
    FDE .1647 FRA-1.9954 FC3-5.0904 BSP 2238
BDE .2966 BRA .5955 BC3 .6050 FSP -1444
                                                                          SG1 852.6 SG2 493.4 THA 60.86
                                                                                                                                 EL1 352.4 EL2 209.1 ALF 112.31
                                                                                                                                             ARRIVAL DATE OCT 20 1967
                                                                             FLIGHT TIME 98.00
LAUNCH DATE JUL 14 1967
                                                                             DISTANCE 278.684
    RL 152.07 LAL -.00 LOL 290.89 VL 27.602 GAL -9.11 AZL 91.38 MCA 126.45 SMA 134.93 ECC .20206 INC 1.3777 V1 29.297 RP 108.00 LAP -1.11 LOP 57.35 VP 38.393 GAP -1.85 AZP 89.18 TAL 222.51 TAP 348.96 RCA 107.67 APO 162.19 V2 35.088 RC 80.046 GL -7.83 GP -25.16 TAL 153.39 ZAP 74.42 ETS 7.64 ZAE 159.45 ETE 279.87 ZAC 105.61 ETC 8.78 CLP -72.74
    PLANETOCENTRIC CONIC
     C3 23.116 VHL 4.808 OLA 8.44 RAL 136.50 RAD 6567.9 VEL 12.021 PTH 2.15 VHP 3.763 OPA -14.02 RAP 157.36 ECC 1.3804
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      102.69 24 37 29
64.82 15 22 12
                                                                                                                                   1914.0
                                                                                                                                                     -23.53
                                                                                                                                                                       53.27
         90.00 23 55 35 2513.98
90.00 14 5 3 4628.61
                                                      -25.53
                                                                      61.37
                                                                                       2.93
                                                                                                                                                                      189.44
                                                                                                                                      4028.6
                                                       13.41
                                                                      196.37
                                                                                     358.73
                                                                                                                                                                       32.67
                                                                                                                   2 2 16
                                                                                                                                     1638.4
                                                                                                                                                     -24.53
                      1 24 57 2238.43
                                                      -26.71
                                                                      40.79
                                                                                       2.62
                                                                                                      103.95
        100.00
                                                                                                                 16 35 18
                                                                                                                                      3779.4
                                                                                                                                                     10.83
                                                                                                                                                                      170.63
                    -579.39
- 42 32 1995.67
16 21 13 410
                                                       14.50
                                                                      177,50
                                                                                     358.19
                                                                                                       63.57
        100.00
                                                                                                      107,46 3 15 cm 10 17 31 8
                                                                                                                                     1395.7
                                                                                                                                                     -27.19
                                                                                                                                                                       13.18
                                                      -29.87
                                                                       21.35
                                                                                       1.61
        110.00
                                                                                                                                      3594.9
                                                                                                                                                      13.28
                                                                                                                                                                     155.19
                                                       17.39
                                                                      161.89
                                                                                     356.57
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SCT 691.7 SGR 841.9 SG3 494.3

RRT .5922 RRF .9116 RTF .6255

SGB 1089.6 R23 .2033 R13 .8950

SGI 978.3 SG2 479.6 THA 54.23
                                                                                                                                 ST 255.0 SR 317.8 SS 260.1
CRT -.2641 CRS -.0730 CST -.9312
     TOE .1372 TRA -.5415 TC3 -.1682 BAU .2179
     RDE -.2423 RRA -.3633 RC3 -.6849 FAU .14342
                                                                                                                                 LSA 363.5 MSA 317.5 SSA 27.0
     FOE .2347 FRA-2.0287 FC3-5.3713 BSP 2609
BOE .2785 BRA .6521 BC3 .7052 FSP -1522
                                                                                                                                  EL1 333.2 EL2 234.7 ALF 114.98
                                                                                                                                             ARRIVAL DATE OCT 22 1967
                                                                              FLIGHT TIME 100.00
LAUNCH DATE JUL 14 1967
                                                                              DISTANCE 285.117
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.599 GAL -9.03 AZL 91.20 MCA 129.66 SMA 134.91 ECC .20104 INC 1.2035 V1 29.297 RP 107.96 LAP -.93 LOP 60.56 VP 38.403 GAP -1.34 AZP 89.23 TAL 222.29 TAP 351.95 RCA 107.79 APO 162.03 V2 35.101 RC 82.236 GL -6.91 GP -26.70 ZAL 153.48 ZAP 79.52 ETS 5.60 ZAE 157.90 ETE 269.00 ZAC 107.87 ETC 7.55 CLP -78.25
    PLANETOCENTRIC CONIC
                                            9.27 RAL 136.92 RAD 6567.9 VEL 12.001 PTH 2.14 VMP 3.722 DPA -14.64 RAP 154.78 ECC 1.3726
     C3 22.640 VHL 4.758 OLA
     LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     23 50 39 2535.98
14 13 22 4596.47
                                                                                                      101.99 24 32 55
                                                                                                                                                     -23.94
                                                                                                                                                                      54.75
                                                                                                                                      1936.0
                                                       -25.85
                                                                      62.90
                                                                                        3.31
                                                                                                        64.37 15 29 59
                                                                                                                                                                      187.60
                                                                                                                                      3996.5
                                                                                                                                                        8.92
                                                                                      358.79
                                                       12.47
                                                                      194.48
                                                                                                                                                                       34.06
                                                                                                                     1 58 7
                                    2258.99
                                                                                                       103.26
                                                                                                                                      1659.0
                                                                                                                                                      -24.94
                       1 20 28
                                                       -27.04
                                                                       42.23
                                                                                        3.02
        100.00
                                                                                                        63.10 16 42 39
                                                                                                                                      3748.7
                                                                                                                                                         9.85
                                                                                                                                                                      168.89
                     15 30 10 4348.70
                                                       13.56
                                                                      175.71
                                                                                      358.23
                                                                                                                  3 12 36
                                                                                                                                      1413.1
                                                                                                                                                                       14.36
                     2 39 3 2013.08
16 28 5 4167.37
                                                       -30.22
                                                                       22.59
                                                                                       2.05
                                                                                                       106.80
                                                                                                        59.60 17 37 32
                                                                                                                                      3567.4
                                                                                                                                                        12.29
                                                                                                                                                                      153.67
                                                                                      356.60
                                                       16.45
                                                                      160.31
        110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 815.7 SGR 899.0 SG3 506.4
RRT .7028 RRF .9282 RTF .7333
SGB 1213.9 R23 .2085 R13 .9116
SG1 1121.2 SG2 465.3 THA 48.94
                                                                                                                               ST 280.4 SR 296.0 SS 271.6
CRT -.1769 CRS -.0212 CST -.9704
     TOE .1436 TRA -.6028 TC3 -.3232 BAU .2514
     RDE -.2170 RRA -.3751 RC3 -.7653 FAU .14584
                                                                                                                              LSA 389.4 MSA 296.2 SSA 27.2
ELI 313.8 EL2 260.3 ALF 126.51
     FOE .3160 FRA-2.0147 FC3-5.5768 BSP 3040
BDE .2602 BRA .7099 BC3 .8308 FSP -1565
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FLIGHT TIME 102.00
                                                                                                                                                                                                                                         ARRIVAL DATE OCT 24 1967
LAUNCH DATE JUL 14 1967
                                                                                                                                 DISTANCE 291.522
     HELIOCENTRIC CONIC
        RL 152.07 LAL -.00 LOL 290.89 VL 27.590 GAL -8.94 AZL 91.01 HCA 132.88 SMA 134.84 ECC .20015 INC 1.0121 V1 29.297
RP 107.92 LAP -.74 LOP 63.78 VP 38.408 GAP -.86 AZP 89.31 TAL 221.96 TAP 354.85 RCA 107.85 APO 161.83 V2 35.113
RC 84.440 GL -5.87 GP -28.26 ZAL 153.48 ZAP 84.49 ETS 3.39 ZAE 155.72 ETE 259.66 ZAC 110.05 ETC 6.20 CLP -83.74
      PLANETOCENTRIC CONIC
        C3 22.156 VHL 4.707 DLA 10.20 RAL 137.46 RAD 6567.9 WEL 11.981 PTH 2.14 VHP 3.713 DPA -15.30 RAP 152.24 ECC 1.3646
       C3 22.156 VHL 4.707 OLA 10.20 RAL 137.46 RAD 6567.9 VEL 11.981 PTH 2.14 VHP 5.713 DRA -15.30 RAP 152.24 ECC 1.3646 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 45 23 2560.91 -26.19 64.65 3.85 101.17 24 28 4 1960.9 -24.38 56.44 90.00 14 22 58 4561.05 11.42 192.41 358.97 63.91 15 38 59 3961.1 7.82 185.58 100.00 1 15 43 2282.27 -27.39 43.87 3.56 102.46 1 53 45 1682.3 -25.40 35.64 100.00 15 39 15 4314.93 12.51 173.75 358.41 62.63 16 51 10 3714.9 8.75 166.98 110.00 2 35 26 2032.80 -30.60 24.00 2.63 106.04 3 9 19 1432.8 -28.09 15.69 110.00 16 36 1 4137.17 15.40 158.60 356.75 59.10 17 44 58 3557.2. 11.19 152.03
     DIFFERENTIAL CORRECTIONS
                                                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                         SGT 962.2 SGR 955.6 SG3 511.7
RRT .7769 RRF .9416 RTF .8032
SGB 1356.1 R23 .2097 R13 .9250
SGI 1278.3 SG2 452.9 THA 44.75
                                                                                                                                                                                                                     ST 312.0 SR 271.8 SS 285.0
CRT -.1009 CRS .0150 CST -.9878
LSA 421.8 MSA 271.5 SSA 27.4
EL1 316.4 EL2 266.6 ALF 161.96
        TOE .1567 TRA -.6644 TC3 -.4916 BAU .2901
       ROE -.1893 RRA -.3831 RC3 -.8469 FAU .14626
FOE .3960 FRA-1.9636 FC3-5.7153 BSP 3538
BOE .2457 BRA .7670 BC3 .9792 FSP -1594
LAUNCH DATE JUL 14 1967
                                                                                                                                 FLIGHT TIME 104.00
                                                                                                                                                                                                                                          ARRIVAL DATE OCT 26 1967
                                                                                                                                 DISTANCE 297.898
    HELIOCENTRIC CONTC
      RL 152.07 LAL -.00 LOL 290.89 VL 27.576 GAL -8.83 A7L 90.80 MCA 136.10 SMA 134.74 ECC .19937 INC .7994 V1 29.297
RP 107.89 LAP -.55 LOP 67.00 VP 38.409 GAP -.39 A7P 89.42 TAL 221.55 TAP 357.65 RCA 107.87 APO 161.60 VZ 35.125
RC 86.655 GL -4.69 GP -29.84 ZAL 153.38 ZAP 89.26 ETS .99 ZAE 153.07 ETE 252.00 ZAC 112.08 ETC 4.75 CLP -89.14
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 21.666 VHL 4.655 DLA 11.23 RAL 138.13 RAD 6567.9 VEL 11.960 PTH 2.13 VHP 3.734 DPA -16.D4 RAP 149.78 ECC 1.3566
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 39 34 2589.80 -26.55 66.68 4.54 100.22 24 22 44 1989.8 -24.87 58.42
90.00 14 34 7 4521.37 10.22 190.11 359.31 63.45 15 49 29 3921.4 6.57 183.33
100.00 1 10 30 2309.22 -27.77 45.78 4.28 101.53 1 48 59 1709.2 -25.90 37.48
100.00 15 49 49 4277.17 11.32 171.58 358.73 62.15 17 1 6 3677.2 7.51 164.87
110.00 2 31 33 2055.61 -31.01 25.64 3.40 105.15 3 5 48 1455.6 -28.62 17.26
110.00 16 45 15 4103.55 14.22 156.72 357.04 58.58 17 53 39 3503.5 9.95 150.21
                                                                                                                       HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                   SGT 1125.5 SGR 1007.1 SG3 508.3

RRT .8267 RRF .9521 RTF .8485

SGB 1510.3 R23 .2112 R13 .9347

SGI 1444.3 SG2 441.5 THA 41.16
                                                                                                                                                                                                                    ST 349.8 SR 243.4 SS 301.5

CRT -.0255 CRS .0397 CST -.9925

LSA 461.0 MSA 243.2 SSA 27.8
        TOE .1771 TRA -.7248 TC3 -.6724 BAU .3314
       ROE -.1574 RRA -.3852 RC3 -.9259 FAU .14420
FOE .4829 FRA-1.8671 FC3-5.7618 BSP 4065
        BDE .2369 BRA .8208 BC3 1.1443 FSP -1588
                                                                                                                                                                                                                      EL1 349.9 EL2 243.2 ALF 178.04
                                                                                                                                                                                                                                        ARRIVAL DATE OCT 28 1967
LAUNCH DATE JUL 14 1967
                                                                                                                               FLIGHT TIME 106.00
                                                                                                                                DISTANCE 304.247
    HELIOCENTRIC CONIC
      RL 152.07 LAL -.00 LOL 290.89 VL 27.557 GAL -8.73 AZL 90.56 HCA 139.32 SMA 134.59 ECC .19870 INC .5604 V1 29.297
RP 107.85 LAP -.37 LOP 70.22 VP 38.406 GAP .06 AZP 89.57 TAL 221.04 TAP .36 RCA 107.85 APO 161.34 V2 35.137
RC 88.880 GL -3.32 GP -31.47 ZAL 153.17 ZAP 93.75 ETS 358.40 ZAE 150.11 ETE 245.87 ZAC 113.93 ETC 3.21 CLP -94.40
     PLANETOCENTRIC CONIC
       C3 21.176 VHL 4.602 DLA 12.42 RAL 138.94 RAD 6567.9 VEL 11.940 PTH 2.12 VHP 3.785 DPA -16.90 RAP 147.46 ECC 1.3485
       LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       99.06 24 16 36
62.99 16 1 53
100.39 1 43 32
61.66 17 12 49
                                                                                                                   69.12
                                                                                                                                                                                                                                                   -25.42
                                                                                                                                                                                                                            2024.1
             90.00 23 32 52 2624.08
90.00 14 47 17 4476.06
                                                                                                                                                 5.44
                                                                                        -26.94
                                                                                                                                                                                                                                                          5.13
                                                                                                                                                                                                                            3876.1
                                                                                                                   187.51
                                                                                                                                            359.81
                                                                                          8.83
                                1 4 31 2341.18
16 2 15 4234.19
                                                                                                                                                                                                                            1741.2
                                                                                                                                                                                                                                                                                   39.69
                                                                                                                   48.07
                                                                                                                                                                                                                                                    -26.46
            100.00
                                                                                        -28.19
                                                                                                                                               5.20
                                                                                                                                     359.22
                                                                                                                                                                                                                                                         6.08
            100.00
                                                                                          9.94
                                                                                                                   169.13
                                                                                                                                                                                                                            3634.2
                                                                                    -31.48
                                                                                                                                                                       104.07 3 1 51
58.05 18 3 53
                                                                                                                                                                                                                                                    -29.22
                                2 27 9 2082.64
16 56 7 4065.50
                                                                                                                                                                                                                            1482.6
                                                                                                                                                                                                                                                                                  19.13
            110.00
                                                                                                                    27.61
                                                                                                                                               4.38
                                                                                                                                            357.50
                                                                                                                                                                                                                            3465.5
                                                                                                                                                                                                                                                         8.54
            110.00
                                                                                         12.86
                                                                                                                  154.61
                                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                        RET .8602 RRF .9606 RTF .8781
SCB 1674.2 R23 .2135 R13 .9421
SCI 1617.4 SC2 432.6 THA 38.16
                                                                                                                                                                                                                    ST 395.2 SR 212.8 SS 321.5

CRT .0615 CRS .0285 CST -.9895

LSA 508.2 MSA 213.9 SSA 28.2
       TOE .2068 TRA -.7811 TC3 -.8629 BAU .3748
      ROE -.1221 RRA -.3823 RC3-1.0039 FAU .14014
FOE .5678 FRA-1.7376 FC3-5.7293 BSP 4627
       BOE .2402 BRA .8696 BC3 1.3237 FSP -1564
                                                                                                                                                                                                                     ELI 395.5 EL2 212.2 ALF 2.67
                                                                                                                                                                                                                                        ARRIVAL DATE OCT 30 1967
LAUNCH DATE JUL 14 1967
                                                                                                                                FLIGHT TIME 108,00
                                                                                                                               DISTANCE 310.570
    HELIOCENTRIC CONIC
      RL 152.07 LAL -.00 LOL 290.89 VL 27.534 GAL -8.61 A7L 90.29 MCA 142.54 SMA 134.42 ECC .19811 INC .2866 V1 29.297
RP 107.82 LAP -.17 LOP 73.44 VP 38.400 GAP .50 AZP 89.77 TAL 220.46 TAP 3.00 RCA 107.79 APO 161.05 V2 35.149
RC 91.113 GL -1.72 GP -33.20 ZAL 152.83 ZAP 97.92 ETS 355.62 ZAE 146.94 ETE 241.04 ZAC 115.53 ETC 1.58 CLP -99.48
    PLANETOCENTRIC CONIC
                                                                                                                                                                              2.12 VHP 3.868 OPA -17.94 RAP 145.27 ECC 1.3406
       C3 20.693 VHL 4.549 DLA 13.80 RAL 139.91 RAD 6567.8 VEL 11.919 PTH
      20.093 WR 4.549 ULA 15.80 KR 159.91 KR 0507.8 VEL 11.919 FIN 2.12 VIP 5.080 UPA 17.91 KR 147.2 ECC 17.400 UPA 27.10 FIN.2 ECC 17.400 UPA 27.10 UPA 27.10 FIN.2 ECC 17.400 UPA 27.10 
                               15 3 4 4423.26 7.18

0 57 22 2380.03 -28.63

16 17 8 4184.28 8.32

2 21 56 2115.42 -32.00

17 9 4 4021.65 11.26
                                                                                                                     50.87
                                                                                                                                                                       61.18 17 26 53
102.73 2 57 12
57.51 18 16 5
                                                                                                                   166.32
                                                                                                                                     359.93
5.63
                                                                                                                                                                                                                             3584.3
                                                                                                                                                                                                                                                           4.41
                                                                                                                                                                                                                                                                                159.71
            100.00
                                                                                                                                                                                                                             1515.4
                                                                                                                                                                                                                                                      -29.91
                                                                                                                    30.03
            110.00
                                                                                                                                                                                                                            3421.7
                                                                                                                                                                                                                                                           6.90
                                                                                                                                            358.16
                                                                                                                   152.21
           110.00
                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                     MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                     SGT 1479.2 SGR 1099.2 SG3 480.2

RRT .8828 RRF .9676 RTF .8976

SGB 1842.9 R23 .2174 R13 .9474

SGI 1793.0 SG2 425.9 THA 35.58
                                                                                                                                                                                                                ST 450.4 SR 180.7 SS 347.1

CRT .1891 CRS -.0431 CST -.9834

LSA 567.0 MSA 183.5 SSA 28.8

EL1 451.9 EL2 176.9 ALF 5.13
       TDE .2480 TRA -.8306 TC3-1.0601 BAU .4184
       RDE -.0823 RRA -.3730 RC3-1.0789 FAU .13406
       FOE .6544 FRA-1.5756 FC3-5.6086 BSP 5193
BOE .2613 BRA .9105 BC3 1.5125 FSP -1513
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LAUNCH DATE JUL 14 1967
                                                                             FLIGHT TIME 110.00
                                                                                                                                          ARRIVAL CATE NOV 1 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 316.866
     RL 152.07 LAL -.00 LOL 290.89 VL 27.508 GAL -8.48 AZL 89.97 MCA 145.77 SMA 134.22 ECC .19761 INC .0198 V1 29.297
RP 107.78 LAP .02 LOP 76.66 VP 38.391 GAP .92 AZP 90.02 TAL 219.79 TAP 5.56 RCA 107.70 APO 160.74 V2 35.160
RC 93.352 GL .17 GP -35.07 ZAL 152.31 ZAP 101.69 ETS 352.62 ZAE 143.62 ETE 237.28 ZAC 116.88 ETC 359.87 CLP-104.33
   PLANETOCENTRIC CONIC
     C3 20.232 VML 4.498 DLA 15.42 RAL 141.07 RAD 6567.8 VEL 11.900 PTH 2.11 VMP 3.983 DPA -19.19 RAP 143.24 ECC 1.3330
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 14 43 2718.12 -27.77 75.87 8.04 95.77 24 0 1 2118.1 -26.68 67.37 90.00 15 22 25 4360.19 5.19 180.94 1.57 62.12 16 35 5 3760.2 1.42 174.29
        100.00
                      0 48 26 2428.55
                                                     -29.10
                                                                      54.40
                                                                                       7.87
                                                                                                      97.18
                                                                                                                  1 28 55
                                                                                                                                   1828.6
                                                                                                                                                   -27.80
                                                                                                                                                                    45.84
                    16 35 19 4124.98
2 15 29 2156.19
                                                                                                    60.73 17 44 4
101.01 2 51 25
56.97 18 30 55
       100.00
                                                       6.36
                                                                     163.01
                                                                                        .93
                                                                                                                                   3525.0
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                                                                                                                                                                   156.44
       110.00
                                                     -32.57
                                                                      33.07
                                                                                      7.22
                                                                                                                                   1556.2
                                                                                                                                                   -30.71
                                                                                                                                                                   24.35
                                                                                                                                                                  143.12
       110.00
                    17 24 45
                                    3970.12
                                                      9.37
                                                                     149.42
                                                                                   359.09
                                                                                                                                   3370.1
                                                                                                                                                    4.95
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    TOE .3027 TRA -.8712 TC3-1.2619 BAU .4623 ROE -.0378 RRA -.3581 RC3-1.1526 FAU .12647
                                                                        SCT 1662.1 SCR 1140.7 SC3 456.9

RRT .8983 RRF .9736 RTF .9110

SCB 2015.9 R23 .2224 R13 .9514

SCI 1971.1 SC2 422.6 THA 33.39
                                                                                                                               ST 518.7 SR 153.1 SS 378.2
CRT .3969 CRS -.2242 CST -.9782
    FOE .7370 FRA-1.3929 FC3-5.4114 BSP 5784
BOE .3050 BRA .9419 BC3 1.7091 FSP -1449
                                                                                                                               LSA 641.0 MSA 154.3 SSA 29.4
EL1 522.6 EL2 139.5 ALF 7.20
LAUNCH DATE JUL 14 1967
                                                                             FLIGHT TIME 112.00
                                                                                                                                           ARRIVAL DATE NOV 3 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 323.138
    RL 152.07 LAL -.00 LOL 290.89 VL 27.477 GAL -8.35 AZL 89.60 HCA 148.99 SMA 134.00 ECC .19718 INC .4015 V1 29.297
RP 107.75 LAP .21 LOP 79.88 VP 38.379 GAP 1.32 AZP 90.34 TAL 219.05 TAP 8.04 RCA 107.57 APO 160.42 V2 35.170
RC 95.596 GL 2.46 GP -37.15 ZAL 151.56 ZAP 105.01 ETS 349.37 ZAE 140.19 ETE 234.41 ZAC 117.93 ETC 358.07 CLP-108.96
   PLANETOCENTRIC CONIC
    C3 19.816 VHL 4.451 DLA 17.39 RAL 142.46 RAD 6567.8 VEL 11.883 PTH 2.11 VMP 4.136 DPA -20.74 RAP 141.32 ECC 1.3261
    LNCH AZHTH LNCH TIME L-I TIME
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    23 1 21
                                   2785.91
                                                                                                     93.32 23 47 47
61.80 16 58 15
                                                     -28.14
                                                                     80.80
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                                                                                                                                   2185.9
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                                                                                                                                                                   72.21
        90.00
                    15 46 52
                                    4282.49
                                                       2.70
                                                                     176.58
                                                                                       3.02
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                      0 36 42 2491.10
       100.00
                                                     -29.54
                                                                      59.00
                                                                                       9.78
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                                                                                                                                    1891.1
                                                                                                                 1 18 43
                                                                                                                                                    -28.56
                   16 58 8 4052.53
2 7 6 2208.29
17 44 14 3908.11
       100.00
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                                                                     159.00
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56.46 18 49 22
       110.00
                                                     -33.18
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                                                                                        .41
       110.00
                                                       7.05
                                                                     146.12
                                                                                                                                   3308.1
                                                                                                                                                    2.59
                                                                                                                                                                   139.A7
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    TOE .3759 TRA -.8991 TC3-1.4627 BAU .5046
                                                                                                                               ST 606.6 SR 140.7 SS 419.1
CRT .6988 CRS -.5418 CST -.9748
                                                                        SGT 1844.0 SGR 1176.8 SG3 427.3
    ROE .0145 RRA -.3352 RC3-1.2202 FAU .11717
                                                                        RRT .9087 RRF .9784 RTF .9199
SGB 2187.5 R23 .2290 R13 .9541
SG1 2146.4 SG2 422.1 THA 31.46
    FOE .8244 FRA-1.1871 FC3-5.1191 BSP 6347
BOE .3762 BRA .9595 BC3 1.9048 FSP -1356
                                                                                                                               LSA 739.1 MSA 127.7 SSA 29.4
                                                                                                                               EL1 614.8 EL2 99.3 ALF
LAUNCH DATE JUL 14 1967
                                                                            FLIGHT TIME 114.00
                                                                                                                                          ARRIVAL DATE NOV 5 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 329.384
    RL 152.07 LAL -.00 LOL 290.89 VL 27.444 GAL -8.20 AZL 89.15 MCA 152.24 SMA 133.75 ECC .19682 INC .8535 V1 29.297
RP 107.72 LAP .40 LOP 83.11 VP 38.365 GAP 1.72 AZP 90.76 TAL 218.25 TAP 10.47 RCA 107.42 APO 160.07 VZ 35.180
RC 97.843 GL 5.26 GP -39.54 ZAL 150.48 ZAP 107.80 ETS 345.83 ZAE 136.62 ETE 232.25 ZAC 118.68 ETC 356.14 CLP-113.36
   PLANETOCENTRIC CONIC
    C3 19.484 VHL 4.414 OLA 19.81 RAL 144.15 RAD 6567.8 VEL 11.869 PTH 2.11 VMP 4.334 OPA -22.65 RAP 139.48 ECC 1.3207
    LNCH AZMTH LNCH TIME L-I TIME IN LAT IN LONG IN RT ASC IN LATTH IN TIME PO CST TIM IN 2 LAT IN 2 LONG 90.00 22 42 32 2877.89 -28.32 87.52 12.29 89.96 23 30 30 2277.9 -28.02 78.86 90.00 16 19 10 4182.50 -.53 171.01 5.12 61.69 17 28 52 3582.5 -4.51 164.37 100.00 0 20 23 2575.07 -29.86 65.22 12.26 91.54 1 3 18 1975.1 -29.32 56.45
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       100.00
                    17 27 56
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                                    3960.56
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                                   2277.07
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                                    3831.32
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                                                                                                                                                                  135.86
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SCT 2026.4 SCR 1213.7 SC3 393.9

RRT .9154 RRF .9826 RTF .9264

SCB 2362.0 R23 .2355 R13 .9563

SCI 2323.3 SC2 426.1 THA 29.84
                                                                                                                              ST 721.2 SR 162.8 SS 467.9
CRT .9241 CRS -.8306 CST -.9749
    TOE .4721 TRA -.9124 TC3-1.6593 BAU .5466
    ROE .0745 RRA -.3058 RC3-1.2844 FAU .10692
    FDE .9058 FRA -.9753 FC3-4.7508 BSP 6944
BDE .4780 BRA .9623 BC3 2.0984 FSP -1260
                                                                                                                              LSA 867.8 MSA 108.4 SSA 28.0
                                                                                                                              EL1 736.8 EL2 60.9 ALF 11.87
LAUNCH DATE JUL 14 1967
                                                                            FLIGHT TIME 116.00
                                                                                                                                          ARRIVAL DATE NOV 7 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 335.606
   RL 152.07 LAL -.00 LOL 290.89 VL 27.407 GAL -8.05 A7L 88.59 MCA 155.44 SMA 133.48 ECC .19653 INC 1.4131 V1 29.297
RP 107.69 LAP .59 LOP 86.34 VP 38.348 GAP 2.10 AZP 91.29 TAL 217.38 TAP 12.82 RCA 107.25 APO 159.71 V2 35.190
RC 100.092 GL 8.76 GP -42.35 ZAL 148.92 ZAP 110.00 ETS 341.94 ZAE 132.86 ETE 230.69 ZAC 119.10 ETC 354.03 CLP-117.57
  PLANETOCENTRIC CONIC
    C3 19.310 VHL 4.394 DLA 22.83 RAL 146.25 RAD 6567.8 VEL 11.861 PTH
                                                                                                       2.10 VHP 4.590 OPA -25.01 RAP 137.64 ECC 1.3178
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 13 13 3012.40 -27.92 97.33 15.31 85.06 23 3 26 2412.4 -28.31 88.69
        90.00
                    17 5 12
                                   4043.74
                                                      -4.99
                                                                    163.24
                                                                                      8.32
                                                                                                      62.09 18 12 36
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       100.00
                    23 51 43
                                    2694.84
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      100.00
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                                    3836.53
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                                                                    147.13
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      110.00
                   18 42 37
                                   3732.38
                                                                    136.90
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                                                                                                                                 3132.4
                                                                                                                                                   -4.12
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   TOE .6030 TRA -.9043 TC3-1.8373 BAU .5861
ROE .1479 RRA -.2652 RC3-1.3335 FAU .09535
                                                                      SGT 2205.1 SGR 1245.6 SG3 355.3
RRT .9190 RRF .9860 RTF .9309
SGB 2532.6 R23 .2426 R13 .9577
                                                                                                                             ST 876.3 SR 226.1 SS 529.7
CRT .9922 CRS -.9573 CST -.9772
   FOE .9910 FRA -.7508 FC3-4.2747 BSP 7500
                                                                                                                             LSA 1043.6 MSA 100.0 SSA 23.5
   BOE .6209 BRA .9424 BC3 2.2703 FSP -1139
                                                                       SG1 2495.1 SG2 434.1 THA 28.37
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ELI 904.6 EL2 27.3 ALF 14.37

ARRIVAL CATE NOV 9 1967

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FLIGHT TIME 118.00
LAUNCH DATE JUL 14 1967
                                                                   DISTANCE 341.803
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 27.368 GAL -7.89 AZL 87.87 HCA 158.66 SMA 133.19 ECC .19630 INC 2.1303 V1 29.297 RP 107.66 LAP .78 LOP 89.57 VP 38.328 GAP 2.46 AZP 91.98 TAL 216.46 TAP 15.12 RCA 107.05 APO 159.34 V2 35.199 RC 102.344 GL 13.22 GP -45.72 ZAL 146.62 ZAP 111.48 ETS 337.65 ZAE 128.81 ETE 229.59 ZAC 119.20 ETC 351.67 CLP-121.64
  PLANETOCENTRIC CONIC
                                                                                            2.11 VMP 4.931 DPA -27.94 RAP 135.66 ECC 1.3198
   C3 19.432 VHL 4.408 DLA 26.69 RAL 148.93 RAD 6567.8 VEL 11.866 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                              3253.91
                                                                           18.67
                                                                                          76.86 22 8 21
                                                                                                                    2653.9
                                                                                                                                  -26.87
                                                                                                                                                106.18
                                                            114.50
                  21 14 7
                                               -25.31
                                                                                           64.31 19 29 10
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                  18 25 45
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                                                            149.59
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61.60 20 16 15
84.93 1 53 52
56.12 20 30 53
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                                                                                                                     2289.9
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               23 7 2 2889.91
                                                              88.38
                                              -28.16
                                                                                                                     3044.4
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                                                            136.44
                                                                            12.51
      100.00
                 19 15 31
                               3644.45
                                               -9.76
                                                                                                                     1911.1
                                                                                                                                  -34.18
                                                                                                                                                  51.29
                1 12 1 2511.13
19 30 57 3595.99
                                                                           20.24
                                              -33.85
                                                              60.52
      110.00
                                                                                                                   2996.0
                                                                                                                                  -9.25
                                                                                                                                                123.47
                                                            129.77
                                                                            9.52
                                               -4.84
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1087.8 SR 323.9 SS 601.6
CRT .9960 CRS -.9910 CST -.9814
                                                                SGT 2383.8 SGR 1276.1 SG3 313.2
RRT .9197 RRF .9886 RTF .9344
SGB 2703.9 R23 .2482 R13 .9591
   TOE .7833 TRA -.8695 TC3-1.9796 BAU .6240
RDE .2371 RRA -.2127 RC3-1.3600 FAU .08296
                                                                                                                 LSA 1280.4 MSA 101.7 SSA 17.3
EL1 1134.7 EL2 27.9 ALF 16.53
   FDE 1.0692 FRA -.5285 FC3-3.6958 BSP 8073
BDE .8184 BRA .8951 BC3 2.4018 FSP -1013
                                                                SG1 2666.6 SG2 447.8 THA 27.04
                                                                                                                            ARRIVAL DATE NOV 11 1967
                                                                    FLIGHT TIME 120.00
                                                                    DISTANCE 347.975
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 27.327 GAL -7.71 AZL 86.91 HCA 161.89 SMA 132.89 ECC .19612 INC 3.0897 VI 29.297 RP 107.63 LAP .96 LOP 92.80 VP 38.307 GAP 2.82 AZP 92.94 TAL 215.47 TAP 17.36 RCA 106.83 APO 158.96 V2 35.208 RC 104.596 GL 18.98 GP -49.83 ZAL 143.22 ZAP 11Z.11 ETS 332.86 ZAE 124.30 ETE 228.79 ZAC 118.94 ETC 348.94 CLP-125.70
  PLANETOCENTRIC CONIC
                                                                                             2.11 VHP 5.401 DPA -31.56 RAP 133.33 ECC 1.3314
    C3 20.138 VHL 4.488 DLA 31.65 RAL 152.54 RAD 6567.8 VEL 11.896 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                           66.45 19 13 35
                                                                                                                   3309.8
                                                                            22.15
                                                            161.79
                  18 8 25
                                3909.79
                                               -21.78
       75.23
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                  18 8 25
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74.51 1 2 42
58.19 21 51 6
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                 22 0 12 3166.29
0 16 48 2754.65
                                              -21.77
                                                             106.78
                                                                            22.14
      104.77
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                                                                            25.74
                                                              78.84
                                              -30.86
      110.00
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                                                                                                                     2769.4
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                 20 54 56 3369.43
                                              -13.24
                                                             117.61
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1381.1 SR 453.5 SS 685.4
CRT .9917 CRS -.9987 CST -.9858
                                                                 SGT 2562.6 SGR 1294.9 SG3 266.6
    TOE 1.0440 TRA -. 7937 TC3-2.0462 BAU .6576
                                                                 RRT .9172 RRF .9902 RTF .9373
SGB 2871.2 R23 .2529 R13 .9602
    RDE .3507 RRA -.1391 RC3-1.3337 FAU .06946
                                                                                                                  LSA 1603.3 MSA 111.0 SSA 11.5
    FOE 1.1436 FRA -.3044 FC3-2.9859 BSP 8599
BOE 1.1014 BRA .8058 BC3 2.4425 FSP -866
                                                                                                                  EL1 1452.6 EL2 55.4 ALF 18.07
                                                                 SG1 2833.0 SG2 466.7 THA 25.61
                                                                                                                           ARRIVAL DATE NOV 13 1967
                                                                    FLIGHT TIME 122.00
LAUNCH DATE JUL 14 1967
                                                                    DISTANCE 354.120
    RL 152.07 LAL -.00 LOL 290.89 VL 27.284 GAL -7.53 A7L 85.55 MCA 165.10 SMA 132.58 ECC .19601 INC 4.4483 V1 29.297 RP 107.61 LAP 1.14 LOP 96.04 VP 38.283 GAP 3.17 A7P 94.30 TAL 214.43 TAP 19.54 RCA 106.59 APO 158.57 V2 35.216 RC 106.849 GL 26.51 GP -54.92 7AL 138.17 ZAP 111.68 ETS 327.42 ZAE 119.12 ETE 228.00 ZAC 118.29 ETC 345.59 CLP-130.00
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 22.093 VHL 4.700 DLA 38.03 RAL 157.70 RAD 6567.9 VEL 11.978 PTH 2.13 VHP 6.094 DPA -36.03 RAP 130.29 ECC 1.3636
    3542.6
                  17 19 38 4142.56
23 30 10 2978.03
                                               -25.09
                                                             181.85
                                                                            30.96
        63.47
                                                                                                                     2378.0
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                                                                                                                                                  86.30
                                               -25.07
                                                              93.82
                                                                            30.95
       116.53
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 RET .9099 RRF .9900 RTF .9407
SGB 3039.4 R23 .2545 R13 .9616
SGI 2999.3 SGZ 491.7 THA 23.83
                                                                                                                  ST 1779,5 SR 598.2 55 769.5
    TOE 1.4375 TRA -.6569 TC3-1.9796 BAU .6865
                                                                                                                  CRT .9894 CRS -.9999 CST -.9898
    ROE .4897 RRA -.0372 RC3-1.2179 FAU .05533
                                                                                                                 LSA 2025.2 MSA 122.6 SSA 7.3
    FOE 1.1974 FRA -.0937 FC3-2.1680 BSP 9176
BOE 1.5186 BRA .6580 BC3 2.3243 FSP -716
                                                                                                                  EL1 1875.5 EL2 82.4 ALF 18.43
                                                                                                                             ARRIVAL DATE NOV 15 1967
                                                                     FLIGHT TIME 124.00
LAUNCH DATE JUL 14 1967
                                                                     DISTANCE 360.232
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 27.239 GAL -7.34 AZL 83.47 HCA 168.31 SMA 132.26 ECC .19593 INC 6.5336 V1 29.297 RP 107.59 LAP 1.32 LOP 99.28 VP 38.258 GAP 3.50 AZP 96.40 TAL 213.34 TAP 21.65 RCA 106.34 APO 158.17 V2 35.223 RC 109.101 GL 36.21 GP -61.28 ZAL 130.87 ZAP 109.96 ETS 320.93 ZAE 112.91 ETE 226.58 ZAC 117.25 ETC 341.05 CLP-135.27
   PLANETOCENTRIC CONIC
    C3 27.076 VHL 5.203 DLA 45.91 RAL 165.74 RAD 6568.1 VEL 12.184 PTH 2.19 VHP 7.207 DPA -41.45 RAP 125.82 ECC 1.4456
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ & LAT INJ & LONG
                                                                                        51.69 18 15 37
51.69 1 42 38
                                                                         45.41
                                                                                                                     3725.0
        52.22 17 3 32 4324.98
                                               -27.55
                                                            199.58
                                                                                                                      2295.5
                                                                                                                                    -32.29
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4324.98
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                                                                                                                    2295.5
                                                                                                                                   -32.29
                                                                                                                                                   81.49
                                                                             45.40
                                                                                            51.69
                    0 54 22
                                                -27.53
                                                               88.49
       127.78
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                 SGT 2955.1 SGR 1226.4 SG3 165.1
RRT .8901 RRF .9844 RTF .9455
SGB 3199.5 R23 .2531 R13 .9634
                                                                                                                  ST 2302.4 SR 705.7 SS 838.5
     TOE 2.0833 TRA -.4009 TC3-1.6830 BAU .6995
                                                                                                            CRT .9869 CRS -.9991 CST -.9928
LSA 2546.2 MSA 137.7 SSA 4.5
     RDE .6363 RRA .1164 RC3 -.9494 FAU .04049
    FOE 1.2216 FRA .1054 FC3-1.2947 BSP 9645
BDE 2.1789 BRA .4174 BC3 1.9324 FSP -550
                                                                 SG1 3156.4 SG2 523.2 THA 20.88
                                                                                                                 EL1 2405.6 EL2 109.1 ALF 16.86
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ARRIVAL DATE NOV 17 1967

JPL TM 33-99

LAUNCH DATE JUL 14 1967

DISTANCE 366.298 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 27.193 GAL- -7.13 AZL 79.84 MCA 171.49 SMA 131.92 ECC .19587 INCIO.1592 VI 29.297
RP 107.57 LAP 1.50 LOP 102.51 VP 38.231 GAP 3.82 AZP 100.05 TAL 212.18 TAP 23.67 RCA 106.08 APO 157.76 V2 35.230
RC 111.351 GL 47.98 GP -69.22 ZAL 121.01 ZAP 106.70 ETS 311.69 ZAE 105.09 ETE 222.47 ZAC 115.88 ETC 333.38 CLP-144.09 PLANETOCENTRIC CONIC C3 41.040 VHL 6.406 DLA 54.34 RAL 179.39 RAD 6568.6 VEL 12.744 PTH 2.32 VHP 9.246 DPA -47.77 RAP 118.32 ECC 1.6754 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 68.70 40.53 18 38 23 3912.1 -32.18 211.44 217.16 17 23 11 4512.06 -26.23 41.47 3 12 13 2317.7 -32.17 83.60 40.53 68.68 2 23 35 2917.66 -26.22 89.32 138.53 68.70 40.53 18 38 23 3912.1 -32.18 211.44 17 23 11 4512.06 -26.23 217.16 -32.17 83.60 40.53 3 12 13 2317.7 2 23 35 2917.66 17 23 11 4512.06 2 23 35 2917.66 138.53 -26.22 89.32 68.68 -32.18 211.44 68.70 40.53 18 38 23 3912.1 17 23 11 -26.23 217.16 -32.17 83.60 3 12 13 2317.7 68.68 40.53 -26.22 89.32 138.53 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2852.9 SR 564.9 SS 849.0 CRT .9669 CR5 -.9883 CST -.9945 SGT 3196.1 SGR 998.8 SG3 115.7 RRT .8114 RRF .9428 RTF .9554 SGB 3348.5 R23 .2437 R13 .9672 TOE 3:1889 TRA .1176 TC3-1.1169 BAU .6753 RDE .6073 RRA .3345 RC3 -.5173 FAU .02592 FDE 1.1791 FRA .2845 FC3 -.5468 BSP 10163 LSA 3025.4 MSA 161.4 SSA 2.6 SG1 3300.4 SG2 565.4 THA 14.67 EL1 2904.9 EL2 141.5 ALF 10.86 BOE 3.2462 BRA .3546 BC3 1.2309 FSP -392 ARRIVAL DATE NOV 19 1967 FLIGHT TIME 128.00 HELIOCENTRIC CONIC DISTANCE 372.270 RL 152.07 LAL -.00 LOL 290.89 VL 27.145 GAL -6.90 AZL 72.02 HCA 174.60 SMA 131.58 ECC .19574 INC17.9843 V1 29.297 RP 107.55 LAP 1.67 LOP 105.75 VP 38.203 GAP 4.10 AZP 107.91 TAL 210.94 TAP 25.54 RCA 105.83 APO 157.34 V2 35.236 RC 113.598 GL 59.73 GP -78.11 ZAL 109.31 ZAP 101.79 ETS 288.74 ZAE 94.28 ETE 204.12 ZAC 114.65 ETC 311.01 CLP-172.58 PLANETOCENTRIC CONIC 2.65 VHP 13.871 DPA -53.97 RAP 103.50 ECC 2.5275 C3 92.815 VHL 9.634 DLA 59.46 RAL 201.31 RAD 6569.8 VEL 14.634 PTH LNCH AZMTH LNCH TIME, L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 35.25 18 33 52 4741.83 -16.81 230.85 101.07 32.06 19 52 54 4141.8 -23.53 226.64 90.67 32.05 4 59 10 2479.8 -23.52 4 7 51 3079.78 -16.79 94.87 101.04 19 52 54 4141.8 -23.53 226.64 32.06 18 33 52 4741.83 -16.81 230.85 101.07 35.25 -23.52 90.67 4 7 51 3079.78 18 33 52 4741.85 101.04 32.05 4 59 10 2479.8 -16.79 94.87 144.75 226.64 32.06 19 52 54 4141.8 -23.53 101.07 18 33 52 -16.81 230.85 35.25 32.05 4 59 10 2479.8 -23.52 90.67 94.87 101.04 4 7 51 3079.78 -16.79 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2874.6 SR 597.2 SS 782.9 CRT -.9425 CRS .9094 CST -.9961 SGT 3404.4 SGR 678.0 SG3 76.3 RRT -.4476 RRF -.2741 RTF .9819 TDE 4.7526 TRA 1.4903 TC3 -.3877 BAU .4873 RDE -.9918 RRA .2665 RC3 -.0624 FAU .01155 LSA 3031.3 MSA 210.3 SSA 1.3 SGB 3471.2 R23 -. 2009 R13 -. 9788 FOE 1.0581 FRA .4987 FC3 -.1078 BSP 10247 EL1 2929.4 EL2 195.8 ALF 168.87 SG1 3418.3 SG2 503.8 THA 174.74 BOE 4.8550 BRA 1.5139 BC3 .3927 FSP -249 ARRIVAL DATE NOV 21 1967 FLIGHT TIME 130.00 LAUNCH DATE JUL 14 1967 DISTANCE 377.865 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 27.095 GAL -6.58 A7L 46.03 MCA 177.36 SMA 131.24 ECC .19498 INC43.9713 V1 29.297 RP 107.53 LAP 1.83 LOP 109.00 VP 38.173 GAP 4.28 A7P 133.94 TAL 209.43 TAP 26.79 RCA 105.65 APO 156.82 V2 35.241 RC 115.842 GL 60.96 GP -70.84 ZAL 98.16 ZAP 95.74 ETS 205.70 ZAE 74.05 ETE 124.94 ZAC 116.26 ETC 224.69 CLP 107.75 PLANETOCENTRIC CONIC C3 456.966 VML 21.377 OLA 52.09 RAL 217.98 RAD 6572.3 VEL 24.047 PTH 3.31 VMP 29.377 OPA -52.47 RAP 70.02 ECC 8.5205 LNCH AZMTH LNCH TIME L-I TIME INLLAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 37.95 21 27 36 37.95 5 45 32 227.61 4333.1 -8.70 20 5 23 4933.15 4 49 17 3375.16 232.16 126.12 -2.40 44.27 2775.2 -8.68 103.76 108.31 -2.39 126.10 135.73 37.95 21 27 36 4333.1 -8.70 227.61 20 5 23 4933.15 4 49 17 3375.16 232.16 126.12 20 5 23 -2.40 44.27 103.76 2775.2 -8.68 5 45 32 -2.39 108.31 126.10 37.95 135.73 37.95 21 27 36 4333.1 -8.70 227.61 20 5 23 4933.15 4 49 17 3375.16 -2,40 232.16 126.12 44.27 MID-COURSE EXECUTION ACCURACY -8.68 103.76 2775.2 -2.39 106.31 135.73 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 674.6 SGR 3323.5 SG3 53.5-RRT -.5943 RRF -.9915 RTF .6921 SGB 3391.3 R23 -.1082 R13 -.9938 SGI 3348.2 SGZ 538.6 THA 97.06 ST 230.1 SR 2252.1 SS 930.5 CRT .1971 CRS .9955 CST .1033 LSA 2435.8 MSA 240.4 SSA 1.1 TDE -.4360 TRA 1.5149 TC3 -.0162 BAU .9668 RDE-7.9371 RRA-5.6469 RC3 -.1574 FAU-.01433 FOE 1.2436 FRA 1.1659 FC3 .0272 BSP 9579 BDE 7.9491 BRA 5.8466 BC3 .1582 FSP -162 EL1 2252.6 EL2 225.6 ALF 88.83 ARRIVAL DATE NOV 23 1967 FLIGHT TIME 132.00 LAUNCH DATE JUL 14 1967 DISTANCE 385.809 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 27.045 GAL -6.73 AZL 145.96 HCA 182.40 SMA 130.88 ECC .19896 INC55.9566 VI 29.297 RP 107.52 LAP 1.99 LOP 112.24 VP 38.141 GAP 5.12 AZP 34.07 TAL 209.37 TAP 31.77 RCA 104.84 APO 156.92 VZ 35.246 RC 118.080 GL -56.75 GP 66.93 ZAL 96.68 ZAP 96.04 ETS 171.83 ZAE 67.82 ETE 250.27 ZAC 91.74 ETC 141.89 CLP 105.58 PLANETOCENTRIC CONIC C3 708.274 VHL 26.613 DLA -53.13 RAL 154.63 RAD 6572.7 VEL 28.802 PTH 3.43 VHP 33.057 DPA 66.92 RAP 337.41 ECC12.6564 INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT 143.13 60.98 4 29 27 1730.5 .66 3 50 37 2330.54 65.39 64.12 42.96 12 51 11 7.06 295.23 154.6 143.13 12 38 37 754.59 .67 299.63 64.14 137.04 60.98 4 29 27 1730.5 7.05 143.13 3 50 37 2330.54 65.39 64.12 . 66 42.96 143.13 12 51 11 143.13 4 29 27 295.23 154.6 7.06 .67 299.63 64.14 137.04 12 38 37 754.59 7.05 60.98 1730.5 3 50 37 2330.54 . 66 65.39 64.12 42.96 12 51 11 295.23 154.6 7.06 137.04 12 36 37 754.59 .67 299.63 64.14 143.13 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 927.0 SGR 3247.1 SG3 54.6 RRT -.8386 RRF .9978 RTF -.8039 SGB 3376.8 R23 -.0961 R13 .9950 ST 497.1 SR 2833.3 SS 1627.8 TOE 2.0661 TRA 2.0587 TC3 -.0639 BAU 1.9801 CRT -.9458 CRS -.9998 CST .9392 RD-13.0459 RRA-3.4494 RC3 .1991 FAU-.02803 FDE-2.6307 FRA -.5915 FC3 .0343 BSP 9594 LSA 3301.1 MSA 164.4 SSA 1.5 SG1 3341.0 SG2 490.8 THA 103.77 EL1 2872.1 EL2 159.3 ALF 99.45 BDE13.2085 BRA 4.0170 BC3 .2091 FSP -160

FLIGHT TIME 126.00

ARRIVAL DATE NOV 25 1967 FLIGHT TIME 134.00 LAUNCH DATE JUL 14 1967 DISTANCE 391.262 HELLOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 26.994 GAL -6.38 AZL 115.05 MCA 185.06 SMA 130.53 ECC .19810 INC25.0526 V1 29.297
RP 107.50 LAP 2.14 LOP 115.48 VP 38.109 GAP 5.26 AZP 65.03 TAL 207.73 TAP 32.80 RCA 104.67 APO 156.39 V2 35.250
RC 120.312 GL -63.00 GP 76.14 ZAL 103.26 ZAP 103.85 ETS 105.50 ZAE 90.67 ETE 185.99 ZAC 88.10 ETC 76.20 CLP 177.62 PLANETOCENTRIC CONTC C3 162.544 VHL 12.749 DLA -51.98 RAL 136.63 RAD 6570.8 VEL 16.848 PTH 2.91 VHP 14.852 DPA 78.29 RAP 259.20 ECC 3.6751 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 9.49 39.10 1555.5 15.69 2 43 8 2155.53 11 22 30 5886.92 141.35 44.40 58.02 3 19 3 53.26 135.60 9.50 272.26 39.12 141.35 13 0 37 5286.9 15.71 267.49 44.40 2 43 8 2155.53 9.49 58.02 39.10 141.35 3 19 3 1555.5 15.69 53.26 141.35 13 0 37 135.60 11 22 30 5886.92 9.50 272.26 39.12 5286.9 15.71 267.49 2 43 8 2155.53 11 22 30 5886.92 141.35 3 19 3 141.35 13 0 37 44.40 9.49 58.02 39.10 1555.5 15.69 53.26 9.50 272.26 39.12 5286.9 15.71 267.49 135.60 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 3058.7 SGR 2154.9 SG3 80.1 RRT .9584 RRF .9373 RTF .9974 SGB 3741.6 R23 -.1592 R13 .9868 TDE-5.1407 TRA-2.7284 TC3 -.0928 BAU .2038 ST 2386.2 SR 1293.2 SS 962.6 CRT .9839 CRS -.9787 CST -.9996 RDE-2.6127 RRA-2.4761 RC3 -.0136 FAU .00820 FOE-1.6267 FRA -.7668 FC3 -.0437 BSP 11281 BDE 5.7666 BRA 3.6844 BC3 .0938 FSP -249 LSA 2871.9 MSA 212.6 SSA 1.0 SG1 3707.0 SG2 507.5 THA 34.77 EL1 2706.5 EL2 203.6 ALF 28.24 FLIGHT TIME 136.00 ARRIVAL DATE NOV 27 1967 HELIOCENTRIC CONIC DISTANCE 397.150 RL 152.07 LAL -.00 LOL 290.89 VL 26.942 GAL -6.11 A7L 106.33 MCA 188.16 SMA 130.17 ECC .19824 INC16.3318 VI 29.297 RP 107.49 LAP 2.29 LOP 118.73 VP 38.075 GAP 5.51 AZP 73.82 TAL 206.34 TAP 34.50 RCA 104.37 APO 155.98 V2 35.253 RC 122.538 GL -58.89 GP 65.78 ZAL 108.50 ZAP 112.19 ETS 68.98 ZAE 102.24 ETE 152.56 ZAC 89.78 ETC 40.11 CLP-157.02 PLANETOCENTRIC CONIC C3 77.421 VHL 8.799 DLA -46.50 RAL 135.88 RAD 6569.5 VEL 14.099 PTH 2.57 VHP 9.819 DPA 72.06 RAP 209.09 ECC 2.2742 ENCH AZHTH. ENCH TIME. E-I TIME. INJ. EAT. INJ. EONG. INJ. AZHTH. INJ. TIME. PO. CST. TIM. INJ. 2 LAT. INJ. 2 LONG 134.26 51.43 3 3 25 1948.27 16.03 44.75 30.05 3 35 53 1348.3 21.52 39.01 128.57 10 56 15 5791.68 16.05 270.17 30.06 134.26 12 32 47 5191.7 21.53 264.44 51.43 3 3 25 1948.27 16.03 44.75 30.05 134.26 3 35 53 1348.3 21.52 39.01 10 56 15 5791.68 3 3 25 1948.27 128.57 16.05 270.17 30.06 134.26 12 32 47 5191.7 21.53 254 44 134.26 3 35 53 134.26 12 32 47 51-.43 16.03 44,75 30.05 1348.3 21.52 39.01 128.57 10 56 15 5791.68 16.05 270.17 30.06 5191.7 21.53 264.44 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 3823.5 SGR 499.1 SG3 120.5 RRT -.1620 RRF -.3174 RTF .9731 SGB 3855.9 R23 .2200 R13 -.9737 SGI 3824.4 ŠGZ 492.4 THA 178.77 ST 2518.2 SR 419.3 SS 909.8 CRT -.8591 CRS .9146 CST -.9927 TOE-3.6377 TRA-3.0096 TC3 -.5397 BAU .5614 ROE .6322 RRA -.2808 RC3 .0540 FAU .02355 FOE-1.6054 FRA -.8430 FC3 -.2634 BSP 11819 BOE 3.6922 BRA 3.0226 BC3 .5424 FSP -383 LSA 2700.2 MSA 232.0 SSA 1.9 EL1 2544.0 EL2 212.4 ALF 171.80 ARRIVAL DATE NOV 29 1967 FLIGHT TIME 138.00 LAUNCH DATE JUL 14 1967 DISTANCE 403.109 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 26.890 GAL -5.84 AZL 102.43 MCA 191.34 SMA 129.81 ECC .19864 INC12.4294 VI 29.297 RP 107.49 LAP 2.43 LOP 121.98 VP 38.040 GAP 5.79 AZP 77.81 TAL 204.98 TAP 36.32 RCA 104.02 APO 155.60 VZ 35.256 RC 124.755 GL -54.26 GP 55.85 ZAL 112.05 ZAP 119.80 ETS 59.49 ZAE 110.14 ETE 147.52 ZAC 91.85 ETC 30.94 CLP-152.29 PLANETOCENTRIC CONIC C3 50.313 VHL 7.093 DLA -41.96 RAL 137.92 RAD 6568.9 VEL 13.102 PTH 2.39 VHP 7.799 DPA 63.51 RAP 191.98 ECC 1.8280 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.63 3 35 44 1780.40 19.20 32.43 25.13 128.06 4 5 24 1180.4 23.99 25.96 122.37 10 40 11 5751.61 19.21 269.44 25.14 128.06 12 16 3 5151.6 24.01 262.97 57.63 3 35 44 1780.40 19.20 32.43 25.13 128.06 4 5 24 1180.4 23.99 25.96 128.06 4 5 24 128.06 12 16 3 128.06 4 5 24 128.06 12 16 3 128.06 4 5 24 128.06 4 5 24 128.06 12 16 3 10 40 11 5751.61 122.37 19.21 269.44 25.14 5151.6 24.01 262.97 3 35 44 1780.40 10 40 11 5751.61 19,20 32.43 25.13 1180.4 23.99 25.96 269.44 25.14 5151.6 24.01 262.97 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2373.9 SR 603.7 SS 933.5 CRT -.9407 CRS .9827 CST -.9872 TOE-2.7403 TRA-2.6293 TC3-1.0065 BAU .6860 SGT 3885.4 SGR 648.8 SG3 162.1 RDE .7472 RRA .0430 RC3 .1646 FAU .03582 FDE-1.6773 FRA -.8828 FC3 -.6163 BSP 12128 RRT -.7151 RRF -.8763 RTF .9584 SGB 3939.2 R23 .2597 R13 -.9621 SG1 3913.4 SG2 450.3 THA 173.10 LSA 2610.9 MSA 233.6 SSA 2.7 EL1 2441.4 EL2 199.2 ALF 166.45 BOE 2.8403 BRA 2.6296 BC3 1.0199 FSP LAUNCH DATE JUL 14 1967 FLIGHT TIME 140.00 ARRIVAL DATE DEC 1 1967 DISTANCE 409.082 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 26.837 GAL -5.57 AZL 100.23 HCA 194.55 SMA 129.45 ECC .19919 INC10.2256 V1 29.297 RP 107.48 LAP 2.56 LOP 125.22 VP 38.005 GAP 6.07 AZP 80.10 TAL 203.61 TAP 38.16 RCA 103.67 APO 155.24 V2 35.258 RC 126.964 GL -50.32 GP 47.62 ZAL 114.27 ZAP 126.33 ETS 54.87 ZAE 115.77 ETE 148.12 ZAC 93.40 ETC 26.67 CLP-151.51 PLANETOCENTRIC CONIC C3 37.964 VHL 6.161 DLA -38.51 RAL 140.42 RAD 6568.5 VEL 12.623 PTH 2.29 VHP 6.828 DPA 55.75 RAP 184.60 ECC 1.6248 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 123.32 4 36 18 123.32 12 2 45 4 8 54 1644.36 24.76 20.52 21.89 22.33 4 36 18 1044.4 14.95 117.26 10 26 59 5746.00 20.54 269.98 22.34 5146.0 24.77 261.04 20.52 21.89 22.33 123.32 4 36 18 1044.4 24.76 14.95 62.74 4 8 54 1644.36 22.34 5146.0 24.77 263.04 117.26 10 26 59 5746.00 20.54 269.98 20.52 21.89 22.33 1044.4 24.76 14.95 1644.36 5746.00" 117.26 10 26 59 20.54 269.98 22.34 5146.0 24.77 263.04 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3963.3 SGR 659.9 SG3 196.4 RRT -.7810 RRF -.9260 RTF .9491 SGB 4017.9 R23 .2830 R13 -.9530 ST 2298.7 SR 590.8 SS 951.4 CRT -.9476 CRS .9899 CST -.9832 TOE-2.2986 TRA-2.3674 TC3-1.4572 BAU .7484 ROE .6345 RRA .0844 RC3 .2257 FAU .04511 LSA 2546.3 MSA 233.5 SSA 3.6 FOE-1.7016 FRA -.8655 FC3-1.0288 BSP 12368 EL1 2366.3 EL2 183.4 ALF 166.23 BOE 2.3845 BRA 2.3689 BC3 1.4746 FSP -631 SG1 3997.0 SG2 408.7 THA 172.51

ARRIVAL DATE DEC 3 1967

JPL TM 33-99

LAUNCH DATE JUL 14 1967

HELIOCENTRIC CONIC DISTANCE 415.054 RL 152.07 LAL -.00 LOL 290.89 VL 26.784 CAL -5.30 AZL 98.81 MCA 197.78 SMA 129.09 ECC .19987 INC 8.8061 V1 29.297 RP 107.48 LAP 2.68 LOP 128.47 VP 37.968 CAP 6.36 AZP 81.61 TAL 202.22 TAP 40.00 RCA 103.29 APO 154.89 V2 35.259 RC 129.165 GL -47.08 CP 40.95 ZAL 115.49 ZAP 131.79 ETS 51.67 ZAE 119.76 ETE 150.31 ZAC 94.30 ETC 23.85 CLP-151.93 PLANETOCENTRIC CONIC C3 31.082 VHL 5.575 OLA -35.93 RAL 142.97 RAD 6568.2 VEL 12.347 PTH 2.23 VHP 6.324 DPA 49.14 RAP 180.98 ECC 1.5115 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.83 20.91 930.6 4 40 40 1530.62 119.83 5 6 11 5.75 21.03 12.98 66.90 10 15 36 5758.84 4 40 40 1530.62 11 51 35 5158.8 24.85 264.13 21.05 271.36 20.92 119.82 113.10 21.03 20.91 119.83 5 6 11 930.6 24.83 5.75 12.98 66.90 119.82 11 51 35 119.83 5 6 11 119.82 11 51 35 10 15 36 5758.84 4 40 40 1530.62 20.92 5158.8 24.85 264.13 21.05 271.36 113.10 20.91 930.6 24.83 5.75 12.98 21.03 66.90 264.13 24.85 10 15 36 5758.84 21.05 271.36 20.92 5158.8 113.10 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4057.3 SCR 611.9 SC3 221.0 RRT -.7910 RRF -.9317 RTF .9426 SCB 4103.2 R23 .2938 R13 -.9458 SCI 4086.3 SC2 371.7 THA 173.14 ST 2259.4 SR 541.0 SS 955.5 CRT -.9479 CRS .9922 CST -.9801 LSA 2501.2 MSA 232.8 SSA 4.5 TDE-2.0444 TRA-2.1756 TC3-1.8861 BAU .7903 ROE .5256 RRA .0733 RC3 .2438 FAU .05135 FDE-1.6747 FRA -.8023 FC3-1.4301 BSP 12650 BOE 2.1109 BRA 2.1768 BC3 1.9018 FSP -712 EL1 2317.1 EL2 168.0 ALF 167.14 ARRIVAL DATE DEC 5 1967 FLIGHT TIME 144.00 LAUNCH DATE JUI 14 1967 HELIOCENTRIC CONIC DISTANCE 421.017 RL 152.07 LAL -.00 LOL 290.89 VL 26.730 GAL -5.02 A7L 97.81 MCA 201.01 SMA 128.73 ECC .20066 INC 7.8113 V1 29.297
RP 107.48 LAP 2.79 LOP 131.72 VP 37.930 GAP 6.64 A7P 82.70 TAL 200.81 TAP 41.82 RCA 102.90 APO 154.56 V2 35.259 RC 131.355 GL -44.43 GP 35.58 7AL 115.96 ZAP 136.34 ETS 49.11 7AE 122.56 ETE 152.93 ZAC 94.59 ETC 21.70 CLP-152.80 PLANETOCENTRIC CONIC C3 26.722 VHL 5.169 OLA -34.03 RAL 145.52 RAD 6568.1 VEL 12.170 PTH 2.18 VHP 6.058 DPA 43.58 RAP 179.21 ECC 1.4398 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.26 20.42 5 10 22 1433.86 10 6 12 5780.07 5.45 5 34 16 833.9 70.29 21.21 117.25 11 42 32 5180.1 273.14 20.43 10 6 12 109.71 1433.86 5780 ~ 21.22 5 34 16 833.9 24.69 5 10 22 5.45 20.42 117.26 70.29 21.21 5180.1 10 6 12 273.14 20.43 109.71 21.22 5249.7 22.62 270.09 110.00 9 43 23 5849.69 18.90 277.25 19.11 5100.3 10 32 22 268.17 21.69 110.00 5700.27 23.57 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4171.2 SGR 556.0 SG3 238.2 RRT -.7860 RRF -.9233 RTF .9383 SGB 4208.1 R23 .2925 R13 -.9408 SG1 4194.2 SG2 341.9 THA 173.98 ST 2249.5 SR 493.9 SS 954.8 CRT -.9479 CRS .9935 CST -.9778 TOE-1.8914 TRA-2.0254 TC3-2.3025 BAU .8269 RDE .4451 RRA .0566 RC3 .2371 FAU .05534 FDE-1.6244 FRA -.7186 FC3-1.7929 BSP 13101 LSA 2482.4 MSA 231.4 SSA EL1 2297.9 EL2 154.0 ALF 168.19 BOF 1.9430 BRA 2.0262 BC3 2.3146 FSP -780 ARRIVAL DATE DEC 7 1967 LAUNCH DATE JUL 14 1967 FLIGHT TIME 146.00 **DISTANCE 426.972** HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 26.676 GAL -4.72 AZL 97.07 HCA 204.24 SHA 128.37 ECC .20155 INC 7.0716 VI 29.297 RP 107.48 LAP 2.90 LOP 134.97 VP 37.892 GAP 6.92 AZP 83.55 TAL 199.38 TAP 43.63 RCA 102.50 APO 154.25 V2 35.259 RC 133.537 GL -42.24 GP 31.23 ZAL 115.84 ZAP 140.15 ETS 46.96 ZAE 124.51 ETE 155.51 ZAC 94.39 ETC 19.94 CLP-153.87 PLANETOCENTRIC CONIC C3 23.704 VHL 4.869 DLA -32.66 RAL 148.07 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 5.925 DPA 38.90 RAP 178.49 ECC 1.3901 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.53 115.37 6 0 5 115.36 11 36 4 751.9 351.63 73.01 5 37 34 1351,94 21.29 359.16 20.61 5202.9 24.54 267.42 9 59 21 5802.91 21.30 274.95 20.62 106.99 6 Ø 5 I1 36 4 351.63 115.37 751.9 24.53 5 37 34 1351.94 359.16 20.61 73.01 21.29 267.42 274.95 20.62 115.36 5202.9 24.54 106.99 9 59 21 5802.91 21.30 18.38 121.37 9 12 37 109.56 13 6 51 300.18 16.67 14.33 306.96 94.8 9 1 2 694.76 247.13 31.00 11 35 3 5508.08 255.52 23.94 4908.1 110.00 28.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2216.8 SR 445.1 SS 924.7 CRT -.9463 CRS .9944 CST -.9749 LSA 2432.0 MSA 229.6 SSA 6.6 SGT 4208.6 SGR 487.8 SG3 240.7 RRT -.7527 RRF -.8963 RTF .9308 SGB 4236.8 R23 .2911 R13 -.9328 TDE-1.7619 TRA-1.8607 TC3-2.6479 BAU .8415 ROE .3780 RRA .0332 RC3 .2000 FAU .05555 FDE-1.5199 FRA -.5805 FC3-2.0287 88P 12758 SG1 4224.7 SG2 319.9 THA 174.99 EL1 2256.6 EL2 141.4 ALF 169.20 BDE 1.8020 BRA 1.8610 BC3 2.6555 FSP -745 ARRIVAL DATE DEC. 9 1967 FLIGHT TIME 148.00 DISTANCE 432.911 RL 152.07 LAL -.00 LOL 290.89 VL 26.622 GAL -4.42 AZL 96.50 MCA 207.48 SMA 128.02 ECC .20257 INC 6.4970 V1 29.297 RP 107.48 LAP 2.99 LOP 138.22 VP 37.853 GAP 7.20 AZP 84.23 TAL 197.94 TAP 45.42 RCA 102.08 APO 153.95 V2 35.257 RC 135.709 GL -40.39 GP 27.68 ZAL 115.26 ZAP 143.38 ETS 45.12 ZAE 125.87 ETE 157.91 ZAC 93.80 ETC 18.46 CLP-155.01 PLANETOCENTRIC CONIC C3 21.484 VHL 4.635 DLA -31.69 RAL 150.64 RAD 6567.9 VEL 11.953 PTH 2.13 VHP 5.874 DPA 34.91 RAP 178.43 ECC 1.3536 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.43 113.98 6 23 27 683.7 346.39 6 2 3 1283.74 21.37 354.00 21.30 75.13 11 32 27 5223.3 24.44 268.93 9 55 24 5823.35 21.38 276.54 21.31 113.97 104.87 6 2 3 1283.74 21.37 354.00 21.30 113.98 6 23 27 683.7 24.43 346.39 75.13 268.93 11 32 27 5223.3 24.44 104.87 9 55 24 5823.35 21.38 276.54 21.31 113.97 121.98 9 2 26 106.20 13 36 46 302.70 110.00 8 50 8 738.38 12.77 309.37 16.53 138.4 16.91 12 6 29 5416.70 240.40 110.00 30.52 249.09 25.02 4816.7 32.44 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 4335.5 SGR 449.6 SG3 247.5 RRT -.7315 RRF -.8680 RTF ..9289 SGB 4358.8 R23 .2715 R13 -.9303 SGI 4348.0 SG2 305.7 THA 175.64 ST 2244.0 SR 418.9 SS 922.1 CRT -.9491 CRS ..9956 CST -.9740 LSA 2451.5 MSA 226.6 SSA 7.7 EL1 2279.1 EL2 129.9 ALF 169.92 TOE-1.7068 TRA-1.7427 TC3-3.0387 BAU .8742 RDE .3387 RRA .0252 RC3 .1723 FAU .05653 FOE-1.4590 FRA -.4851 FC3-2.2781 BSP 13354

FLIGHT TIME 142.00

BDE 1.7401 BRA 1.7429 BC3 3.0436 FSP -788

ARRIVAL DATE DEC 11 1967

LAUNCH DATE JUL 14 1967

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DISTANCE 438.838
    HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 26.568 GAL -4.11 AZL 96.04 MCA 210.72 SMA 127.66 ECC .20371 INC 6.0352 V1 29.297 RP 107.49 LAP 3.08 LOP 141.48 VP 37.813 GAP 7.48 AZP 84.81 TAL 196.48 TAP 47.20 RCA 101.66 APO 153.67 V2 35.255
      RC 137.871 GL -38.80 GP 24.76 7AL 114.29 7AP 146.16 ETS 43.56 7AE 126.82 ETE 160.04 7AC 92.91 ETC 17.19 CLP-156.17
    PLANETOCENTRIC CONIC
      C3 19.775 VHL 4.447 DLA -31.05 RAL 153.27 RAD 6567.8 VEL 11.881 PTH 2.11 VMP 5.875 DPA 31.46 RAP 178.83 ECC 1.3255
      C3 19,775 VML 4.447 DLA -31,105 RAL 153,27 RAU 0507.8 VEL 11,001 FM 2.11 VMP 3.015 VMP 3.015 VMP 12,002 FM 10.015 FM
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9 55 3 5837.60
6 23 23 1229.83
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103.90 13 58 2
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         110.00
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                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                   SGT 4437.6 SGR 417.5 SG3 248.8

RRT -.6983 RRF -.8280 RTF ..9262

SGB 4457.2 R23 .2490 R13 -.9274

SG1 4447.2 SG2 298.2 THA 176.22
                                                                                                                                                                             ST 2271.7 SR 398.3 SS 913.0
CRT -.9530 CRS .9969 CST -.9732
LSA 2470.5 MSA 222.8 SSA 8.9
      TOE-1.6682 TRA-1.6181 TC3-3.4012 BAU .8999
     RDE .3090 RRA .0186 RC3 .1374 FAU .05606
FDE-1.3888 FRA -.3788 FC3-2.4543 BSP 13714
BDE 1.6965 BRA 1.6182 BC3 3.4040 FSP -797
                                                                                                                                                                              EL1 2303.3 EL2 119.0 ALF 170.49
                                                                                                                                                                                               ARRIVAL DATE DEC 13 1967
                                                                                                          FLIGHT TIME 152.00
LAUNCH DATE JUL 14 1967
    HELIOCENTRIC CONIC
                                                                                                         DISTANCE 444.750
     RL 152.07 LAL -.00 LOL 290.89 VL 26.514 GAL -3.78 AZL 95.65 HCA 213.96 SMA 127.31 ECC .20497 INC 5.6538 V1 29.297 RP 107.50 LAP 3.16 LOP 144.73 VP 37.773 GAP 7.76 AZP 85.31 TAL 195.00 TAP 48.96 RCA 101.22 APO 153.41 V2 35.253 RC 140.023 GL -37.39 GP 22.34 ZAL 112.99 ZAP 148.59 ETS 42.24 ZAE 127.48 ETE 161.91 ZAC 91.77 ETC 16.10 CLP-157.33
     PLANETOCENTRIC CONIC
C3 18.420 VHL 4.292 DLA -30.67 RAL 155.98 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 5.910 DPA 28.44 RAP 1/9.56 ELC 1.0002
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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112.24 7 1 15 590.2 24.51 339.37
    PLANETOCENTRIC CONIC
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9 56 36 5843.68
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                                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 4532.3 SGR 394.4 SG3 247.2
RRT -.6584 RRF -.7794 RTF .9237
SGB 4549.5 R23 .2240 R13 -.9246
SG1 4539.8 SG2 296.4 THA 176.71
                                                                                                                                                                               ST 2308.5 SR 384.1 SS 903.7
CRT -.9582 CRS .9981 CST -.9728
      TOE-1.6476 TRA-1.4911 TC3-3.7476 BAU
                                                                               .9232
      ROE .2877 RRA .0146 RC3 .1013 FAU .05482
     FDE-1.3214 FRA -.2733 FC3-2.5767 BSP 14026
BDE 1.6725 BRA 1.4912 BC3 3.7489 FSP -793
                                                                                                                                                                              LSA 2499.1 MSA 218.2 SSA 10.0
                                                                                                                                                                              EL1 2337.7 EL2 108.5 ALF 170.92
                                                                                                                                                                                              ARRIVAL DATE DEC 15 1967
                                                                                                         FLIGHT TIME 154.00
LAUNCH DATE JUL 14 1967
                                                                                                         DISTANCE 450.648
    HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 26.460 GAL -3.45 A7L 95.33 MCA 217.20 SMA 126.96 ECC .20637 JNC 5.3316 VI 29.297
RP 107.51 LAP 3.22 LOP 147.98 VP 37.731 GAP 8.04 A7P 85.75 TAL 193.51 TAP 50.71 RCA 100.76 APO 153.16 V2 35.249
RC 142.165 GL -36.13 GP 20.31 7AL 111.41 7AP 150.75 ETS 41.15 7AE 127.95 ETE 163.54 7AC 90.44 ETC 15.16 CLP-158.48
    PLANETOCENTRIC CONIC
      C3 17.324 VHL 4.162 DLA -30.50 RAL 158.79 RAD 6567.7 VEL 11.777 PTH 2.08 VHP 5.970 DPA 25.75 RAP 180.53 ECC 1.2851
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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10 6 23 5840.38
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9 1 45 755.71
12 59 54 5297.65
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                                                                                                   MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ST 2354.8 SR 375.5 SS 896.0

CRT -.9646 CRS .9990 CST -.9730

LSA 2538.4 MSA 212.6 SSA 11.2
                                                                                                   SCT 4623.7 SCR 380.2 SC3 244.1

RRT -.6165 RRF -.7264 RTF .9216

SCB 4639.3 R23 .1980 R13 -.9223

SCI 4629.7 SG2 298.9 THA 1777.09
      TDE-1.6420 TRA-1.3610 TC3-4.0811 BAU .9453
      ROE .2728 RRA .0131 RC3 .0670 FAU .05320 FDE-1.2596 FRA -.1728 FC3-2.6587 BSP 14319
                                                                                                                                                                              EL1 2382.5 EL2 97.9 ALF 171.24
      BOE 1.6645 BRA 1.3611 BC3 4.0817 FSP -783
                                                                                                                                                                                               ARRIVAL DATE DEC 17 1967
                                                                                                         FLIGHT TIME 156.00
LAUNCH DATE JUL 14 1967
                                                                                                         DISTANCE 456.529
     RL 152.07 LAL -.00 LOL 290.89 VL 26.406 GAL -3.11 AZL 95.05 MCA 220.44 SMA 126.62 ECC .20791 INC 5.0542 V1 29.297 RP 107.52 LAP .3.28 LOP 151.23 VP 37.690 GAP 8.32 AZP 86.15 TAL 192.00 TAP 52.44 RCA 100.29 APO 152.94 V2 35.245 RC 144.295 GL -34.97 GP 18.58 ZAL 109.56 ZAP 152.68 ETS 40.26 ZAE 128.27 ETE 164.95 ZAC 88.95 ETC 14.33 CLP-159.60
    PLANETOCENTRIC CONIC
      C3 16.429 VHL 4.053 DLA -30.50 RAL 161.72 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 6.048 DPA 23.33 RAP 181.68 ECC 1.2704
                                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.23 344.51 27.76 111.43 7 27 4 552.5 24.94 336.71 22.24 277.31 27.76 111.42 11 55 8 5228.4 24.95 269.52 22.23 344.51 27.76 111.43 7 27 4 482 8 24.95 269.52
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          110.00
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                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 4714.8 SGR 373.1 SG3 240.2

RRT - .5757 RRF - .6729 RTF .9201

SGB 4729.5 R23 .1725 R13 - .9206

SGI 4719.7 SG2 304.8 THA 177.38
                                                                                                                                                                             ST 2411.2 SR 371.4 SS 890.5
CRT -.9715 CRS .9993 CST -.9735
LSA 2588.9 MSA 206.3 SSA 12.3
      TDE-1.6497 TRA-1.2274 TC3-4.4024 BAU .9670
      RDE .2627 RRA .0134 RC3 .0354 FAU .05136
FDE-1.2043 FRA -.0785 FC3-2.7065 85P 14641
BDE 1.6704 BRA 1.2275 BC3 4.4025 FSP -772
                                                                                                                                                                            ELI 2438.1 EL2 87.1 ALF 171.48
       BOE 1.6704 BRA 1.2275 BC3 4.4025 FSP
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FLIGHT TIME 150.00

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ARRIVAL DATE DEC 19 1967
LAUNCH DATE JUL 14 1967
                                                                      FLIGHT TIME 158.00
                                                                      DISTANCE 462.395
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 26.353 GAL -2.75 AZL 94.81 MCA 223.68 SMA 126.28 ECC .20959 INC 4.8115 V1 29.297 RP 107.53 LAP 3.32 LOP 154.48 VP 37.648 GAP 8.61 AZP 86.52 TAL 190.48 TAP 54.16 RCA 99.81 APO 152.74 V2 35.240 RC 146.414 GL -33.86 GP 17.11 ZAL 107.48 ZAP 154.42 ETS 39.57 ZAE 128.50 ETE 166.17 ZAC 87.34 ETC 13.60 CLP-160.70
  PLANETOCENTRIC CONIC
    C3 15.699 VML 3.962 DLA -30.63 RAL 164.78 RAD 6567.6 VEL 11.708 PTH 2.06 VHP 6.141 DPA 21.12 RAP 182.99 ECC 1.2584
   LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 17 26 1150.56
10 32 51 5809.71
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                                                                              25.23
      110.00
                                  726.49
                                                                                                                                                      230.11
                                                                                                                        4681.8
                                                                                                                                        33.79
                                                                              33.40
                                                               239.16
      110.00
                   13 21 47
                                 52A1.7A
                                                  32.66
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2469.3 SR 370.1 SS 883.2
CRT -.9783 CRS .9990 CST -.9742
                                                                  SGT 4791.0 SGR 370.8 SG3 234.8
RRT -.5355 RRF -.6201 RTF .9182
SGB 4805.4 R23 .1495 R13 -.9186
    TDE-1.6635 TRA-1.0838 TC3-4.6965 BAU .9857
   ROE .2559 RRA .0143 RC3 .0060 FAU .04919
FOE-1.1502 FRA .0145 FC3-2.7127 BSP 14850
                                                                                                                     LSA 2641.0 MSA 199.3 SSA 13.5
                                                                   SG1 4795.2 SG2 312.9 THA 177.62
                                                                                                                     EL1 2495.8 EL2 75.9 ALF 171.65
    BOE 1.6831 BRA 1.0839 BC3 4.6965 FSP -751
                                                                                                                                ARRIVAL DATE DEC 21 1967
                                                                       FLIGHT TIME 160.00
LAUNCH DATE JUL 14 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 468.243
   RL 152.07 LAL -.00 LOL 290.89 VL 26.299 GAL -2.38 AZL 94.60 MCA 226.93 SMA 125.94 ECC .21142 INC 4.5959 VI 29.297
RP 107.55 LAP 3.36 LOP 157.73 VP 37.605 GAP 8.89 AZP 86.86 TAL 188.94 TAP 55.87 RCA 99.31 APO 152.57 V2 35.234
RC 148.521 GL -32.80 GP 15.85 ZAL 105.18 ZAP 156.02 ETS 39.06 ZAE 128.66 ETE 167.23 ZAC 85.61 ETC 12.96 CLP-161.77
  PLANETOCENTRIC CONIC
    C3 15.109 VHL 3.887 DLA -30.86 RAL 167.99 RAD 6567.6 VEL 11.683 PTH 2.05 VHP 6.245 DPA 19.08 RAP 184.41 ECC 1.2487
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               32.83
                                                                                                       7 44 58
                                                                                                                          556.2
                                                                                                                                        25.63
                                                               345.09
                                                                                           111.21
                    7 25 41 1156.24
                                                  22.96
       77.19
                                                                                                                          5186.8
                   10 50 9 5786.79
7 25 41 1156.24
                                                                                                        12 26 35
                                                                                                                                          25.64
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                                                  22.97
                                                               274.50
                                                                               32.83
                                                                                             111.20
      102.81
                                                                                                                          556.2
                                                                                                                                          25.63
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                                                                                             111.21
                                                                                                        7 44 58
                                                               345.09
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       77.19
                                                  22.96
                                                                                                       12 26 35
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                                                                               32.83
                                                                                             111.20
      102.81
                   10 50 9 5786.79
                                                                                             121.52 9 56 3
100.86 14 58 49
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                                                                307.54
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      110.00
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      110.00
                                 5285.80
                                                                239.46
                                                                               35.96
                  13 30 43
                                                  32.61
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4874.3 SGR 373.3 SG3 229.9
RRT -.5027 RRF -.5739 RTF .9174
                                                                                                                     ST 2537.9 SR 372.1 SS 879.1
CRT -.9847 CRS ..9978 CST -.9753
    TOE-1.6885 TRA -.9373 TC3-4.9776 BAU 1.0054
    RDE .2524 RRA .0163 RC3 -.0187 FAU .04712
                                                                   SGB 4888.5 R23 .1280 R13 -1.9178
SG1 4877.9 SG2 322.5 THA 177.79
                                                                                                                     LSA 2704.7 MSA 191.7 SSA 14.7
    FDE-1.1040 FRA .0983 FC3-2.6997 BSP 15148
                                                                                                                     EL1 2564.3 EL2 64.2 ALF 171.78
    BDE 1.7072 BRA .9374 BC3 4.9776 FSP -738
                                                                                                                               ARRIVAL DATE DEC 23 1967
                                                                      FLIGHT TIME 162.00
LAUNCH DATE JUL 14 1967
                                                                      DISTANCE 474.074
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 26.246 GAL -2.00 AZL 94.40 HCA 230.16 SMA 125.61 ECC .21343 INC 4.4021 V1 29.297 RP 107.57 LAP 3.38 LOP 160.98 VP 37.562 GAP 9.18 AZP 87.18 TAL 187.40 TAP 57.56 RCA 98.80 APO 152.41 V2 35.228 RC 150.615 GL -31.74 GP 14.75 ZAL 102.69 ZAP 157.50 ETS 38.73 ZAE 128.77 ETE 168.16 ZAC 83.80 ETC 12.39 CLP-162.81
   PLANETOCENTRIC CONIC
    C3 14.646 VHL 3.827 DLA -31.17 RAL 171.34 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 6.359 DPA 17.17 RAP 185.93 ECC 1.2410
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.40 7 33 24 1167.20 23.35 346.08 35.79 111.26 7 52 51 567.2 26.02 338.20
                  7 33 24 1167.20
11 9 12 5761.93
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                                                                                                                          5161.9
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                                                                               35.80
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       103.60
                                                  23.36
                                                               272.79
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                                 1167.20
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121.16 10 14 20
101.30 15 7 3
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      110.00
                   10 2 59
                                   680.90
                                                  14.82
                                                                306.18
                                                                               31.36
                                                                                                                          4696.2
                                                                                                                                         33.69
                                                                                                                                                       231.23
                  13 38 47 5296.23
                                                  32.48
                                                               240.25
                                                                               38.81
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4953.8 SGR 378.8 SG3 224.7

RRT - .4751 RRF - .5339 RTF .9170

SGB 4968.3 R23 .1093 R13 - .9172

SG1 4957.1 SG2 333.1 THA 177.91
                                                                                                                     ST 2610.9 SR 376.3 SS 875.2
    TDE-1.7203 TRA -.7827 TC3-5.2311 BAU 1.0243
                                                                                                                     CRT -.9901 CRS .9956 CST -.9766
LSA 2773.1 MSA 183.9 SSA 16.0
    ROE .2513 RRA .0185 RC3 -.0397 FAU .04498
    FDE-1.0614 FRA .1782 FC3-2.6587 BSP 15423
BDE 1.7385 BRA .7830 BC3 5.2313 FSP -722
                                                                                                                     EL1 2637.3 EL2 52.3 ALF 171.88
                                                                                                                                 ARRIVAL DATE DEC 25 1967
LAUNCH DATE JUL 14 1967
                                                                       FLIGHT TIME 164.00
                                                                       DISTANCE 479.885
   HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 26.193 GAL -1.60 AZL 94.23 HCA 233.40 SMA 125.28 ECC .21560 INC 4.2258 V1 29.297
RP 107.59 LAP 3.39 LOP 164.22 VP 37.518 GAP 9.47 AZP 87.48 TAL 185.84 TAP 59.25 RCA 98.27 APO 152.29 V2 35.221
RC 152.696 GL -30.68 GP 13.79 ZAL 100.02 ZAP 158.87 ETS 38.57 ZAE 128.85 ETE 168.96 ZAC 81.91 ETC 11.89 CLP-163.83
   PLANETOCENTRIC CONIC
    C3 14.300 VHL 3.782 DLA -31.53 RAL 174.85 RAD 6567.6 VEL 11.648 PTH 2.04 VHP 6.482 DPA 15.39 RAP 187.54 ECC 1.2353
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 41 16 1181.14
11 29 18 5737.41
7 41 16 1181.14
11 29 18 5737.41
                                                                                                          8 0 57
                                                                                                                                                       339.40
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                                                  23.73
                                                                347.30
                                                                                                       13 4 55
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                                                                271.10
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                                                   23.73
                                                                347.30
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        75.52
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101.98 15 14 45
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       110.00
                                                                               34.90
                   10 23 31
                                   654.36
                                                   15.75
                                                                304.68
                                                                                                                          4712.2
                                                                                                                                        33.57
                                                                                                                                                       232.45
                                                                               41.93
       110.00
                    13 46 13
                                 5312.19
                                                   32.26
                                                                241.44
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2683.8 SR 382.1 SS 870.0
CRT -.9943 CRS .9925 CST -.9779
                                                                  SCT 5029.5 SCR 386.1 SC3 219.3
RRT -.4531 RRF -.5003 RTF .9170
SCB 5044.3 R23 .0929 R13 -.9172
    TDE-1.7559 TRA -.6205 TC3-5.4517 BAU 1.0423
    ROE .2521 RRA .0206 RC3 -.0566 FAU .04284
FOE-1.0207 FRA .2534 FC3-2.5933 BSP 15685
BOE 1.7739 BRA .6208 BC3 5.4520 FSP -705
                                                                                                                    LSA 2841.6 MSA 176.0 SSA 17.2
                                                                                                                     ELI 2710.6 EL2 40.4 ALF 171.94
                                                                   9G1 5032.5 SG2 344.0 THA 178.00
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LAUNCH DATE JUL 14 1967

ARRIVAL DATE DEC 27 1967

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HELIOCENTRIC CONIC
                                                                              DISTANCE 485.677
    RL 152.07 LAL -.00 LOL 290.89 VL 26.140 GAL -1.19 AZL 94.06 HCA 236.64 SMA 124.95 ECC .21797 INC 4.0639 VI 29.297
RP 107.62 LAP 3.39 LOP 167.47 VP 37.475 GAP 9.77 AZP 87.76 TAL 184.28 TAP 60.92 RCA 97.72 APO 152.19 VZ 35.214
RC 154.762 GL -29.59 GP 12.95 ZAL 97.19 ZAP 160.14 ETS 38.57 ZAE 128.90 ETE 169.66 ZAC 79.96 ETC 11.45 CLP-164.82
   PLANETOCENTRIC CONIC
     C3 14.069 VHL 3.751 DLA -31.91 RAL 178.50 RAD 6567.6 VEL 11.638 PTH
                                                                                                           2.04 VHP 6.613 DPA 13.70 RAP 189.21 ECC 1.2315
     ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        74.63
                       7 49 46 1196.59
                                                       24.10
                                                                      348.63
                                                                                      42.57
                                                                                                    111.58
                                                                                                                     8 9 42
                                                                                                                                      596.6
                                                                                                                                                      26.81
                                                                                                                                                                      340.71
                                                                                                    111.56 13 25 13
111.56 8 9 42
111.56 13 25 13
120.26 10 56 4
102.84 15 22 9
                     11 49 58 5714.75
                                                                      269.54
                                                                                       42.57
                                                                                                                                      5114.7
                                                                                                                                                        26.82
                                                                                                                                                                      261.62
        105.37
                                                       24.11
                                                                                                                                                                      340.71
                       7 49 46
                                     1196.59
                                                       24.10
                                                                      348.63
                                                                                       42.57
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                    11 49 58 5714.75
                                                                                       42.57
                                                                                                                                      5114.7
                                                      24.11
                                                                      269.54
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                    10 45 37
                                                                      303:10
                                                                                       38.74
                                                                                                                                                       20.61
                                                                                                                                                                      296.14
       110.00
                                      626.52
                                                       16.71
                                                                                                                                        26.5
                    13 53 17 5332.62
                                                     31.96
                                                                                       45.32
                                                                                                                                    4732.8
                                                                                                                                                      33.39
                                                                                                                                                                      234.04
       110.00
                                                                      242.97
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5104.6 SGR 394.7 SG3 214.0
RRT -.4570 RRF -.4734 RTF .9176
SGB 5119.9 R23 .0783 R13 -.9178
SGI 5107.6 SG2 354.8 THA 178.06
                                                                                                                                  ST 2755.6 SR 389.4 SS 863.7
CRT -.9971 CRS .9884 CST -.9792
    TOE-1.7950 TRA -.4503 TC3-5.6371 BAU 1.0603
     ROE .2548 RRA .0224 RC3 -.0691 FAU .04078
    FOE - 9822 FRA .3240 FC3-2.5094 BSP 15971
BOE 1.8130 BRA .4508 BC3 5.6375 FSP -691
                                                                                                                                 LSA 2909.1 MSA 168.4 SSA 18.3
                                                                                                                                  EL1 2782.9 EL2 29.3 ALF 171.98
LAUNCH DATE JUL 14 1967
                                                                              FLIGHT TIME 168.00
                                                                                                                                              ARRIVAL DATE DEC 29 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 491.448
    RL 152.07 LAL -.00 LOL 290.89 VL 26.088 GAL -.77 AZL 93.91 MCA 239.88 SMA 124.63 ECC .22053 INC 3.9136 VI 29.297 RP 107.64 LAP 3.38 LOP 170.71 VP 37.430 GAP 10.08 AZP 88.03 TAL 182.71 TAP 62.58 RCA 97.15 APO 152.12 V2 35.205 RC 156.813 GL -28.47 GP 12.21 ZAL 94.22 ZAP 161.35 ETS 38.76 ZAE 128.94 ETE 170.27 ZAC 77.96 ETC 11.06 CLP-165.79
   PLANETOCENTRIC CONIC
    C3 13.949 VHL 3.735 DLA -32.30 RAL 182.30 RAD 6567.5 VEL 11.633 PTH
                                                                                                          2.04 VHP 6.753 DPA 12.09 RAP 190.95 ECC 1.2296
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                     27.16
                                                                                                                                                                  342.06
                      7 59 10 1212.60
                                                       24.42
                                                                      349.99
                                                                                    46.36
                                                                                                    111.82
                                                                                                                     8 19 23
                                                                                                                                       612.6
        73.78
                    12 10 51
                                                        24.44
                                                                                                       111.80
                                                                                                                   13 45 46
                                                                                                                                       5095.0
                                                                                                                                                                       260.24
       106.22
                                    5694.99
                                                                      268.18
                                                                                       46.36
                                                                                                                                                        27.18
                  7 59 10 1212.60
12 10 51 5694.99
11 9 1 5886.36
                                                                                                    111.82 8 19 23
111.89 13 45 46
119.75 12 47 7
103.84 15 29 28
                                                                      349.99
                                                                                       46.36
                                                                                                                                        612.6
                                                                                                                                                                       342.06
                                                       24.42
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                                                       24.44
                                                                      268.18
                                                                                       46.36
                                                                                                                                       5095.0
                                                                                                                                                        27.18
                                                                                                                                                                      260.24
       106.22
                                                       17.67
                                                                      279.36
                                                                                       42.87
                                                                                                                                      5286.4
                                                                                                                                                       21.50
                                                                                                                                                                       272.34
       110.00
       110.00
                    14 0 11
                                   5357.27
                                                       31.57
                                                                      244.78
                                                                                       48.96
                                                                                                                                     4757.3
                                                                                                                                                       33.15
                                                                                                                                                                      235.91
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        BGT 5161.4 SGR 403.6 SG3 207.7
RRT -.4226 RRF -.4504 RTF .9175
SGB 5177.2 R23 .0669 R13 -.9176
SG1 5164.3 SG2 365.6 THA 178.10
                                                                                                                               ST 2815.1 SR 397.2 SS 852.0
CRT -.9985 CRS .9830 CST -.9802
LSA 2963.5 MSA 161.9 SSA 19.5
    TOE-1.8307 TRA -.2665 TC3-5.7611 BAU 1.0745
    RDE .2588 RRA .0233 RC3 -.0793 FAU .03849
    FOE - 9409 FRA .3949 FCJ-2.3688 BSP 16122
BOE 1.8489 BRA .2676 BC3 5.7617 FSP -668
                                                                                                                              EL1 2842.9 EL2 21.3 ALF 171.98
                                                                                                                                            ARRIVAL DATE DEC 31 1967
LAUNCH DATE JUL 14 1967
                                                                             FI IGHT TIME 170.00
                                                                             DISTANCE 497.196
   RL 152.07 LAL -.00 LOL 290.89 VL 26.036 GAL -.32 AZL 93.77 MCA 243.11 SMA 124.32 ECC .22331 INC 3.7729 V1 29.297
RP 107.67 LAP 3.36 LOP 173.96 VP 37.386 GAP 10.39 AZP 88.29 TAL 181.13 TAP 64.24 RCA 96.56 APO 152.08 V2 35.197
RC 158.850 GL -27.31 GP 11.56 ZAL 91.13 ZAP 182.48 ETS 39.12 ZAE 128.96 ETE 170.81 ZAC 75.90 ETC 10.72 CLP-166.74
   PLANETOCENTRIC CONIC
    C3 13.945 VHL 3.734 DLA -32.66 RAL 186.22 RAD 6567.5 VEL 11.633 PTH 2.04 VHP 6,900 DPA 10.55 RAP 192.74 ECC 1.2295
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                  112.09 8 30 14
112.08 14 6 13
112.08 14 6 13
112.08 14 6 13
112.08 14 6 13
119.22 13 10 55
104.93 15 36 58
        73.00 8 9 45 1228.27
107.00 12 31 34 5679.18
73.00 8 9 45 1228.27
                                                                                 50.39
                                                                                                                    8 30 14
                                                                                                                                      628.3
                                                                                                                                                      27.46 343.37
                                                      24.69
                                                                     351.31
                                                       24.70
                                                                     267.08
                                                                                      50.40
                                                                                                                                      5079.2
                                                                                                                                                       27.47
                                                                                                                                                                     259.14
       107.00
                                                       24.69
                                                                     351.31
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                   12 31 34
11 33 16
14 7 14
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       107.00
                                    5679.18
                                                       24.70
                                                                     267.08
                                                                                       47.24
                                                                                                                                      5259.0
                                                                                                                                                       22.34
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       110.00
                                    5859.05
                                                      18.59
                                                                     277.79
                                                                                                                                     4784.4
                                                                                                                                                       32.65
                                                                                                                                                                     237.97
                                    5384.43
                                                      31.11
                                                                     246.76
                                                                                      52.82
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5228.6 SGR 413.4 SG3 202.4

RRT -.4154 RRF -.4353 RTF .9192

SGB 5244.9 R23 .0566 R13 -.9193

SGI 5231.4 SG2 375.8 THA 178.11
                                                                                                                               ST 2072.9 SR 406.5 SS 841.7

CRT -.9986 CRS .9771 CST -.9814

LSA 3017.0 MSA 155.8 SSA 20.5
    TOE-1.8702 TRA -.0777 TC3-5.8492 BAU 1.0906
    ROE .2648 RRA .0239 RC3 -.0840 FAU .03650
FOE -.9049 FRA .4578 FC3-2.2658 89P 16407
BOE 1.8889 BRA .0814 BC3 5.8498 FSP -657
                                                                                                                                EL1 2901.4 EL2 21.4 ALF 171.96
                                                                              FLIGHT TIME 172.00
                                                                                                                                             ARRIVAL DATE JAN 2 1968
LAUNCH DATE JUL 14 1967
                                                                             DISTANCE 502.919
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 25.985 GAL .13 AZL 93.64 MCA 246.35 SMA 124.01 ECC .22632 INC 3.6402 V1 29.297
RP 107.70 LAP 3.33 LOP 177.20 VP 37.341 GAP 10.71 AZP 88.54 TAL 179.54 TAP 65.89 RCA 95.94 APO 152.07 V2 35.187
RC 160.871 GL -26.10 GP 10.97 ZAL 87.94 ZAP 163.55 ETS 39.66 ZAE 128.98 ETE 171.29 ZAC 73.81 ETC 10.42 CLP-167.66
   PLANETOCENTRIC CONIC
    C3 14.059 VHL 3.749 DLA -32.98 RAL 190.25 RAD 6567.6 VEL 11.638 PTH
                                                                                                         2.04 VHP 7.056 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    112.39 8 42 17
112.38 14 26 22
112.39 8 42 17
112.38 14 26 22
112.38 14 26 22
118.70 13 35 5
106.05 15 45 0
                  8 21 34 1243.26
12 51 54 5667.76
8 21 34 1243.26
12 51 54 5667.76
                                                       24.87
                                                                                      54.65
                                                                                                                                       643.3
                                                                                                                                                       27.68
        72.34
                                                                     352.54
                                                                                       54.65
                                                                                                                                      5067.8
                                                                                                                                                       27.69
                                                                                                                                                                      258.35
                                                       24.88
                                                                      266.29
       107.66
                                                                                                                                       643.3
                                                                                                                                                       27.68
                                                                                                                                                                      344.60
                                                       24.87
                                                                      352.54
                                                                                       54.65
        72.34
                                                                                                                                      5067.8
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                                                       24.88
                                                                     266.29
                                                                                       54.65
       107.66
                   11 57 51 5834.06
14 14 47 5413.00
                                                                                       51.83
                                                                                                                                      5234.1
                                                                                                                                                       23.09
                                                                                                                                                                      269.12
                                                       19.41
                                                                      276.33
       110.00
                                                                                                                                                      32.49
                                                                                                                                    4813.0
                                                       30.59
                                                                     248.82
                                                                                       56.90
                                                                                                                                                                     240.12
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        SGT 5263.7 SGR 421.7 SG3 194.8
RRT - .4040 RRF - .4185 RTF .9168
SG8 5280.6 R23 .0504 R13 -.9169
SG1 5266.5 SG2 385.6 THA 178.14
                                                                                                                              ST 2904.8 3R 414.5 SS 818.5 CRT -.9973 CRS .9690 CST -.9815 LSA 3042.2 MSA 153.4 SSA 21.3 EL1 2934.0 EL2 30.3 ALF 171.90
    TOE-1.8984 TRA .1290 TC3-5.8487 BAU 1.0994

RDE .2711 RRA .0227 RC3 -.0898 FAU .03383

FDE -.8574 FRA .5280 FC3-2.0834 BSP 16493

BDE 1.9176 BRA .1309 BC3 5.8493 FSP -629
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FLIGHT TIME 166.00

ARRIVAL DATE JAN 4 1958

JPL TM 33-99

LAUNCH DATE JUL 14 1967

DISTANCE 508.616 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 25.934 GAL .61 AZL 93.51 HCA 249.58 SMA 123.70 ECC .22958 INC 3.5139 V1 29.297
RP 107.73 LAP 3.29 LOP 180.44 VP 37.297 GAP 11.04 AZP 88.77 TAL 177.95 TAP 67.53 RCA 95.30 APO 152.10 V2 35.178
RC 162.878 GL -24.86 GP 10.45 ZAL 84.69 ZAP 164.56 ETS 40.41 ZAE 129.00 ETE 171.70 ZAC 71.68 ETC 10.16 CLP-168.57 PLANETOCENTRIC CONIC C3 14.298 VHL 3.781 DLA -33.24 RAL 194.36 RAD 6567.6 VEL 11.648 PTH 2.04 VHP 7.220 DPA 7.64 RAP 196.45 ECC 1.2353 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.82 8 34 39 1257.19 24.96 353.65 59.10 112.70 8 55 36 657.2 27.81 345.73 108.18 13 11 36 5661.28 24.97 265.83 59.10 112.69 14 45 58 5061.3 27.82 257.90 71.82 8 34 39 1257.19 24.96 353.65 59.10 112.69 14 45 58 5061.3 27.82 257.90 108.18 13 11 36 5661.28 24.97 265.83 59.10 112.69 14 45 58 5061.3 27.82 257.90 100.18 13 11 36 5661.28 24.97 265.83 59.10 112.69 14 45 58 5061.3 27.82 257.90 110.00 12 22 1 5813.52 20.08 275.11 56.58 118.26 13 58 54 5213.5 23.70 267.83 110.00 14 23 25 5440.98 30.05 250.82 61.18 107.12 15 54 6 4841.0 32.09 242.21 118.26 13 58 54 107.12 15 54 6 110.00 14 23 25 5440.98 30.05 250.82 61.18 4841.0 242.21 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5333.2 SGR 431.2 SG3 190.5 RRT -.4058 RRF -.4127 RTF ..9206 SGB 5350.6 R23 ..0405 R13 -.9207 SGI 5336.1 SG2 393.9 THA 178.11 ST 2934.5 SR 424.7 SS 602.8 CRT -.9947 CRS .9612 CST -.9825 LSA 3068.1 MSA 150.3 SSA 21.9 EL1 2964.8 EL2 43.1 ALF 171.81 TOE-1.9309 TRA .3361 TC3-5.8410 BAU 1.1166 ROE .2802 RRA .0216 RC3 -.0853 FAU .03230 FOE -.8226 FRA .5839 FC3-1.9558 BSP 16718 BOE 1.9511 BRA .3368 BC3 5.8416 FSP -615 FLIGHT TIME 176.00 ARRIVAL DATE JAN 6 1968 LAUNCH DATE JUL 14 1967 HELIOCENTRIC CONIC **DISTANCE 514.284** RL 152.07 LAL -.00 LOL 290.89 VL 25.883 GAL 1.11 AFL 93.39 MCA 252.81 SMA 123.40 ECC .23311 INC 3.3929 V1 29.297 RP 107.76 LAP \$.24 LOP 183.67 VP 37.252 GAP 11.37 AZP 89.00 TAL 176.36 TAP 69.16 RCA 94.63 APO 152.16 V2 35.167 RC 164.869 GL -23.57 GP 9.98 ZAL 81.39 ZAP 165.53 ETS 41.37 ZAE 129.01 ETE 172.07 ZAC 69.52 ETC 9.95 CLP-169.47 PERRETOCENTRIC CONIC C3 14.671 VHL 3.830 DLA -33.42 RAL 198.52 RAD 6567.6 VEL 11.664 PTH 2.05 VHP 7.393 OPA 6.26 RAP 198.37 ECC 1.2414 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.46 27.83 8 48 58 1269.88 24.94 354.63 63.71 113.01 9 10 8 569.9 346.71 27.84 108.54 13 30 28 265.72 63.72 113.00 15 4 48 5060.0 257.81 5660.01 24.95 8 48 58 63.71 113.01 9 10 8 669.9 71.46 1269.88 24.94 354.63 27.63 346.71 5660.01 13 30 28 24.95 265.72 63.72 113.00 15 4 48 5060.0 27.84 108.54 117.96 14 21 26 108.04 16 4 56 110.00 12 44 46 5800.08 20.51 274.30 5200.1 24.09 266.98 61.43 31.72 14 33 50 252.58 65.65 4865.8 110.00 5465.85 29.54 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5387.3 SGR 439.7 SG3 185.0 RRT - 4064 RRF - 4078 RTF . 9223 SGB 5405.2 R23 .0338 R13 - .9224 SGI 5390.2 SG2 401.5 THA 178.09 TOE-1.9558 TRA .5562 TC3-5.7599 BAU 1.1298 RDE .2901 RRA .0189 RC3 -.0808 FAU .03041 FDE -.7828 FRA .6420 FC3-1.7947 89P 16929 BDE 1.9772 BRA .5566 BC3 5.7605 FSP -599 ST 2943.9 SR 434.1 SS 780.2 CRT -.9910 CRS .9516 CST -.9829 LSA 3072.5 MSA 150.6 SSA 22.2 EL1 2975.1 EL2 57.7 ALF 171.68 ARRIVAL DATE JAN 8 1968 FLIGHT TIME 178.00 LAUNCH DATE JUL 14 1867 DISTANCE 519.921 HELIOCENTRIC CONIC RL 152.07 LAL -.00 LOL 290.89 VL 25.833 GAL 1.62 AZL 93.28 HCA 256.04 SMA 123.10 ECC .23692 INC 3.2761 V1 29.297
RP 107.79 LAP 3.18 LOP 186.91 VP 37.207 GAP 11.73 AZP 89.21 TAL 174.76 TAP 70.79 RCA 93.94 APO 152.27 V2 35.156
RC 166.846 GL -22.25 GP 9.56 ZAL 78.08 ZAP 166.44 ETS 42.58 ZAE 129.01 ETE 172.40 ZAC 67.33 ETC 9.77 CLP-170.35 PLANETOCENTRIC CONIC C3 15.189 VML 3.897 DLA -33.52 RAL 202.69 RAD 6567.6 VEL 11.686 PTH 2.06 VHP 7.576 DPA 4.92 RAP 200.31 ECC 1.2500 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.31 9 25 47 113.30 15 22 40 9 25 47 9 4 26 1281.22 13 48 16 5664.18 24.79 355.44 68.45 681.2 27.73 71.27 27.74 68.45 5064.2 10A.73 13 48 16 24.81 265.98 113.31 9 25 47 113.30 15 22 40 681.2 27.73 347.55 9 4 26 1281.22 13 48 16 5664.18 68.45 71.27 24.79 355.44 5064.2 27.74 258.09 68.45 10A.73 13 48 16 24.81 265.98 13 4 56 5796.90 14 46 56 5484.53 117.89 14 41 33 108.72 16 18 21 5196.9 266.78 24.18 110.00 20.61 274.11 66.28 70.32 4884.5 31.41 245.42 110.00 29.14 253.88 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5434.2 SGR 447.6 SG3 179.5 RRT -.4085 RRF -.4060 RTF .9242 SGB 5452.6 R23 .0288 R13 -.9243 SGI 5437.3 SG2 408.3 THA 178.06 ST 2932.7 SR 443.1 SS 755.1 CRT -.9859 CR6 .9407 CST -.9832 LSA 3056.7 MSA 153.0 SSA 22.1 TOE-1.9725 TRA .7886 TC3-5.6198 BAU 1.1412 ROE .3013 RRA .0151 RC3 -.0744 FAU .02854 FDE -.7430 FRA .6980 FC3-1.6268 BSP 17115 EL1 2965.1 EL2 73.3 ALF 171.52 BOE 1.9954 BRA .7887 BC3 5.6203 FSP -584 ARRIVAL DATE JAN 10 1968 LAUNCH DATE JUL 14 1967 FLIGHT TIME 180.00 HELIOCENTRIC CONIC DISTANCE 525.524 RL 152.07 LAL -.00 LOL 290.89 VL 25.784 GAL 2.16 AZL 93.16 MCA 259.26 SMA 122.81 ECC .24105 INC 3.1626 V1 29.297 RP 107.83 LAP 3.11 LOP 190.14 VP 37.162 GAP 12.09 AZP 89.41 TAL 173.16 TAP 72.42 RCA 93.21 APO 152.41 V2 35.145 RC 168.808 GL -20.91 GP 9.18 ZAL 74.78 ZAP 167.32 ETS 44.05 ZAE 129.02 ETE 172.69 ZAC 65.12 ETC 9.64 CLP-171.21 PLANETOCENTRIC CONIC C3 15.864 VHL 3.963 DLA -35.52 RAL 206.84 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 7.770 DPA 3.62 RAP 202.29 ECC 1.2611 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.27 9 20 57 1291.11 24.53 356.08 73.27 113.59 9 42 29 691.1 27.50 348.23 113.58 15 39 24 5073.9 27.51 258.76 266.61 73.28 14 4 50 24.54 108.73 5673.92 113.59 9 42 29 27,50 348.23 24.53 691.1 71.27 9 20 57 1291.11 356.08 73.27 113.58 15 39 24 118.11 14 58 20 109.08 16 34 59 5073.9 27.51 258.76 73.28 14 4 50 24.54 256.61 108.73 5673.92 13 21 34 23.90 5606.46 20.31 274.68 71.06 5206.5 110.00 5494.60 246.15 4894.6 31.24 110.00 15 3 24 24.91 254.58 75.19 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5476.3 SGR 454.5 SG3 174.0 RRT -.4119 RRF -.4058 RTF .9259 ST 2901.3 SR 451.1 SS 726.6 CRT -.9795 CRS .9280 CST -.9832 TOE-1.9803 TRA 1.0326 TC3-5.4286 BAU 1.1514 ROE .3136 RRA .0100 RC3 -.0665 FAU .02670 FOE -.7015 FRA .7531 FC3-1.4568 BSP 17281 BOE 2.0050 BRA 1.0327 BC3 5.4290 FSP -568 SG8 5495.2 R23 .0244 R13 -.9259 SG1 5479.6 SG2 413.9 THA 178.03 LSA 3020.5 MSA 158.0 SSA 21.8 EL1 2934.8 EL2 89.8 ALF 171.33

FLIGHT TIME 174.00

ARRIVAL DATE JAN 12 1968

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FLIGHT TIME 182.00
LAUNCH DATE JUL 14 1967
                                                                            OISTANCE 531.089
   HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 25.735 GAL 2.72 AZL 93.05 MCA 262.49 SMA 122.52 ECC .24552 INC 3.0516 V1 29.297
RP 107.86 LAP 3.03 LOP 193.37 VP 37.117 GAP 12.47 AZP 89.60 TAL 171.57 TAP 74.05 RCA 92.44 APO 152.61 V2 35.134
RC 170.755 GL -19.56 GP 8.84 ZAL 71.51 ZAP 168.14 ETS 45.82 ZAE 129.02 ETE 172.95 ZAC 62.90 ETC 9.54 CLP-172.07
   PLANETOCENTRIC CONIC
                                                                                                                                     2.36 RAP 204.30 ECC 1.2751
    C3 16.714 VHL 4.088 OLA -33.43 RAL 210.93 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 7.975 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.45 9 38 25 1299.51 24.14 356.54 78.15 113.85 10 0 4 699.5 27.15 348.73
                                                                                                INJ AZMTH INJ TIME
113.85 10 0 4
113.85 10 0 4
113.85 10 0 4
113.85 10 0 4
113.84 15 54 50
118.60 15 11 34
109.12 16 54 47
                                                                                                                                   5089.3
                                                                                                                                                    27.16
                                                                                                                                                                  259.80
                                  5689.32
                                                                    267.61
                                                                                     78.15
                    14 20 i
                                                      24.15
       108.55
                                                                                     78.15
                                                                                                                                    699.5
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                                                                                                                                                                  348.73
                                                                    356.54
        71.45
                     9 38 25 1299.51
                                                      24.14
                                                                                     78.15
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                                                                                                                                                                  259.80
                                                                    267.61
                   14 20 1
                                    5689.32
                                                      24.15
       108.55
                                                                                                                                   5229.1
                                                                                                                                                    23.24
                                                                                                                                                                  268.81
                                                                                     75.72
                   13 34 25 5829.07
15 23 11 5495.80
                                                                    276.03
       110.00
                                                      19.58
                                                                                                                                                   31.22
                                                                                                                                   4895.8
                                                                                                                                                                  246.24
                                                                                     80.23
                                                                    254.67
       110.00
                                                      28.89
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5509.1 SGR 460.3 SG3 168.5
RRT -.4161 RRF -.4069 RTF .9275
SG8 5528.3 R23 .0205 R13 -.9276
SG1 5512.5 SG2 418.3 THA 178.00
                                                                                                                              ST 2847.6 SR 457.9 SS 695.5
CRT -.9715 CRS .9129 CST -.9829
    TDE-1.9761 TRA 1.2916 TC3-5.1855 BAU 1.1587
    RDE .3267 RRA .0034 RC3 -.0578 FAU .02486
                                                                                                                              LSA 2962.3 MSA 165.7 SSA 21.2
    FOE -.6587 FRA .8081 FC3-1.2877 BSP 17367
                                                                                                                               ELI 2882.4 EL2 107.2 ALF 171.11
    BDE 2.0030 BRA 1.2916 BC3 5.1858 FSP -550
                                                                            FLIGHT TIME 184.00
                                                                                                                                          ARRIVAL DATE JAN 14 1968
LAUNCH DATE JUL 14 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 536.611
   RL 152.07 LAL -.00 LOL 290.89 VL 25.686 GAL 3.31 AZL 92.94 HCA 265.71 SHA 122.24 ECC .25036 INC 2.9422 VI 29.297 RP 107.90 LAP 2.93 LOP 196.60 VP 37.072 GAP 12.87 AZP 89.78 TAL 169.97 TAP 75.68 RCA 91.64 APO 152.85 V2 35.122 RC 172.686 GL -18.20 GP 8.53 ZAL 68.31 ZAP 168.93 ETS 47.94 ZAE 129.02 ETE 173.17 ZAC 60.66 ETC 9.49 CLP-172.91
   PLANETOCENTRIC CONIC
    C3 17.756 VHL 4.214 DLA -33.24 RAL 214.93 RAD 6567.7 VEL 11.796 PTH 2.09 VHP 8.192 DPA 1.14 RAP 206.33 ECC 1.2922 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  114.09
                                                                                                                10 18 27
                                                                                                                                    706.3
                                                                                                                                                   26.68
                                                                                                                                                                  349.06
                                                                    356.82
                                                                                     83.03
                                                      23.63
        71.82
                     9 56 41
                                   1306.33
                                                                                                    114.08 16 8 48
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                                                                    269.00
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       108.18
                                                      23.64
                    14 33 38
                                   5710.44
                                                                                                    114.09 10 18 27
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                                                                                                                                                                   349.06
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        71.82
                     9 56 41
                                   1306.33
                                                                                                    114.08 16 8 48
                                                                                                                                    5110.4
                                                                                                                                                    26.69
                                                                                                                                                                   261.24
                                                                    269.00
                                                                                     83.04
       108.18
                   14 33 38
                                   5710.44
                                                     23.64
                                                                                                    119.29 15 21 45
108.92 17 16 57
                   13 44 2
                   13 44 2 5862.70
15 45 27 5490.11
                                                                                                                                   5262.7
                                                                                                                                                   22.23
                                                                                                                                                                   270.89
                                                      18.47
                                                                                     80.25
       110.00
                                                                    278.01
                                                                                                                                   4890.1
                                                                                                                                                   31.32
                                                                                                                                                                   245.83
                                                                                     85.40
                                                                    254.27
                                                     29.01
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        RTI -,4223 RRF -,4108 RTF .,9296
SGB 5562.9 R23 .0176 R13 -,9297
SG1 5546.9 SG2 421.7 THA 177.96
                                                                                                                               ST 2783.0 SR 463.6 SS 665.4
CRT -.9620 CRS .8963 CST -.9827
     TDE-1.9667 TRA 1.5596 TC3-4.9140 BAU 1.1665
    ROE .3410 RRA -.0045 RC3 -.0483 FAU .02315
FOE -.6183 FRA .8603 FC3-1.1269 BSP 17531
BOE 1.9960 BRA 1.5596 BC3 4.9142 FSP -536
                                                                                                                               LSA 2893.4 MSA 175.1 SSA 20.4
                                                                                                                               EL1 2818.6 EL2 124.9 ALF 170.88
                                                                                                                                          ARRIVAL DATE JAN 16 1968
                                                                            FLIGHT TIME 186.00
LAUNCH DATE JUL 14 1967
                                                                            DISTANCE 542.087
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.638 GAL 3.93 A7L 92.83 MCA 268.93 SMA 121.97 ECC .25561 INC 2.8339 V1 29.297 RP 107.94 LAP 2.83 LOP 199.82 VP 37.027 GAP 13.28 AZP 89.95 TAL 168.38 TAP 77.31 RCA 90.79 APO 153.14 V2 35.110 RC 174.603 GL -16.86 GP 8.25 TAL 65.19 ZAP 169.67 ETS 50.45 ZAE 129.01 ETE 173.38 ZAC 58.40 ETC 9.47 CLP-173.75
   PLANETOCENTRIC CONIC
     C3 19.013 VHL 4.360 DLA -32.96 RAL 218.80 RAD 6567.8 VEL 11.849 PTH 2.10 VHP 8.424 DPA -.05 RAP 208.38 ECC 1.3129
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.38 10 15 40 1311.48 23.00 356.91 87.90 114.29 10 37 31 711.5 26.08 349.21 107.62 14 45 34 5737.34 23.01 270.76 87.91 114.28 16 21 11 5137.3 26.09 263.06
                                                                                                 INJ AZMTH INJ TIME
114.29 10 37 31
114.28 16 21 11
114.29 10 37 31
114.28 16 21 11
120.08 14 1 32
108.57 17 40 29
                                                                                                                                   711.5
                                                                                                                                                    26.08
                                                                                                                                                                  349.21
                                                                                     87.90
                    10 15 40
                                   1311.46
                                                      23.00
                                                                    356.91
        72.38
                    14 45 34 5737.34
13 51 16 616.40
16 9 9 5480.42
                                                                                     87.91
                                                                                                                                   5137.3
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                                                                                                                                                                  263.06
                                                      23.01
                                                                    270.76
       107.62
                                                                                                                                     16.4
                                                                                                                                                    20.93
                                                                                                                                                                  295.53
                   13 51 16
                                                                                     84.66
                                                     17.06
                                                                    302.52
       110.00
                                                                                                                                                   31.48
                                                                                                                                                                  245.12
                                                                                                                                  4880.4
                                                                                     90.62
                                                      29.23
                                                                    253.60
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5572.2 SGR 469.5 SG3 158.1
RRT -.4293 RRF -.4157 RTF .9317
SGB 5591.9 R23 .0149 R13 -.9317
SGI 5575.9 SG2 423.7 THA 177.92
                                                                                                                              ST 2704.3 SR 467.8 SS 635.0
CRT -.9506 CRS .8770 CST -.9823
     TOE-1.9476 TRA 1.8420 TC3-4.6121 BAU 1.1724
     ROE .3560 RRA -.0138 RC3 -.0389 FAU .02149
                                                                                                                              LSA 2810.7 MSA 186.6 SSA 19.6
     FOE -.5779 FRA .9127 FC3 -.9785 BSP 17671
                                                                                                                              EL1 2740.7 EL2 143.3 ALF 170.64
    BOE 1.9799 BRA 1.8421 BC3 4.6123 FSP -522
                                                                                                                                          ARRIVAL DATE JAN 18 1968
                                                                             FLIGHT TIME 188.00
LAUNCH DATE JUL 14 1967
                                                                           DISTANCE 547.510
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.590 GAL 4.58 AZL 92.73 HCA 272.15 SMA 121.69 ECC .26130 INC 2.7259 VI 29.297 RP 107.97 LAP 2.72 LOP 203.04 VP 36.982 GAP 13.72 AZP 90.10 TAL 166.80 TAP 78.95 RCA 89.89 APO 153.49 V2 35.097 RC 176.504 GL -15.54 GP 7.99 ZAL 62.16 ZAP 170.36 ETS 53.41 ZAE 128.99 ETE 173.56 ZAC 56.14 ETC 9.50 CLP-174.59
   PLANETOCENTRIC CONIC
     C3 20.512 VHL 4.529 DLA -32.61 RAL 222.53 RAD 6567.8 VEL 11.912 PTH 2.12 VHP 8.671 DPA -1.20 RAP 210.46 ECC 1.3376
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.11 10 35 17 1314.80 22.26 356.80 92.73 114.46 10 57 12 714.8 25.37 349.16
                                                                                     92.73
                                                                                                    114.45
                                                                                                                16 31 51
                                                                                                                                    5170.1
                                                                                                                                                    25.38
                                                                    272.91
                    14 55 41
                                   5770.07
                                                      22.28
       106.89
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                                                                    356.80
                    10 35 17
                                   1314.80
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                    14 55 41 5770.07
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       106.89
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                                                                                     88.94
                    13 56 49
                                      663.75
                                                      15.42
                                                                     305.22
       110.00
                    16 33 20 5469.11
                                                                                     95.85
                                                                                                    108.16 18 4 29
                                                                                                                                    4869.1
                                                                                                                                                    31.66
                                                                                                                                                                   244.29
                                                      29.47
                                                                    252.81
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
SGT 5595.7 SGR 472.3 SG3 153.1
RRT -.4369 RRF -.4216 RTF .9337
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2615.5 SR 470.2 SS 605.5

CRT -.9369 CRS .8549 CST -.9818

LSA 2718.2 MSA 199.6 SSA 18.7
     TOE-1.9199 TRA 2.1384 TC3-4.2899 BAU 1.1765
     RDE .3716 RRA -.0245 RC3 -.0299 FAU .01987
                                                                        SGB 5615.6 R23 .0126 R13 -.9338
     FDE -.5383 FRA .9649 FC3 -.8386 8SP 17790
                                                                        SG1 5599.6 SG2 424.6 THA 177.88
                                                                                                                               EL1 2652.5 EL2 162.0 ALF 170.40
     BOE 1.9555 BRA 2.1385 BC3 4.2900 FSP -508
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ARRIVAL DATE JAN 20 1968

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LAUNCH DATE JUL 14 1967
                                                                       DISTANCE 552.874
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 25.544 GAL 5.26 AZL 92.62 HCA 275.36 SMA 121.43 ECC .26748 INC 2.6175 V1 29.297 RP 108.01 LAP 2.61 LOP 206.26 VP 36.938 GAP 14.19 AZP 90.24 TAL 165.23 TAP 80.59 RCA 88.95 APO 153.91 V2 35.084 RC 178.389 GL -14.25 GP 7.76 ZAL 59.25 ZAP 171.00 ETS 56.89 ZAE 128.97 ETE 173.73 ZAC 53.88 ETC 9.57 CLP-175.42
   PLANETOCENTRIC CONIC
    C3 22.285 VHL 4.721 DLA -32.18 RAL 226.09 RAD 6567.9 VEL 11.986 PTH 2.14 VHP 8.934 OPA -2.33 RAP 212.55 ECC 1.3668
    LNCM AZHTH LNCM TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.03 10 55 32 1316.04 21,43 356.49 97.49 114.61 11 17 28 716.0 24.57 348.91
                                                                                           114.61 11 17 28
114.59 16 40 42
                                                                                                                                                         267.88
                                                                                                                            5208.8
                                                   21.44
                                                                275.46
                                                                                97.50
       105.97
                   15 3 53
                                  5808.75
                                                                                              114.59 16 40 42
114.61 11 17 28
114.59 16 40 42
121.66 14 13 7
107.75 18 28 21
                                                                                                                             716.0
                                                                                                                                            24.57
                                                                                                                                                         348.91
                  10 55 32
                                1316.04
                                                   21.43
                                                                356.49
                                                                                97.49
        74.03
                                                                                                                                           24.58
                                                                                                                                                         267.88
                                                                                                                            5208.8
                   15 3 53
                                  5808.75
                                                   21.44
                                                                275.46
                                                                                97.50
       105.97
                                                                                                                                                          301.35
                                                                                                                             114.9
                                                                                                                                            17.71
                                                                308.08
                                                                                93.12
                   14 1 12
                                   714.90
                                                   13.62
       110.00
                                                                                                                            4857.9
                                                                                                                                            31.84
                                                                                                                                                         243.46
                                5457.88
                                                                252.02
                                                                               101.04
       110.00
                   16 57 23
                                                  29.70
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2518.1 SR 470.7 S5 576.9
CRT -.9204 CRS .8289 CST -.9811
                                                                    SGT 5612.4 SGR 473.8 SG3 148.3
RRT -.4448 RRF -.4279 RTF .9357
SGB 5632.3 R23 .0103 R13 -.9357
    TOE-1.8814 TRA 2.4532 TC3-3.9499 BAU 1.1768
    ROE .3876 RRA -.0369 RC3 -.0220 FAU .01824
FOE -.4985 FRA 1.0186 FC3 -.7086 BSP 17821
BDE 1.9210 BRA 2.4535 BC3 3.9499 FSP -491
                                                                                                                        LSA 2617.1 MSA 214.3 SSA 17.9
                                                                                                                        ELI 2555.3 EL2 181.3 ALF 170.19
                                                                    SG1 5616.4 SG2 424.1 THA 177.84
                                                                                                                                   ARRIVAL DATE JAN 22 1968
                                                                        FLIGHT TIME 192,00
LAUNCH DATE JUL 14 1967
                                                                        DISTANCE 558.170
  HELIOCENTRIC CONIC
   RL 152.07 LAL -.00 LOL 290.89 VL 25.497 GAL 5.97 AZL 92.51 HCA 278.57 SMA 121.16 ECC .27421 INC 2.5081 V1 29.297 RP 108.05 LAP 2.48 LOP 209.48 VP 36.894 GAP 14.68 AZP 90.37 TAL 163.67 TAP 82.24 RCA 87.94 APO 154.39 V2 35.071 RC 180.257 GL -12.99 GP 7.54 ZAL 56.46 ZAP 171.58 ETS 60.95 ZAE 128.94 ETE 173.88 ZAC 51.61 ETC 9.69 CLP-176.25
   PLANETOCENTRIC CONIC
                                                                                                                              -3.41 RAP 214.66 ECC 1.4011
    C3 24.369 WHL 4.937 OLA -31.70 RAL 229.48 RAD 6568.0 VEL 12.073 PTH
                                                                                                  2.16 VHP 9.217 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              114.72 11 38 18
                                                                                                                             714.8
                                                                                                                                          23.67
                   11 16 24 1314.82
15 10 0 5853.60
                                                                355.94
                                                                               102.17
        75.12
                                                   20.51
                                                                                               114.70 16 47 34
                                                                                                                             5253.6
                                                                                                                                            23.69
                                                                                                                                                          270.90
                                                                 278.42
                                                                               102.18
                                                    20.53
       104.88
                                                                                                                             714.8
                                                                                                                                            23.67
                                                                                                         11 38 18
                                                                 355.94
                                                                               102.17
                                                                                               114.72
                    11 16 24
                                  1314.82
                                                   20.51
        75.12
                                                                                              114.70 16 47 34
122.36 14 17 33
107.38 18 51 38
                                5853.60
                                                                                                                            5253.6
                                                                                                                                            23.69
                                                                                                                                                          270.90
                                                                 278.42
                                                                               102.18
                    15 10 0
                                                    20.53
       104.88
                                                                                                                             168.6
                                                                                                                                           15.86
                                                                                                                                                          304.43
                                                   11.68
                                                                 311.03
                                                                                97.18
                    14 4 44
                                    768.63
       110.00
                                                                                                                            4847.8
                                                                                                                                            31.99
                                                                                                                                                          242.71
                   17 20 50
                                                                 251.30
                                                                               106.17
                                                   29.91
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5626.9 SGR 474.4 SG3 143.7

RRT -.4538 RRF -.4358 RTF .9381

SGB 5646.8 R23 .0087 R13 -.9381

SGI 5631.0 SG2 422.4 THA 177.80
                                                                                                                        ST 2422.0 SR 469.6 SS 551.9
CRT -.9014 CRS .8013 CST -.9808
    TOE-1.8397 TRA 2.7806 TC3-3.6115 BAU 1.1766
    RDE .4042 RRA -.0506 RC3 -.0148 FAU .01673
                                                                                                                        LSA 2517.6 MSA 229.0 SSA
                                                                                                                                                              17.0
    FDE -.4623 FRA 1.0711 FC3 -.5944 BSP 17929
                                                                                                                       EL1 2458.9 EL2 200.2 ALF 170.02
    BOE 1.8836 BRA 2.7810 8C3 3.6115 FSP -479
                                                                                                                                  ARRIVAL DATE JAN 24 1968
                                                                        FLIGHT TIME 194.00
LAUNCH DATE JUL 14 1967
                                                                        DISTANCE 563.389
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.452 GAL 6.73 AZL 92.40 MCA 281.78 SMA 120.91 ECC .28154 INC 2.3969 V1 29.297

RP 108.09 LAP 2.35 LOP 212.69 VP 36.850 GAP 15.21 AZP 90.49 TAL 162.12 TAP 83.91 RCA 86.87 APO 154.95 V2 35.058

RC 182.108 GL -11.78 GP 7.35 ZAL 53.81 ZAP 172.09 ETS 65.66 ZAE 128.91 ETE 174.01 ZAC 49.35 ETC 9.86 CLP-177.08
   PLANETOCENTRIC CONIC
    C3 26.810 VHL 5.178 DLA -31.17 RAL 232.67 RAD 6568.1 VEL 12.173 PTH 2.18 VHP 9.521 DPA -4.47 RAP 216.79 ECC 1.4412
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             114.79 11 59 54
114.78 15 24 8
114.79 11 59 54
114.79 11 59 54
114.78 15 24 8
122.96 14 21 23
107.06 19 14 5
                                                                                                                          710.4
                                                                                                                                         22.70
                                                                               106.77
                                                   19.52
                                                                 355.12
        76.40 11 38 3 1310.40
                                                                                                                                                          296.47
                                                                                                                                            22.72
                                                                 303.93
                                                                               106.77
                                                                                                                              17.1
                    15 13 51
                                                    19.54
       103.60
                                    617.12
                                                                                                                                                          347.67
                                                                                                                                            22.70
                                                                                                                             710.4
                                                    19.52
                                                                 355.12
                                                                               106.77
                   11 38 3 1310.40
        76.40
                                                                                                                                                          296.47
                                                                                                                                            22.72
                                                    19.54
                                                                 303.93
                                                                               106.77
                                                                                                                              17.1
       103.60
                    15 13 51
                                   617.12
                                                                                                                                                          307.54
                                                                               101.15
                                                                                                                              224.1
                                                                                                                                            13.91
                                                     9.64
                                                                 314.03
       110.00
                   14 7 39
                                   824.09
                                 5439.47
                                                                                                                            4839.5
                                                                                                                                                          242.10
                                                                                                                                            32.12
                                                                 250.72
                                                                               111.20
                    17 43 26
       110.00
                                                    30.08
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2326.8 SR 466.7 SS 529.8

CRT -.8795 CRS .7710 CST -.9807

LSA 2419.2 MSA 244.0 SSA 16.3

EL1 2363.1 EL2 218.7 ALF 169.91
                                                                     SGT 5636.5 SGR 473.8 SG3 139.3
     TOE-1.7923 TRA 3.1252 TC3-3.2748 BAU 1.1738
                                                                     RRT -.4632 RRF -.4444 RTF .9406
SGB 5656.3 R23 .0072 R13 -.9406
SGI 5640.7 SGZ 419.6 THA 177.76
    RDE .4211 RRA -.0657 RC3 -.0087 FAU .01526
FOE -.4278 FRA 1.1246 FC3 -.4929 BSP 18020
     BOE 1.8411 BRA 3.1259 BC3 3.2748 FSP -466
                                                                                                                                   ARRIVAL DATE JAN 26 1968
                                                                         FLIGHT TIME 196.00
 LAUNCH DATE JUL 14 1967
                                                                         DISTANCE 568.520
   HELIOCENTRIC CONTC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.407 GAL 7.54 AZL 92.28 HCA 284.99 SMA 120.66 ECC .28953 INC 2.2830 VI 29.297
RP 108.13 LAP 2.21 LOP 215.90 VP 36.806 GAP 15.77 AZP 90.59 TAL 160.60 TAP 85.59 RCA 85.72 APO 155.59 V2 35.045
RC 183.942 GL -10.62 GP 7.17 ZAL 51.29 ZAP 172.53 ETS 71.07 ZAE 128.85 ETE 174.14 ZAC 47.09 ETC 10.09 CLP-177.92
    RC 183.942 GL -10.62 GP
    PLANETOCENTRIC CONIC
     C3 29.662 VHL 5.446 DLA -30.60 RAL 235.68 RAD 6568.2 VEL 12.290 PTH 2.21 VHP 9.849 DPA -5.48 RAP 218.93 ECC 1.4882
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             114.84 12 22 25
114.83 15 26 25
                                                                             111.26
                                                                                                                              701.9
                                                                                                                                            21.67
                   12 0 43 1301.67
                                                   18.46
                                                                 353.97
         77.AA
                                                                                                                                             21.68
                                                    18.49
                                                                  307.85
                                                                                111.27
                                                                                                                               76.1
                                    676.08
                    15 15 9
       102.12
                                                                                                                                                           346.58
                                                                                                         12 22 25
15 26 25
                   12 0 43 1301.87
                                                                                                114.84
                                                                                                                              701.9
                                                                                                                                             21.67
                                                    18.48
                                                                  353.97
                                                                               111.26
         77.88
                                                                                                114.83
                                                                                                                               76.1
                                                                                                                                             21.68
                                                    18.49
                                                                  307.85
                                                                                111.27
                    15 15 9
14 10 3
                                    676.08
       102.12
                                                                                                123.44 14 24 44
106.83 19 35 32
                                                                                                                                                           310.66
                                                                                                                              280.7
                                                                                                                                             11.88
                                                     7.53
                                                                  317.06
                                                                                105.01
                                    880.68
       110.00
                                                                                                                                             32.21
                                                                                                                                                          241.64
                    18 4 59 5433.31
                                                                                                                             4833.3
                                                    30.20
                                                                 250.28
                                                                                116.14
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2234.8 SR 462.0 SS 510.5
CRT -.8544 CRS .7383 CST -.9808
LSA 2324.1 MSA 258.6 SSA 15.5
                                                                    SGT 5641.2 SGR 471.9 SG3 135.1
RRT -.4728 RRF -.4535 RTF .9432
     TDE-1.7394 TRA 3.4891 TC3-2.9448 BAU 1.1678
     RDE .4382 RRA -.0822 RC3 -.0038 FAU .01383
     FOE -.3951 FRA 1.1794 FC3 -.4037 BSP 18088
BDE 1.7937 BRA 3.4900 BC3 2.9448 FSP -453
                                                                    SGB 5660.9 R23 .0058 R13 -.9432
                                                                                                                      EL1 2269.8 ELZ 236.4 ALF 169.87
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FLIGHT TIME 190.00

SG1 5645.6 SG2 415.4 THA 177.72

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LAUNCH DATE JUL 14 1967
                                                                                     . FLIGHT TIME 198.00
                                                                                                                                                              ARRIVAL DATE JAN 28 1968
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 573.548
     RL 152.07 LAL -.00 LOL 290.89 VL 25.362 GAL 8.39 AZL 92.17 MCA 288.20 SMA 120.41 ECC .29826 INC 2.1659 V1 29.297 RP 108.18 LAP 2.06 LOP 219.10 VP 36.763 GAP 16.37 AZP 90.68 TAL 159.10 TAP 87.29 RCA 84.30 APO 156.32 V2 35.032 RC 185.758 GL -9.50 GP 7.01 ZAL 48.91 ZAP 172.88 ETS 77.17 ZAE 128.79 ETE 174.25 ZAC 44.84 ETC 10.37 CLP-178.76
    PLANETOCENTRIC CONIC
     C3 32.990 VHL 5.744 DLA -30.01 RAL 238.49 RAD 6568.3 VEL 12.424 PTH
                                                                                                                      2.25 VHP 10.204 DPA -6.47 RAP 221.08 ECC 1.5429
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               INJ AZMTH INJ TIME
114.85 12 46 24
114.85 12 46 24
114.84 15 25 45
123.81 14 27 41
106.68 19 55 54
                                                                                           115.64
          79.63 12 24 57 1287.20
                                                             17.38
                                                                              352.34
                                                                                                                                                     687.2
                                                              17.40
                                                                                                                                                        144.2
         100.37
                        15 13 20
                                           744.21
                                                                              312.40
                                                                                               115.65
                                                                                                                                                                         20.60
                                                                                                                                                                                          305.07
                      12 24 57
                                        1287.20
                                                             17.38
                                                                              352.34
                                                                                             115.64
                                                                                                                                                        687.2
                                                                                                                                                                         20.59
         100.37
                       15 13 20
                                           744.21
                                                             17.40
                                                                              312.40
                                                                                              115.65
                                                                                                                                                        144.2
                                                                                                                                                                         20.60
                                                                                                                                                                                          305.07
                      14 12 3
                                           937.97
                                                                5.37
                                                                              320,09
                                                                                             108.78
                                                                                                                                                        338.0
                                                                                                                                                                           9.77
                                                                                                                                                                                          313.76
                       18 25 24
                                        5429.47
                                                              30.28
                                                                              250.00
                                                                                               120.97
                                                                                                                                                      4829.5
                                                                                                                                                                         32.26
    DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 SCT 5640.8 SCR 468.6 SC3 131.1

RRT -.4824 RRF -.4627 RTF .9459

SCB 5660.3 R23 .0045 R13 -.9459

SCI 5645.4 SC2 410.1 THA 177.69
                                                                                                                                                ST 2146.6 SR 455.5 SS 494.2
CRT -.8254 CRS .7026 CST -.9812
LSA 2232.7 MSA 272.8 SSA 14.8
     TDE-1.6790 TRA 3.8764 TC3-2.6223 BAU 1.1566
     RDE .4553 RRA -.1002 RC3 -.0003 FAU .01238
     FOE -.3633 FRA 1.2370 FC3 -.3249 BSP 18065
BOE 1.7397 BRA 3.6777 BC3 2.6223 FSP -437
                                                                                                                                                 EL1 2179.8 EL2 253.2 ALF 169.93
                                                                                        FLIGHT TIME 200.00
                                                                                                                                                              ARRIVAL DATE JAN 30 1968
                                                                                       DISTANCE 578-456
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.319 GAL 9.30 A7L 92.04 MCA 291.40 SMA 120.17 ECC .30783 INC 2.0444 V1 29.297 RP 108.22 LAP 1.90 LOP 222.31 VP 36.720 GAP 17.02 AZP 90.75 TAL 157.63 TAP 89.03 RCA 83.18 APO 157.16 V2 35.019 RC 187.557 GL -8.44 GP 6.86 ZAL 46.68 ZAP 173.13 ETS 83.93 ZAE 128.71 ETE 174.36 ZAC 42.61 ETC 10.73 CLP-179.62
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5636.4 SGR 464.2 SG3 127.2
RRT -.4926 RRF -.4729 RTF .9490
SGB 5655.4 R23 .0034 R13 -.9490
SGI 5641.0 SG2 403.6 THA 177.66
                                                                                                                                                 ST 2068.7 SR 447.5 SS 481.6
CRT -.7945 CRS .6676 CST -.9821
     TOE-1.6204 TRA 4.2815 TC3-2.3191 BAU 1.1433
     RDE .4725 RRA -.1193 RC3 .0024 FAU .01103
FDE -.3351 FRA 1.2952 FC3 -.2590 BSP 18125
                                                                                                                                                LSA 2151.9 MSA 285.0 SSA 14.2
     BOE 1.6879 BRA 4.2831 BC3 2.3191 FSP -426
                                                                                                                                                EL1 2099.6 EL2 267.8 ALF 170.08
LAUNCH DATE JUL 14 1967
                                                                                       FLIGHT TIME 202.00
                                                                                                                                                             ARRIVAL DATE FEB 1 1968
                                                                                       DISTANCE 583.225
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.276 GAL 10.28 AZL 91.92 MCA 294.60 SMA 119.93 ECC .31833 INC 1.9176 V1 29.297
RP 108.26 LAP 1.74 LOP 225.51 VP 36.678 GAP 17.73 AZP 90.80 TAL 156.19 TAP 90.79 RCA 81.76 APO 158.11 V2 35.005
RC 189.337 GL -7.43 GP 6.72 ZAL 44.59 ZAP 173.26 ETS 91.20 ZAE 128.60 ETE 174.46 ZAC 40.39 ETC 11.15 CLP 179.52
    PLANETOCENTRIC CONIC
     C3 41.410 VHL 6.435 DLA -28.77 RAL 243.54 RAD 6568.6 VEL 12.758 PTH 2.32 VHP 11.008 DPA -8.32 RAP 225.39 ECC 1.6815
    C3 41.410 VML 6.435 OLA -28.77 RAL 243.54 RAD 6588.6 VEL 12.758 PM 2.32 VMP 11.008 DPA -8.32 RAP 225.39 ECC 1.6815
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
84.70 13 25 6 1216.15 15.10 346.00 124.08 114.78 13 45 22 616.2 18.32 338.76
95.30 14 53 29 930.06 15.11 325.04 124.09 114.77 15 8 59 350.1 18.33 317.81
100.00 14 21 52 1031.90 8.73 329.26 120.80 118.70 14 39 4 431.9 12.50 322.49
100.00 16 39 24 5877.59 21.68 280.74 127.01 111.10 18 17 21 5277.6 24.36 272.97
110.00 14 15 1 1053.42 .97 326.13 116.05 124.17 14 32 35 453.4 5.45 319.90
110.00 19 2 44 5428.84 30.29 249.96 130.28 106.66 20 33 13 4828.8 32.27 241.30
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 562-9 SGR 458-5 SG3 123.4

RRT --5026 RRF --4833 RTF -9522

SGB 5645-6 R23 .0027 R13 -.9522

SGI 5631.7 SG2 396.0 THA 177.64
                                                                                                                                               ST 1997.4 SR 438.1 SS 472.2
CRT -.7608 CRS .6322 CST -.9834
LSA 2077.7 MSA 295.4 SSA 13.6
     TOE-1.5574 TRA 4.7106 TC3-2.0329 BAU 1.1255
    RDE .4897 RRA -.1396 RC3 .0041 FAU .00970
FDE -.3089 FRA 1.3561 FC3 -.2027 BSP 18173
     BOE 1.6326 BRA 4.7127 BC3 2.0329 FSP
                                                               -414
                                                                                                                                                EL1 2025.6 EL2 280.4 ALF 170.34
LAUNCH DATE JUL 14 1967
                                                                                       FLIGHT TIME 204,00
                                                                                                                                                              ARRIVAL DATE FEB 3 1968
                                                                                       DISTANCE 587.828
   HELIOCENTRIC CONIC
    RL 152.07 LAL -.00 LOL 290.89 VL 25.234 GAL 11.32 AZL 91.78 MCA 297.80 SMA 119.71 ECC .32989 INC 1.7842 V1 29.297
RP 108.30 LAP 1.58 LOP 228.70 VP 36.637 GAP 18.50 AZP 90.83 TAL 154.80 TAP 92.60 RCA 80.22 APO 159.20 V2 34.992
RC 191.100 GL -6.47 GP 6.59 ZAL 42.64 ZAP 173.26 ETS 98.77 ZAE 128.48 ETE 174.55 ZAC 38.19 ETC 11.66 CLP 178.63
   PLANETOCENTRIC CONIC
    C3 46.718 VHL 6.835 DLA -28.14 RAL 245.78 RAD 6568.7 VEL 12.965 PTH 2.36 VHP 11.467 DPA -9.19 RAP 227.54 ECC 1.7689
    ENCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 50 19 1194.09 11.37 342.56 126.87 116.11 14 10 13 594.1 14.79 335.55
                                                                                                               113.31 15 3 3 119.36 14 32 25 110.44 18 42 56 124.16 14 34 34 106.78 20 50 10
                                      1012.82
         90.00
                      14 46 11
                                                             16.55
                                                                              331.77
                                                                                               129.33
                                                                                                                                                       412.8
                                                                                                                                                                        19.56
                                                                                                                                                                                         324.39
                      14 13 47
                                                               5.88
                                                                             334.08
                                                                                             123.95
                                                                                                                                                       518.2
                                                                                                                                                                          9.75
                                                                                                                                                                                       327.42
        100.00
                                                                             279.09
                                                                                                                                                                        24.88
        100.00
                      17 5 24
                                         5852.00
                                                             22.30
                                                                                               131.77
                                                                                                                                                     5252.0
                      14 16 3
                                                             -1.24
                                                                                                                                                       511.1
                                         1111.08
                                                                              329.13
                                                                                              119.55
                                                                                                                                                                          3.26
                                                                                                                                                                                        322.93
        110.00
                                                                                                                                                                         32.23
        110.00
                      19 19 38
                                         5431.87
                                                             30.23
                                                                             250.17
                                                                                               134.75
                                                                                                                                                     4831.9
                                                                                                                                                                                         241.53
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SCT 5614.2 SCR 451.5 SC3 119.9

RRT -.5127 RRF -.4939 RTF .9556

SCB 5632.3 R23 .0018 R13 -.9556

SCI 5619.0 SC2 387.3 THA 177.63
                                                                                                                                              ST 1935.2 SR 427.2 SS 465.6

CRT -.7251 CRS .5972 CST -.9850

LSA 2013.0 MSA 303.4 SSA 13.0
     TOE-1,4935 TRA 5.1682 TC3-1.7640 BAU 1.1018
    ROE .5067 RRA -.1610 RC3 .0049 FAU .00837
FOE -.2846 FRA 1.4203 FC3 -.1552 8SP 18188
80E 1.5771 BRA 5.1707 BC3 1.7640 FSP -402
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EL1 1960.4 EL2 290.4 ALF 170.70

ARRIVAL DATE FEB 5 1968

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FLIGHT TIME 206.00
LAUNCH DATE JUL 14 1967
                                                                                                DISTANCE 592.235
   HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 25.193 GAL 12.45 AZL 91.64 MCA 300.99 SMA 119.48 ECC .34264 INC 1.6428 V1 29.297
RP 108.34 LAP 1.41 LOP 231.90 VP 36.596 GAP 19.34 AZP 90.85 TAL 153.46 TAP 94.45 RCA 78.54 APO 160.42 V2 34.979
RC 192.846 GL -5.56 GP 6.48 ZAL 40.84 ZAP 173.13 ETS 106.39 ZAE 128.32 ETE 174.65 ZAC 36.03 ETC 12.27 CLP 177.72
    PLANETOCENTRIC CONIC
      C3 52.946 VHL 7.276 OLA -27.51 RAL 247.85 RAD 6568.9 VEL 13.203 PTH 2.41 VMP 11.971 DPA -10.02 RAP 229.69 ECC 1.8714
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            117.45 13 49 17
111.90 15 41 32
                                                                                                                                                                         728.0
                                                                                                                                                                                           10.88
          90.00 13 27 9 1328.02
                                                                                                       129.31
                                                                     7.25
                                                                                       350.24
                                                                                                                                                                                                               319.81
                                                                                                                                                                                            21.23
                          15 25 50
                                              941.31
                                                                     18.42
                                                                                       327.35
                                                                                                           134.56
                                                                                                                                                                         341.3
           90.00
                                                                                                                               119.73 14 27 50
110.02 19 5 3
124.03 14 36 15
106.97 21 6 0
                                                                                                                                                                                                               331.81
                                                                                                                                                                         596.3
                         14 7 54 1196.33
                                                                                                                                                                                              7.19
                                                                      3.25
                                                                                       338.39
                                                                                                           127.12
                                                                                                                                                                                                               270.18
                                                                                                                                                                                            25.19
         100.00
                          17 27 46 5836.27
                                                                     22.67
                                                                                       278.07
                                                                                                           136.30
                                                                                                                                                                       5236.3
                         14 16 46 1168.44
19 35 23 5436.92
                                                                                                                                                                                                               325.92
                                                                     -3.42
                                                                                       332.13
                                                                                                           122.97
                                                                                                                                                                        568.4
                                                                                                                                                                                              1.07
         110,00
                                                                     30.13
                                                                                                                                                                       4836.9
                                                                                                                                                                                             32.15
                                                                                                                                                                                                               241.91
                                                                                       250.53
                                                                                                          139.08
         110.00
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 5597.7 SGR 443.1 SG3 116.5
RRT --5225 RRF --5043 RTF -9591
SGB 5615.2 R23 _0010 R13 --9591
.SGI 5602.5 SG2 377.5 THA 177.62
                                                                                                                                                                 ST 1880.1 SR 414.9 SS 462.3
CRT -.6870 CRS .5617 CST -.9867
LSA 1955.7 MSA 309.3 SSA 12.4
      TDE-1.4248 TRA 5.6590 TC3-1.5111 BAU 1.0696
     ROE .5233 RRA -.1835 RC3 .0047 FAU .00700
FOE -.2613 FRA 1.4896 FC3 -.1144 BSP 18112
BOE 1.5178 BRA 5.6619 BC3 1.5111 FSP -389
                                                                                                                                                                  EL1 1902.1 EL2 298.0 ALF 171.16
                                                                                                 FLIGHT TIME 208.00
                                                                                                                                                                                 ARRIVAL DATE FEB 7 1968
   HELIOCENTRIC CONIC
                                                                                                 DISTANCE 596.405
     RL 152.07 LAL -.00 LOL 290.89 VL 25.153 CAL 13.67 A7L 91.49 HCA 304.19 SMA 119.27 ECC .35674 INC 1.4918 VI 29.297 RP 108.38 LAP 1.23 LOP 235.09 VP 36.556 CAP 20.26 AZP 90.84 TAL 152.18 TAP 96.37 RCA 76.72 APO 161.82 V2 34.966 RC 194.574 GL -4.70 CP 6.37 ZAL 39.19 ZAP 172.86 ETS 113.77 ZAE 128.13 ETE 174.74 ZAC 33.90 ETC 12.97 CLP 176.78
    PLANETOCENTRIC CONIC
          60.279 VHL 7.764 DLA -26.88 RAL 249.74 RAD 6569.1 VEL 13.477 PTH
                                                                                                                                     2.46 VHP 12.526 OPA -10.80 RAP 231.83 ECC 1.9920
     C3 60.279 VML 7.764 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 VIN 12.40 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAL 249.74 KAU 0309.1 VEL 13.411 FIN 2.70 ULA -20.88 KAU 0309
                                                                                                                               111.18 16 8 9
119.88 14 24 20
109.77 19 24 41
123.78 14 37 38
107.23 21 20 45
                          15 53 1
                                                908.20
                                                                                       325.28
                                                                                                           139.15
                                                                                                                                                                         308.2
                                                                                                                                                                                             21.96
                                                                                                                                                                                                                317.65
                                                                     19.25
                         14 3 10 1269.36
17 47 34 5826.96
                                                                                       342.40
                                                                                                           130.25
                                                                                                                                                                          669.4
                                                                                                                                                                                               4.75
                                                                                                                                                                                                                335.87
                                                                         .78
                                                                     22.89
                                                                                       277.47
                                                                                                           140.61
                                                                                                                                                                        5227.0
                                                                                                                                                                                             25.37
                                                                                                                                                                                                                269.55
         100.00
                          14 17 12
                                              1225.31
                                                                     -5.58
                                                                                       335.12
                                                                                                           126.30
                                                                                                                                                                         625.3
                                                                                                                                                                                             -1.11
                                                                                                                                                                                                                328.89
         110.00
                         19 50 1 5443.78
                                                                     29.99
                                                                                       251.02
                                                                                                          143.26
                                                                                                                                                                       4843.8
                                                                                                                                                                                             32.05
                                                                                                                                                                                                               242.41
         110.00
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                           SCT 5575.9 SCR 433.5 SC3 113.2
RRT -.5322 RRF -.5151 RTF .9628
SCB 5592.8 R23 .0005 R13 -.9628
SCI 5580.7 SC2 366.7 THA 177.62
                                                                                                                                                                  ST 1833.8 SR 401.7 SS 461.8
CRT -.6497 CRS .5300 CST -.9886
     TOE-1.3603 TRA 6.1779 TC3-1.2809 BAU 1.0323
     RDE .5398 RRA -.2066 RC3 .0042 FAU .00568
FDE -.2413 FRA 1.5620 FC3 -.0816 BSP 18136
                                                                                                                                                                 LSA 1907.9 MSA 311.8 SSA 11.9
     BOE 1.4635 BRA 6.1813 BC3 1.2809 FSP -379
                                                                                                                                                                  EL1 1852.8 ELZ 302.2 ALF 171.68
                                                                                                                                                                                ARRIVAL DATE FEB 9 1968
                                                                                                 FLIGHT TIME 210.00
LAUNCH DATE JUL 14 1967
                                                                                                 DISTANCE 600.291
     RL 152.07 LAL -.00 LOL 290.89 VL 25.115 GAL 15.00 AZL 91.33 MCA 307.38 SMA 119.06 ECC .37240 INC 1.3289 V1 29.297 RP 108.42 LAP 1.06 LOP 238.28 VP 36.517 GAP 21.28 AZP 90.81 TAL 150.98 TAP 98.36 RCA 74.72 APO 163.40 V2 34.953 RC 196.285 GL -3.89 GP 6.27 ZAL 37.68 ZAP 172.46 ETS 120.72 ZAE 127.90 ETE 174.82 ZAC 31.82 ETC 13.79 CLP 175.80
    PLANETOCENTRIC CONIC
     C3 68.949 VHL 8.304 DLA -26.27 RAL 251.45 RAD 6569.3 VEL 13.795 PTH 2.52 VHP 13.141 DPA -11.55 RAP 233.95 ECC 2.1347
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               118.28 13 31 35
110.74 16 30 7
119.86 14 21 26
                         13 6 26 1508.61
                                                                                                         135.03
                                                                                                                                                                    908.8
                                                                                                                                                                                             5.25
                                                                                                                                                                                                             353.75
                                                                      1.48
                                                                                            .40
           90.00
                         16 15 18
                                                888.83
                                                                     19.72
                                                                                       324.05
                                                                                                           143.43
                                                                                                                                                                         288.8
                                                                                                                                                                                            22.36
                                                                                                                                                                                                               316.38
           90.00
                         13 59 7 1338.65
18 5 18 5822.26
                                                                                                           133.33
                                                                                                                                                                         738.7
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                                                                                                                                                                                                               339.66
         100.00
                                                                     -1.57
                                                                                      346.20
                                                                                                                                109.64 19 42 20
123.41 14 38 42
107.54 21 34 26
                                                                                                                                                                                                               269.23
         100.00
                                                                     23.00
                                                                                      277.16
                                                                                                           144.73
                                                                                                                                                                       5222.3
                                                                                                                                                                                            25.46
                         14 17 20 1281.49
20 3 34 5452.19
                                                                     -7.70
                                                                                       338.09
                                                                                                           129.54
                                                                                                                                                                         681.5
                                                                                                                                                                                             -3.25
                                                                                                                                                                                                               331.82
         110.00
                                                                                                                                                                       4852.2
                                                                                                                                                                                           31.93
                                                                                                                                                                                                               243.04
                                                                     29.82
                                                                                       251.62
                                                                                                           147.29
         110.00
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 1794.0 SR 387.3 SS 464.0

CRT -.6124 CRS .5001 CST -.9905

LSA 1867.2 MSA 311.6 SSA 11.3

EL1 1810.1 EL2 303.5 ALF 172.25
                                                                                            SCT 5550.1 SGR 422.6 SG3 110.1
RRT -.5416 RRF -.5257 RTF .9665
SGB 5566.2 R23 -.0000 R13 -.9665
SGI 5554.9 SG2 355.0 THA 177.63
     TDE-1.2951 TRA 6.7349 TC3-1.0686 BAU .9851
     ROE .5560 RRA -.2303 RC3 .0031 FAU .00431
FOE -.2230 FRA 1.6402 FC3 -.0541 BSP 18126
     BDE 1.4094 BRA 6.7389 BC3 1.0686 FSP -368
LAUNCH DATE JUL 14 1967
                                                                                                  FLIGHT TIME 212.00
                                                                                                                                                                                 ARRIVAL DATE FEB 11 1968
                                                                                                 DISTANCE 603.829
    HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 25.077 GAL 16.45 AZL 91.15 MCA 310.56 SMA 118.86 ECC .38983 INC 1.1518 V1 29.297
RP 108.46 LAP .87 LOP 241.46 VP 36.479 GAP 22.42 AZP 90.75 TAL 149.88 TAP 100.44 RCA 72.52 APO 165.19 V2 34.941
RC 197.979 GL -3.11 GP 6.18 ZAL 36.32 ZAP 171.92 ETS 127.09 ZAE 127.62 ETE 174.92 ZAC 29.79 ETC 14.75 CLP 174.78
    PLANETOCENTRIC CONIC
     C3 79.252 VHL 8.902 OLA -25.66 RAL 252.99 RAD 6569.5 VEL 14.163 PTH 2.58 VHP 13.826 OPA -12.25 RAP 236.03 ECC 2.3043
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                             118.30 13 25 58
110.48 16 49 6
119.67 14 18 51
109.61 19 58 17
122.92 14 39 25
107.90 21 47 5
           90.00 12 59 33 1585.39
                                                                                                        137.89
                                                                                                                                                                                              2.80
                                                                                                                                                                                                                358.04
                                                                       - .99
                                                                                                                                                                         985.4
                                                                                                                                                                                                                315.61
           90.00
                          16 34 29
                                                877.28
                                                                     19.99
                                                                                        323.32
                                                                                                           147.46
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                                                                                                                                                                                             22.60
                         13 55 26 1404.91
                                                                                                           136.32
                                                                                                                                                                         804.9
                                                                                                                                                                                                 .17
                                                                                                                                                                                                                343.32
                                                                      -3.81
                                                                                        349.85
                                                                                                                                                                        5221.0
                                                                                                                                                                                             25.49
                                                                                                                                                                                                                269.14
         100.00
                           18 21 16
                                              5821.02
                                                                     23.02
                                                                                        277.08
                                                                                                           148.65
                                           1336.81
                                                                                                                                                                                                                334.73
                                                                                       341.05
                                                                                                           132.68
                                                                                                                                                                         736.8
                                                                                                                                                                                             -5.36
         110.00
                           14 17 8
                                                                      -9.76
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         110.00
                           20 16 3
                                              5461.89
                                                                     29.62
                                                                                       252.30
                                                                                                            151.14
                                                                                                                                                                        4861.9
                                                                                                                                                                                            31.78
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ST 1760.1 SR 372.0 SS 469.1

CRT -.5761 CRS .4726 CST -.9923

LSA 1833.3 MSA 308.6 SSA 10.8
                                                                                            SGT 5520.2 SGR 410.4 SG3 107.1
RRT -.5506 RRF -.5359 RTF .9703
      TDE-1.2313 TRA 7.3339 TC3 -.8746 BAU .9266
      RDE .5718 RRA -.2543 RC3 .0018 FAU .00287
     FOE -.2065 FRA 1.7250 FC3 -.0314 BSP 18104
BDE 1.3576 BRA 7.3383 BC3 .8746 FSP -358
                                                                                            SGB 5535.5 R23 -.0004 R13 -.9703
                                                                                                                                                                  ELI 1773.5 EL2 301.8 ALF 172.85
                                                                                            SG1 5524.9 SG2 342.3 THA 177.65
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ARRIVAL DATE FEB 13 1968

EL1 1666.4 EL2 270.4 ALF 175.15

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FLIGHT TIME 214.00
LAUNCH DATE JUL 14 1967
                                                                                                       DISTANCE 606.940
    HELIOCENTRIC CONIC
      RL 152.07 LAL -.00 LOL 290.89 VL 25.041 GAL 18.04 AZL 90.96 MCA 313.75 SMA 118.67 ECC .40930 INC .9569 V1 29.297 RP 108.50 LAP .69 LOP 244.65 VP 36.443 GAP 23.68 AZP 90.66 TAL 148.88 TAP 102.63 RCA 70.10 APO 167.24 V2 34.929 RC 199.655 GL -2.38 GP 6.10 ZAL 35.11 ZAP 171.25 ETS 132.83 ZAE 127.28 ETE 175.01 ZAC 27.82 ETC 15.84 CLP 173.71
    PLANETOCENTRIC CONIC
                                                                                                                                            2.65 VHP 14.591 OPA -12.91 RAP 238.08 ECC 2.5069
      C3 91.566 VHL 9.569 DLA -25.06 RAL 254.36 RAD 6569.8 VEL 14.591 PTH
                                                                   RAL 254.36 RAO 6569.8 VEL 14.591 PTH 2.65 VHP 14.591 OPA -12.91 RAP 238.08 ECC 2.3069
INJ LAT INJ LONG INJ RT. ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-3.29 8.65 140.68 118.14 13 21 12 1056.8 .50 2.02
20.15 322.91 151.24 110.33 17 5 49 270.9 22.73 315.19
-5.94 353.36 139.22 119.35 14 16 23 868.5 -11.99 346.81
22.99 277.17 152.35 109.65 20 12 43 5222.4 25.46 269.24
-11.76 343.99 135.71 122.33 14 39 46 791.1 -7.40 337.60
29.39 253.05 154.81 108.29 21 58 42 4872.6 31.61 244.54
      LNCH AZHTH LNCH TIME L-I TIME
                         12 53 36 1656.77
16 51 19 870.85
13 51 55 1468.50
18 35 41 5822.40
           90.00
            90.00
          100.00
          100.00
                          14 16 35 1391.09
20 27 29 5472.58
          110.00
          110.00
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 1730.7 SR 355.9 SS 476.9
CRT -.5403 CRS .4464 CST -.9939
LSA 1804.8 MSA 303.3 SSA 10.3
                                                                                                SCT 5487.7 SCR 396.8 SC3 104.3
RRT -.5588 RRF -.5455 RTF .9739
SCB 5502.1 R23 -.0008 R13 -.9739
      TDE-1.1656 TRA 7.9843 TC3 -.6962 BAU
                                                                              .8523
      ROE .5872 RRA -.2784 RC3 .0001 FAU .00129
FDE -.1909 FRA 1.8186 FC3 -.0122 BSP 17974
                                                                                                  SG1 5492.2 SG2 328.8 THA 177.68
                                                                                                                                                                            EL1 1741.7 EL2 297.6 ALF 173.47
      BDE 1.3051 BRA 7.9892 BC3 .6962 FSP -347
                                                                                                                                                                                            ARRIVAL DATE FEB 15 1968
                                                                                                        FLIGHT TIME 216.00
LAUNCH DATE JUL 14 1967
                                                                                                        DISTANCE 609.521
   HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 25.007 GAL 19.80 AZL 90.74 HCA 316.93 SMA 118.48 ECC .43111 INC .7405 V1 29.297
RP 108.53 LAP .51 LOP 247.83 VP 36.408 GAP 25.11 AZP 90.54 TAL 148.02 TAP 104.95 RCA 67.40 APO 169.56 V2 34.917
RC 201.315 GL -1.69 GP 6.01 ZAL 34.07 ZAP 170.45 ETS 137.95 ZAE 126.87 ETE 175.11 ZAC 25.93 ETC 17.10 CLP 172.56
    PLANETOCENTRIC CONIC
     C3 106.382 VHL 10.314 DLA -24.48 RAL 255.54 RAD 6570.0 VEL 15.090 PTH 2.71 VHP 15.452 DPA -13.51 RAP 240.07 ECC 2.7508 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 17 6 12 867.97 20.21 322.72 154.78 110.26 17 20 40 268.0 22.79 315.00 100.00 13 48 23 1529.59 -7.97 356.77 142.00 118.91 14 13 52 929.6 -4.05 350.17 100.00 18 48 39 5825.70 22.92 277.38 155:84 109.74 20 25 45 5225.7 25.40 269.46 110.00 14 15 36 1444.11 -13.67 346.90 138.61 121.64 14 39 42 844.1 -9.38 340.43 110.00 20 37 53 5483.94 29.15 253.84 159.25 108.70 22 91 4883.9 31.42 245.37
      C3 106.382 VHL 10.314 DLA -24.48 RAL 255.54 RAD 6570.0 VEL 15.090 PTH 2.71 VHP 15.452 DPA -13.51 RAP 240.07 ECC 2.7508
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5449.3 SGR 382.0 SG3 101.6
RRT -.5662 RRF -.5544 RTF .9775
SGB 5462.7 R23 -.0012 R13 -.9775
                                                                                                                                                                            ST 1705.3 SR 339.2 SS 487.7
CRT -.5081 CRS .4245 CST -.9953
      TOE-1.1081 TRA 8.6834 TC3 -.5368 BAU .7635
      RDE .6024 RRA -.3018 RC3 -.0016 FAU-.00039
                                                                                                                                                                            LSA 1781.5 MSA 295.3 SSA
      FOE -.1784 FRA 1.9203 FC3 .0031 BSP 17952
BDE 1.2613 BRA 8.6887 BC3 .5368 FSP -338
                                                                                               SGB 5462.7 RZ3 - .UU12 RIS .....
SGI 5453.6 SG2 314.6 THA 177.72
                                                                                                                                                                          EL1 1714.3 EL2 290.6 ALF 174.06
                                                                                                                                                                                           ARRIVAL DATE FEB 17 1968
                                                                                                       FLIGHT TIME 218.00
LAUNCH DATE JUL 14 1967
                                                                                                       DISTANCE 611.438
    HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 24.974 GAL 21.76 A7L 90.50 MCA 320.11 SMA 118.31 ECC .45564 INC .4966 V1 29.297 RP 108.57 LAP .32 LOP 251.01 VP 36.374 GAP 26.72 A7P 90.38 TAL 147.32 TAP 107.43 RCA 64.40 APO 172.22 V2 34.905 RC 202.957 GL -1.03 GP 5.94 ZAL 33.20 ZAP 169.51 ETS 142.49 ZAE 126.37 ETE 175.21 ZAC 24.14 ETC 18.52 CLP 171.34
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 124.340 VHL 11.151 DLA -23.90 RAL 256.54 RAD 6570.3 VEL 15.674 PTH 2.79 VHP 16.425 DPA -14.08 RAP 242.00 ECC 3.0463
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 42 54 1787.74 -7.45 16.03 145.92 117.40 13 12 42 1187.7 -3.72 9.33
90.00 17 19 23 867.54 20.22 322.69 158.06 110.25 17 33 51 267.5 22.80 314.97
100.00 13 44 43 1588.23 -9.88 .07 144.62 118.36 14 11 11 988.2 -6.02 353.41
100.00 19 0 16 5830.33 22.81 277.69 159.07 109.86 20 37 26 5230.3 25.31 269.78
110.00 14 14 14 1495.67 -15.49 349.79 141.36 120.86 14 39 9 895.7 -11.28 343.21
110.00 20 47 14 5495.65 28.89 254.66 161.46 109.12 22 18 50 4895.7 31.22 246.23
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 1682.3 SR 321.8 SS 501.6
CRT -.4782 CRS .4050 CST -.9965
LSA 1761.8 MSA 285.3 SSA 9.2
EL1 1689.6 EL2 281.4 ALF 174.62
                                                                                                SCT 5407.0 SCR 365.8 SC3 99.1
RRT -.5724 RRF -.5621 RTF .9809
SCB 5419.4 R23 -.0014 R13 -.9809
SCI 5411.1 SC2 299.7 THA 177.78
      TOE-1.0550 TRA 9.4441 TC3 -.3930 BAU .6533
      ROE .6173 RRA -.3241 RC3 -.0033 FAU-.00229
      FDE -.1678 FRA 2.0332 FC3 .0159 BSP :17897
      BDE 1.2224 BRA 9.4496 BC3 .3930 FSP -329
                                                                                                                                                                                            ARRIVAL DATE FEB 19 1968
LAUNCH DATE JUL 14 1967
                                                                                                        FLIGHT TIME 220.00
                                                                                                       DISTANCE 612.518
   HELIOCENTRIC CONIC
     RL 152.07 LAL -.00 LOL 290.89 VL 24.944 GAL 23.95 AZL 90.22 MCA 323.29 SMA 118.16 ECC .48331 INC .2179 V1 29.297
RP 108.60 LAP .13 LOP 254.18 VP 36.343 GAP 28.56 AZP 90.18 TAL 146.82 TAP 110.11 RCA 61.05 APO 175.26 V2 34.894
RC 204.581 GL -.41 GP 5.86 ZAL 32.51 ZAP 168.44 ETS 146.52 ZAE 125.78 ETE 175.33 ZAC 22.46 ETC 20.12 CLP 170.02
    PLANETOCENTRIC CONIC
      LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 37 38 1848.17 -9.32 19.48 148.30 116.86 13 8 26 1248.2 -5.65 12.73 90.00 17 31 0 868.73 20.20 322.77 161.05 110.28 17 45 24 262 7 22 78
      C3 146.283 WHL 12.095 DLA -23.35 RAL 257.33 RAD 6570.6 VEL 16.359 PTH 2.86 VMP 17.531 OPA -14.59 RAP 243.84 ECC 3.4075
                            17 31 0
                                                                                                                                       117.71 14 8 10
110.01 20 47 49
120.00 14 38 3
109.53 22 27 18
                                                                                                                                                                                                         -7.88
                                                                                                                                                                                                                            356.54
                                                                                                                                                                                  1044.4
                          13 40 46 1644.40
                                                                                               3.27
                                                                                                                147.07
          100.00
                                                                        -11.68
                          19 10 33 5635.77
14 12 17 1545.56
                                                                                                                                                                                                        25.20
                                                                                                                                                                                  5235.8
                                                                                                                                                                                                                            270.15
                                                                       22.68
                                                                                             278.04
                                                                                                                162.03
          100.00
                                                                                                                                                                                                      -13.09
31.02
                                                                                                                                                                                                                            345.94
                                                                                                                                                                                    945.6
                                                                   -17.21
                                                                                             352.63
                                                                                                                143.92
          110.00
                                                                                                                                                        22 27 18
                                                                                                                                                                                  4907.4
                           20 55 31
                                                 5507.38
                                                                        28.63
                                                                                             255.47
                                                                                                                 164.39
          110.00
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1660.6 SR 304.1 SS 519.0
CRT -.4512 CRS .3880 CST -.9974
                                                                                                  SGT 5360.3 SGR 348.4 SG3 96.6

RRT -.5770 RRF -.5681 RFF .9841

SGB 5371.6 R23 -.0017 R13 -.9841
      TDE-1.0090 TRAID.2731 TC3 -.2640 BAU .5164
      ROE .6320 RRA -.3444 RC3 -.0049 FAU-.00449
                                                                                                                                                                          LSA 1744.8 MSA 273.6 SSA
      FOE -.1594 FRA 2.1591 FC3 .0266 BSP 17824
BOE 1.1906 BRA10.2789 BC3 .2640 FSP -321
                                                                                                                                                                                                                                 8.6
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SG1 5364.1 SG2 284.3 THA 177.85

ARRIVAL DATE SEP 23 1967

LAUNCH DATE JUL 15 1967

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DISTANCE 186.723
   HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 26.795 GAL -10.27 AZL 93.03 MCA 82.32 SMA 129.16 ECC .24952 INC 3.0312 V1 29.298

RP 108.54 LAP -3.00 LOP 14.16 VP 37.658 GAP -11.20 AZP 90.41 TAL 215.35 TAP 297.67 RCA 96.93 APO 161.38 V2 34.914

RC 53.515 GL -14.09 GP -9.84 ZAL 145.06 ZAP 18.49 ETS 30.52 ZAE 149.68 ETE .95 ZAC 89.56 ETC 13.81 CLP -15.74
   PLANETOCENTRIC CONIC
                                                  .16 RAL 141.83 RAD 6568.3 VEL 12.417 PTH 2.24 VMP 7.490 DPA -5.29 RAP 175.82 ECC 1.5401
    C3 32.819 VHL 5.729 DLA .16 RAL 141.83 RAD 6568.3 VEL 12.417 PTH 2.24 VHP 7.490 DPA -5.29 RAP 175.82 ECC 1.3401 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 19 29 2341.21 -22.43 49.67 11.54 107.76 1 58 30 1741.2 -19.79 41.99 90.00 13 19 49 4975.62 22.23 217.99 11.44 71.99 14 42 44 4375.6 19.56 210.33 100.00 2 40 54 2078.59 -23.62 29.92 11.11 108.87 3 15 32 1478.6 -20.83 22.24 100.00 14 41 5 4713.47 23.42 198.27 11.00 70.88 15 59 39 4113.5 20.60 190.62 110.00 3 49 18 1864.46 -26.84 12.34 9.78 112.00 4 20 23 1264.5 -23.62 4.66 110.00 15 49 10 4500.37 26.64 180.76 9.66 67.74 17 4 10 3900.4 23.38 173.11
    C3 32.819 VHL 5.729 OLA
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 254.6 SR 396.3 SS 141.3

CRT -.8800 CRS -.7665 CST .3951

LSA 469.8 MSA 143.1 SSA 25.9

EL1 459.3 EL2 104.3 ALF 121.27
                                                                                  SCT 609.2 SCR 429.5 SG3 128.0
RRT -.2042 RRF .2836 RTF -.5930
SCB 745.4 R23 -.0601 R13 .6129
    TOE .2377 TRA -.2999 TC3 .4137 BAU .1817
    RDE -.3929 RRA -.1718 RC3 -.0212 FAU .04570
FDE -.1484 FRA -.5154 FC3-1.2054 BSP 1584
BDE .4592 BRA .3456 BC3 .4142 FSP -325
                                                                                  SG1 620.7 SG2 412.7 THA 165.10
                                                                                                                                                              ARRIVAL DATE SEP 25 1967
                                                                                       FLIGHT TIME 72.00
LAUNCH DATE JUL 15 1967
                                                                                       DISTANCE 193.521
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 26.942 GAL -10.19 A7L 92.92 MCA 85.50 SMA 130.16 ECC .24235 INC 2.9205 V1 29.298
RP 108.50 LAP -2.91 LOP 17.35 VP 37.771 GAP -10.29 A7P 90.23 TAL 216.70 TAP 302.20 RCA 98.62 APO 161.70 V2 34.926
RC 55.163 GL -13.89 GP -10.51 ZAL 146.31 ZAP 21.39 ETS 27.56 ZAE 149.76 ETE 359.05 ZAC 89.55 ETC 13.84 CLP -18.74
   PLANETOCENTRIC CONIC
    C3 31.696 VHL 5.630 OLA
                                                   .75 RAL 140.70 RAD 6568.3 VEL 12.372 PTH
                                                                                                                       2.23 VHP 7.015 OPA
                                                                                                                                                         -5.98 RAP 175.71 ECC 1.5216
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   1750.8
                                                                                                                                                                      -20.02
                                                                                                                                                                                           42.60
                                                                                                   9.98
                                                                                                                 107.50
                                                                                                                                  1 49 45
                        1 10 34 2350.82
                                                             -22.62
                                                                                50.30
         90.00
                                                                                                                  71.28 14 42 10
108.62 3 7 3
70.16 15 58 48
111.79 4 12 29
66.98 17 2 44
                                                                                                                                                                                          208.62
                                                                                                                                                      4348.5
                                                                                                                                                                         18.89
                                                              21.64
                                                                              216.21
                                                                                                   9.52
                      13 19 41
                                        4948.47
         90.00
                                                                                                                                                                        -21.05
                         2 32 15 2087,32
                                                                                                                                                      1487.3
                                                             -23.82
                                                                                30.50
                                                                                                   9.55
        100.00
                                                                                                                                                      A087.2
                                                                                                                                                                 -23.82
22.66
                                                                                                                                                                      19.91
                                                                                                                                                                                          188.96
                                                                              196.55
                                                                                                   9.07
                      14 40 41 4687.21
                                                             22.83
        100.00
                                                                                                                                                     1271.2
                         3 41 16 1871.21
                                                            -27.02
                                                                                12.79
                                                                                                   8.25
        110.00
                                                                                                   7.70
                                                                                                                                                      3876.1
                      15 48 8
                                                             26.00
                                                                              179.16
        110.00
                                         4476.08
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 250.0 SR 398.6 SS 146.6

CRT -.8795 CRS -.7128 CST .3184

LSA 468.6 MSA 150.4 SSA 26.4

EL1 459.0 EL2 103.3 ALF 120.60
                                                                                 SGT 614.4 SGR 436.4 SG3 145.1
RRT -.2292 RRF .3257 RTF -.5953
SGB 753.6 R23 -.0757 R13 .6216
    TOE .2298 TRA -.2856 TC3 .4336 BAU .1845
    ROE - 3880 RRA - .1773 RC3 - .0392 FAU .05054
FOE - .1459 FRA - .6065 FC3-1.3804 BSP 1614
BOE .4510 BRA .3362 BC3 .4353 FSP - 376
                                                                                   SG1 629.2 SG2 414.8 THA 163.35
                                                                                                                                                              ARRIVAL DATE SEP 27 1967
                                                                                       FLIGHT TIME 74.00
LAUNCH DATE JUL 15 1967
                                                                                       DISTANCE 200.301
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.072 GAL -10.12 AZL 92.81 MCA 88.69 SMA 131.06 ECC .23613 INC 2.8107 V1 29.298 PP 108.46 LAP -2.81 LOP 20.54 VP 37.875 GAP -9.43 AZP 90.06 TAL 217.96 TAP 306.65 RCA 100.11 APO 162.01 V2 34.938 RC 56.885 GL -13.63 GP -11.26 TAL 147.47 ZAP 24.49 ETS 25.19 ZAE 150.09 ETE 356.95 ZAC 89.71 ETC 13.85 CLP -21.89
   PLANETOCENTRIC CONIC
     C3 30.737 VML 5.544 OLA 1.35 RAL 139.69 RAD 6568.2 VEL 12.333 PTH 2.22 VHP 6.573 OPA -6.68 RAP 175.43 ECC 1.5058
     LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               107.20 1 41 27
70.62 14 42 8
108.34 2 59 0
69.48 15 58 31
111.53 4 5 3
66.28 17 1 50
                                                                                                                                                                    -20.28
                       1 2 5 2361.69
13 20 6 4922.15
2 24 3 2097.30
14 40 49 4661.78
                                                                                               8.61
                                                                                                                                                  1761.7
                                                                               51.02
                                                             -22.85
         90.00
                                                                                                                                                                                          206.97
                                                                                                   7.80
                                                                             214.50
                                                                                                                                                      4322.1
                                                                                                                                                                         18.22
                                                             21.06
          90.00
                                                                                                                                                                                          23.43
                                                                                                                                                                     -21.30
                                                                                                                                                      1497.3
                                                             -24.03
                                                                                31.16
                                                                                                   8.20
        100.00
                                                                                                                                                                                          187.38
                                                                           194.90
                                                                                                                                                                       19.24
                                                             22.23
                                                                                                   7.34
                                                                                                                                                      4061.8
        100.00
                                                                                                                                                                                             5.59
                                                                                                                                                                     -24.05
21.94
                      3 33 44 1879.18
15 47 37 4452.66
                                                                                13.33
                                                                                                   6.92
                                                                                                                                                      1279.2
                                                             -27.22
        110.00
                                                                                                                                                                                          170.15
                                                                                                                                                     3852.7
                                                                              177.63
                                                                                                   5.95
                                                            25.37
        110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 244.4 SR 399.9 SS 152.6

CRT -.8761 CRS -.6551 CST .2349

LSA 465.7 MSA 159.0 SSA 26.8

EL1 457.2 EL2 103.0 ALF 119.83
                                                                                   SGT 615.9 SGR 444.5 SG3 164.3
RRT -.2547 RRF .3728 RTF -.5925
SGB 759.5 R23 -.0949 R13 .6282
     TOE .2212 TRA -.2746 TC3 .4477 BAU .1857
    ROE -.3830 RRA -.1845 RC3 -.0607 FAU .05599
FOE -.1411 FRA -.7079 FC3-1.5770 BSP 1633
BDE .4422 BRA .3308 BC3 .4518 FSP -433
                                                                                   SGI 634.8 SG2 417.0 THA 161.25
                                                                                                                                                               ARRIVAL DATE SEP 29 1967
                                                                                        FLIGHT TIME 76.00
LAUNCH DATE JUL 15 1967
                                                                                        DISTANCE 207.061
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.185 GAL -10.06 AZL 92.70 HCA 91.88 SMA 131.86 ECC .23075 INC 2.7011 V1 29.298
RP 108.43 LAP -2.70 LOP 23.73 VP 37.968 GAP -8.60 AZP 89.91 TAL 219.12 TAP 311.00 RCA 101.43 APO 162.29 V2 34.951
RC 58.673 GL -13.34 GP -12.08 ZAL 148.54 ZAP 27.80 ETS 23.24 ZAE 150.68 ETE 354.57 ZAC 90.05 ETC 13.83 CLP -25.23
   PLANETOCENTRIC CONIC
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 54 3 2373.55 -23.08 51.81 7.44 106.87 1 33 37 1773.5 -20.55 44.05 90.00 13 21 2 4896.58 20.47 212.85 6.28 70.00 14 40 30 100.6
                         13 21 2 4896.58
2 16 18 2108.24
14 41 22
                                                                                                                                                                                            24.13
                                                                                                                                                                         -21.57
                                                                                                    7.04
                                                                                                                    108.02
                                                                                                                                  2 51 27
                                                                                                                                                      1508.2
                                                             -24.26
                                                                                31.89
        100.00
                                                                                                                     68.85 15 58 45
                                                                                                                                                       4037.1
                                                                                                                                                                          18.56
                                                                                                                                                                                           185.86
                                                             21.63
                                                                              193.31
                                                                                                    5.81
        100.00
                       14 41 28
                                                                                                                   111.24 3 58 6
65.62 17 1 27
                                                                                                                                                      1288.1
                                                                                                                                                                        -24.30
                                                                                                                                                                                              6.16
                          3 26 38
                                        1888.11
                                                             -27.44
                                                                                13.93
                                                                                                    5.78
        110.00
                                                                                                                                                      3630.0
                                                                                                                                                                          21.24
                                                             24.74
                                                                              176.17
                                                                                                    4.40
                       15 47 37
                                         4430.01
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 238.0 SR 400.2 SS 159.5
CRT -.8693 CRS -.5951 CST .1452
LSA 461.5 MSA 169.0 SSA 27.0
     TOE .2121 TRA - .2672 TC3 .4551 BAU .1852
                                                                                   SGT 612.9 SGR 454.4 SG3 185.8
                                                                                  RRT -.2797 RRF .4246 RTF -.5834
SGB 763.0 R23 -.1185 R13 .6328
     RDE -.3776 RRA -.1936 RC3 -.0860 FAU .06209
     FDE -.1338 FRA -.8203 FC3-1.7972 BSP 1640
BDE .4531 BRA .3300 BC3 .4632 FSP -499
                                                                                                                                                 EL1 454.0 EL2 103.7 ALF 118.99
                                                                                   SG1 637.2 SG2 419.6 THA 158.68
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FLIGHT TIME 70.00

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LAUNCH DATE JUL 15 1967
                                                                                              FLIGHT TIME 78.00
                                                                                                                                                                         ARRIVAL DATE OCT 1 1967
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 213.798
     RL 152.06 LAL -.00 LOL 291.85 VL 27.284 GAL -10.00 AZL 92.59 MCA 95.07 SMA 132.56 ECC .22612 INC 2.5910 V1 29.298 RP 108.39 LAP -2.58 LOP 26.92 VP 38.050 GAP -7.81 AZP 89.77 TAL 220.16 TAP 315.23 RCA 102.59 APO 162.54 V2 34.964 RC 60.521 GL -12.99 GP -12.98 ZAL 149.52 ZAP 31.32 ETS 21.57 ZAE 151.51 ETE 351.83 ZAC 90.59 ETC 13.77 CLP -28.75
    PLANETOCENTRIC CONIC
      C3 29.181 VHL 5.402 OLA 2.56 RAL 138.03 RAD 6568.2 VEL 12.270 PTH 2.21 VHP 5.785 DPA -8.06 RAP 174.29 ECC 1.4802
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       106.52 1 26 16
69.41 14 43 40
107.67 2 44 22
68.26 15 59 30
110.92 3 51 39
65.00 17 1 36
                        0 46 30 2386.16
13 22 26 4871.65
                                                                                                    6.44
                                                                 -23.33
                                                                                                                                                           1786.2
                                                                                     52.65
                                                                                                          4.95
                                                                  19.88
                                                                                   211.26
                                                                                                                                                                4271.6
                           2 9 2 2119.94
                                                                 -24.51
                                                                                     32.68
                                                                                                         6.05
                                                                                                                                                               1519.9
                                                                                                                                                                                   -21.86
         100.00
                        14 42 37
                                           4613.09
                                                                 21.03
                                                                                  191.77
                                                                                                          4.47
                                                                                                                                                                4013.1
                                                                                                                                                                                    17.90
                          3 20 1 1897.78
                                                                                                                                                                                -24.58
         110.00
                                                                 -27.67
                                                                                     14.58
                                                                                                         4.81
                                                                                                                                                              1297.8
                                                                                                                                                                                                        6.78
         110.00
                        15 48 8
                                            4408.02
                                                                 24.11
                                                                                   174.77
                                                                                                         3.03
                                                                                                                                                                3808.0
                                                                                                                                                                                    20.54
    DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       SGT 606.6 SGR 467.3 SG3 210.0
RRT -.3044 RRF .4815 RTF -.5685
SGB 765.7 R23 -.1452 R13 .6379
                                                                                                                                                         ST 232.3 SR 399.7 SS 167.6
CRT -.8597 CRS -.5373 CST .0558
LSA 456.7 MSA 180.2 SSA 27.1
     TOE .2038 TRA -.2631 TC3 .4565 BAU .1837
     ROE -.3718 RRA -.2046 RC3 -.1159 FAU .06894
FDE -.1247 FRA -.9449 FC3-2.0453 BSP 1666
BDE .4240 BRA .3333 BC3 .4710 FSP -576
                                                                                        SG1 638.3 SG2 423.1 THA 155.46
                                                                                                                                                          EL1 450.1 EL2 105.3 ALF 118.23
                                                                                              FLIGHT TIME 80.00
LAUNCH DATE JUL 15 1967
                                                                                                                                                                         ARRIVAL DATE OCT 3 1967
   HELIOCENTRIC CONIC
                                                                                             DISTANCE 220,509
    RL 152.06 LAL -.00 LOL 291.85 VL 27.368 GAL -9.94 AZL 92.48 MCA 98.26 SMA 133.18 ECC .22212 INC 2.4797 V1 29.298 RP 108.35 LAP -2.45 LOP 30.12 VP 36.122 GAP -7.06 AZP 89.64 TAL 221.09 TAP 319.35 RCA 103.59 APO 162.76 V2 34.977 RC 62.420 GL -12.61 GP -13.97 ZAL 150.40 ZAP 35.06 ETS 20.09 ZAE 152.57 ETE 348.59 ZAC 91.34 ETC 13.66 CLP -32.48
   PLANETOCENTRIC CONIC
     C3 28.533 VHL 5.342 DLA 3.16 RAL 137.39 RAD 6568.1 VEL 12.244 PTH 2.20 VHP 5.438 DPA -8.74 RAP 173.39 ECC 1.4696 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 -23.58
          90.00
                           0 39 26 2399.34
                                                                                     53.54
                                                                                                         5.61
                                                                                                                         106.15
                                                                                                                                           1 19 26
                                                                                                                                                               1799.3
                                                                                                                                                                                 -21.14
                                                                                                                         68.86 14 45 12
107.31 2 37 48
67.69 16 0 46
110.57 3 45 41
64.42 17 2 15
                                                                                                         3.78
                        13 24 24
                                            4847.23
                                                                  19.29
                                                                                   209.72
                                                                                                                                                                 4247.2
                                                                                                                                                                                    16.25
                           2 2 15 2132.21
                                                                 -24.76
                                                                                                                                                                1532.2
                                                                                     33.50
                                                                                                         5.22
                                                                                                                                                                                   -22.15
                        14 44 17 4589.60
                                                                 20.43
                                                                                  190.29
                                                                                                         3.30
                                                                                                                                                               3989.6
                                                                                                                                                           1308.0
3786.6
                           3 13 53 1908.01
                                                                -27.92
                                                                                                                                                                                 -24.87
19.85
         110.00
                                                                                     15.27
                                                                                                         4.01
                        15 49 8 4386.56
         110.00
                                                                23.49
                                                                                   173.41
                                                                                                         1.84
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                       SGT 593.5 SGR 483.4 SG3 236.3
RRT -.3180 RRF .5399 RTF -.5393
     TOE .1936 TRA -.2656 TC3 .4467 BAU .1798
                                                                                                                                                          ST 225,1 SR 397.8 SS 175.7
                                                                                                                                                           CRT -.8419 CRS -.4755 CST -.0502
     ROE -.3650 RRA -.2175 RC3 -.1502 FAU .07636
     FOE -.1097 FRA-1.0772 FC3-2.3169 BSP 1646
BDE .4132 BRA .3433 BC3 .4713 FSP -658
                                                                                      SGB 765.5 R23 -.1787 R13 .6402
SG1 633.9 SG2 429.1 THA 151.51
                                                                                                                                                         LSA 449.3 MSA 192.7 SSA 27.1
                                                                                                                                                           EL1 443.9 EL2 108.8 ALF 117.24
                                                                                             FLIGHT TIME 82.00
                                                                                                                                                                        ARRIVAL DATE OCT 5 1967
LAUNCH DATE JUL 15 1967
                                                                                            DISTANCE 227.193
    RL 152.06 LAL -.00 LOL 291.85 VL 27.439 GAL -9.89 AZL 92.37 MCA 101.46 SMA 133.70 ECC .21868 INC 2.3665 V1 29.298 RP 108.31 LAP -2.32 LOP 33.31 VP 38.185 GAP -6.34 AZP 89.53 TAL 221.88 TAP 323.34 RCA 104.46 APO 162.94 V2 34.990 RC 64.367 GL -12.19 GP -15.04 ZAL 151.18 ZAP 39.03 ETS 18.74 ZAE 153.83 ETE 344.70 ZAC 92.32 ETC 13.48 CLP -36.44
   PLANETOCENTRIC CONIC
                                                   3,77 RAL 136.87 RAD 6568.1 VEL 12.220 PTH 2.20 VHP 5.124 DPA -9.41 RAP 172.26 ECC 1.4599
     C3 27.944 VHL 5.286 DLA
    CS 27.944 VHL 5.286 DLA 3.77 RAL 136.87 RAD 6568.1 VEL 12.220 PTM 2.20 VMP 5.124 DPA -9.41 RAP 172.26 ECC 1.4599

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG

90.00 0 32 50 2412.98 -23.84 54.45 4.93 105.76 1 13 3 1813.0 -21.45 46.60

90.00 13 26 51 4823.18 18.69 208.20 2.78 68.34 14 47 14 4223.2 15.59 200.90

100.00 1 55 57 2144.93 -25.01 34.36 4.55 106.92 2 31 41 1544.9 -22.46 26.50

100.00 14 46 26 4566.47 19.83 188.84 2.29 67.16 16 2 32 3966.5 16.56 181.56

110.00 3 8 14 1918.68 -28.17 16.00 3.36 110.21 3 40 12 1318.7 -25.16 8.12

110.00 15 50 38 4365.48 22.86 172.10 81 63.87 17 3 23 3765.5 19.16 164.91

DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1832 TRA -.2740 TC3 .4264 BAU .1744

RDE -.3573 RRA -.2323 RC3 -.1897 FAU .08439

FDE -.0893 FRA-1.2172 FC3-2.6145 BSP 1616

BDE .4015 BRA .3592 BC3 .4667 FSP -747
                                                                                      SGT 575.6 SGR 503.8 SG3 264.9
RRT -.3181 RRF .5992 RTF -.4941
SGB 764.9 R23 -.2142 R13 .6447
                                                                                                                                                         ST 218.2 SR 394.6 SS 184.4
                                                                                                                                                         CRT -.8157 CRS -.4136 CST -.1658
                                                                                                                                                         LSA 440.4 MSA 206.5 SSA 27.1
                                                                                       SG1 626.6 SG2 438.8 THA 146.39
                                                                                                                                                         EL1 436.2 EL2 114.2 ALF 116.21
                                                                                             FLIGHT TIME 84.00
                                                                                                                                                                        ARRIVAL DATE OCT 7 1967
LAUNCH DATE JUL 15 1967
                                                                                            DISTANCE 233.850
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.498 GAL -9.84 AZL 92.25 MCA 104.65 SMA 134.14 ECC .21571 INC 2.2507 V1 29.298
RP 108.27 LAP -2.18 LOP 36.51 VP 38.240 GAP -5.65 AZP 89.43 TAL 222.55 TAP 327.20 RCA 105.20 APO 163.07 V2 35.003
RC 66.356 GL -11.73 GP -16.20 ZAL 151.88 ZAP 43.23 ETS 17.44 ZAE 155.23 ETE 339.95 ZAC 93.54 ETC 13.22 CLP -40.64
   PLANETOCENTRIC CONIC
                                                    4.37 RAL-136.47 RAD 6568.1 VEL 12.197 PTH 2.19 VHP 4.841 DPA -10.07 RAP 170.89 ECC 1.4509
    C3 27.398 VHL 5.234 DLA 4.37 RAL—136.47 RAD 6568.1 VEL 12.197 PTH 2.19 VHP 4.841 DPA -10.07 RAP 170.89 ECC 1.4909 ELONG AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 29 48 4799.31 18.09 206.72 1.94 67.83 14 49 47 4199.3 14.92 199.47 100.00 1 50 4 2158.05 -25.27 35.25 4.02 106.52 2 26 2 1558.0 -22.76 27.35 100.00 14 49 6 4543.53 19.22 187.41 1.44 66.65 16 4 49 3943.5 15.89 180.19 110.00 3 3 1 1929.73 -28.43 16.76 2.86 109.83 3 35 11 1329.7 -25.46 8.84 110.00 15 52 38 4344.61 22.23 170.89 5550170 ACCUPACY CORLI DETERMINATION ACCUPACY
     C3 27.398 VHL 5.234 DLA
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE .1742 TRA -.2880 TC3 .3961 BAU .1687
RDE -.3487 RRA -.2492 RC3 -.2351 FAU .09306
                                                                                      SCT 555.2 SGR 530.2 SC3 295.9
RRT -.3002 RRF .6584 RTF -.4295
                                                                                                                                                       ST 213.3 SR 390.5 55 194.5
CRT -.7814 CRS -.3595 CST -.2792
                                                                                     SGB 767.7 R23 -.2420 R13 .6588 LSA 431.2 MSA 221.6 S5A 27.0 SGI 619.8 SG2 453.1 THA 139.37 EL1 428.0 EL2 121.4 ALF 115.30
     FDE -.0662 FRA-1.3649 FC3-2.9406 BSP 1612
BDE .3698 BRA .3608 BC3 .4606 FSP -850
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ARRIVAL DATE OCT 9 1967

LAUNCH DATE JUL 15 1967

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DISTANCE 240.477
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.546 GAL -9.78 AZL 92.13 MCA 107.85 SMA 134.50 ECC .21315 INC 2.1313 VI 29.298 RP 108.22 LAP -2.03 LOP 39.71 VP 38.286 GAP -4.99 AZP 89.35 TAL 223.08 TAP 330.93 RCA 105.83 APO 163.17 V2 35.016 RC 68.382 GL -11.23 GP -17.45 ZAL 152.49 ZAP 47.66 ETS 16.14 ZAE 156.71 ETE 334.10 ZAC 94.98 ETC 12.87 CLP -45.09
   PLANETOCENTRIC CONTC
                                     4.98 RAL 136.18 RAD 6568.1 VEL 12.176 PTH 2.19 VHP 4.590 DPA -10.71 RAP 169.27 ECC 1.4424
    C3 26.883 VHL 5.185 DLA
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                      104.92 1 1 37
67.35 14 52 52
                                                                        3.99
                                                                                                                1841.5
                                                                                                                               -22.06
                                                                                                                                               48.46
       90.00
                   0 20 55 2441.47
                                               -24.35
                                                            56.38
                                                                                                                                               198.04
        90.00
                  13 33 16 4775.43
                                                17.47
                                                            205.24
                                                                            1.23
                                                                                                                   4175.4
                                                                                                                                 14.25
                                                                                        106.11 2 20 48
66.16 16 7 37
109.43 3 30 35
62.83 17 7 12
                                                                                                                                               28.23
                                                                                                                   1571.5
                                                                                                                                -23.07
      100.00
                   1 44 37 2171.53
                                               -25.53
                                                             36.17
                                                                            3.63
      100.00
                  14 52 16 4520.60
                                                18.59
                                                            185.99
                                                                             .72
                                                                                                                   3920.6
                                                                                                                                 15.21
                                                                                                                                              178.83
      110.00
                   2 58 14 1941.11
                                               -28.69
                                                             17.54
                                                                           2.49
                                                                                                                   1341.1
                                                                                                                                -25.77
                                                                                                                                                9.58
      110.00
                  15 55 8
                                4323.78
                                                21.59
                                                            169.53
                                                                         359.20
                                                                                                                   3723.8
                                                                                                                                 17.78
                                                                                                                                               162.48
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 532.6 SGR 561.7 SG3 327.7
RRT -.2454 RRF .7129 RTF -.3301
                                                                                                               ST 209.0 SR 384.4 SS 203.9
CRT -.7307 CRS -.2996 CST -.4115
    TDE .1641 TRA -.3104 TC3 .3506 BAU .1626
    RDE -.3383 RRA -.2673 RC3 -.2858 FAU .10190
                                                                                                               LSA 419.1 MSA 237.8 SSA 26.9
    FOE -.0329 FRA-1.5099 FC3-3.2817 BSP 1590
BDE .3760 BRA .4097 BC3 .4523 FSP -953
                                                                SGB 774.0 R23 -.2415 R13 .6896
                                                                                                                EL1 417.3 EL2 131.4 ALF 114.22
                                                                SG1 612.1 SG2 473.8 THA 128.87
                                                                   FLIGHT TIME 88.00
                                                                                                                          ARRIVAL DATE OCT 11 1967
LAUNCH DATE JUL 15 1967
   HELIOCENTRIC CONIC
                                                                   DISTANCE 247.075
   RL 152.06 LAL -.00 LOL 291.85 VL 27.584 GAL -9.73 AZL 92.01 MCA 111.06 SMA 134.79 ECC .21094 INC 2.0075 V1 29.298 RP 108.18 LAP -1.87 LOP 42.92 VP 38.326 GAP -4.36 AZP 89.28 TAL 223.48 TAP 334.54 RCA 106.35 APO 163.22 VZ 35.029 RC 70.443 GL -10.68 GP -18.76 ZAL 153.02 ZAP 52.30 ETS 14.81 ZAE 158.14 ETE 326.88 ZAC 96.65 ETC 12.40 CLP -49.77
   PLANETOCENTRIC CONIC
    C3 26.386 VHL 5.137 DLA
                                      5.60 RAL 136.01 RAD 6568.1 VEL 12.156 PTH
                                                                                            2.18 VHP 4.372 DPA -11.34 RAP 167.41 ECC 1.4342
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                -22.38
       90.00
                   0 15 32 2456.35
                                               -24.61
                                                            57,40
                                                                         3.72
                                                                                       104.47
                                                                                                   0 56 28
                                                                                                                   1856.3
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       90.00
                  13 37 17
                               4751.30
                                                16.83
                                                            203.75
                                                                             . 65
                                                                                         66.89 14 56 28
                                                                                                                   4151.3
                                                                                                                                  13.56
                                                                                                                                               196.61
      100.00
                   1 39 31 2185.44
                                               -25.79
                                                             37.12
                                                                            3.37
                                                                                         105.67
                                                                                                    2 15 57
                                                                                                                    1585.4
                                                                                                                                 -23.39
                                                                                                                                                29.15
                                                                                        65.69 16 10 56
109.02 3 26 23
62.34 17 9 52
      100.00
                  14 55 58 4497.44
                                                17.95
                                                            184.57
                                                                             .13
                                                                                                                   3897.4
                                                                                                                                 14.52
                                                                                                                                               177.46
      110.00
                   2 53 50 1952.86
                                               -28.96
                                                             18.35
                                                                            2.25
                                                                                                                   1352.9
                                                                                                                                 -26.09
                                                                                                                                               10.35
      110.00
                 15 58 9 4302.79
                                                20.93
                                                            168.26
                                                                         358.59
                                                                                                                   3702.8
                                                                                                                                 17.06
                                                                                                                                              161.27
   DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SGT 514.5 SGR 599.5 SG3 360.1
RRT -.1470 RRF .7624 RTF -.1907
SGB 790.0 R23 -.1597 R13 .7497
SGI 614.5 SG2 496.4 THA 111.88
                                                                                                               ST 207.5 SR 376.6 SS 213.8 CRT -.6648 CRS -.2417 CST -.5449
    TDE .1549 TRA -.3404 TC3 .2908 BAU .1584
    RDE -.3262 RRA -.2867 RC3 -.3424 FAU .11081
    FDE .0078 FRA-1.6495 FC3-3.6358 BSP 1602
                                                                                                               LSA 405.8 MSA 255.2 SSA 26.8
    BDE .3611 BRA .4451 BC3 .4492 FSP -1058
                                                                                                                EL1 405.1 EL2 144.1 ALF 113.22
                                                                                                                         ARRIVAL DATE OCT 13 1967
LAUNCH DATE JUL 15 1967
                                                                   FLIGHT TIME 90.00
   HELIOCENTRIC CONIC
                                                                   DISTANCE 253.642
   RL 152.06 LAL -.00 LOL 291.85 VL 27.613 GAL -9.66 A7L 91.88 MCA 114.26 SMA 135.00 ECC .20903 INC 1.8781 V1 29.298
RP 108.14 LAP -1.71 LOP 46.12 VP 38.359 GAP -3.75 A7P 89.23 TAL 223.76 TAP 338.02 RCA 106.78 APO 163.22 V2 35.042
RC 72.534 GL -10.10 GP -20.15 7AL 153.46 7AP 57.14 ETS 13.40 7AE 159.37 ETE 318.08 7AC 98.53 ETC 11.79 CLP -54.69
   PLANETOCENTRIC CONIC
                                     6.24 RAL 135.94 RAD 6568.0 VEL 12.136 PTH 2.18 VMP 4.187 DPA -11.94 RAP 165.33 ECC 1.4263
    C3 25.900 VHL 5.089 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       104.00 0 51 38
66.43 15 0 39
105.21 2 11 24
                                                                                                                              -22.69
                                                                         3.56
                                                                                                                1871.8
                                                                                                                                               50.46
       90.00
                   0 10 26 2471.78
                                               -24.86
                                                             58.45
                                                                                                                                 12.84
                                4726.67
                                                16.16
                                                            202.25
                                                                                                                   4126.7
                                                                                                                                              195.15
                                                                           3.22
                                                                                        105.21
                                                                                                   2 11 24
                                                                                                                   1599.9
                                                                                                                                -23.71
                                                                                                                                               30.10
      100.00
                   1 34 44
                               2199.86
                                               -26.05
                                                             38.12
                                                                                        105.21 2 11 24
65.22 16 14 49
108.58 3 22 31
61.85 17 13 4
                  15 0 15 4473.82
                                               17.28
                                                            183.14
                                                                         359.67
                                                                                                                   3873.8
                                                                                                                                13.60
                                                                                                                                              176.08
                                                                                                                               -26.41
16.33
                 2 49 46 1965.05
16 1 43 4281.39
      110.00
                                               -29.22
                                                             19.20
                                                                           2.13
                                                                                                                   1365.1
                                                                                                                                               11.15
                                                                         358.11
                                                                                                                   3681.4
                                                                                                                                              160.04
                                               20.25
                                                            166.97
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SCT 508.6 SCR 644.0 SC3 392.4

RRT -.0030 RRF .8061 RTF -.0112

SCB 820.7 R23 .0049 R13 .8061

SCI 644.0 SC2 508.6 THA 90.36
    TOE .1480 TRA -.3770 TC3 .2166 BAU .1590
                                                                                                               ST 210.2 SR 367.3 SS 224.4
    RDE -.3126 RRA -.3072 RC3 -.4050 FAU .11959
                                                                                                               CRT -.5871 CRS -.1918 CST -.6644
    FDE .0529 TRA-1.7811 FC3-3.9973 BSP 1685
                                                                                                               LSA 392.1 MSA 273.8 SSA 26.7
    BDE .3459 BRA .4863 BC3 .4593 FSP -1170
                                                                                                               EL1 392.0 ELZ 159.5 ALF 112.49
LAUNCH DATE JUL 15 1967
                                                                   FLIGHT TIME 92.00
                                                                                                                          ARRIVAL DATE OCT 15 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 260.179
   RL 152.06 LAL -.00 LOL 291.85 VL 27.633 GAL -9.60 AZL 91.74 MCA 117.47 SMA 135.16 ECC .20736 INC 1.7418 V1 29.298
RP 108.10 LAP -1.55 LOP 49.33 VP 38.385 GAP -3.17 AZP 89.20 TAL 223.91 TAP 341.38 RCA 107.13 APO 163.18 V2 35.056
RC 74.652 GL -9.46 GP -21.58 ZAL 153.82 ZAP 62.13 ETS 11.88 ZAE 160.20 ETE 307.69 ZAC 100.57 ETC 11.05 CLP -59.82
   PLANETOCENTRIC CONIC
   C3 25.418 VHL 5.042 DLA 6.90 RAL 135.99 RAD 6568.0 VEL 12.116 PTH 2.17 VMP 4.034 DPA -12.52 RAP 163.06 ECC 1.4183
    LNCH AZHTH LNCH TIME L-I TIME
                                            INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      INJ AZMI..
103.51 0 47 -
65.98 15 5 26
104.72 2 7 8
                 0 5 35 2487.92
13 47 5 4701.23
                                                                                                                1887.9
                                                                                                                               -23.02
       90.00
                                               -25.13
                                                             59.57
                                                                           3.52
                                                                                                                                               51.53
       90.00
                                                15.47
                                                            200.71
                                                                         359.85
                                                                                                                   4101.2
                                                                                                                                  12.09
                                                                                                                                               193.66
                   1 30 13 2214.94
                                               -26.31
                                                             39.16
                                                                           5.19
                                                                                                                   1614.9
                                                                                                                                 -24.03
                                                                                                                                               31.10
      100.00
                                                                                        104.72 2 7 8
64.76 16 19 18
108.12 3 18 57
61.38 17 16 50
                  15 5 8
                               4449.44
                                                                         359.32
                                                                                                                   3849.4
                                                                                                                                  13.04
                                                                                                                                               174.66
      100.00
                                                16.58
                                                            181.67
      110.00
                   2 45 59
                             1977.80
                                               -29.50
                                                             20.09
                                                                                                                   1377.8
                                                                                                                                 -26.74
                                                                                                                                                11.99
                                                                           2.13
                                                                          357.74
      110.00
                  16 5 51
                               4259.35
                                               19.54
                                                            165.66
                                                                                                                   3659.3
                                                                                                                                  15.56
                                                                                                                                               158.79
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
    TDE .1420 TRA -.4222 TC3 .1246 BAU .1658
                                                                SGT 524.7 SGR 692.8 SG3 422.1
                                                                                                               ST 216.9 SR 355.3 SS 234.7
                                                                                                              CRT -.4945 CRS -.1359 CST -.7784
LSA 376.7 MSA 293.0 SSA 26.6
                                                               RRT .1836 RRF .8423 RTF .2008
SGB 869.1 R23 .1292 R13 .8336
    RDE -.2964 RRA -.3269 RC3 -.4719 FAU .12751
    FDE .1102 FRA-1.8883 FC3-4.3431 BSP 1828
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FLIGHT TIME 86.00

707.0 SG2 505.5 THA 73.44

EL1 376.3 EL2 178.0 ALF 111.95

BDE .3286 BRA .5339 BC3 .4881 FSP -1268

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ARRIVAL DATE OCT 17 1967
                                                                                                  FLIGHT TIME 94.00
LAUNCH DATE JUL 15 1967
                                                                                                 DISTANCE 266.685
   HELIOCENTRIC CONIC
     RL 152.06 LAL -.00 LOL 291.85 VL 27.646 GAL -9.52 A7L 91.60 HCA 120.68 SHA 135.25 ECC .20591 INC 1.5973 V1 29.298 RP 108.06 LAP -1.37 LOP 52.54 VP 38.406 GAP -2.61 A7P 89.18 TAL 223.94 TAP 344.62 RCA 107.40 APO 163.10 V2 35.069 RC 76.795 GL -8.76 GP -23.04 TAL 154.10 TAP 67.22 ETS 10.23 ZAE 160.44 ETE 296.09 ZAC 102.74 ETC 10.17 CLP -65.12
    PLANETOCENTRIC CONIC
     C3 24.934 VHL 4.993 OLA 7.58 RAL 136.14 RAD 6568.0 VEL 12.096 PTH 2.17 VHP 3.914 DPA -13.09 RAP 160.64 ECC 1.4103 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1905.0
                                                                                                                                                                                         -23.35
                         0 0 53 2505.04
13 53 0 4674.64
                                                                    -25.39
                                                                                         60.75
                                                                                                             3.60
          90.00
                                                                                                           359.63
                                                                                                                                                                        4074.6
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                                                                    14.72
                                                                                      199.11
          90.00
                                                                                                                                                                        1630.9
                                                                                                                                                                                                                  32.17
                           1 25 52 2230.93
                                                                                                                                                                                          -24.37
                                                                    -26.59
                                                                                        40.27
                                                                                                             3.28
         100.00
                                                                   15.83
                                                                                      180.14
                                                                                                        359.09
                                                                                                                                                                        3824.0
                                                                                                                                                                                           12.25
                                                                                                                                                                                                                173.19
                         15 10 42 4423.98
         100.00
                                                                                                                                                                    1391.3
                                                                                                                                                                                                                 12.89
                        2 42 26 1991.32
16 10 36 4236.35
                                                                                                                                                                                          -27.08
                                                                    -29.78
                                                                                        21.04
                                                                                                             2.24
         110.00
                                                                                                                                                                                             14.76
                                                                                                                                                                       3636.4
                                                                   18.76
                                                                                       164.30
                                                                                                           357.49
         110.00
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 570.9 SGR 746.5 SG3 449.0
RRT .3732 RRF .8725 RTF .4053
SGB 939.8 R23 .1806 R13 .8579
SG1 798.9 SG2 494.9 THA 63.02
                                                                                                                                                                  ST 229.4 SR 341.6 S5 245.5
CRT -.4003 CRS -.0894 CST -.8634
     TOE .1395 TRA -.4732 TC3 .0171 BAU .1813
     RDE -.2783 RRA -.3461 RC3 -.5436 FAU .13450
FDE .1704 FRA-1.9724 FC3-4.6701 BSP 2073
BDE .3113 BRA .5862 BC3 .5439 FSP -1365
                                                                                                                                                                 LSA 363.7 MSA 310.8 SSA 26.6
EL1 359.9 EL2 199.5 ALF 112.19
                                                                                                                                                                                 ARRIVAL DATE OCT 19 1967
                                                                                                  FLIGHT TIME 96.00
LAUNCH DATE JUL 15 1967
                                                                                                 DISTANCE 273.161
   HELIOCENTRIC CONIC
  RL 152.06 LAL -.00 LQL 291.85 VL 27.651 GAL -9.44 AZL 91.44 HCA 123.89 SMA 135.29 ECC .20465 INC 1.4428 VI 29.298

RP 108.02 LAP -1.20 LOP 55.75 VP 36.422 GAP -2.07 AZP 89.20 TAL 223.86 TAP 347.75 RCA 107.60 APO 162.98 V2 35.082

RC 78.958 GL -7.99 GP -24.53 ZAL 154.30 ZAP 72.36 ETS 8.42 ZAE 159.95 ETE 284.13 ZAC 104.99 ETC 9.14 CLP -70.54
   PLANETOCENTRIC CONIC
                                                                                                                                     2.16 VHP 3.827 OPA -13.65 RAP 158.12 ECC 1.4023
                                                      8.31 RAL 136.40 RAD 6568.0 VEL 12.076 PTH
     C3 24.444 VHL 4.944 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                            2.03 3.79 102.39 24 34 22
7.43 359.51 65.09 15 17 10
1.47 3.48 103.62 1 59 4
8.54 358.96 63.85 16 30 19
2.07 2.48 107.07 3 12 27
2.89 357.34 60.42 17 26 19
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                          -23.71
                                                                                                                                                                       1923.5
          90.00 23 52 18 2523.45
90.00 13 59 43 4646.48
                                                                    -25.67
                                                                                                                                                                                                                   53.91
                                                                                         62.03
                                                                                                                                                                         4046.5
                                                                                                                                                                                             10.45
                                                                                                                                                                                                                 190.47
                                                                    13.92
                                                                                        197.43
                        1 21 36 2248.13
15 17 2 4397.04
2 39 1 2005.65
16 16 7 4212.07
                                                                                                                                                                                                                   33.32
                                                                                                                                                                         1648.I
                                                                                                                                                                                             -24.73
                                                                                          41.47
                                                                    -26.87
         100.00
                                                                                                                                                                                         11.40
                                                                                                                                                                        3797.0
                                                                                                                                                                                                               171.64
                                                                                       178.54
                                                                    15.03
                                                                                                                                                                        3797.u
1405.9 -27.44
         100.00
                                                                                                                                                                                                                 13.67
                                                                                         22.07
                                                                   -30.07
         110.00
                                                                                                                                                                                              13.90
                                                                                                                                                                        3612.1
                                                                                                                                                                                                                 156.14
                                                                   17.97
                                                                                       162.89
         110.00
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                             SGT 650.9 SGR 800.8 SG3 470.0
RRT .5386 RRF .8963 RTF .5752
SGB 1032.0 R23 .2010 R13 .8803
SG1 913.0 SG2 481.0 THA 55.59
                                                                                                                                                                  ST 247.0 SR 324.5 SS 256.7
CRT -.3055 CRS -.0373 CST -.9285
     TOE .1399 TRA -.5305 TC3 -.1082 BAU .2047
     ROE -.2571 RRA -.3625 RC3 -.6171 FAU .13970
FOE .2421 FRA-2,0173 FC3-4.9477 BSP 2392
                                                                                                                                                                  LSA 362.9 MSA 315.9 SSA 26.7
EL1 340.9 EL2 223.9 ALF 113.94
      BOE .2927 BRA .6425 BC3 .6265 FSP -1437
                                                                                                                                                                                 ARRIVAL DATE OCT 21 1967
                                                                                                  FLIGHT TIME 98.00
LAUNCH DATE JUL 15 1967
                                                                                                DISTANCE 279.608
     RL 152.06 LAL -.00 LOL 291.85 VL 27.649 GAL -9.36 AZL 91.28 MCA 127.10 SMA 135.28 ECC .20353 INC 1.2760 V1 29.298
RP 107.98 LAP -1.02 LOP 58.96 VP 38.432 GAP -1.56 AZP 89.23 TAL 223.67 TAP 350.77 RCA 107.75 APO 162.81 V2 35.094
RC 81.139 GL -7.13 GP -26.02 ZAL 154.42 ZAP 77.48 ETS 6.45 ZAE 158.70 ETE 272.80 ZAC 107.24 ETC 7.97 CLP -76.04
    PLANETOCENTRIC CONIC
      C3 23.948 VHL 4.894 DLA 9.09 RAL 136.77 RAD 6568.0 VEL 12.055 PTH 2.15 VMP 3.771 OPA -14.22 RAP 155.57 ECC 1.3941
     C3 23.948 VHL 4.894 DLA 9.09 RAL 136.77 RAD 6568.0 VEL 12.055 PTH 2.15 VMP 3.771 DPA -14.22 RAP 155.57 ECC 1.3941 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 47 37 2543.65 -25.96 63.44 4.11 101.74 24 30 0 1943.6 -24.08 55.27 90.00 14 7 22 4616.23 13.05 195.64 359.51 64.64 15 24 18 4016.2 9.53 188.73 100.00 1 17 19 2266.98 -27.16 42.79 3.81 102.99 1 55 6 1667.0 -25.10 34.60 100.00 15 24 16 4368.13 14.16 176.84 358.95 63.40 16 37 4 3768.1 10.47 169.99 110.00 2 35 41 2021.78 -30.39 23.21 2.84 106.47 3 9 22 1421.8 -27.85 14.94 110.00 16 22 24 4186.09 17.09 161.39 357.31 59.94 17 32 10 3586.1 12.97 154.70 INSESSENTIAL CORPECTIONS
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 760.9 SGR 857.1 SG3 485.9
RRT .6609 RRF .9157 RTF .6962
SG8 1146.1 R23 .2068 R13 .9002
SG1 1046.3 SG2 467.8 THA 50.12
                                                                                                                                                                ST 270.6 9R 305.4 SS 268.4

CRT -.2210 CRS .0030 CST -.9659

LSA 382.3 MSA 302.8 SSA 26.7

EL1 322.6 EL2 249.8 ALF 120.62
     TOE .1453 TRA -.5911 TC3 -.2481 BAU .2357 RDE -.2338 RRA -.3765 RC3 -.6933 FAU .14329 FDE .3136 FRA-2.0286 FC3-5.1800 BSP 2799 BDE .2752 BRA .7008 BC3 .7363 FSP -1500
                                                                                                                                                                                  ARRIVAL DATE OCT 23 1967
                                                                                                   FLIGHT TIME 100.00
 LAUNCH DATE JUL 15 1967
                                                                                                  DISTANCE 286.026
    HELIOCENTRÍC CONIC
     RL 152.06 LAL -.00 LOL 291.85 VL 27.642 GAL -9.27 AZL 91.09 HCA 130.32 SMA 135.22 ECC .20255 INC 1.0943 VI 29.298 RP 107.94 LAP -.83 LOP 62.17 VP 38.439 GAP -1.06 AZP 89.29 TAL 223.38 TAP 353.70 RCA 107.83 APO 162.61 V2 35.107 RC 83.336 GL -6.18 GP -27.52 ZAL 154.46 ZAP 82.49 ETS 4.31 ZAE 156.78 ETE 262.84 ZAC 109.44 ETC 6.69 CLP -81.53
     PLANETOCENTRIC CONIC
      C3 Z3.444 VPL 4.84Z DLA 9.94 RAL 137.25 RAD 6568.0 VEL 12.034 PTH 2.15 VPP 3.747 DPA -14.82 RAP 153.04 ECC 1.3858
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 42 42 2566.20 -26.26 65.02 4.55 101.00 24 25 29 1966.2 -24.47 56.80
90.00 14 16 7 4583.26 12.08 193.70 359.63 64.19 15 32 30 3983.3 8.51 186.84
100.00 15 25 32 33 4354.27 13.10 4.28 4.27 102.26 15 11 1688.0 -25.51 36.03
                                                                                                                                 62.93 16 44 49 3736.7
105.78 3 6 17 1439.6
59.44 17 38 56 3557.9
                                                                                                           359.06
                         15 32 33 4336.67
2 32 17 2039.56
16 29 38 4157.90
                                                                    13.19
                                                                                     175.01
          100.00
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                                                                    -30.72
                                                                                                              3.34
                                                                                          24.48
          110.00
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                                                                                       159.77
                                                                                                            357.40
                                                                    16.12
          110.00
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                          SGT 896.5 SGR 909.7 SG3 493.6

RRT .7468 RRF .9307 RTF .7777

SGB 1277.2 R23 .2090 R13 .9154

SG1 1193.6 SG2 454.4 THA 45.56
                                                                                                                                                                  ST 299.6 SR 282.2 SS 281.6
CRT -,1435 CRS .0441 CST -,9864
       TDE .1560 TRA -,6540 TC3 -.4029 BAU .2718
       ROE -. 2067 RRA -. 3656 RC3 -. 7681 FAU .14447
                                                                                                                                                                  LSA 411.6 MSA 280.5 SSA 26.9
EL1 312.8 EL2 267.5 ALF 146.31
      FDE .3943 FRA-1.9932 FC3-5.3351 BSP 3254
BDE .2590 BRA .7592 BC3 .8673 FSP -1529
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ARRIVAL DATE OCT 25 1967 LAUNCH DATE JUL 15 1967 FLIGHT TIME 102,00 DISTANCE 292.414 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 27.629 GAL -9.16 AZL 90.89 HCA 133.54 SMA 135.13 ECC .20169 INC .8942 V1 29.298 RP 107.91 LAP -.65 LOP 65.39 VP 38.441 GAP -.58 AZP 89.38 TAL 222.99 TAP 356.53 RCA 107.87 APO 162.38 V2 35.119 RC 85.546 GL -5.10 GP -29.03 ZAL 154.40 ZAP 87.34 ETS 2.00 ZAE 154.34 ETE 254.53 ZAC 111.52 ETC 5.30 CLP -86.96 PLANETOCENTRIC CONIC 2.14 VHP 3.753 OPA -15.48 RAP 150.58 ECC 1.3774 C3 22.933 VHL 4.789 DLA 10.89 RAL 137.85 RAD 6567.9 VEL 12.013 PTH C3 22.933 VHL 4.789 OLA 10.89 RAL 137.85 RAD 6567.9 VEL 12.013 PTH 2.14 VMP 3.73 OPA -13.48 RAP 130.58 ECC 1.3774 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 37 24 2591.97 -26.58 66.84 5.15 100.14 24 20 36 1992.0 -24.91 58.57 90.00 14 26 12 4546.75 10.99 191.58 359.88 63.74 15 41 59 3946.7 7.37 184.77 100.00 1 8 8 2312.06 -27.81 45.98 4.89 101.43 1 46 40 1712.1 -25.95 37.68 100.00 15 42 6 4301.89 12.10 173.00 359.30 62.46 16 53 48 3701.9 8.32 166.25 110.00 2 28 43 2059.86 -31.09 25.95 4.00 104.98 3 3 3 1459.9 -28.72 17.55 110.00 16 37 59 4126.85 15.04 158.02 357.61 58.94 17 46 46 3526.9 10.81 151.47 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1050.0 SGR 961.5 SG3 495.1 RRT .8043 RRF .9431 RTF .8306 SGB 1423.7 R23 .2099 R13 .9274 SG1 1352.9 SG2 443.4 THA 41.87 ST 334.7 SR 257.1 SS 296.4 CRT -.0739 CRS .0660 CST -.9925 TOE .1737 TRA -.7164 TC3 -.5695 BAU .3121 RDE -.1775 RRA -.3907 RC3 -.8436 FAU .14379 FDE .4708 FRA-1.9229 FC3-5.4279 BSP 3768 LSA 446.8 MSA 256.2 SSA 27.1 BDE .2484 BRA .8160 BC3 1.0178 FSP -1546 EL1 336.0 EL2 255.4 ALF 172.26 ARRIVAL DATE OCT 27-1967 FLIGHT TIME 104.00 LAUNCH DATE JUL 15 1967 HELIOCENTRIC CONIC DISTANCE 298.775 RL 152.06 LAL -.00 LOL 291.85 VL 27.612 GAL -9.06 AZL 90.67 MCA 136.76 SMA 134.99 ECC .20093 INC .6715 V1 29.298
RP 107.87 LAP -.46 LOP 68.61 VP 38.439 GAP -.12 AZP 89.51 TAL 222.52 TAP 359.27 RCA 107.87 APO 162.12 V2 35.131
RC 87.767 GL -3.87 GP -30.57 ZAL 154.24 ZAP 91.95 ETS 359.51 ZAE 151.54 ETE 247.80 ZAC 113.43 ETC 3.82 CLP -92.27 PLANETOCENTRIC CONIC 2.14 VHP 3.789 OPA -16.23 RAP 148.24 ECC 1.3690 C3 22.419 VHL 4.735 DLA 11.95 RAL 138.58 RAD 6567.9 VEL 11.992 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5.92 99.12 24 15 9 2022.1 68.97 90.00 23 31 27 2622.07 -26.92 63.28 15 53 4 14 37 58 149.20 3905.6 6.07 182.44 90.00 4505.62 9.74 .28 1 2 49 2340.11 15 53 14 4262.82 2 24 48 2083.54 16 47 43 4092.15 1 41 49 1740.1 47.99 5.68 100.43 100.00 -28.17 61.98 17 4 17 104.04 2 59 32 58.42 17 55 56 100.00 10.86 170.76 359.69 3662.8 7.03 4.85 1483.5 -29.24 110.00 -31.49 27.6A 3492.1 9.53 149.59 110.00 13.61 156.08 357.96 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET .8435 RRF .9531 RTF .8655 SGB 1580.8 R23 .2115 R13 .9363 SGI 1520.0 SG2 434.0 THA 38.74 TOE .1993 TRA -.7761 TC3 -.7466 BAU .3545 ROE -.1452 RRA -.3907 RC3 -.9175 FAU .14097 ST 376.2 SR 229.3 SS 313.4 CRT -.0006 CRS .0667 CST -.9913 FOE .5474 FRA-1.8160 FC3-5.4437 89P 4317 BOE .2465 BRA .8689 BC3 1.1829 FSP -1541 LSA 488.7 MSA 229.7 SSA 27.5 EL1 376.2 EL2 229.3 ALF 179.96 FLIGHT TIME 106.00 ARRIVAL DATE OCT 29 1967 LAUNCH DATE JUL 15 1967 DISTANCE 305.108 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 27.589 GAL -8.94 A7L 90.42 HCA 139.98 SMA 134.82 ECC .20026 INC .4201 V1 29.298
RP 107.83 LAP -.27 LOP 71.83 VP 38.433 GAP .32 AZP 89.68 TAL 221.95 TAP 1.93 RCA 107.82 APO 161.82 V2 35.143
RC 89.996 GL -2.45 GP -32.18 ZAL 153.96 ZAP 96.26 ETS 356.85 ZAE 148.50 ETE 242.46 ZAC 115.13 ETC 2.27 CLP -97.40 PLANETOCENTRIC CONIC C3 21.907 VHL 4,680 OLA 13.17 RAL 139.45 RAD 6567.9 VEL 11.970 PTH 2.13 VHP 3.855 OPA -17.13 RAP 146.04 ECC 1.3605 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 24 30 2658.08 90.00 14 51 54 4458.42 6.90 97.88 24 8 48 62.82 16 6 12 -25.91 63.15 -27.29 71.55 2058.1 179.78 4.57 3656.4 8.28 186.50 .87 0 56 38 2373.62 16 6 22 4218.11 2 20 18 2111.80 16 59 11 4052.70 41.95 -26.99 1 36 11 1773.6 -28.56 50.41 6.68 99.21 61.50 17 16 41 102.88 2 55 30 5.54 161.58 9.42 168.22 .26 3618.1 102.88 2 55 30 -29.84 110.00 -31.94 29.76 5.92 1511.8 21.18 153.90 57.89 18 6 44 358.49 3452.7 8.06 147.48 12.39 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 425.9 SR 198.1 SS 335.4 CRT .0957 CRS .0330 CST -.9859 LSA 540.4 MSA 200.7 SSA 28.0 EL1 426.5 EL2 196.9 ALF 3.24 SGT 1390.2 SGR 1051.0 SG3 475.4 TOE .2348 TRA -.8306 TC3 -.9312 BAU .3975 RRT .8702 RRF .9610 RTF .8884 SGB 1742.8 R23 .2153 R13 .9426 SGI 1689.9 SG2 425.9 THA 35.98 RDE -.1080 RRA -.3839 RC3 -.9873 FAU .13590 FDE .6298 FRA-1.6700 FC3-5.3707 BSP 4864 BDE .2584 BRA .9150 BC3 1.3571 FSP -1500 FLIGHT TIME 108.00 ARRIVAL DATE OCT 31 1967 LAUNCH DATE JUL 15 1967 DISTANCE 311.415 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 27.563 GAL -8.81 AZL 90.13 MCA 143.20 SMA 134.62 ECC .19967 INC .1318 V1 29.298
RP 107.80 LAP -.08 LOP 75.05 VP 38.425 GAP .75 AZP 89.89 TAL 221.31 TAP 4.51 RCA 107.74 APO 161.50 VZ 35.154
RC 92.232 GL -.78 GP -33.89 ZAL 153.53 ZAP 100.21 ETS 353.98 ZAE 145.31 ETE 238.27 ZAC 116.57 ETC .65 CLP-102.33 PLANETOCENTRIC CONIC C3 Z1.407 VHL 4.627 OLA 14.60 RAL 140.49 RAO 6567.9 VEL 11.949 PTH 2.13 VHP 3.951 OPA -18.21 RAP 144.00 ECC 1.3523 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8.14 -26.49 2102.3 90.00 23 16 0 2702.30 90.00 15 8 40 4403.06 66.25 96.33 24 1 2 62.39 16 22 3 -27.66 74.73 3803.1 2.80 176.68 6.55 183.36 1.70 0 49 7 2414.69 16 22 10 4165.90 1 29 21 44.85 1814.7 -27.61 -28.97 53.39 7.95 97.70 100.00 7.71 165.29 1.07 61.03 17 31 36 3565.9 3.79 158.70 100.00 1546.3 2 14 53 2146.33 17 12 53 4007.03 101.43 2 50 39 57.35 18 19 40 -30.52 23.64 -32.44 32.33 7.27 110.00 145.06 3407.0 6.35 110.00 17 12 53 10.73 151.41 359.25 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1567.7 SCR 1088.0 SC3 455.4 RRT .8887 RRF .9677 RTF .9039 SCB 1908.3 R25 .2206 R13 .9471 ST 486.5 SR 167.0 55 362.8 CRT .2480 CRS -.0772 CST -.9798 TOE .2824 TRA -.8771 TC3-1.1207 BAU .4403 RDE -.0663 RRA -.3710 RC3-1.0542 FAU .12907 FDE .7121 FRA-1.4976 FC3-5.2200 BSP 5415 LSA 604.9 MSA 171.5 SSA 28.5 BOE .2901 BRA .9524 BC3 1.5386 FSP -1437 SG1 1861.4 SG2 420.1 THA 33.60 EL1 488.5 EL2 161.1 ALF 5.46

ARRIVAL DATE NOV 2 1967

LAUNCH DATE JUL 15 1967

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DISTANCE 317.696
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 27.533 GAL -8.68 AZL 89.80 MCA 146.42 SMA 134.40 ECC .19916 INC .2015 VI 29.298
RP 107.77 LAP .11 LOP 78.27 VP 38.413 GAP 1.16 AZP 90.17 TAL 220.60 TAP 7.02 RCA 107.63 APO 161.17 V2 35.165
RC 94.474 GL 1.20 GP -35.76 ZAL 152.92 ZAP 103.75 ETS 350.90 ZAE 142.01 ETE 235.02 ZAC 117.74 ETC 358.95 CLP-107.03
   PLANETOCENTRIC CONTC
    C3 20.937 VHL 4.576 DLA 16.30 RAL 141.72 RAD 6567.9 VEL 11.930 PTH
                                                                                                      2.12 VHP 4.081 DPA -19.53 RAP 142.10 ECC 1.3446
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    94.33 23 51 7
62.00 16 41 38
                 23 5 8 2758.25
15 29 21 4336.44
                                                                     78.78
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        90.00
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        90.00
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                   0 39 33 2466.46
16 41 33 4103.46
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       100.00
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       100.00
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56.82 18 35 27
                    2 8 2 2189.60
17 29 33 3953.08
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                                                                                                                                  1589.6
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      110.00
                                                   -32.97
                                                                     35.59
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      110.00
                                                    8.73
                                                                   148.51
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       RGT 1746.9 SGR 1124.6 SG3 431.1
RRT .9013 RRF .9735 RTF .9146
SGB 2077.6 R23 .2268 R13 .9506
SG1 2035.1 SG2 418.2 THA 31.61
                                                                                                                             ST 561.5 SR 143.9 SS 395.0
CRT .4885 CRS -.3094 CST -.9760
    TOE .3445 TRA -.9138 TC3-1.3132 BAU .4833
   RDE -.0205 RRA -.3531 RC3-1.1208 FAU .12109
FDE .7874 FRA-1.3113 FC3-5.0068 BSP 5994
                                                                                                                              LSA 685.8 MSA 144.4 SSA 28.9
    BDE .3451 BRA .9796 BC3 1.7265 FSP -1370
                                                                                                                              EL1 566.1 EL2 124.5 ALF
                                                                                                                                          ARRIVAL DATE NOV 4 1967
                                                                            FLIGHT TIME 112.00
LAUNCH DATE JUL 15 1967
                                                                           DISTANCE 323.952
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 27.499 GAL -8.54 AZL 89.40 HCA 149.65 SHA 134.15 ECC .19872 INC .5989 V1 29.298 RP 107.73 LAP .30 LOP 81.50 VP 38.399 GAP 1.56 AZP 90.52 TAL 219.81 TAP 9.46 RCA 107.49 APO 160.81 V2 35.175 RC 96.719 GL 3.60 GP -37.88 ZAL 152.04 ZAP 106.81 ETS 347.57 ZAE 138.60 ETE 232.56 ZAC 118.62 ETC 357.16 CLP-111.50
  PLANETOCENTRIC CONIC
   C3 20.524 VHL 4.530 DLA 18.36 RAL 143.20 RAD 6567.8 VEL 11.912 PTH 2.12 VHP 4.249 DPA -21.16 RAP 140.31 ECC 1.3378 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   11.70
                                                                                                    91.66 23 37 43
                                                                                                                                  2231.6
                                                    -28.27
                                                                   84.13
       90.00
                  22 50 32 2831.64
                  15 55 46 4253.54

0 26 48 2533.88

17 6 7 4026.50

1 59 1 2245.36

17 50 23 3887.78
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       90 00
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       100.00
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      100.00
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56.33 18 55 11
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                                                                     39.85
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      140.00
                                                                   145.04
                                                                                      1.78
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                                                                                                                                                                  138.81
                                                    6.2A
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE .4265 TRA -.9366 TC3-1.5028 BAU .5244
RDE .0335 RRA -.3270 RC3-1.1809 FAU .11158
FDE .8676 FRA-1.1049 FC3-4,7066 BSP 6542
BDE .4278 BRA .9920 BC3 1.9113 FSP -1276
                                                                       RIT 1924.2 SGR 1156.1 SG3 401.2

RRT .9097 RRF .9783 RTF .9219

SGB 2244.8 R23 .2344 R13 .9529

SG1 2205.4 SG2 418.9 THA 29.84
                                                                                                                             ST 657.9 SR 141.1 SS 436.8
CRT .7876 CRS -.6455 CST -.9742
                                                                                                                              LSA 792.5 MSA 120.9 SSA 28.5
                                                                                                                              EL1 667.4 EL2 85.7 ALF
                                                                                                                                         ARRIVAL DATE NOV 6 1967
                                                                            FLIGHT TIME 114.00
LAUNCH DATE JUL 15 1967
                                                                           DISTANCE 330.183
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 27.463 GAL -8.39 AZL 88.92 MCA 152.87 SMA 133.88 ECC .19834 INC 1.0807 V1 29.298
RP 107.70 LAP .49 LOP 84.73 VP 38.382 GAP 1.95 AZP 90.96 TAL 218.96 TAP 11.84 RCA 107.32 APO 160.43 V2 35.185
RC 98.967 GL 6.54 GP -40.33 ZAL 150.79 ZAP 109.34 ETS 343.93 ZAE 135.06 ETE 230.73 ZAC 119.19 ETC 355.24 CLP-115.75
  PLANETOCENTRIC CONTC
    C3 20.217 VHL 4.496 DLA 20.89 RAL 145.00 RAD 6567.8 VEL 11.899 PTH 2.11 VHP 4.465 DPA -23.17 RAP 138.58 ECC 1.3327
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                87.94 23 18 17
61.73 17 40 19
89.56 0 52 24
60.11 18 44 4
93.74 2 25 6
55.95 19 20 44
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                                                                                 14.24
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                   22 29 24 2932.98
16 31 14 4144.97
0 8 38 2625.69
                                                                   91.55
                                                    -28.25
        90.00
                                                                                     6.88
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                                                                                                                                                                 162.26
                                                     -1.74
                                                                   168.91
        90.00
                                                                                   14.28
                                                                                                                                  2025.7
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                                                                     6A.98
       100.00
                                                    -29.89
                  17 38 37 3927.49
1 46 27 2319.69
18 17 18 3806.25
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                                                                                     6.08
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       100.00
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       110.00
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                                                    3.19
                                                                   140.76
       110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 2101.0 SGR 1188.2 SG3 367.9
RRT .9148 RRF .9824 RTF .9272
SGB 2413.7 R23 .2416 R13 .9548
SG1 2376.1 SG2 424.4 THA 28.34
                                                                                                                             ST 783.6 SR 174.4 SS 486.2
CRT .9571 CRS -.8829 CST -.9754
    TDE .5340 TRA -.9432 TC3-1.6849 BAU .5648
RDE .0955 RRA -.2942 RC3-1.2362 FAU .10123
                                                                                                                              LSA 932.3 MSA 105.0 SSA 26.3
    FOE .9421 FRA -.8947 FC3-4.3349 BSP 7117
BDE .5425 BRA .9881 BC3 2.0898 FSP -1179
                                                                                                                              EL1 801.2 EL2 49.4 ALF 12.07
                                                                                                                                          ARRIVAL DATE NOV 8 1967
                                                                            FLIGHT TIME 116.00
LAUNCH DATE JUL 15 1967
                                                                            DISTANCE 336.390
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 27,424 GAL -8.23 AZL 88.32 HCA 156.10 SMA 133.59 ECC .19803 INC 1.6821 VI 29.298 RP 107.67 LAP .68 LOP 87.96 VP 38.362 GAP 2.33 AZP 91.54 TAL 218.05 TAP 14.15 RCA 107.13 APO 160.04 V2 35.195 RC 101.218 GL 10.24 GP -43.24 ZAL 148.99 ZAP 111.24 ETS 339.95 ZAE 131.32 ETE 229.43 ZAC 119.45 ETC 353.14 CLP-119.83
   PLANETOCENTRIC CONIC
    C3 20.104 VHL 4.484 DLA 24.07 RAL 147.24 RAE 6567.8 VEL 11.895 PTH 2.11 VHP 4.744 DPA -25.67 RAP 136.80 ECC 1.3309
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     82.42 22 46 17
                                                                                                                                  2486.8
                                                                                                                                                 -28.13
                                                                    102.71
                                                                                    17.38
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        90.00 21 54 51 3086.81
90.00 17 23 40 3988.46
                                                                                                     62.43 18 30 9
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                                                                                    10.59
                                                     -6.74
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        90.00
                   17 23 40
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       100.00
                   23 36 10 2760.15
18 25 2 3790.36
                                                    -29.40
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88.95 2 8 6 1823.5
55.83 19 55 34 3099.8
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                    18 25 2
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                    1 27 43 2423.45
18 53 55 3699.82
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                                                    -34.17
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                                                     -.88
                                                                    135.21
                                                                                     7,08
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 952.8 SR 245.3 SS 548.1
CRT .9958 CRS -.9715 CST -.9784
    TDE .6794 TRA -.9271 TC3-1.8451 BAU .6028
                                                                        SGT 2274.9 SGR 1215.6 SG3 330.1
                                                                       RRT .9170 RRF .9857 RTF .9309
SGB 2579.3 R23 .2494 R13 .9560
SG1 2542.5 SG2 433.8 THA 26.95
    RDE .1715 RRA -.2499 RC3-1.2750 FAU .08972
                                                                                                                             LSA 1121.6 MSA 99.9 SSA 21.4
EL1 983.6 EL2 21.7 ALF 14.39
    FOE 1.0194 FRA -.6753 FC3-3.8637 BSP 7652
    BDE .7007 BRA .9602 BC3 2.2427 FSP -1060
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FLIGHT TIME 110.00

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ARRIVAL DATE NOV 10 1967
LAUNCH DATE JUL 15 1967
                                                                           FLIGHT TIME 118.00
                                                                          DISTANCE 342.571
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.382 GAL -8.06 AZL 87.54 HCA 159.32 SMA 133.28 ECC .19778 INC 2.4586 V1 29.298 RP 107.65 LAP .87 LOP 91.19 VP 38.341 GAP 2.69 AZP 92.30 TAL 217.08 TAP 16.40 RCA 106.92 APO 159.64 V2 35.204
    RC 103.470 GL 14.94 GP -46.74 TAL 146.37 ZAP 112.41 ETS 335.54 ZAE 127.25 ETE 228.53 ZAC 119.38 ETC 350.76 CLP-123.80
   PLANETOCENTRIC CONIC
    C3 20.356 VHL 4.512 DLA 28.13 RAL 150.13 RAD 6567.8 VEL 11.905 PTH 2.12 VMP 5.116 DPA -28.75 RAP 134.85 ECC 1.3350
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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        90.00
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       110.00
                                   3548.67
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      RGT 2449.3 SGR 1240.6 SG3 289.1
RGT .9164 RRF .9882 RTF .9340
SGB 2745.5 R23 .2553 R13 .9573
SG1 2708.6 SG2 449.0 THA 25.66
                                                                                                                            ST 1181.9 SR 346.4 SS 618.9
CRT .9949 CRS -.9942 CST -.9826
    TOE .8801 TRA -.8815 TC3-1.9633 BAU .6390
    RDE .2634 RRA -.1926 RC3-1.2877 FAU .07750
    FOE 1.0892 FRA -.4593 FC3-3.2959 BSP 8213
BOE .9186 BRA .9023 BC3 2.3479 FSP -938
                                                                                                                            LSA 1374.4 MSA 103.4 SSA 15.5
                                                                                                                             EL1 1231.2 EL2 33.6 ALF 16.27
                                                                                                                                        ARRIVAL DATE NOV 12 1967
                                                                           FLIGHT TIME 120.00
LAUNCH DATE JUL 15 1967
                                                                           DISTANCE 348.727
  HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.339 GAL -7.88 AZL 86.49 HCA 162.54 SMA 132.96 ECC .19758 INC 3.5083 VI 29.298
RP 107.62 LAP 1.05 LOP 94.42 VP 38.317 GAP 3.04 AZP 93.35 TAL 216.06 TAP 18.60 RCA 106.69 APO 159.24 V2 35.212
RC 105.723 GL 21.03 GP -51.03 ZAL 142.54 ZAP 112.68 ETS 330.61 ZAE 122.69 ETE 227.83 ZAC 118.97 ETC 347.95 CLP-127.81
   PLANETOCENTRIC CONIC
    C3 21.331 VHL 4.619 DLA 33.34 RAL 154.06 RAD 6567.9 VEL 11.946 PTH
                                                                                                      2.13 VHP 5.635 DPA -32.55 RAP 132.46 ECC 1.3511
    T1.62 17 46 52 3997.16
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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64.70 18 53 29
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                                   3106.49
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                    17 46 52
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69.22 24 21 47
60.07 22 32 48
                    22 26 1 3106.49
23 33 27 2899.73
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       108.38
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       110.00
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                                                    -17.35
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       110.00
                   21 38 36
                                   3251.92
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 2625.1 SGR 1251.5 SG3 244.1
RRT .9121 RRF .9894 RTF .9367
SGB 2908.2 R23 .2598 R13 .9583
SGI 2870.1 SG2 469.2 THA 24.19
                                                                                                                             ST 1496.9 SR 474.6 SS 699.8
    TOE 1.1719 TRA -. 7907 TC3-1.9959 BAU .6704
                                                                                                                             CRT .9908 CRS -.9993 CST -.9869
    RDE .3794 RRA -.1130 RC3-1.2423 FAU .06426
                                                                                                                             LSA 1715.4 MSA 113.2 SSA 10.2
    FOE 1.1538 FRA -.2443 FC3-2.6081 BSP 8729
BOE 1.2318 BRA .7987 BC3 2.3510 FSP -797
                                                                                                                             EL1 1569.1 EL2 61.3 ALF 17.47
                                                                                                                                       ARRIVAL DATE NOV 14 1967
                                                                           FILIGHT TIME 122.00
LAUNCH DATE JUL 15 1967
                                                                          DISTANCE 354.855
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.293 GAL -7.69 A7L 84.98 HCA 165.76 SMA 132.63 ECC .19743 INC 5.0153 V1 29.298
RP 107.60 LAP 1.23 LOP 97.66 VP 38.292 GAP 3.38 A7P 94.86 TAL 214.98 TAP 20.74 RCA 106.45 APO 158.82 V2 35.220
RC 107.975 GL 28.94 GP -56.35 7AL 136.94 ZAP 111.85 ETS 324.97 ZAE 117.38 ETE 227.02 ZAC 118.19 ETC 344.44 CLP-132.20
   PLANETOCENTRIC CONIC
    C3 23.879 VHL 4.887 DLA 39.97 RAL 159.76 RAD 6568.0 VEL 12.052 PTH 2.15 VHP 6.411 DPA -37.21 RAP 129.23 ECC 1.3930
    C3 23.879 VML 4.887 OLA 39.97 RAL 159.76 RAD 6568.0 VEL 12.052 PTH 2.15 VMP 6.411 DPA -37.21 RAP 129.25 ECC 1.3930 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.52 17 9 47 4201.95 -25.56 187.11 34.99 58.16 18 19 49 3602.0 -29.57 179.72 119.48 23 48 34 2956.50 -25.55 92.34 34.98 58.15 24 37 51 2356.5 -29.56 84.95 119.48 23 48 34 2956.50 -25.55 92.34 34.98 58.15 24 37 51 2356.5 -29.56 84.95 60.52 17 9 47 4201.95 -25.56 187.11 34.99 58.16 18 19 49 3602.0 -29.57 179.72 119.48 23 48 34 2956.50 -25.55 92.34 34.98 58.15 24 37 51 2356.5 -29.56 84.95 119.48 23 48 34 2956.50 -25.55 92.34 34.98 58.15 24 37 51 2356.5 -29.56 84.95 119.48 23 48 34 2956.50 -25.55 92.34 34.98 58.15 24 37 51 2356.5 -29.56 84.95
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1921.0 SR 607.2 SS 778.5
CRT .9885 CRS -.9998 CST -.9906
    TOE 1.6191 TRA -.6279 TC3-1.8792 BAU .6951
                                                                       SGT 2810.7 SGR 1233.9 SG3 196.4
                                                                       RRT .9014 RRF .9881 RTF .9404

SGB 3069.6 R23 .2608 R13 .9599

SGI 3029.3 SGZ 495.7 THA 22.22
    ROE .5171 RRA -.0010 RC3-1.0996 FAU .05043
                                                                                                                             LSA 2156.2 MSA 125.2 55A
    FOE 1.1976 FRA -.0418 FC3-1.8283 BSP 9260
                                                                                                                             EL1 2012.7 EL2 87.6 ALF 17.39
    BOE 1.6997 BRA .6279 BC3 2.1772 FSP
                                                         -650
                                                                                                                                        ARRIVAL DATE NOV 16 1967
LAUNCH DATE JUL 15 1967
                                                                            FLIGHT TIME 124.00
                                                                           DISTANCE 360.948
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.246 GAL -7.49 A7L 82.62 MCA 168.96 SMA 132.29 ECC .19732 INC 7.3772 V1 29.298
RP 107.58 LAP 1.41 LOP 100.89 VP 38.265 GAP 3.70 A7P 97.24 TAL 213.85 TAP 22.81 RCA 106.19 APO 158.40 V2 35.227
RC 110.226 GL 39.02 GP -62.99 ZAL 129.02 ZAP 109.70 ETS 318.07 ZAE 110.95 ETE 225.26 ZAC 117.04 ETC 339.48 CLP-137.91
   PLANETOCENTRIC CONIC
    C3 30.356 VHL 5.510 DLA 47.96 RAL 168.78 RAD 6568.2 VEL 12.318 PTH 2.22 VHP 7.686 DPA -42.82 RAP 124.30 ECC 1.4996
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
49.52 17 2 10 4377.62
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                                  2899.96
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                                                                                    51.06
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 3016.7 SGR 1136.8 SG3 147.6
RRT .8719 RRF .9776 RTF .9461
SGB 3224.4 R23 .2579 R13 .9622
                                                                                                                             ST 2456.4 SR 669.3 SS 835.2
CRT .9842 CRS -.9981 CST -.9933
     TOE 2.3571 TRA -.3251 TC3-1.5286 BAU
                                                         .7014
    RDE .6388 RRA .1653 RC3 -.8064 FAU .03614
FDE 1.2071 FRA .1465 FC3-1.0306 BSP 9736
                                                                                                                             LSA 2675.7 MSA 141.1 SSA
                                                                       SG1 3180.8 SG2 528.8 THA 18.76
                                                                                                                             ELI 2543.3 EL2 114.5 ALF 15.04
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BOE 2.4421 BRA .3647 BC3 1.7282 FSP -495

ARRIVAL DATE NOV 18 1967

LAUNCH DATE JUL 15 1967

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DISTANCE 366.988
   MELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.197 GAL -7.27 A7L 78.38 HCA 172.13 SMA 131.95 ECC .19721 INC11.6237 VI 29.298 RP 107.56 LAP 1.58 LOP 104.13 VP 38.236 GAP 4.01 AZP 101.52 TAL 212.65 TAP 24.78 RCA 105.92 APO 157.97 V2 35.233 RC 112.475 GL 50.88 GP -71.20 ZAL 118.66 ZAP 105.98 ETS 307.41 ZAE 102.72 ETE 219.65 ZAC 115.66 ETC 330.27 CLP-148.70
   PLANETOCENTRIC CONTC
    C3 49.092 VHL 7.007 OLA 55.91 RAL 184.12 RAD 6568.8 VEL 13.056 PTH 2.38 VHP 10.103 DPA -49.19 RAP 115.73 ECC 1.8079 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    17 32 43 4568.46
2 43 56 2951.30
17 32 43 4568.46
2 43 56 2951.30
17 32 43 4568.46
2 43 56 2951.30
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                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 3255.2 SGR 845.9 SG3 102.3
RRT .7235 RRF .8843 RTF .9588
SGB 3363.3 R23 .2437 R13 .9675
                                                                                                                                  ST 2952.1 SR 395.4 SS 828.9
CRT .9239 CRS -.9582 CST -.9948
    TOE 3.6058 TRA .312' TC3 -.9288 BAU
                                                           .6572
    ROE .4375 RRA .3831 RC3 -.3743 FAU .02221
                                                                                                                                  LSA 3087.0 MSA 168.6 SSA 2.3
EL1 2974.7 EL2 150.2 ALF 7.07
    FOE 1.1482 FRA .3214 FC3 -.3917 8SP 10255
                                                                          SG1 3314.0 SG2 573.5 THA 10.98
    BOE 3.6323 BRA .4942 BC3 1.0014 FSP -349
                                                                                                                                              ARRIVAL DATE NOV 20 1967
LAUNCH DATE JUL 15 1967
                                                                               FLIGHT TIME 128.00
                                                                              DISTANCE 372.907
  HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.148 GAL -7.02 A7L 68.62 MCA 175.20 SMA 131.59 ECC .19697 INC21.3805 V1 29.298
RP 107.54 LAP 1.75 LOP 107.37 VP 38.206 GAP 4.28 AZP 111.31 TAL 211.36 TAP 26.55 RCA 105.67 APO 157.51 V2 35.239
RC 114.720 GL 61.60 GP -79.18 ZAL 106.86 ZAP 100.67 ETS 275.10 ZAE 90.90 ETE 191.74 ZAC 114.78 ETC 298.16 CLP 170.49
   PLANETOCENTRIC CONIC
    C3 124.881 VHL 11.166 DLA 59.13 RAL 206.85 RAD 6570.3 VEL 15.685 PTH 2.79 VHP 15.914 DPA -54.72 RAP 98.19 ECC 3.0519
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          2.79 VHP 15.914 DPA -54.72 RAP 98.19 ECC 3.0519
                                                                                                                                       4201.3
                                                                                                                   20 13 4
                                                                                                                                                                     228.49
        35.65
                    18 53 2 4801.31
                                                      -13.21
                                                                      232.54
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                    4 24 58 3143.09
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4 24 58 3143.09
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       144.35
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                                                                         MID-COURSE EXECUTION ACCURACY
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                                                                                                                                                       -19.95
       144.35
                                                     -13.19
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 3248.4 SGR 1176.4 SG3 68.1
RRT -.8511 RRF -.7746 RTF .9908
                                                                                                                                  ST 2571.1 SR 1164.8 SS 770.0
CRT -.9815 CRS .9654 CST -.9975
LSA 2917.7 MSA 217.5 SSA 1.1
    TOE 4.8708 TRA 2.0106 TC3 -.2293 BAU .3822
    ROE-2.2678 RRA -.1724 RC3 -.0023 FAU .00805
                                                                          SGB 3454.8 R23 -.1852 R13 -.9821
SG1 3404.2 SG2 589.3 THA 162.32
    FOE 1.0399 FRA .5659 FC3 -.0559 BSP 10561
BDE 5.3729 BRA 2.0180 BC3 .2293 FSP -228
                                                                                                                                  EL1 2815.3 EL2 203.5 ALF 155.89
                                                                              FLIGHT TIME 130.00
                                                                                                                                             ARRIVAL DATE NOV 22 1967
LAUNCH DATE JUL 15 1967
                                                                             DISTANCE 378.243
   HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 27.097 GAL -6.66 A7L 32.78 HCA 177.73 SHA 131.23 ECC .19569 INC57.2237 V1 29.298
RP 107.52 LAP 1.91 LOP 110.62 VP 38.174 GAP 4.39 A7P 147.20 TAL 209.66 TAP 27.39 RCA 105.55 APO 156.91 V2 35.244
RC 116.961 GL 56.39 GP -63.42 TAL 96.46 TAP 94.67 ETS 195.22 TAE 66.12 ETE 115.87 TAC 118.24 ETC 212.58 CLP 100.49
   PLANETOCENTRIC CONIC
    C3 738.350 VHL 27.173 DLA 46.50 RAL 217.65 RAD 6572.7 VEL 29.320 PTH 3.44 VHP 36.862 DPA -47.66 RAP 60.57 ECC13.1514
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
51.44 20 23 52 4911.04 -.49 227.72 127.21 43.50 21 45 43 4311.0 -6.28 222.61
                                                       -.49
                                                                                                                                                                      110.16
                                   3467.15
4911.04
                                                                                                                    5 18 8
                                                                                                                                      2867.2
                                                                                                                                                       -6.26
       128.56
                      4 20 21
                                                         -,47
                                                                     115.28
                                                                                    127.19
                                                                                                        43.50
                                                                                                        43.50 21 45 43
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                                                                                                                                      4311.0
                                                                                                                                                       -6.28
                                                         -.49
                                                                     227.72
                                                                                    127.21
        51.44
                    20 23 52
                                                                                                                                      2867.2
                                                                                                                                                                      110.16
       128.56
                      4 20 21
                                   3467.15
                                                         -,47
                                                                     115.28
                                                                                    127.19
                                                                                                        43.50
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                                  4911.04
3467.15
                                                                                                        43.50 21 45 43
                                                                                                                                                                      222.61
        51.44
                     20 23 52
                                                         -.49
                                                                     227.72
                                                                                     127.21
                                                                                                                                      4311.0
                                                                                                                                                       -6.2A
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                      2867.2
                                                                                                                                                       -6.26
                                                                                                                                                                      110.16
       128.56
                      4 20 21
                                                                     115.28
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 522.2 SR 1983.1 SS 1056.9

CRT .6935 CRS .9976 CST .8602

LSA 2298.5 MSA 245.5 SSA 1.0

EL1 2037.9 EL2 228.2 ALF 76.59
                                                                         SCT 601.5 SCR 3171.8 SC3 50.9

RRT .4212 RRF -.9962 RTF -.3421

SCB 3228.4 R23 -.0994 R13 -.9949

SCI 3182.2 SC2 543.7 THA 85.30
    TOE-2.4634 TRA .5765 TC3 -.0454 BAU 1.9450
    ROE-8.7868 RRA-7.6852 RC3 -.1917 FAU-.02945
    FOE 1.4415 FRA 1.5312 FC3 .0345 BSP 9227
BOE 9.1255 BRA 7.7068 BC3 .1970 FSP -155
                                                                                                                                              ARRIVAL DATE NOV 24 1967
LAUNCH DATE JUL 15 1967
                                                                              FLIGHT TIME 132.00
                                                                              DISTANCE 386.297
  HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 27.045 CAL -6.82 AZL 135.77 HCA 182.88 SMA 130.87 ECC .19994 INC45.7686 V1 29.298
RP 107.51 LAP 2.07 LOP 113.86 VP 38.142 CAP 5.25 AZP 44.27 TAL 209.63 TAP 32.52 RCA 104.70 APO 157.03 V2 35.248
RC 119.197 GL -60.20 GP 72.26 ZAL 98.12 ZAP 97.52 ETS 164.70 ZAE 74.33 ETE 243.25 ZAC 90.27 ETC 133.86 CLP 115.45
  PLANETOCENTRIC CONIC
    C3 491.680 VHL 22.174 OLA -54.54 RAL 148.54 RAD 6572.3 VEL 24.758 PTH 3.53 VHP 27.216 OPA 72.08 RAP 325.33 ECC 9.0918
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
41.22 3 17 21 2315.33 2.12 65.70 57.01 144.51 3 55 56 1715.3 8.62 61.43
                                                                                                    144.51
144.51
                                                                                                                   12 27 25
                                                                                                                                       117.4
                                                                                                                                                         8.64
                                                                                                                                                                       293.23
       130.78
                    12 15 27
                                     717.42
                                                         2.14
                                                                      297.50
                                                                                       57.03
                                                                                                                                      1715.3
                                                                                                                                                                        61.43
                      3 17 21
                                   2515.33
                                                         2.12
                                                                      65.70
                                                                                       57.01
                                                                                                      144.51
                                                                                                                     3 55 56
                                                                                                                                                         8.62
        41.22
                                                         2.14
                                                                     297.50
                                                                                       57.03
                                                                                                      144.51
                                                                                                                  12 27 25
                                                                                                                                        117.4
                                                                                                                                                         8.64
                                                                                                                                                                      293.23
       138.78
                    12 15 27
                                      717.42
                                                                                                      144.51
                                                                                                                    3 55 56
                                                                                                                                      1715.3
                                                                                                                                                         8.62
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                      3 17 21
                                   2315.33
                                                         2.12
                                                                       65.70
                                                                                       57.01
        41.22
                                                                                                                                                         8.64
       138.78
                    12 15 27
                                      717.42
                                                         2.14
                                                                      297.50
                                                                                       57.03
                                                                                                      144.51
                                                                                                                   12 27 25
                                                                                                                                       117.4
                                                                      MID-COURSE EXECUTION ACCURACY
SGT 620.5 SGR 3442.8 SG3 57.4
RRT -.6323 RRF .9956 RTF -.5605
SGB 3498.3 R23 -.1050 R13 .9941
SGI 3465.5 SG2 477.6 THA 96.63
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 186.4 SR 2886.4 SS 1380.€
    TDE .2091 TRA 1.3344 TC3 -.0383 BAU 1.1629
                                                                                                                                 CRT -.4636 CRS -.9995 CST .4344
LSA 3200.4 MSA 170.5 SSA 1.3
    RO-10.9738 RRA-4.0324 RC3 .1727 FAU-.01523
FDE-2.2448 FRA -.6788 FC3 .0268 BSP 10244
BDE10.9758 BRA 4.2475 BC3 .1769 FSP -173
                                                                                                                                  EL1 2887.7 EL2 165.1 ALF 91.72
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FLIGHT TIME 126.00

ARRIVAL DATE NOV 26 1967

FLIGHT TIME 134.00 LAUNCH DATE JUL 15 1967 DISTANCE 391.903 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.992 GAL -6.50 AZL 112.89 HCA 185.70 SMA 130.50 ECC .19938 INC22.8875 VI 29.298 RP 107.50 LAP 2.22 LOP 117.11 VP 38.108 GAP 5.43 AZP 67.21 TAL 208.08 TAP 33.78 RCA 104.48 APO 156.52 V2 35.252 RC 121.426 GL -62.33 GP 74.31 7AL 104.62 ZAP 105.62 ETS 94.52 ZAE 93.19 ETE 175.10 ZAC 88.41 ETC 64.28 CLP-174.57 PLANETOCENTRIC CONIC C3 138.705 VHL 11.777 DLA -50.99 RAL 136.39 RAD 6570.5 VEL 16.126 PTH 2.84 VHP 13.615 DPA 77.85 RAP 244.72 ECC 3.2827 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 37.44 2 42 6 -2118.12 11 13 46 5867.15 2 42 6 2118.12 11 13 46 5867.15 3 17 24 1518.1 50.86 140.14 10.86 55.79 12 51 34 266.94 5267.2 10.87 271.87 37.46 140.14 3 17 24 1518.1 16.94 50.86 37.44 140.14 45.64 10.86 55,79 12 51 34 266.94 5267.2 16.96 134.36 10.87 271.87 37.46 140.14 2 42 6 2118.12 11 13 46 5867.15 1518.1 50.86 140.14 3 17 24 16.94 10.86 55.79 37.44 3 1 · 1 12 51 34 45.64 5267.2 16.96 140.14 10.87 271.87 37.46 134.36 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2532.0 SR 765.0 SS 923.0 CRT .9577 CRS -.9407 CET _ AGE SGT 3428.9 SGR 1536.1 SG3 85.3 RRT .9324 RRF .8834 RTF .9925 SGB 3757.2 R23 -.1742 R13 .9840 TDE-4.9914 TRA-3.0923 TC3 -.1633 BAU . 3060 RDE-1.3162 RRA-1.8051 RC3 -.0235 FAU .01139 LSA 2792.6 MSA 221.9 SSA 1.2 FDE-1.5694 FRA -. 7805 FC3 -. 0711 8SP 11412 SGI 3722.3 SG2 511.6 THA 23.13 EL1 2636.6 EL2 211.3 ALF 16.25 BDE 5.1621 BRA 3.5806 BC3 .1650 FSP -268 ARRIVAL DATE NOV 28 1967 FLIGHT-TIME 136,00 DISTANCE 397.801 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.938 GAL -6.22 AZL 105.56 HCA 188.82 SMA 130.13 ECC .19954 INC15.5572 VI 29.298
RP 107.49 LAP 2.36 LOP 120.35 VP 38.073 GAP 5.69 AZP 74.62 TAL 206.68 TAP 35.50 RCA 104.17 APO 156.10 V2 35.255
RC 123.648 GL -57.90 GP 63.83 ZAL 109.56 ZAP 113.84 ETS 67.36 ZAE 103.75 ETE 151.28 ZAC 90.13 ETC 37.48 CLP-156.41 PLANETOCENTRIC CONIC C3 71.887 VHL 8.479 DLA -45.62 RAL 136.54 RAD 6569.4 VEL 13.901 PTH 2.54 VHP 9.452 DPA 70.43 RAP 204.66 ECC 2.1831 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1320.0 21.96 3 6 24 1920.01 10 50 39 5785.38 16.59 42.65 29.57 133.13 3 38 24 52.61 133.12 12 27 4 5185.4 21.97 10 50 39 270.14 29.58 16.61 127.39 3 38 24 1320.0 21.96 16.59 42.65 29.57 133.13 52.61 6 24 1920.01 5785.38 133.12 12 27 4 5185.4 21.97 10 50 39 16.61 270.14 29.58 127.39 3 38 24 1320.0 21.96 16.59 42.65 29.57 133.13 52.61 3 6 24 1920.01 133.12 12 27 4 21.97 270.14 5185.4 10 50 39 29.58 127.39 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3834.2 SGR 505.1 SG3 124.8 RRT -.2944 RRF -.5113 RTF .9695 SGB 3867.3 R23 .2316 R13 -.9706 SGI 3837.1 SG2 482.3 THA 177.74 ST 2461.4 SR 452.1 SS 895.0 CRT -.8806 CRS .9355 CST -.9912 TDE-3.4102 TRA-2.9818 TC3 -.6159 BAU .5956 RDE .6629 RRA - .2096 RC3 .D684 FAU .02567 LSA 2647.5 MSA 233.7 SSA FOE-1.5802 FRA -.8486 FC3 -.3091 BSP 11944 EL1 2493.7 EL2 211.4 ALF 170.75 BOF 3.4740 BRA 2.9891 BC3 .6197 FSP -400 ARRIVAL DATE NOV 30 1967 LAUNCH DATE JUL 15 1967 FLIGHT TIME 138.00 DISTANCE 403.754 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.885 GAL -5.95 AZL 102.06 MCA 192.01 SMA 129.76 ECC .19993 INC12.0621 VI 29.298 RP 107.48 LAP 2.49 LOP 123.60 VP 38.036 GAP 5.97 AZP 78.19 TAL 205.30 TAP 37.31 RCA 103.82 APO 155.71 V2 35.257 RC 125.861 GL -53.38 GP 54.32 ZAL 112.88 ZAP 121.23 ETS 59.29 ZAE 111.10 ETE 147.77 ZAC 91.99 ETC 29.71 CLP-152.73 PLANETOCENTRIC CONIC C3 48.465 VML 6.962 DLA -41.29 RAL 138.70 RAD 6568.8 VEL 13.032 PTH 2.38 VHP 7.687 QRA 61.96 RAP 190.58 ECC 1.7976 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM TNJ 2 LAT INJ 2 LONG 127.23 4 8 23 127.22 12 11 8 1159.7 24.02 3 39 4 1759.68 10 35 14 5753.66 25.16 4 8 23 19.32 30.73 58.60 263.17 24.03 5153.7 19.33 269.72 25.17 121.40 3 39 4 1759.68 10 35 14 5753.66 3 39 4 1759.68 10 35 14 5753.66 24.18 127.23 4 8 23 127.22 12 11 8 24.02 1159.7 19.32 30.73 25.16 58.60 263.17 24.03 19.33 269.72 25.17 5153.7 121.40 24.18 24.02 30.73 25.16 127.23 4 8 23 1159.7 19.32 58.60 127.22 12 11 8 263.17 269.72 5153.7 24.03 25.17 19.33 121.40 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2331.5 SR 580.0 SS 914.4 CRT -.9367 CRS .9822 CST -.9858 LSA 2559.9 MSA 235.1 SSA 2.9 SCT 3894.6 SCR 625.7 SC3 163.3 RRT -.7053 RRF -.8733 RTF .9555 SCB 3944.5 R23 .2689 R13 -.9591 SCI 3919.8 SC2 440.7 THA 173.45 TOE-2.6317 TRA-2:6230 TC3-1.0709 BAU .7022 ROE .7045 RRA .0373 RC3 .1663 FAU .03699 FOE-1.6357 FRA -.8727 FC3 -.6608 BSP 12139 EL1 2394.4 EL2 197.7 ALF 166.79 BOE 2.7243 BRA 2.6233 BC3 1.0837 FSP -523 ARRIVAL DATE DEC 2 1967 FLIGHT TIME 140.00 LAUNCH DATE JUL 15 1967 DISTANCE 409.718 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.830 GAL -5.68 AZL 100.02 HCA 195.22 SMA 129.39 ECC .20047 INCIO.0211 VI 29.298
RP 107.48 LAP 2.62 LOP 126.85 VP 37.999 GAP 6.25 AZP 80.32 TAL 203.90 TAP 39.12 RCA 103.45 APO 155.33 V2 35.258
RC 128.066 GL -49.57 GP 46.46 ZAL 114.94 ZAP 127.54 ETS 55.02 ZAE 116.36 ETE 148.69 ZAC 93.31 ETC 25.78 CLP-152.19 PLANETOCENTRIC CONIC C3 37.248 VHL 6.103 OLA -38.00 RAL 141.21 RAD 6568.5 VEL 12.594 PTH 2.28 VHP 6.816 DPA 54.44 RAP 184.27 ECC 1.6130 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 63.53 4 12 2 1628.26 20.46 20.52 22.66 122.74 4 39 10 1028.3 24.63 13.54 122.74 4 39 10 122.74 11 58 10 1028.3 22.66 4 12 2 1628.26 24.64 5152.5 5752.48 20.46 270.48 22.67 10 22 18 115.47 13.54 24.63 22.66 122.74 4 39 10 1028.3 1628.26 20.46 20.52 4 12 2 122.74 4 39 10 122.74 11 58 10 122.74 4 39 10 122.74 11 58 10 63.53 270.48 22.67 5152.5 24.64 5752.48 20.48 10 22 18 116.47 24.63 13.54 4 12 2 1628.26 10 22 18 5752.48 1028.3 20.46 20.52 22.66 63.53 5152.5 24.64 20.48 270.48 22.67 116.47 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2264.8 SR 561.7 SS 927.6 CRT -.9429 CRS .9890 CST -.9817 LSA 2500.0 MSA 235.1 SSA 3.8 SGT 3979.0 SGR 626.3 SG3 194.5 RRT -.7649 RRF -.9180 RTF .9465 SGB 4028.0 R23 .2897 R13 -.9501 TDE-2.2354 TRA-2.3772 TC3-1.5124 BAU .7609 ROE .5976 RRA .0709 RC3 .2174 FAU .04548 FOE-1.6465 FRA -.8458 FC3-1.0571 BSP 12419 BOE 2.3139 BRA 2.3783 BC3 1.5280 FSP -626 EL1 2326.2 EL2 182.2 ALF 166.76 SG1 4008.1 SG2 400.5 THA 173.06

ARRIVAL DATE DEC 4 1967

EL1 2248.4 EL2 130.6 ALF 170.10

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LAUNCH DATE JUL 15 1967
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 415.680
     RL 152.06 LAL -.00 LOL 291.85 VL 26.776 GAL -5.40 AZL 98.68 MCA 198.45 SMA 129.02 ECC .20113 INC 8.6790 V1 29.298
RP 107.48 LAP 2.74 LOP 130.10 VP 37.961 GAP 6.53 AZP 81.76 TAL 202.49 TAP 40.94 RCA 103.07 APO 154.98 V2 35.259
RC 130.261 GL -46.45 GP 40.09 ZAL 116.05 ZAP 132.81 ETS 51.96 ZAE 120.10 ETE 150.91 ZAC 94.00 ETC 23.11 CLP-152.66
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 30.804 VHL 5.550 DLA -35.55 RAL 143.76 RAD 6568.2 VEL 12.336 PTH 2.22 VHP 6.356 DPA 48.05 RAP 181.15 ECC 1.5070
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
67.55 4 43 28 1517.55 20.90 11.86 21.43 119.43 5 8 46 917.5 24.66 4.61
112.45 10 11 10 5767.40 20.92 271.97 21.44 119.42 11 47 18 5167.4 24.67 264.72
67.55 4 43 28 1517.55 20.90 11.86 21.43 119.43 5 8 46 917.5 24.66 4.61
112.45 10 11 10 5767.40 20.92 271.97 21.44 119.42 11 47 18 5167.4 24.67 264.72
67.55 4 43 28 1517.55 20.90 11.86 21.43 119.45 5 8 46 917.5 24.66 4.61
112.45 10 11 10 5767.40 20.92 271.97 21.44 119.42 11 47 18 5167.4 24.67 264.72
67.55 4 43 28 1517.55 20.90 11.86 21.43 119.45 5 8 46 917.5 24.66 4.61
112.45 10 11 10 5767.40 20.92 271.97 21.44 119.42 11 47 18 5167.4 24.67 264.72
                                                                                                                119.43 5 8 46
119.42 11 47 18
119.43 5 8 46
119.42 11 47 18
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 4079.1 SGR 582.1 SG3 217.1
RRT -.7752 RRF -.9229 RTF .9403
SGB 4120.4 R23 .2978 R13 -.9433
SGI 4104.2 SG2 365.5 THA 173.64
                                                                                                                                             ST 2231.1 SR 516.9 SS 930.7
CRT -.9435 CRS .9914 CST -.9786
LSA 2461.0 MSA 234.4 SSA 4.8
     TOE-2.0032 TRA-2.1937 TC3-1.9354 BAU .8027
     RDE .5001 RRA .0626 RC3 .2314 FAU .05122
    FOE-1.6156 FRA -.7808 FC3-1.4394 85P 12761
                                                                                                                                              EL1 2284.1 EL2 167.4 ALF 167.60
                                                                                                                                                            ARRIVAL DATE DEC 6 1967
                                                                                      FLIGHT TIME 144.00
LAUNCH DATE JUL 15 1967
                                                                                      DISTANCE 421.632
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 26.721 GAL -5.11 AZL 97.73 MCA 201.68 SMA 128.66 ECC .20190 INC 7.7252 V1 29.298 RP 107.48 LAP 2.85 LOP 133.35 VP 37.923 GAP 6.81 AZP 82.82 TAL 201.07 TAP 42.75 RCA 102.68 APO 154.63 V2 35.259
    RC 132.447 GL -43,88 GP 34.94 ZAL 116.44 ZAP 137.20 ETS 49.49 ZAE 122.73 ETE 153.46 ZAC 94.13 ETC 21.04 CLP-153.53
   PLANETOCENTRIC CONIC
     C3 26.637 VHL 5.161 OLA -33.74 RAL 146.30 RAD 6568.1 VEL 12.166 PTH
                                                                                                                     2.18 VHP
                                                                                                                                    6.112 DPA 42.67 RAP 179.65 ECC 1.4384
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            21.06
         70.83
                        5 12 52 1422.89
10 2 3 5789.45
                                                             21.07
                                                                               4.52
                                                                                                                                 5 36 35
                                                                                                                                                    822.9
                                                                                                                                                                      24.52
                                                                                                               116.99
                                                                                                                 116.98 11 38 32
                      10 2 3
                                                             21.08
                                                                             273.79
                                                                                                21.07
                                                                                                                                                    5189.5
        109.17
                                     1422.89
5789.45
         70.83
                                                                                                                                 5 36 35
                                                                                                                                                      822.9
                         5 12 52
                                                             21.07
                                                                                4.52
                                                                                               21.06
                                                                                                                 116.99
                                                                                                                                                                       24.52
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120.02 9 35 44
114.02 12 22 41
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                      10 2 3
                                                             21.08
                                                                             273.79
                                                                                               21.07
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        109.17
                                                                                                                                                                                       295.33
        110.00
                        9 25 31
                                          613.07
                                                            17.17
                                                                             302.33
                                                                                               18.82
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                                                                                                                                                                    28.11
                                                       25.08
                                       5647.26
                                                                                                                                                    5047.3
        110.00
                      10 48 34
                                                                             264.80
                                                                                               23.14
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SCT 4184.8 SGR 529.0 SG3 231.8

RRT -.7673 RRF -.9122 RTF .9356

SGB 4218.1 R23 .2956 R13 -.9379

SG1 4204.6 SG2 337.6 THA 174.42
                                                                                                                                              ST 2218.7 SR 473.5 SS 925.8
CRT -.9434 CRS .9929 CST -.9761
     TOE-1.8567 TRA-2.0421 TC3-2.3394 BAU .8368
     ROE .4262 RRA .0475 RC3 .2209 FAU .05456
    FDE-1.5587 FRA -.6914 FC3-1.7734 BSP 13133
                                                                                                                                             LSA 2439.2 MSA 233.0 SSA 5.8
                                                                                                                                              EL1 2263.5 EL2 153.9 ALF 168.56
     BOE 1.9050 BRA 2.0427 BC3 2.3498 FSP -759
                                                                                                                                                           ARRIVAL DATE DEC 8 1967
                                                                                      FLIGHT TIME 146.00
LAUNCH DATE JUL 15 1967
                                                                                     DISTANCE 427.578
    RL 152.06 LAL -.00 LOL 291.85 VL 26.666 GAL -4.81 AZL 97.01 MCA 204.91 SMA 128.29 ECC .20279 INC 7.0087 V1 29.298
RP 107.48 LAP 2.95 LOP 136.60 VP 37.883 GAP 7.08 AZP 83.64 TAL 199.62 TAP 44.53 RCA 102.28 APO 154.31 V2 35.258
RC 134.624 GL -41.75 GP 30.77 ZAL 116.26 ZAP 140.89 ETS 47.40 ZAE 124.58 ETE 155.96 ZAC 93.79 ETC 19.34 CLP-154.56
   PLANETOCENTRIC CONIC
    C3 23.710 VHL 4.869 DLA -32.44 RAL 148.85 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 5.990 DPA 38.12 RAP 179.10 ECC 1.3902
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     5 39 43 1342.74
9 55 32 5812.23
5 39 43 1342.74
9 55 32 5812.23
                                                                                                                                                                  24.37
                                                                                           21.32
                                                                                                               115.19 6 2 6
115.18 11 32 25
115.19 6 2 6
                                                                                                                                                                                    350.86
                                                                                                                                6 2 6
                                                                                                                                                    742.7
                                                                            358.39
         73.46
                                                           21.16
                                                                            275.59
                                                                                               21.33
                                                                                                                                                   5212.2
                                                                                                                                                                      24.38
                                                                                                                                                                                      268.06
        106.54
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        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                SGT 4214.5 SGR 465.9 SG3 232.7

RRT -.7300 RRF -.8814 RTF ..9276

SGB 4240.2 R23 .2933 R13 -.9294

SGI 4228.3 SG2 317.4 THA 175.36
                                                                                                                                              ST 2183.7 SR 429.1 SS 893.6
 - TOE-1.7308 TRA-1.8748 TC3-2.6740 BAU .8496
    ROE .3645 RRA .0263 RC3 .1828 FAU .05437
FOE-1.4533 FRA -.5520 FC3-1.982 BSP 12727
BDE 1.7687 BRA 1.8750 BC3 2.6803 FSP -715
                                                                                                                                              CRT -.9419 CRS .9939 CST -.9729
LSA 2387.0 MSA 231.0 SSA 6.9
EL1 2221.0 EL2 141.7 ALF 169.47
                                                                                      FLIGHT TIME 148.00
                                                                                                                                                           ARRIVAL DATE DEC 10 1967
LAUNCH DATE JUL 15 1967
                                                                                    DISTANCE 433.506
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 26.611 GAL -4.50 AZL 96.45 MCA 208.15 SMA 127.93 ECC .20380 INC 6.4477 V1 29.298
RP 107.48 LAP 3.04 LOP 139.85 VP 37.843 GAP 7.36 AZP 84.31 TAL 198.16 TAP 46.31 RCA 101.86 APO 154.00 V2 35.256
RC 136.791 GL -39.94 GP 27.35 ZAL 115.63 ZAP 144.03 ETS 45.62 ZAE 125.87 ETE 158.26 ZAC 93.10 ETC 17.91 CLP-155.68
   PLANETOCENTRIC CONIC
    C3 21.534 VHL 4.640 OLA -31.53 RAL 151.43 RAD 6567.9 VEL 11.955 PTH 2.13 VHP 5.945 OPA 34.23 RAP 179.16 ECC 1.3544
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.51 6 3 52 1276.12 21.25 353.37 22.08 113.86 6 25 8 676.1 24.29 345.76
104.49 9 52 0 5832.09 21.26 277.15 22.08 113.85 11 29 12 5232.1 24.30 269.54
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        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SCT 4346.9 SGR 433.9 SG3 239.7
RRT -.7099 RRF -.8520 RTF .9260
SGB 4368.5 R23 .2717 R13 -.9274
SG1 4357.9 SG2 304.8 THA 175.93
                                                                                                                                             ST 2215.0 SR 407.5 SS 893.5
CRT -.9456 CRS .9953 CST -.9721
LSA 2412.2 MSA 228.0 SSA 8.0
     TDE-1.6824 TRA-1.7586 TC3-3.0649 BAU .8835
    RDE .3300 RRA .0209 RC3 .1573 FAU .05535
FDE-1.3986 FRA -.4619 FC3-2.2253 BSP 13386
BDE 1.7144 BRA 1.7587 BC3 3.0690 FSP -763
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 12 1967

ELI 2409.3 EL2 88.1 ALF 171.44

LAUNCH DATE JUL 15 1967

DISTANCE 439.422 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 25.555 GAL -4.19 AZL 95.99 MCA 211.39 SMA 127.57 ECC .20493 INC 5.9942 V1 29.298
RP 107.49 LAP 3.12 LOP 143.10 VP 37.802 GAP 7.64 AZP 84.88 TAL 196.68 TAP 48.07 RCA 101.43 APO 153.71 V2 35.254 RC 138.949 GL -38.38 GP 24.53 TAL 114.62 TAP 146.74 ETS 44.11 TAE 126.79 ETE 160.31 TAC 92.12 ETC 16.70 CLP-156.81 PLANETOCENTRIC CONIC C3 19.846 VHL 4.455 DLA -30.93 RAL 154.07 RAD 6567.8 VEL 11.884 PTH 2.11 VHP 5.949 DPA 30.85 RAP 179.64 ECC 1.3266 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 23.23 6 45 13 623.8 24.31 6 24 49 1223.77 9 52 7 5845.35 349.48 112.89 77.00 21.39 112.88 11 29 33 5245.4 24.32 103.00 21.41 278.22 23.24 341.81 112.89 6 45 13 623.8 6 24 49 1223.77 23.23 24.31 77.00 21.39 349.48 112.88 11 29 33 270.54 103.00 9 52 7 5845.35 21.41 278.22 23.24 5245.4 24.32 8 58 50 13 59 14 304.17 164.2 16.02 110.00 8 46 6 764.17 11.84 310.79 18.03 122.30 103.67 4753.0 33.19 235.58 110.00 12 30 1 5352.95 31.64 244.46 27.01 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4449.1 SGR 406.1 SG3 240.8 RRT -.6762 RRF -.8102 RTF .9234 SG8 4467.6 R23 .2482 R13 -.9245 ST 2243.9 SR 390.1 SS 885.3 CRT -.9501 CRS .9967 CST -.9714 TDE-1.6470 TRA-1.6330 TC3-3.4250 BAU .9093 RDE .3032 RRA .0158 RC3 .1241 FAU .05482 LSA 2433.2 MSA 224.1 SSA FDE-1.3325 FRA -.3588 FC3-2.3914 BSP 13755 BDE 1.6747 BRA 1.6330 BC3 3.4273 FSP -771 9.1 EL1 2274.4 EL2 120.0 ALF 170.59 SG1 4457.6 SG2 298.6 THA 176.45 LAUNCH DATE JUL 15 1967 FLIGHT TIME 152.00 ARRIVAL DATE DEC 14 1967 DISTANCE 445.324 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.500 GAL -3.86 AZL 93.62 HCA 214.63 SMA 127.21 ECC .20619 INC 5.6177 V1 29.298
RP 107.50 LAP 3.19 LOP 146.35 VP 37.760 GAP 7.91 AZP 85.37 TAL 195.18 TAP 49.81 RCA 100.98 APO 153.44 V2 35.251 RC 141.095 GL -37.00 GP 22.18 ZAL 113.29 ZAP 149.12 ETS 42.84 ZAE 127.43 ETE 162.11 ZAC 90.91 ETC 15.64 CLP-157.94 PLANETOCENTRIC CONIC C3 18.499 VHL 4.301 DLA -30.59 RAL 156.80 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 5.985 DPA 27.88 RAP 180.43 ECC 1.3045 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.73 7 2 11 77.92 6 42 25 1185.95 21.60 346.74 112.20 586.0 24.42 339.02 102.08 9 56 18 5849.98 21.61 278.65 24.74 112.19 11 33 48 5250.0 24.43 270.93 77.92 6 42 25 1185.95 21.60 346.74 24.73 112.20 7 2 11 586.0 24.42 339.02 9 56 18 112.19 11 33 48 5250.0 270.93 102.08 5849.98 21.61 27A . 65 24.74 24.43 766.39 9 4 2 304.30 110.00 8 51 15 11.76 310.91 19.45 122.33 166.4 15.94 102.20 14 15 15 5317.54 110.00 12 46 38 32.18 241.84 28.40 4717.5 33.53 232.47 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4542.0 SGR 386.6 SG3 239.2 RRT -.6366 RRF -.7605 RTF .9209 SGB 4558.4 R23 .2226 R13 -.9217 SGI 4548.7 SG2 297.7 THA 176.89 ST 2280.4 SR 378.3 SS 876.6 CRT -.9560 CRS .9980 CST -.9711 TOE-1.6280 TRA-1.5039 TC3-3.7687 BAU .9323 RDE .2839 RRA .0130 RC3 .0899 FAU .05357 LSA 2462.5 MSA 219.2 SSA 10.3 FDE-1.2685 FRA -.2563 FC3-2.5069 BSP 14057 BDE 1.6526 BRA 1.5040 BC3 3.7698 FSP -767 FLI 2309.0 EL2 109.5 ALF 170.97 ARRIVAL DATE DEC 16 1967 LAUNCH DATE JUL 15 1967 FLIGHT TIME 154.00 DISTANCE 451.212 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.445 GAL -3.52 AZL 95.30 MCA 217.87 SMA 126.86 ECC .20758 INC 5.2982 VI 29.298
RP 107.51 LAP 3.25 LOP 149.60 VP 37.718 GAP 8.19 AZP 85.81 TAL 193.67 TAP 51.54 RCA 100.53 APO 153.19 VZ 35.247
RC 143.232 GL -35.75 GP 20.20 ZAL 111.66 ZAP 151.22 ETS 41.80 ZAE 127.89 ETE 163.68 ZAC 89.52 ETC 14.73 CLP-159.06 PLANETOCENTRIC CONIC C3 17.405 VHL 4.172 DLA -30.44 RAL 159.63 RAD 6567.7 VEL 11.781 PTH 2.08 VMP 6.046 DPA 25.23 RAP 181.45 ECC 1.2864 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 56 41 10 4 37 24.62 7 16 4 337.32 345.08 26.56 111.73 562.3 78.33 1162.30 21.86 5245.2 5845.22 21.87 278.41 26.56 111.72 11 42 2 24.63 270.65 101.67 111.73 7 16 4 562.3 24.62 337.32 78.33 6 56 41 1162.30 21.86 345.08 26.56 5845.22 101.67 10 4 37 21.87 278.41 26.56 111.72 11 42 2 5245.2 24.63 270.65 ,110.00 9 0 15 759.77 12.00 310.55 21.32 122.25 9 12 55 159.8 16.17 303.92 101.28 14 28 29 13 0 13 5295.75 4695.7 33.70 231.19 240.21 30.09 110.00 32.48 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4631.6 SGR 375.1 SG3 236.3 RRT -.5958 RRF -.7076 RTF .9188 SGB 4646.8 R23 .1965 R13 -.9194 SG1 4637.0 SG2 300.9 THA 177.23 ST 2326.7 SR 371.6 SS 869.7 CRT -.9630 CRS .9989 CST -.9713 TOE-1.6238 TRA-1.3712 TC3-4.1007 BAU .9543 ROE .2705 RRA .0122 RC3 .0574 FAU .05197 FOE-1.2102 FRA -.1582 FC3-2.5849 BSP 14352 LSA 2502.4 MSA 213.5 SSA 11.4 BOE 1.6462 BRA 1.3713 BC3 4.1011 FSP -758 EL1 2354.1 EL2 99.0 ALF 171.24 LAUNCH DATE JUL 15 1967 FLIGHT TIME 156.00 ARRIVAL DATE DEC 18 1967 HELIOCENTRIC CONIC **DISTANCE 457.083** RL 152.06 LAL -.00 LOL 291.85 VL 26.391 GAL -3.17 AZL 95.02 MCA 221.11 SMA 126.51 ECC .20911 INC 5.0223 VI 29.298 RP 107.53 LAP 3.30 LOP 152.85 VP 37.675 GAP 8.47 AZP 86.21 TAL 192.15 TAP 53.26 RCA 100.05 APO 152.96 VZ 35.243 RC 145.356 GL -34.59 GP 18.53 ZAL 109.79 ZAP 153.11 ETS 40.96 ZAE 128.22 ETE 165.04 ZAC 87.99 ETC 13.93 CLP-160.16 PLANETOCENTRIC CONIC C3 16.509 VHL 4.063 DLA -30.46 RAL 162.59 RAD 6567.7 VEL 11.743 PTH 2.07 VMP 6.124 DPA 22.84 RAP 182.65 ECC 1.2717 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.43 7 27 16 111.42 11 54 0 1151.40 28.69 24.89 336.61 7 27 16 8 5 22.18 344,40 551.4 101.73 10 16 48 5831.78 22.19 277.54 28.69 5231.8 24.90 269.75 1151.40 7 27 16 551.4 24.89 336.61 7 8 5 22.18 344.40 28.69 111.43 277.54 111.42 11 54 0 5231.8 24.90 269.75 101.73 10 16 48 5831.78 22.19 28.69 122.09 9 24 47 100.81 14 39 47 9 12 21 746.60 12.48 23.57 146.6 16.63 303.17 110.00 309.82 110.00 13 11 42 5284.58 32.63 239.37 32.08 4684.6 33.77 230.32 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2382.5 SR 368.9 SS 864.7 CRT -.9704 CRS .9993 CST -.9719 LSA 2552.9 MSA 206.9 SSA 12.6 TOE-1.6322 TRA-1.2351 TC3-4.4200 BAU .9755 SGT 4720.2 SGR 370.1 SG3 232.5 RRT -.5568 RRF -.6549 RTF .9172 SGB 4734.7 R23 .1710 R13 -.9177 RDE .2615 RRA .0131 RC3 .0276 FAU .05015 FDE-1.1577 FRA -.0664 FC3-2.6298 BSP 14652

FLIGHT TIME 150.00

SG1 4724.7 SG2 307.2 THA 177.49

BOE 1.6530 BRA 1.2351 BC3 4.4200 FSP -747

ARRIVAL DATE DEC 20 1967

LAUNCH DATE JUL 15 1967

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DISTANCE 462.939
   HELIOCENTRIC CONIC.
    RL 152.06 LAL -.00 LOL 291.85 VL 26.336 GAL -2.80 AZL 94.78 MCA 224.35 SNA 126.16 ECC .21079 INC 4.7800 V1 29.298 RP 107.54 LAP 3.34 LOP 156.10 VP 37.632 GAP 8.75 AZP 86.58 TAL 190.61 TAP 54.96 RCA 99.57 APO 152.76 V2 35.237 RC 147.469 GL -33.50 GP 17.09 ZAL 107.67 ZAP 154.82 ETS 40.31 ZAE 128.45 ETE 166.23 ZAC 86.33 ETC 13.23 CLP-161.23
   PLANETOCENTRIC CONIC
    C3 15.776 VHL 3.972 DLA -30.61 RAL 165.68 RAD 6567.6 VEL 11.712 PTH 2.06 VHP 6.217 DPA 20.64 RAP 183.98 ECC 1.2596 LNCH AZHTH LNCH TIME -L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4798.6 SGR 369.7 SG3 227.8
RRT -.5199 RRF -.6045 RTF ..9156
SGB 4812.8 R23 ..1480 R13 -.9160
SGI 4802.4 SG2 315.5 THA 177.70
                                                                                                                                    ST 2442.5 SR 369.0 SS 859.1
CRT -.9776 CRS .9989 CST -.9728
    TOE-1.6482 TRA-1.0899 TC3-4.7163 BAU .9947
    ROE .2557 RRA .0145 RC3 .0003 FAU .04809
FOE-1.1079 FRA .0231 FC3-2.6389 BSP 14886
BOE 1.6679 BRA 1.0900 BC3 4.7163 FSP -730
                                                                                                                                    LSA 2607.7 MSA 199.6 SSA 13.8
                                                                                                                                     EL1 2469.0 EL2 76.7 ALF 171.59
                                                                                                                                                 ARRIVAL DATE DEC 22 1967
                                                                                FLIGHT TIME 160.00
                                                                                DISTANCE 468.777
   HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 26.282 GAL -2.43 AZL 94.56 HCA 227.59 SMA 125.82 ECC .21263 INC 4.5643 V1 29.298 RP 107.56 LAP 3.37 LOP 159.35 VP 37.589 GAP 9.04 AZP 86.92 TAL 189.06 TAP 56.66 RCA 99.07 APO 152.58 V2 35.231 RC 149.570 GL -32.43 GP 15.85 ZAL 105.34 ZAP 156.39 ETS 39.85 ZAE 128.62 ETE 167.25 ZAC 84.57 ETC 12.61 CLP-162.28
   PLANETOCENTRIC CONIC
                                                                                                             2.06 VHP 6.320 OPA 18.62 RAP 185.43 ECC 1.2499
    C3 15.183 VHL 3.897 DLA -30.86 RAL 168.92 RAD 6567.6 VEL 11.686 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                    13 30 28 5286.95
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                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SG1 4882.7 SG2 325.3 THA 177.85
                                                                                                                                    ST 2510.7 SR 371.9 S5 855.5
CRT -.9843 CRS .9975 CST -.9740
    TDE-1.6737 TRA -.9401 TC3-4.9957 BAU 1.0141
     ROE .2528 RRA .0166 RC3 -.0229 FAU .04604
                                                                                                                                    LSA 2671.5 MSA 191.9 SSA 15.1
    FOE-1.0639 FRA .1058 FC3-2.6251 BSP 15159
BDE 1.6927 BRA .9402 BC3 4.9958 FSP -715
                                                                                                                                    EL1 2537.3 EL2 65.0 ALF 171.70
                                                                                                                                                ARRIVAL DATE DEC 24 1967
                                                                                FLIGHT TIME 162.00
LAUNCH DATE JUL 15 1967
                                                                               DISTANCE 474.598
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 26.228 GAL -2.04 A7L 94.37 MCA 230.83 SMA 125.48 ECC .21464 INC 4.3698 V1 29.298 RP 107.58 LAP 3.39 LOP 162.60 VP 37.545 GAP 9.32 A7P 87.24 TAL 187.50 TAP 58.33 RCA 98.55 APO 152.42 V2 35.225 RC 151.657 GL -31.37 GP 14.77 7AL 102.82 ZAP 157.84 ETS 39.56 ZAE 128.74 ETE 168.15 ZAC 82.73 ETC 12.06 CLP-163.30
   PLANETOCENTRIC CONIC
    C3 14.717 VML 3.836 DLA -31.18 RAL 172.31 RAD 6567.6 VEL 11.666 PTH 2.05 VHP 6.434 DPA 16.73 RAP 186.98 ECC 1.2422
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     111.30 7 52 33
111.28 12 45 23
                    7 33 4 1169.02
11 9 21 5762.28
7 33 4 1169.02
11 9 21 5762.28
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                     13 38 27 5298.09
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                                                                       240.39
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       110.00
                                                        32.45
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 4956.0 SCR 379.5 SC3 218.1

RRT -.4641 RRF -.5223 RTF .9143

SCB 4970.5 R23 .1084 R13 -.9146

SCI 4959.2 SC2 335.9 THA 177.96
                                                                                                                                    ST 2582.4 5R 376.8 5S 851.6

CRT -.9899 CRS ..9952 CST -.9754

LSA 2739.0 MSA 183.8 SSA 16.3
     TOE-1.7052 TRA -.7830 TC3-5.2471 BAU 1.0324
    RDE .2522 RRA .0188 RC3 -.0425 FAU .04394
FOE-1.0230 FRA .1836 FC3-2.5847 BSP 15429
                                                                                                                                     EL1 2609.2 EL2 52.9 ALF 171.78
    BOE 1.7238 BRA .7832 BC3 5.2472 FSP -700
                                                                                                                                                 ARRIVAL DATE DEC 26 1967
                                                                                FLIGHT TIME 164.00
LAUNCH DATE JUL 15 1967
                                                                                DISTANCE 480.400
    RL 152.06 LAL -.00 LOL 291.85 VL 26.174 GAL -1.64 AZL 94.19 MCA 234.07 SMA 125.15 ECC .21683 INC 4.1926 V1 29.298 RP 107.60 LAP 3.39 LOP 165.85 VP 37.501 GAP 9.62 AZP 87.54 TAL 185.93 TAP 60.00 RCA 98.02 APO 152.29 V2 35.217 RC 153.730 GL -30.30 GP 13.83 ZAL 100.11 ZAP 159.19 ETS 39.45 ZAE 128.83 ETE 168.93 ZAC 80.81 ETC 11.58 CLP-164.29
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 14.371 VHL 3.791 DLA -31.55 RAL 175.85 RAD 6567.6 VEL 11.651 PTH 2.05 VHP 6.557 OPA 14.95 RAP 188.61 ECC 1.2365
    C3 14.371 VHL 3.791 DLA -31.55 RAL 175.85 RAD 6567.6 VEL 11.651 PTH 2.05 VHP 6.557 OPA 14.95 RAP 188.61 ECC 1.2365 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.47 7 40 58 1183.35 23.72 347.46 40.13 111.43 8 0 41 583.4 26.42 339.56 104.53 11 29 43 5737.36 23.74 271.10 40.13 111.42 13 5 21 5137.4 26.43 263.19 104.53 11 29 43 5737.36 23.74 271.10 40.13 111.42 13 5 21 5137.4 26.43 263.19 110.00 10 24 1 654.06 15.76 304.67 35.99 120.73 10 34 55 54.1 19.72 297.78
                                                                                                         111.4Z 13 5 21
120.73 10 34 55
102.08 15 14 26
        110.00
                                                                                                                                          4714.7
                                                                                                                                                            33.55
                     13 45 52 5314.65
                                                        32.22
                                                                        241.62
                                                                                         43.02
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2655.8 SR 383.3 SS 847.2
CRT -.9942 CRS .9919 CST -.9768
                                                                          SGT 5031.9 SGR 387.4 SG3 213.1

RRT - .4449 RRF - .4912 RTF .9145

SGB 5046.8 R23 .0919 R13 - .9148

SGI 5034.9 SG2 346.7 THA 178.03
     TOE-1.7417 TRA -.6182 TC3-5.4683 BAU 1.0506
     RDE .2535 RRA .0209 RC3 -.0579 FAU .04188
                                                                                                                                    LSA 2808.3 MSA 175.7 SSA 17.5
     FOE -.9845 FRA .2569 FC3-2.5233 BSP 15708
BOE 1.7600 BRA .6186 BC3 5.4686 FSP -686
                                                                                                                                    EL1 2683.0 EL2 40.8 ALF 171.83
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FLIGHT TIME 158.00

ARRIVAL DATE DEC 28 1967

EL1 2904.2 EL2 31.2 ALF 171.76

LAUNCH DATE JUL 15 1967

DISTANCE 486.181 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.121 GAL -1.22 AZL 94.03 MCA 237.31 SMA 124.82 ECC .21920 INC 4.0295 VI 29.298 RP 107.63 LAP 3.39 LOP 169.09 VP 37.456 GAP 9.91 AZP 87.82 TAL 184.35 TAP 61.66 RCA 97.46 APO 152.19 V2 35.210 RC 155.789 GL -29.21 GP 13.01 ZAL 97.25 ZAP 160.44 ETS 39.51 ZAE 128.89 ETE 169.61 ZAC 78.83 ETC 11.15 CLP-165.27 PLANETOCENTRIC CONIC C3 14.139 VHL 3.760 DLA -31.94 RAL 179.55 RAD 6567.6 VEL 11.641 PTH 2.04 VHP 6.687 DPA 13.26 RAP 190.30 ECC 1.2327 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 49 32 1199.11 11 50 39 5714.42 43.70 8 9 31 599.1 111.63 26.81 74.57 24.09 348.82 111.62 13 25 53 269.52 261.60 105.43 24.11 43.70 5114.4 26.82 340.90 43.70 111.63 8 9 31 599.1 26.81 74.57 7 49 32 1199.11 24.09 348.82 111.62 13 25 53 11 50 39 261.60 105.43 5714.42 24.11 269.52 43.70 5114.4 26.82 120.25 10 56 53 102.96 15 21 51 25.7 296.09 110.00 10 46 27 625.71 16.74 303.05 39.89 20.63 4735.8 33.36 234.27 110.00 13 52 55 5335.82 31.91 243.20 46.45 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5094.0 SCR 396.0 SC3 207.4 RRT - 4287 RRF - 4645 RTF .9144 SCB 5109.3 R23 .0781 R13 - .9146 SCI 5096.8 SC2 357.5 THA 178.08 ST 2721.5 SR 390.5 SS 838.6 CRT -.9971 CRS .9874 CST -.9780 TOE-1.7772 TRA -.4415 TC3-5.6394 BAU 1.0661 ROE .2562 RRA .0224 RC3 -.0703 FAU .03969 FOE -.9447 FRA .3291 FC3-2.4303 BSP 15883 BDE 1.7956 BRA .4420 BC3 5.6399 FSP --665 LSA 2869.4 MSA 168.2 SSA 18.7 EL1 2749.2 EL2 29.4 ALF 171.86 LAUNCH DATE JUL 15 1967 FLIGHT TIME 168.00 ARRIVAL DATE DEC 30 1967 DISTANCE 491.942 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.068 GAL -.79 AZL 93.88 MCA 240.54 SMA 124.50 ECC .22178 INC 3.8778 V1 29.298 RP 107.65 LAP 3.38 LOP 172.34 VP 37.411 GAP 10.22 AZP 88.09 TAL 182.77 TAP 63.31 RCA 96.89 APO 152.11 V2 35.201 RC 157.834 GL -28.08 GP 12.28 ZAL 94.24 ZAP 161.62 ETS 39.74 ZAE 128.94 ETE 170.21 ZAC 76.81 ETC 10.78 CLP-166.22 PLANETOCENTRIC CONIC C3 14.021 VHL 3.745 DLA -32.33 RAL 183.39 RAD 6567.6 VEL 11.636 PTH 2.04 VHP 6.826 OPA 11.66 RAP 192.05 ECC 1.2308 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 615.0 73.71 7 59 9 1215.05 24.42 350.18 47.53 111.87 A 19 24 27.17 342.25 106.29 12 11 40 5694.81 24.43 268.16 47.54 111.86 13 46 35 5094 A 27.18 260.23 1215.05 73.71 7 59 9 24.42 350.18 47.53 111.87 8 19 24 615.0 27.17 342.25 111.86 13 46 35 119.73 12 48 12 103.98 15 29 13 12 11 40 5694.81 11 10 7 5885.25 106.29 24.43 26A.16 47.54 5094.8 27.18 260.23 5285.3 272.27 110.00 17.71 279.32 44.06 21.53 5360.64 110.00 13 59 53 31.52 245.02 50.13 4760.6 33.11 236.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RTT -.4192 RRF -.4453 RTF .9157
SGB 5180.8 R23 .0655 R13 -.9159
SG1 5167.7 SG2 367.9 THA 178.11 TOE-1.8168 TRA -.2599 TC3-5.7784 BAU 1.0833 ST 2786.6 SR 399.3 SS 830.3 CRT -.9985 CRS .9821 CST -.9793 RDE .2608 RRA .0235 RC3 -.0776 FAU .03774 LSA 2930.4 MSA 161.3 SSA 19.8 FOE -.9087 FRA .3946 FC3-2.3301 BSP 16141 BOE 1.8354 BRA .2609 BC3 5.7789 FSP -651 FLT 2814.9 FL2 21.5 ALF 171.86 ARRIVAL DATE JAN 1 1968 FLIGHT TIME 170,00 LAUNCH DATE JUL 15 1967 DISTANCE 497.679 HELIOCENTRIC CONIC RL 152.06 LAL -.00 LOL 291.85 VL 26.016 GAL -.34 AZL 93.74 MCA 243.78 SMA 124.18 ECC .22458 INC 3.7355 VI 29.298 RP 107.68 LAP 3.35 LOP 175.58 VP 37.366 GAP 10.53 AZP 88.35 TAL 181.18 TAP 64.95 RCA 96.29 APO 152.07 VZ 35.192 RC 159.863 GL -26.91 GP 11.63 ZAL 91.11 ZAP 162.73 ETS 40.16 ZAE 128.97 ETE 170.73 ZAC 74.73 ETC 10.45 CLP-167.15 PLANETOCENTRIC CONIC C3 14.021 VHL 3.744 DLA -32.69 RAL 187.35 RAD 6567.6 VEL 11.636 PTH 2.04 VHP 6.974 DPA 10.12 RAP 193.86 ECC 1.2307 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.15 8 30 25 112.14 14 7 13 112.15 8 30 25 112.14 14 7 13 119.19 13 12 14 105.08 15 36 50 51.61 27.46 343.56 8 9 54 1230.79 12 32 34 5679.05 630.8 72.94 24.68 351.50 259.13 5679.05 24.69 267.07 51.62 5079.1 27.47 8 9 54 1230.79 24.68 351.50 51.61 630.8 27.46 343.56 72.94 24.69 12 32 34 5679.05 267.07 51.62 5079.1 27.47 259.13 110.00 11 34 36 5857.82 18.63 277.72 48.49 5257.8 22.38 270.59 7 2 5388.06 247.02 54.04 4788.1 32.60 238.24 31.05 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5229.1 SCR 415.2 SC3 197.3 RRT -.4131 RRF -.4310 RTF .9172 SCB 5245.6 R23 .0550 R13 -.9173 SCI 5232.0 SC2 377.9 THA 178.11 ST 2841.9 SR 408.7 SS 819.1 CRT -.9985 CRS .9758 CST -.9805 TOE-1.8551 TRA -. 0668 TC3-5.8619 BAU 1.0989 ROE .2669 RRA .0237 RC3 -.0814 FAU .03577 FOE -.8727 FRA .4582 FC3-2.2089 BSP 16389 BOE 1.8742 BRA .0709 BC3 5.8625 FSP -638 LSA 2981.6 MSA 155.5 SSA 20.8 EL1 2871.1 EL2 21.9 ALF 171.83 LAUNCH DATE JUL 15 1967 FLIGHT TIME 172.00 ARRIVAL DATE JAN 3 1968 HELIOCENTRIC CONIC DISTANCE 503.392 RL 152.06 LAL -.00 LOL 291.85 VL 25.964 GAL .12 AZL 93.60 MCA 247.01 SMA 123.87 ECC .22761 INC 3.6011 V1 29.298
RP 107.71 LAP 3.31 LOP 178.82 VP 37.321 GAP 10.84 AZP 88.59 TAL 179.58 TAP 66.59 RCA 95.68 APO 152.06 V2 35.183
RC 161.876 GL -25.70 GP 11.06 ZAL 87.89 ZAP 163.78 ETS 40.77 ZAE 129.00 ETE 171.20 ZAC 72.62 ETC 10.17 CLP-168.06 PLANETOCENTRIC CONIC C3 14.141 VHL 3.760 OLA -33.01 RAL 191.43 RAD 6567.6 VEL 11.642 PTH 2.04 VHP 7.129 DPA 8.64 RAP 195.71 ECC 1.2327 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 27.67 55.92 112.45 8 42 44 112.44 14 27 27 8 21 59 1245.57 12 52 59 5668.03 72.29 645.6 344.78 24.85 352.71 8 42 44 25A.37 107.71 12 52 59 24.87 266.30 55.92 5068.0 27.58 112.45 8 42 44 112.44 14 27 27 8 21 59 1245.57 24.85 352.71 55.92 645.6 27.67 344.78 72.29 107.71 12 52 59 5668.03 24.87 266.30 55.92 5068.0 27.68 258.37 110.00 118.68 13 36 33 106.19 15 45 5 11 59 20 5833.07 19.45 276.27 53.13 5233.1 23.12 269.06 110.00 14 14 48 5416.57 30.53 249.08 58.16 4816.6 32.44 240.39 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2874.2 SR 417.3 55 798.4 CRT -.9972 CRS .9679 CST -.9811 SCT 5271.2 SCR 423.9 SC3 190.6 RRT -.4057 RRF -.4170 RTF .9172 SCB 5288.2 R23 .0469 R13 -.9173 TOE-1.8838 TRA .1377 TC3-5.8692 BAU 1.1097 RDE .2738 RRA .0229 RC3 -.0844 FAU .03347 LSA 3008.2 MSA 151.8 SSA 21.6

FLIGHT TIME 166.00

SG1_5274.0 SG2 387.3 THA 178.12

FDE -.8295 FRA .5209 FC3-2.0489 BSP 16411 BDE 1.9035 BRA .1396 BC3 5.8698 FSP -607

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ARRIVAL DATE JAN 5 1968
LAUNCH DATE JUL 15 1967
                                                                            FLIGHT TIME 174.00
                                                                           DISTANCE 509.078
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.912 GAL .61 ATL 93.47 HCA 250,24 SMA 123.56 ECC .23090 INC 3.4729 V1 29.298
RP 107.74 LAP 3.27 LOP 182.06 VP 37.276 GAP 11.17 AZP 88.82 TAL 177.98 TAP 68.22 RCA 95.03 APO 152.09 V2 35.172
RC 163.875 GL -24.44 GP 10.54 ZAL 84.61 ZAP 164.78 ETS 41.59 ZAE 129.03 ETE 171.61 ZAC 70.47 ETC 9.92 CLP-168.96
   PLANETOCENTRIC CONIC
                                                                                                                                      7.22 RAP 197.60 ECC 1.2368
    C3 14.389 VHL 3.793 DLA -33.26 RAL 195.58 RAD 6567.6 VEL 11.652 PTH
                                                                                                       2.05 VHP 7.293 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                    353.81
265.87
                                                                                                                                                27.79
                                                                                    60.42
                                                                                                   112.76
                                                                                                                  8 56 19
                                                                                                                                     659.3
                                                      24.93
                    6 35 20 1259.34
13 12 46 5661.96
       71.78
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                                                                                                                                    5062.0
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                                                                                                    112.74
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       108.22
                                                      24.95
                    8 35 20 1259.34
13 12 46 5661.96
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118.25 14 0 24
107.24 15 54 29
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       108.22
                                                     24.95
                                                                    265.87
                                 5813.12 20.09
5444.21 29.98
                                                                                                                                                                  267.80
                                                                    275.0A
                                                                                     57.92
                                                                                                                                   5213.1
                                                                                                                                                    23.71
       110.00
                    12 23 31
                                                                                                                                   4844.2
                                                                                                                                                    32.05
                                                                    251.05
                                                                                     62.49
                    14 23 45
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        RIT - 4053 RRF - .4105 RTF .9184
SGB 5347.1 R23 .0397 R13 - .9185
SGI 5332.4 SGZ 395.7 THA 178.10
                                                                                                                               ST 2898.6 SR 427.1 SS 780.7
CRT -.9945 CRS .9590 CST -.9816
    TOE-1.9128 TRA .3537 TC3-5.8427 BAU 1.1241
   ROE .2827 RRA .0207 RC3 -.0816 FAU .03162
FOE -.7926 FRA .5837 FC3-1.9024 BSP 16723
BOE 1.9336 BRA .3543 BC3 5.8433 FSP -600
                                                                                                                               LSA 3028.3 MSA 150.7 SSA 22.2
                                                                                                                               EL1 2929.5 EL2 44.4 ALF 171.66
                                                                                                                                           ARRIVAL DATE JAN 7 1968
                                                                             FLIGHT TIME 176.00
LAUNCH DATE JUL 15 1967
                                                                           DISTANCE 514.735
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.861 GAL 1.11 AZL 93.35 HCA 253.47 SMA 123.26 ECC .23445 INC 3.3500 V1 29.298
RP 107.78 LAP 3.21 LOP 185.29 VP 37.230 GAP 11.51 AZP 89.05 TAL 176.37 TAP 69.84 RCA 94.36 APO 152.16 V2 35.162
RC 165.860 GL -23.15 GP 10.08 ZAL 81.28 ZAP 165.73 ETS 42.63 ZAE 129.05 ETE 171.97 ZAC 68.30 ETC 9.72 CLP-169.84
  PLANETOCENTRIC CONIC
                                                                                                        2.05 VHP 7.467 OPA
                                                                                                                                       5.84 RAP 199.53 ECC 1.2432
    C3 14.775 VML 3.844 DLA -33.43 RAL 199.78 RAD 6567.6 VEL 11.669 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T1.44 B 49 57 1271.71 24.90 354.75 65.08 113.06 9 11 9 671.7 27.80 346.84 108.56 13 31 37 5661.32 24.91 265.81 65.08 113.05 15 5 8 5061.3 27.81 257.90
                                                                                                                  9 11 9
                                                                     354.75
                                                                                     65.08
                                                                                                    113.06
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                   8 49 57 1271.71
13 31 37 5661.32
12 46 5 5800.87
        71.44
                                                      24.90
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117.98 14 22 46
108.13 16 5 47
                                                                                                                                    5061.3
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                                                      24.91
                                                                    265.81
                                                                                     65.08
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       108.56
                                                                                                                                                                   267.03
                                                                                                                                    5200.9
                                                                                                                                                     24.06
                                                                    274.35
                                                                                     62.79
                                                      20.49
      110.00
                                  5468.20
                                                                                     67.02
                                                                                                                                   4868.2
                                                                                                                                                     31.68
                                                                                                                                                                   244.22
                                                                    252.74
      110.00
                   14 34 39
                                                      29.49
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        RIT-COURSE EXECUTION ACCORD.

SGT 5379.0 SGR 441.5 SG3 180.4

RRT -.4059 RRF -.4064 RTF .9202

SGB 5397.1 R23 .0337 R13 -.9203

SGI 5382.0 SG2 403.3 THA 178.08
                                                                                                                              ST 2904.1 SR 436.5 SS 758.1
CRT -.9905 CRS .9491 CST -.9821
   TOE-1.9351 TRA .5770 TC3-5,7517 BAU 1.1362
ROE .2927 RRA .0178 RC3 -.0771 FAU .02970
    FOE -.7536 FRA .6400 FC3-1.7401 BSP 16900
BOE 1.9572 BRA .5773 BC3 5.7522 FSP -584
                                                                                                                               LSA 3029.2 MSA 150.9 SSA 22.4
                                                                                                                               EL1 2936.1 EL2 59.3 ALF 171.53
                                                                                                                                          ARRIVAL DATE JAN 9 1968
                                                                            FLIGHT TIME 178.00
LAUNCH DATE JUL 15 1967
                                                                            DISTANCE 520.361
  HELTOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.811 GAL 1.63 AZL 93.23 MCA 256.70 SMA 122.96 ECC .23830 INC 3.2312 V1 29.298 RP 107.81 LAP 3.14 LOP 188.52 VP 37.185 GAP 11.86 AZP 89.26 TAL 174.76 TAP 71.46 RCA 93.66 APO 152.26 V2 35.151 RC 167.829 GL -21.82 GP 9.66 ZAL 77.94 ZAP 166.63 ETS 43.91 ZAE 129.06 ETE 172.29 ZAC 66.10 ETC 9.56 CLP-170.71
   PLANETOCENTRIC CONIC
    C3 15.308 VHL 3.913 DLA -33.51 RAL 203.98 RAD 6567.6 VEL 11.692 PTH 2.06 VHP 7.650 DPA
                                                                                                                                      4.51 RAP 201.49 ECC 1.2519
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                27.6A
                                                                                                                                                               347.65
                                                                                 69.86
                                                                                                 113.35 9 27 8
113.34 15 23 49
113.35 9 27 8
                                                     24.74
                    9 5 45 1282.66
13 49 23 5666.24
                                                                    355.52
        71.28
                                                                                     69.86
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                                                                    266.11
       108.72
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                   9 5 45 1282.66
13 49 23 5666.24
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        71.28
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117.95 14 42 32
108.76 16 19 51
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                                                     24.75
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       108.72
                                                                    266.11
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       110.00
                   13 5 53 5799.49
14 48 26 5485.45
                                                      20.53
                                                                    274.27
                                                                                                                                   4885.5
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                                                                                                                                                                  245.49
                                                                    253.95
                                                                                     71.74
                                                  29.12
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5426.7 SGR 449.3 SG3 175.2

RRT - 4088 RRF - 4053 RTF .9222

SGB 5445.3 R23 .0286 R13 - 9223

SGI 5429.8 SG2 409.8 THA 178.05
                                                                                                                               ST 2890.9 SR 445.4 SS 733.4

CRT -.9853 CRS .9377 CST -.9823

LSA 3011.5 MSA 153.8 SSA 22.3
    TOE-1.9503 TRA .8118 TC3-5.6084 BAU 1.1479
    ROE .3041 RRA .0136 RC3 -.0702 FAU .02788
    FDE -.7147 FRA .6956 FC3-1.5769 BSP 17091
BDE 1.9738 BRA .8119 BC3 5.6089 FSP -570
                                                                                                                               EL1 2924.0 EL2 75.3 ALF 171.36
                                                                                                                                           ARRIVAL DATE JAN 11 1968
                                                                             FLIGHT TIME 180.00
LAUNCH DATE JUL 15 1967
                                                                            DISTANCE 525.952
   HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.761 GAL 2.18 AZL 93.12 MCA 259.92 SMA 122.67 ECC .24247 INC 3.1156 V1 29.298 RP 107.84 LAP 3.07 LOP 191.75 VP 37.139 GAP 12.23 AZP 89.45 TAL 173.16 TAP 73.08 RCA 92.92 APO 152.41 V2 35.139 RC 169.783 GL -20.47 GP 9.29 ZAL 74.61 ZAP 167.48 ETS 45.48 ZAE 129.07 ETE 172.57 ZAC 63.88 ETC 9.44 CLP-171.56
   PLANETOCENTRIC CONIC
    C3 16.003 VHL 4.000 DLA -33.50 RAL 208.16 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 7.845 DPA
                                                                                                                                       3.21 RAP 203.48 ECC 1.2634
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                  9 44 7
                                                                                                                                     692.2
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                      9 22 35 1292.20
14 5 53 5676.77
        71.31
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14 5 53 5676.77
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        71.31
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118.21 14 58 51
109.05 16 37 12
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                    14 5 53
                                                      24.47
       106.69
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                                                                     274.97
                                                                                     72.46
                                                      20.15
                    13 22 0
                                    5811.20
       110.00
                                                                                    76.67
                                                                                                                                  4893.8
                                                                                                                                                    31.25
                                                                                                                                                                   246.09
                                                                     254.53
       110.00
                     15 5 38
                                    5493.80
                                                      28.93
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5468.1 SGR 456.1 SG3 170.0
RRT - .4130 RRF - .4058 RTF .9243
SGB 5487.1 R23 .0240 R13 - .9244
SG1 5471.4 SG2 415.2 THA 178.02
                                                                                                                              ST 2856.3 SR 453.2 SS 705.4
CRT -.9786 CRS .9244 CST -.9823
     TDE-1.9554 TRA 1.0587 TC3-5.4123 BAU 1.1580
    RDE .3164 RRA .0080 RC3 -.0618 FAU .02612
FOE -.6743 FRA .7498 FC3-1.4129 BSP 17262
BDE 1.9809 BRA 1.0587 BC3 5.4126 FSP -556
                                                                                                                              LSA 2972.5 MSA 159.2 SSA 21.9
                                                                                                                               EL1 2890.6 EL2 92.1 ALF 171.16
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ARRIVAL DATE JAN 13 1968

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LAUNCH DATE JUL 15 1967
                                                                               FLIGHT TIME 182.00
                                                                               DISTANCE 531.504
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.711 GAL 2.75 AZL 93.00 HCA 263.14 SMA 122.38 ECC .24699 INC 3.0023 V1 29.298 RP 107.88 LAP 2.98 LOP 194.98 VP 37.094 GAP 12.61 AZP 89.64 TAL 171.55 TAP 74.70 RCA 92.15 APO 152.60 V2 35.128 RC 171.722 GL -19.11 GP 8.95 ZAL 71.33 ZAP 168.29 ETS 47.35 ZAE 129.08 ETE 172.82 ZAC 61.64 ETC 9.36 CLP-172.41
   PLANETOCENTRIC CONIC
     C3 16.873 VHL 4.108 DLA -33.38 RAL 212.27 RAD 6567.7 VEL 11.758 PTH 2.08 VHP 8.050 DPA
                                                                                                                                           1.96 RAP 205.49 ECC 1.2777
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1108.47 14 20 55 5693.16 24.06 267.86 79.63 113.87 15 55 48 5093.2 27.08 260.06
                      9 40 22 1300.10
                                                                       356.54
                                                                                        79.63
                                                                                                        113.88
                                                                                                                    10 2 2
                                                                                                                                         700.1
                                                                                                                                                          27.07
                                                                                                                                                                         348.74
         71.53
                                                         24.05
                    14 20 55
13 34 22
                                                                                                        113.87 15 55 48
118.74 15 11 38
109.04 16 57 39
                                                                                        79.63
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                                                                                                                                                                         260.06
       108.47
                                      5693.16
                                                        24.06
                                                                       267.86
                                      5835.87
                                                        19.35
                                                                       276.43
                                                                                        77.13
                                                                                                                                        5235.9
                                                                                                                                                          23.04
                                                                                                                                                                         269.23
       110.00
       110.00
                    15 26 5
                                     5493.42
                                                        28.94
                                                                       254.50
                                                                                        81.77
                                                                                                                                        4893.4
                                                                                                                                                          31.26
                                                                                                                                                                         246.07
   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                                    ST 2800.1 SR 459.7 SS 674.8
CRT -.9702 CRS .9086 CST -.9820
                                                                           SGT 5500.6 SGR 461.8 SG3 164.7
RRT -.4176 RRF -.4073 RTF .9261
    TDE-1.9486 TRA 1.3201 TC3-5.1650 BAU 1.1653
    ROE .3296 RRA .0010 RC3 -.0531 FAU .02433
FOE -.6323 FRA .8041 FC3-1.2480 88P 17356
BOE 1.9763 BRA 1.3201 BC3 5.1652 FSP -539
                                                                           SGB 5519.9 R23 .0201 R13 -.9261
SG1 5504.0 SG2 419.3 THA 177.98
                                                                                                                                    LSA 2911.8 MSA 167.4 SSA 21.3
                                                                                                                                    ELI 2835.4 ELZ 109.9 ALF 170.94
                                                                                                                                                ARRIVAL DATE JAN 15 1968
LAUNCH DATE JUL 15 1967
                                                                               FLIGHT TIME 184,00
                                                                               DISTANCE 537.013
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.662 GAL 3.35 A7L 92.89 HCA 266.37 SMA 122.09 ECC .25188 INC 2.8907 V1 29.298 RP 107.92 LAP 2.88 LOP 198.21 VP 37.048 GAP 13.01 A7P 89.82 TAL 169.95 TAP 76.31 RCA 91.34 APO 152.85 V2 35.116 RC 173.647 GL -17.76 GP 8.64 ZAL 68.11 ZAP 169.05 ETS 49.58 ZAE 129.08 ETE 173.05 ZAC 59.39 ETC 9.32 CLP-173.24
   PLANETOCENTRIC CONIC
    C3 17.946 VHL 4.236 DLA -33.18 RAL 216.29 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 8.269 DPA
                                                                                                                                               .74 RAP 207.54 ECC 1.2953
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.94 9 58 59 1306.39 23.52 356.77 84.54 114.10 10 20 45 706.4 26.57 349.02
108.06 14 34 21 5715.35 23.53 269.32 84.55 114.09 16 9 37 5115.3 26.58 261.57
                                                                                                                  10 20 45
16 9 37
15 21 28
17 20 20
                    9 58 59
14 34 21
                                                                       356.77
                                                                                                        114.10
                                                                                                                                          706.4
                                                                                                                                                          26.57
                                                                                                                                                                         349.02
        71.94
                                      1306.39
                                                        23.52
                                                                                        84.54
                                      5715.35
                                                                       269.32
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       108.06
                                                        23.53
                                                                                        84.55
                                                                                                        114.09
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                     13 43 37
                                      5871.18
                                                        18.18
                                                                       278.50
                                                                                                        119.46
                                                                                                                                         5271.2
                                                                                                                                                          21.97
                                                                                                                                                                         271.41
       110.00
                                                                                        81.67
                     15 48 53
                                                                       254.03
                                                                                                        108.80
                                                                                                                                         4886.6
       110.00
                                                                                        86.99
                                                                                                                                                          31.38
                                     5486.60
                                                        29.09
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5533.6 SGR 466.7 SG3 159.7

RRT -.4239 RRF -.4113 RTF ..9282

SGB 5553.2 R23 ..0171 R13 -.9283

SGI 5537.1 SG2 422.4 THA 177.94
                                                                                                                                   ST 2732.4 SR 465.1 SS 645.0 CRT -.9602 CRS .8908 CST -.9816 LSA 2840.1 MSA 177.5 SSA 20.5
    TOE-1.9358 TRA 1.5919 TC3-4.8875 BAU 1.1727
    ROE .3438 RRA -.0073 RC3 -.0437 FAU .02265
FDE -.5924 FRA .8566 FC3-1.0926 BSP 17507
BOE 1.9661 BRA 1.5920 BC3 4.8877 FSP -525
                                                                                                                                    EL1 2768.7 EL2 128.2 ALF 170.70
                                                                               FLIGHT TIME 186.00
                                                                                                                                               ARRIVAL DATE JAN 17 1968
LAUNCH DATE JUL 15 1967
   HELIOCENTRIC CONIC
                                                                              DISTANCE 542.475
    RL 152.06 LAL -.00 LOL 291.85 VL 25.614 GAL 3.97 AZL 92.78 MCA 269.58 SMA 121.82 ECC .25719 INC 2.7799 V1 29.298
RP 107.96 LAP 2.78 LOP 201.43 VP 37.003 GAP 13.42 AZP 89.98 TAL 168.35 TAP 77.94 RCA 90.49 APO 153.15 V2 35.103
RC 175.555 GL -16.41 GP 8.36 ZAL 64.97 ZAP 169.77 ETS 52.21 ZAE 129.08 ETE 173.25 ZAC 57.13 ETC 9.32 CLP-174.07
   PLANETOCENTRIC CONIC
    C3 19.237 VHL 4.386 DLA -32.88 RAL 220.18 RAD 6567.8 VEL 11.858 PTH 2.10 VHP 8.502 DPA
                                                                                                                                            -.45 RAP 209.60 ECC 1.3166
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                     25.95
                                                                                    89.44
                                                                                                     114.30 10 40 7
        72.54
                    10 18 16 1311.01
14 46 5 5743.35
                                                        22.87
                                                                      356.81
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                                                                                                                                                                        263.47
                                                                                                                    16 21 48
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       107.46
                                                        22.88
                                                                       271.16
                                                                                        89.45
                                                                                                        114.28
                                                                                                                                        5143.4
                    10 18 16 1311.01
14 46 5 5743.35
                                                                                                        114.30 10 40 7
                                                                                                                                         711.0
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        72.54
                                                        22.87
                                                                       356.81
                                                                                        89.44
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       107.46
                                                        22.88
                                                                       271.16
                                                                                        89.45
                                                                                                        114.28
                                                                                                                    16 21 48
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                                                                                                                                                         25.96
                                                                                                        120.26 14 1 1
108.42 17 44 12
                                                                                                                                         26.2
                                                                                                                                                         20.62
                                                                                                                                                                        296.12
       110.00
                     13 50 35
                                      626.18
                                                        16.73
                                                                       303.08
                                                                                        86.08
                                                                                                                                        4876.2
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                     16 12 56
                                      5476.18
                                                        29.32
                                                                       253.30
                                                                                        92.25
                                                                                                                                                         31.55
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 2651.0 SR 468.8 SS 615.3

CRT -.9481 CRS .8703 CST -.9811

LSA 2755.0 MSA 189.6 SSA 19.6

EL1 2688.2 EL2 147.0 ALF 170.45
                                                                          SGT 5560.6 SGR 470.4 SG3 154.7

RRT -.4310 RRF -.4164 RTF .9304

SGB 5580.5 R23 .0144 R13 -.9304

SGI 5564.3 SG2 424.2 THA 177.90
    TOE-1.9132 TRA 1.8773 TC3-4.5808 BAU 1.1782
    RDE .3588 RRA -.0171 RC3 -.0345 FAU .02101
FDE -.5526 FRA .9087 FC3 -.9457 BSP 17638
    BOE 1.9465 BRA 1.8773 BC3 4.5810 FSP -511
                                                                               FLIGHT TIME 188.00
                                                                                                                                                ARRIVAL DATE JAN 19 1968
LAUNCH DATE JUL 15 1967
                                                                              DISTANCE 547.883
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.566 GAL 4.63 AZL 92.67 MCA 272.80 SMA 121.54 ECC .26296 INC 2.6693 V1 29.298
RP 107.99 LAP 2.67 LOP 204.65 VP 36.958 GAP 13.87 AZP 90.13 TAL 166.76 TAP 79.56 RCA 89.58 APO 153.50 VZ 35.091
RC 177.448 GL -15.09 GP 8.10 ZAL 61.94 ZAP 170.43 ETS 55.30 ZAE 129.07 ETE 173.44 ZAC 54.87 ETC 9.36 CLP-174.90
   PLANETOCENTRIC CONIC
    C3 20.777 VHL 4.558 DLA -32.51 RAL 223.91 RAD 6567.8 VEL 11.923 PTH 2.12 VHP 8.751 DPA -1.59 RAP 211.69 ECC 1.3419
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 106.68 14 55 54 5777.41 22.13 273.40 94.29 114.45 16 32 12 5177.4 25.23 265.77 73.32 10 38 15 1313.61 22.11 356.63 94.29 114.46 11 0 9 713.6 25.22 349.00
                                                                                                       114.45 16 32 12
114.45 11 0 9
114.45 16 32 12
121.06 14 7 13
107.99 18 8 26
                                                                                                                                                                         265.77
                                                                                                                                        5177.4
                                                                                                                                                          25.23
       106.68
                     14 55 54 5777.41
                                                        22.13
                                                                       273.40
                                                                                        94.29
                                                                                                                                           74.5
                                                                                                                                                                         298.99
       110.00
                     13 55 58
                                      674.52
                                                        15.05
                                                                       305.82
                                                                                        90.37
                                                                                                                                                         19.05
                                    5464.49
                                                                                                                                                          31.74
                                                                                                                                                                         243.95
                                                                                                                                        4854.5
       110.00
                    16 37 22
                                                        29.57
                                                                       252.48
                                                                                       97.50
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RRT - 4387 RRF - 4223 RTF 9325
SGB 5603.2 R23 .0120 R13 - .9326
SGB 567.1 SG2 424.8 THA 177.86
                                                                                                                                  ST 2560.5 SR 470.7 SS 586.5
CRT -.9336 CRS .8465 CST -.9805
    TDE-1.8817 TRA 2.1774 TC3-4.2546 BAU 1.1819
    ROE .3743 RRA -.0283 RC3 -.0258 FAU .01942
                                                                                                                                LSA 2660.8 MSA 203.3 SSA 18.7
EL1 2598.1 EL2 166.2 ALF 170.22
    FDE -.5134 FRA .9612 FC3 -.8093 BSP 17756
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BOE 1.9186 BRA 2.1776 BC3 4.2547 FSP -498

ARRIVAL DATE JAN 21 1968

LAUNCH DATE JUL 15 1967

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DISTANCE 553.230
        HELIOCENTRIC CONIC
         RL 152.06 LAL -.00 LOL 291.85 VL 25.519 GAL 5.32 A7L 92.56 MCA 276.01 SMA 121.28 ECC .26922 INC 2.5581 VI 29.298
RP 108.03 LAP 2.54 LOP 207.87 VP 36.913 GAP 14.33 A7P 90.27 TAL 165.18 TAP 81.20 RCA 88.63 APO 153.93 V2 35.078
RC 179.325 GL -13.80 GP 7.87 ZAL 59.02 ZAP 171.05 ETS 58.90 ZAE 129.05 ETE 173.60 ZAC 52.59 ETC 9.45 CLP-175.72
         PLANETOCENTRIC CONIC
          C3 22.599 VHL 4,754 DLA -32.07 RAL 227.48 RAC 6567.9 VEL 11.999 PTH 2.14 VHP 9.017 DPA -2.71 RAP 213.79 ECC 1.3719
          C3 22.399 VAL 4.754 DER 32.07 KAL 227.48 KAD 0501.9 VEL 11.00 TO 1
                             10 58 52 1313.97
15 3 44 5817.60
10 58 52 1313.97
                                                                                                                              114.58 16 40 41
114.59 11 20 46
114.58 16 40 41
121.82 14 12 21
107.57 18 32 25
                                                                                                                                                                     5217.6
                                                                                                                                                                                          24.41
                                                                                                                                                                                                           268.48
                                                                                                             99.07
                                                                       21.27
                                                                                        276.05
                                                                                                                                                                       714.0
                                                                                                             99.07
                                                                       21.26
                                                                                        356.24
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                                                                                                                                                                                                           268.48
                             15 3 44 5817.60
                                                                       21.27
                                                                                                             99.07
                                                                                        276.05
                                                                                                                                                                     126.5
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             110.00
                                                   726.45
                                                                       13.20
                                                                                        308.72
                                                                                                            94.55
                             14 0 14
                                                                                                                                                                     4853.1
                                                                                                                                                                                          31.91
                             17 1 32 5453.12
                                                                                        251.68
                                                                                                          102.71
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
         DIFFERENTIAL CORRECTIONS
                                                                                          SGT 5598.6 SGR 474.3 SG3 145.4

RRT -.4466 RRF -.4287 RTF .9346

SGB 5618.7 R23 .0099 R13 -.9346

SGI 5602.7 SG2 424.1 THA 177.82
                                                                                                                                                                ST 2462.2 SR 470.7 SS 559.0

CRT -.9160 CRS .8188 CST -.9799

LSA 2559.0 MSA 218.5 SSA 17.8
          TDE-1.8396 TRA 2.4958 TC3-3.9113 BAU 1.1817
          RDE .3902 RRA -.0412 RC3 -.0183 FAU .01782
          FDE - .4744 FRA 1.0148 FC3 - .6827 BSP 17783
                                                                                                                                                                EL1 2499.9 EL2 186.0 ALF 170.01
          BOE 1.8805 BRA 2.4961 BC3 3.9114 FSP -482
                                                                                                                                                                              ARRIVAL DATE JAN 23 1968
                                                                                                   FLIGHT TIME 192,00
. LAUNCH DATE JUL 15 1967
                                                                                                   DISTANCE 558.508
        HELIOCENTRIC CONIC
         RL 152.06 LAL -.00 LOL 291.85 VL 25.472 GAL 6.05 A7L 92.45 MCA 279.23 SMA 121.01 ECC .27604 INC 2.4458 V1 29.298 RP 108.07 LAP 2.41 LOP 211.08 VP 36.869 GAP 14.83 A7P 90.39 TAL 163.61 TAP 82.84 RCA 87.61 APO 154.42 V2 35.065 RC 181.185 GL -12.55 GP 7.66 ZAL 56.23 ZAP 171.60 ETS 63.09 ZAE 129.03 ETE 173.75 ZAC 50.32 ETC 9.59 CLP-176.55
         PLANETOCENTRIC CONIC
          C3 24.740 VHL 4.974 DLA -31.56 RAL 230.86 RAD 6568.0 VEL 12.088 PTH 2.16 VHP 9.303 DPA -3.79 RAP 215.91 ECC 1.4072
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             114.68 11 42 3
114.67 16 47 7
                                                                                                         103.76
              75.44 11 20 11 1311.60
104.56 15 9 23 5864.25
                                                                                                                                                                       711.6
                                                                        20.32
                                                                                        355.61
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                                                                        20.34
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              104.56
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15 9 23 5864.25
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                                                                       20.34
                                                                                        279.14
              104.56
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                            14 3 42
                                                 780.81
                                                                        11.23
                                                                                         311.69
                                                                                                            98.62
                              17 25 3 5443.03
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                                                                        30.01
                                                                                         250.97
                                                                                                           107.85
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
         DIFFERENTIAL CORRECTIONS
                                                                                        SCT 5612.0 SCR 474.6 SC3 141.0
RRT -.4555 RRF -.4367 RTF .9372
SCB 5632.0 R23 .0083 R13 -.9372
SCI 5616.2 SC2 422.2 THA 177.78
                                                                                                                                                                ST 2365.9 SR 469.1 SS 535.1
CRT -.8957 CRS .7895 CST -.9796
           TOE-1.7943 TRA 2.8265 TC3-3.5711 BAU 1.1812
          ROE .4068 RRA -.0552 RC3 -.0115 FAU .01635
FDE -.4389 FRA 1.0673 FC3 -.5720 8SP 17893
                                                                                                                                                               LSA 2459.5 MSA 233.7 SSA 17.0
                                                                                                                                                                EL1 2403.2 EL2 205.3 ALF 169.86
           BOE 1.8399 BRA 2.8270 BC3 3.5711 FSP -470
                                                                                                                                                                              ARRIVAL DATE JAN 25 1968
                                                                                                  FLIGHT TIME 194.00
      LAUNCH DATE JUL 15 1967
                                                                                                  DISTANCE 563.707
         HELIOCENTRIC CONIC
          RL 152.06 LAL -.00 LOL 291.85 VL 25.426 GAL 6.82 AZL 92.33 HCA 282.43 SMA 120.76 ECC .28347 INC 2.3314 VI 29.298 RP 108.11 LAP 2.28 LOP 214.29 VP 36.825 GAP 15.36 AZP 90.50 TAL 162.06 TAP 84.50 RCA 86.53 APO 154.99 V2 35.052
           RC 183.028 GL -11.35 GP 7.47 ZAL 53.57 ZAP 172.09 ETS 67.91 ZAE 128.99 ETE 173.88 ZAC 48.06 ETC 9.79 CLP-177.38
         PLANETOCENTRIC CONIC
                                                                                                                                   2.19 VHP 9.610 OPA -4.83 RAP 218.05 ECC 1.4485
           C3 27.249 VHL 5.220 DLA -31.02 RAL 234.05 RAD 6568.1 VEL 12.191 PTH
           LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            114.75 12 4 6
114.74 15 23 10
114.75 12 4 6
114.74 15 23 10
123.08 14 20 30
106.89 19 18 13
                                                                                                        108.36
                                                                                                                                                                       705.8
                                                                                                                                                                                                           347.23
                                                                                                                                                                                          22.50
                76.78 11 42 20 1305.81
                                                                      19.32
                                                                                        354.68
                                                                                                                                                                        29.8
                                                                                                                                                                                          22.51
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              103.22
                              15 12 40
                                                  629.78
                                                                        19.33
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                            11 42 20 1305.61
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                            15 12 40
14 6 33
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              103.22
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                                                                                                          102.59
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                                                                                         314.71
              110.00
                                                 836.78
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                                                                                                                                                                                         32.18
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                                                                                                           112.90
                              17 47 38
                                                5434.85
                                                                        30.17
                                                                                        250.39
              110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
         DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5620.4 SGR 473.6 SG3 136.7
RRT - .4647 RRF - .4452 RTF .9398
SGB 5640.4 R23 .0068 R13 -.9398
SGI 5624.8 SG2 419.0 THA 177.74
                                                                                                                                                                ST 2271.1 SR 465.6 S5 514.0
CRT -.8722 CRS .7571 CST -.9794
           TOE-1.7428 TRA 3.1752 TC3-3.2330 BAU 1.1778
           RDE .4235 RRA -.0707 RC3 -.0058 FAU .01490
                                                                                                                                                               LSA 2361.5 MSA 249.1 SSA 16.2
           FDE -.4048 FRA 1.1212 FC3 -.4734 BSP 17976
                                                                                                                                                                EL1 2307.5 EL2 224.2 ALF 169.76
           BDE 1.7935 BRA 3.1760 BC3 3.2330 FSP -457
                                                                                                                                                                               ARRIVAL DATE JAN 27 1968
                                                                                                   ELICHT TIME 196,00
      LAUNCH DATE JUL 15 1967
         HELIOCENTRIC CONIC
                                                                                                  DISTANCE 568.815
          RL 152.06 LAL -.00 LOL 291.85 VL 25.381 GAL 7.63 AZL 92.21 HCA 285.64 SMA 120.50 ECC .29158 INC 2.2143 V1 29.298 RP 108.16 LAP 2.13 LOP 217.50 VP 36.781 GAP 15.93 AZP 90.60 TAL 160.53 TAP 86.17 RCA 85.37 APO 155.64 V2 35.039 RC 184.853 GL -10.19 GP 7.29 ZAL 51.06 ZAP 172.49 ETS 73.40 ZAE 128.94 ETE 174.01 ZAC 45.79 ETC 10.04 CLP-178.21
          PLANETOCENTRIC CONIC
                                                                                                                                     2.22 VHP 9.942 OPA -5.84 RAP 220.20 ECC 1.4967
           C3 30.182 VHL 5.494 DLA -30.43 RAL 237.04 RAD 6568.2 VEL 12.311 PTH
           ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              114.78 12 27 15
                                                                                                                                                                        695.3
                                                                                                                                                                                          21.45
                                                                                                                                                                                                           345.99
                                                                                                          112.86
                             12 5 40
                                                 1295.32
                                                                        18.26
                                                                                         353.37
                78.35
                                                                                                                                                                         91.3
                                                                                                                                                                                           21.46
                                                                                                                                                                                                            301.50
                                                                                                                               114.77
                                                                                                                                               15 24 45
                                                                                         308.88
                                                                                                           112.87
                            15 13 14
                                                  691.34
                                                                        18.27
              101.65
                                                                                                                              114.78 12 27 15
114.77 15 24 45
123.54 14 23 49
106.66 19 39 38
                                                                                                                                                                                          21.45
                                                                                                                                                                                                            345.99
                                                 1295.32
                                                                        18.26
                                                                                         353.37
                                                                                                           112.86
                              12 5 40
                78.35
                                                691.34
                             15 13 14
                                                                                                                                                                         91.3
                                                                                                                                                                                          21.46
                                                                                                                                                                                                            301.50
                                                                                                           112.87
                                                                       18.27
                                                                                         308.88
               101.65
                                                                                                                                                                                          11.40
                                                    893.80
                                                                         7.04
                                                                                         317.75
                                                                                                           106.46
                              14 8 55
              110.00
                                                                                                                                                                     4828.9
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                                                                                                                                                                                                            241.31
                             18 9 9 5428.89
                                                                        30.29
                                                                                                           117.84
                                                                                         249.96
              110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
         DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 2180.5 SR 460.4 SS 496.0

CRT -.8452 CRS .7224 CST -.9797

LSA 2267.7 MSA 264.1 SSA 15.5

ELI 2215.4 EL2 242.2 ALF 169.76
                                                                                            SGT 5624.3 SGR 471.4 SG3 132.7
RRT -.4742 RRF -.4542 RTF .9426
           TOE-1.6860 TRA 3.5433 TC3-2.9025 BAU 1.1712
           RDE .4404 RRA -.0876 RC3 -.0013 FAU .01349
                                                                                           SGB 5644.0 R23 .0054 R13 -.9426
SGI 5628.7 SGZ 414.7 THA 177.71
           FOE -. 3726 FRA 1.1765 FC3 -. 3870 BSP 18040
           BDE 1.7426 BRA 3.5444 BC3 2.9025 FSP -444
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FLIGHT TIME 190.00

ARRIVAL DATE JAN 29 1968

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FLIGHT TIME 198.00
LAUNCH DATE JUL 15 1967
                                                                       DISTANCE 573.819
  HELIOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.337 GAL 8.50 AZL 92.09 MCA 288.85 SNA 120.26 ECC .30045 INC 2.0935 V1 29.298 RP 108.20 LAP 1.98 LOP 220.70 VP 36.738 GAP 16.54 AZP 90.68 TAL 159.03 TAP 87.87 RCA 84.13 APO 156.39 V2 35.025 RC 186.660 GL -9.09 GP 7.13 ZAL 48.68 ZAP 172.81 ETS 79.54 ZAE 128.88 ETE 174.12 ZAC 43.54 ETC 10.35 CLP-179.05
   PLANETOCENTRIC CONIC
    C3 33.605 VHL 5.797 DLA -29.83 RAL 239.84 RAD 6568.3 VEL 12.449 PTH 2.25 VHP 10.301 DPA -6.81 RAP 222.35 ECC 1.5531
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             114.78 12 52 7
                                                                                                                             677.8
                                                                                                                                         20.35
                   12 30 49 1277.76
                                                   17.15
                                                                351.53
                                                                              117.25
        80.21
                                                                                                                                                          306.36
                                                                                                          15 23 6
                                                                                                                             163.0
                                                                                                                                            20.37
                                                                                              114.77
                                                                313.69
                                                                               117.26
                   15 10 23
                                   762.96
                                                   17.17
                                                                                              115.80 15 8 52
113.77 15 40 17
123.88 14 26 44
106.53 19 59 56
        99.79
                                                                                                                                                          309.31
                                                                                                                             211.0
                                                                                                                                            19.00
                                    810.96
                                                   15.65
                                                                316.51
                                                                               116.51
                   14 55 21
       100.00
                                                                                                                             105.0
                                                                                                                                           21.73
                                                                                                                                                          302.63
                                                                               117.97
                                   705.00
                                                  18.68
                                                                310.10
                   15 28 32
       100.00
                                                                                                                                             9.27
                                                                                                                                                          314.49
                                                                                                                             351.4
                                                                 320.79
                                                                               110.23
                   14 10 53
                                   951.45
                                                     4.86
       110.00
                                                                                                                            4825.3
                                                                                                                                            32.32
                                                                                                                                                          241.04
                                5425.31
                                                                249.71
                                                                               122.67
                   18 29 30
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5622.7 SCR 467.8 SC3 128.8
RRT - .4836 RRF - .4633 RTF .9454
SCB 5642.1 R23 .0042 R13 - .9454
                                                                                                                        ST 2094.6 SR 453.4 SS 481.0
CRT -.8143 CRS .6848 CST -.9802
    TOE-1.6222 TRA 3.9348 TC3-2.5800 BAU 1.1591
    ROE .4572 RRA -.1060 RC3 .0017 FAU .01206
FOE -.3414 FRA 1.2346 FC3 -.3107 BSP 18016
                                                                                                                        LSA 2178.7 MSA 278.4 SSA 14.8
                                                                                                                        EL1 2127.4 EL2 259.1 ALF 169.85
                                                                    SG1 5627.3 SG2 409.1 THA 177.68
    BOE 1.6854 BRA 3.9363 BC3 2.5800 FSP -430
                                                                                                                                   ARRIVAL DATE JAN 31 1968
                                                                         FLIGHT TIME 200.00
LAUNCH DATE JUL 15 1967
                                                                        DISTANCE 578.698
  HELTOCENTRIC CONIC
   RL 152.06 LAL -.00 LOL 291.85 VL 25.293 GAL 9.43 AZL 91.97 MCA 292.05 SMA 120.02 ECC .31017 INC 1.9681 VI 29.298
RP 108.24 LAP 1.82 LOP 223.91 VP 36.695 GAP 17.20 AZP 90.74 TAL 157.55 TAP 89.60 RCA 82.79 APO 157.24 V2 35.012
RC 188.449 GL -8.03 GP 6.98 ZAL 46.46 ZAP 173.02 ETS 86.26 ZAE 128.80 ETE 174.23 ZAC 41.31 ETC 10.74 CLP-179.90
   PLANETOCENTRIC CONIC
    C3 37.603 VHL 6.132 DLA -29.20 RAL 242.44 RAD 6568.5 VEL 12.608 PTH 2.29 VHP 10.691 DPA -7.74 RAP 224.52 ECC 1.6188
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.55 12 59 23 1247.87 16.01 348.77 121.53 114.75 13 20 11 647.9 19.22 341.49
                                                                                                                                                          312.28
                                                                                                                              249.6
                                                                                                                                             19.23
                                                                               121.53
                                                                                               114.74
                                                                                                          15 16 45
                    15 2 35
                                   849.62
                                                    16.03
                                                                 319.56
        97.45
                                                                                               117.94 14 44 26
111.69 16 26 27
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                                                                               119.01
                    14 28 26
                                    959.20
                                                    11.08
                                                                 325.14
       100.00
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                                                                 304.37
                                                                               123.82
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       100.00
                    16 16 13
                                    613.53
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                                                                                               124.09 14 29 19
106.48 20 19 4
                                                                                                                              409.4
                    14 12 30
                                1009.40
                                                    2.65
                                                                 323.83
       110.00
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                    18 48 40
                                  5424.13
                                                   30.38
                                                                 249.62
                                                                               127.39
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2019.5 SR 445.0 SS 469.6
CRT -.7814 CRS .6480 CST -.9812
LSA 2100.6 MSA 290.5 SSA 14.1
                                                                     SCT 5618.4 SCR 483.1 SC3 125.0
RRT -.4936 RRF -.4733 RTF .9485
SCB 5637.5 R23 .0031 R13 -.9486
    TOE-1.5602 TRA 4.3445 TC3-2.2795 BAU 1.1459
    RDE .4743 RRA -.1254 RC3 .0041 FAU .01073
    FOE -.3137 FRA 1.2934 FC3 -.2471 BSP 18108
BDE 1.6307 BRA 4.3463 BC3 2.2795 FSP -419
                                                                                                                        EL1 2049.8 EL2 273.6 ALF 170.05
                                                                     SG1 5623.1 SG2 402.4 THA 177.66
                                                                                                                                  ARRIVAL CATE FEE 2 1964
                                                                        FI IGHT TIME 202.00
LAUNCH DATE JUE-15 1967
                                                                        DISTANCE 583.434
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.250 GAL 10.42 A7L 91.84 MCA 295.25 SMA 119.78 ECC .32085 INC 1.8370 V1 29.298 RP 108.28 LAP 1.66 LOP 227.11 VP 36.653 GAP 17.91 A7P 90.78 TAL 156.12 TAP 91.36 RCA 81.35 APO 158.21 V2 34.999 RC 190.221 GL -7.03 GP 6.84 ZAL 44.38 ZAP 173.12 ETS 93.42 ZAE 128.69 ETE 174.33 ZAC 39.09 ETC 11.20 CLP 179.24
   PLANETOCENTRIC CONIC
    C3 42.275 VHL 6.502 DLA -28.57 RAL 244.86 RAD 6568.6 VEL 12.792 PTH 2.33 VHP 11.117 DPA -8.64 RAP 226.68 ECC 1.6957
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        18.06
                                                                             125.69
                                                                                            114.69 13 57 15
                                                                                                                              585.6
                                                                                                                                                         336.41
                                                                343.64
                    13 37 29 1185.63
                                                   14.86
        86.05
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                                                                               125.69
                                                                                               114.68
                                                                                                          14 59 56
                                                                                                                              371.0
                                                                                                                                            18.08
                    14 43 45
                                                                 327.93
         93.95
                                   971.02
                                                    14.87
                                                                                                                                                          323.89
                                                                               122.12
                                                                                               118.91
                                                                                                         14 34 59
                                                                                                                              456.1
                                                                                                                                            11.73
                                                                 330.62
                    14 17 23 1056.13
                                                     7.94
       100.00
                                                                                                          18 24 16
                                                                                                                             5263.8
                                                                                                                                            24.64
                                                                                                                                                          272.04
                                                                                               110.74
                                                    22.02
                                                                               128.84
                                                                 279.86
       100.00
                    16 46 33
                                   5863.79
                                                                                               124.18 14 31 35
106.52 20 37 2
                                                                                                                                                          320.64
                                                                                                                             467.4
                                                                                                                                             4.92
                                                                               117.51
                                                                 326.86
       110.00
                    14 13 47
                                   1067.40
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                                                                                                                             4825.3
       110.00 19 6 37 5425.28
                                                    30.36
                                                                               131.97
                                                                 249.70
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RRT - 5032 RRF - .4836 RTF .9520
SGB 5626.7 R23 .0024 R13 -.9520
SGI 5612.9 SG2 394.6 THA 177.64
                                                                                                                        ST 1951.0 SR 435.1 SS 461.4

CRT - .7452 CRS .6111 CST -.9828

LSA 2029.3 MSA 300.8 SSA 13.5

EL1 1978.4 EL2 286.1 ALF 170.36
     TOE-1.4927 TRA 4.7800 TC3-1.9932 BAU 1.1265
    ROE .4912 RRA -.1459 RC3 .0054 FAU .00942
FOE -.2879 FRA 1.3551 FC3 -.1930 BSP 18116
BOE 1.5714 BRA 4.7822 BC3 1.9932 FSP -407
                                                                                                                                    ARRIVAL CATE FEB 4 1968
                                                                         FLIGHT TIME 204.00
 LAUNCH DATE JUL 15 1967
                                                                         DISTANCE 587.999
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.208 GAL 11.48 AZL 91.70 HCA 298.44 SMA 119.55 ECC .33261 INC 1.6989 V1 29.298
RP 108.32 LAP 1.49 LOP 230.30 VP 36.611 GAP 18.69 AZP 90.81 TAL 154.73 TAP 93.17 RCA 79.79 APO 159.32 VZ 34.986
RC 191.975 GL -6.08 GP 6.72 ZAL 42.44 ZAP 173.08 ETS 100.80 ZAE 128.56 ETE 174.43 ZAC 36.90 ETC 11.76 CLP 178.35
                        -6.08 GP
   PLANETOCENTRIC CONIC
                                                                                                   2.37 VHP 11.583 DPA -9.49 RAP 228.84 ECC 1.7858
     C3 47.747 VHL 6.910 DLA -27.93 RAL 247.08 RAD 6568.8 VEL 13.004 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              116.66 13 59 13
112.60 15 16 45
119.48 14 29 9
110.16 18 48 53
124.14 14 33 32
106.65 20 53 52
                                                                                                                                                           338.41
                                                                                                                              642.1
                                                                                                                                           13.42
        90.00
                                                     9.92
                                                                 345.34 127.88
                   13 38 31 1242.11
15 0 30 975.71
                                                                                                                                                           322.02
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                                                                                                                              375.7
                                                                  329.49
                                                                               131.47
                    15 0 30
                                                    17.53
         90 00
                                                                                                                                              9.05
                                                                                                                                                           328.64
                                                                                                                               539.8
                   14 10 9 1139.80
17 11 32 5841.30
                                                                  335.27
                                                                                125.32
                                                     5.16
       100.00
                                                                                                                                             25.09
                                                                                                                                                           270.52
                                                                 278.40
                                                                                                                             5241.3
                                                                                133.56
       100.00
                                                    22.55
                                                                                                                                                           323.67
                   14 14 47 1125.24
19 25 23 5428.63
                                                                                                                              525.2
                                                                                                                                              2.72
                                                    -1,78
                                                                  329.87
                                                                                121.02
       110.00
                                                                                                                                                          241.29
                                                                                                                                            32.27
                                                                 249.94
                                                                                                                            4828.6
                                                                                136.43
                                                    30.29
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1891.8 SR 423.8 SS 456.2
CRT -.7074 CRS .5744 CST -.9845
LSA 1967.5 HSA 308.5 SSA 12.9
     TDE-1.4245 TRA 5.2422 TC3-1.7257 BAU 1.1016
                                                                     SGT 5593.6 SGR 449.6 SG3 118.0
                                                                    RRT - .5129 RRF - .4938 RTF - .9555
SGB 5611.6 R23 .0016 R13 - .9555
     RDE .5079 RRA -.1675 RC3 .0058 FAU .00811
FDE -.2638 FRA 1.4203 FC3 -.1471 BSP 18130
                                                                                                                        ELI 1916.0 EL2 295.8 ALF 170.77
                                                                     SG1 5598.3 SG2 385.6 THA 177.63
     BOE 1.5124 BRA 5.2449 BC3 1.7257 FSP -396
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LAUNCH CATE JUL 15 1967
                                                                                                            FLIGHT TIME 206.00
                                                                                                                                                                                                   ARRIVAL DATE FEB 6 1968
                                                                                                            DISTANCE 592.361
    HELIOCENTRIC CONIC
     RL 152.06 LAL -.00 LOL 291.85 VL 25.167 GAL 12.63 AZL 91.55 MCA 301.64 SMA 119.33 ECC .34559 INC 1.5523 V1 29.29R RP 108.36 LAP 1.32 LOP 233.49 VP 36.570 GAP 19.55 AZP 90.81 TAL 153.39 TAP 95.02 RCA 78.09 APO 160.57 V2 34.973 RC 193.712 GL -5.19 GP 6.60 ZAL 40.66 ZAP 172.92 ETS 108.17 ZAE 128.41 ETE 174.52 ZAC 34.73 ETC 12.41 CLP 177.44
    PLANETOCENTRIC CONIC
      C3 54.172 VHL 7.360 OLA -27.30 RAL 249.13 RAO 6569.0 VEL 13.249 PTH 2.42 VHP 12.095 DPA -10.31 RAP 231.00 ECC 1.8915
                                                                      | RAL 249,13 RAO 6569.0 | VEL 13.249 | PTH | 2.42 | VHP 12.095 | DPA -10.31 | RAP 231.00 | ECC | 1.8915 |
| INJ LAT | INJ LONG | INJ RT ASC | INJ AZMTH | INJ THE | PO CST TIM | INJ 2 LAT INJ 2 LONG |
| 6.32 | 351,93 | 130.56 | 117.66 | 13 43 37 | 757.8 | 9.97 | 345.16 |
| 18.88 | 326.20 | 136.44 | 111.50 | 15 49 43 | 322.8 | 21.64 | 318.61 |
| 2.57 | 339.50 | 128.51 | 119.79 | 14 25 1 | 616.5 | 6.52 | 332.93 |
| 22.88 | 277.50 | 138.05 | 109.78 | 19 10 24 | 5227.4 | 25.36 | 269.58 |
| -3.97 | 332.88 | 124.44 | 123.98 | 14 35 12 | 582.7 | .52 | 326.67 |
| 30.19 | 250.33 | 140.75 | 106.86 | 21 9 34 | 4834.0 | 32.20 | 241.69 |
| MID-COMPSE EXECUTION ACCURACY | CRBIT DETERMINATION ACCURACY
      LNCH AZMTH LNCH TIME L-I TIME
         90.00 13 20 59 1357.83
90.00 15 34 20 922.82
100.00 14 4 44 1216.47
100.00 17 33 16 5827.45
110.00 14 15 30 1182.70
110.00 19 39 0 5433.99
                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5576.0 SGR 440.9 SG3 114.8

RRT - .5223 RRF - .5040 RTF .9592

SGB 5593.4 R23 .0009 R13 - .9592

SGI 5580.7 SG2 375.6 THA 177.62
                                                                                                                                                                                 ST 1840.2 SR 411.2 SS 453.8

CRT -.6673 CRS .5380 CST -.9864

LSA 1913.8 MSA 313.7 SSA 12.3

EL1 1861.1 EL2 302.8 ALF 171.29
      TOE-1.3520 TRA 5.7384 TC3-1.4750 BAU 1.0683
     RCE .5243 RRA -.1901 RC3 .0054 FAU .00676
FCE -.2408 FRA 1.4905 FC3 -.1080 BSP 18055
BCE 1.4501 BRA 5.7415 BC3 1.4750 FSP -383
                                                                                                                                                                                                    ARRIVAL DATE FEB 8 1968
LAUNCH DATE JUL 15 1967
                                                                                                            FLIGHT TIME 208.00
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 596.478
     RL 152.06 LAL -.00 LOL 291.85 VL 25.127 GAL 13.87 AZL 91.40 MCA 304.83 SMA 119.12 ECC .35996 INC 1.3954 V1 29.298
RP 108.40 LAP 1.15 LOP 236.68 VP 36.530 GAP 20.48 AZP 90.80 TAL 152.12 TAP 96.94 RCA 76.24 APO 161.99 V2 34.960
RC 195.431 GL -4.34 GP 6.49 ZAL 39.02 ZAP 172.63 ETS 115.27 ZAE 128.21 ETE 174.61 ZAC 32.61 ETC 13.17 CLP 176.50
    PLANETOCENTRIC CONIC
     C3 61.745 VHL 7.858 DLA -26.67 RAL 251.00 RAD 6569.2 VEL 13.531 PTH 2.47 VMP 12.660 DPA -11.08 RAP 233.14 ECC 2.0162 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        118.13 13 34 33
110.88 16 14 45
119.89 14 21 48
109.57 19 29 35
123.70 14 36 34
107.13 21 24 10
        90.00 13 10 23 1449.82
90.00 15 59 50 894.89
100.00 14 .0 19 1288.52
100.00 17 52 35 5819.46
110.00 14 15 54 1239.60
110.00 19 53 29 5441.14
                                                                                                                  133.46
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142.33
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                                                                                                276.97
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                                                                                                                  127.77
                                                                            -6.13
                                                                                                335.87
                                                                                                                                                                                         639.6
                                                                                                                                                                                                                 -1.66
                                                                                                                                                                                                                                     329.64
                                                                            30.05
                                                                                                250.83
                                                                                                                                                                                         4841.1
                                                                                                                                                                                                                 32.09
                                                                                                                                                                                                                                     242.22
                                                                                                                     144.92
                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5553.2 SGR 430.9 SG3 111.6

RRT -.5316 RRF -.5144 RTF .9629

SGB 5569.9 R23 .0003 R13 -.9630

SGI 5558.0 SG2 364.6 THA 177.63
                                                                                                                                                                                ST 1797.2 SR 397.6 SS 454.4

CRT -.6281 CRS .5054 CST -.9885

LSA 1869.4 M5A 315.6 SSA 11.8
     TOE-1.2831 TRA 6.2639 TC3-1.2469 BAU 1.0293
     RDE .5405 RRA -.2132 RC3 .0046 FAU .00544
FDE -.2209 FRA 1.5641 FC3 -.0763 8SP 18077
BDE 1.3923 BRA 6.2676 BC3 1.2469 FSP -373
                                                                                                                                                                                EL1 1815.0 EL2 306.3 ALF 171.86
                                                                                                          FLIGHT TIME 210.00
                                                                                                                                                                                                  ARRIVAL DATE FEB 10 1968
LAUNCH DATE JUL 15 1967
    HELIOCENTRIC CONIC
                                                                                                          DISTANCE 600.300
     RL 152.06 LAL -.00 LOL 291.85 VL 25.088 GAL 15.22 AZL 91.23 MCA 308.02 SMA 118.91 ECC .37593 INC 1.2260 V1 29.298 RP 108.44 LAP .97 LOP 239.87 VP 36.492 GAP 21.52 AZP 90.76 TAL 150.92 TAP 98.94 RCA 74.21 APO 163.61 V2 34.947 RC 197.134 GL -3.53 GP 6.39 ZAL 37.53 ZAP 172.20 ETS 121.94 ZAE 127.98 ETE 174.70 ZAC 30.53 ETC 14.06 CLP 175.52
    PLANETOCENTRIC CONIC
     C3 70.708 VHL 8.409 DLA -26.05 RAL 252.69 RAD 6569.4 VEL 13.859 PTH 2.53 VHP 13.287 OPA -11.81 RAP 235.26 ECC 2.1637
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        INJ AZMTH INJ TIME PO
118.31 13 28 2
110.50 16 35 50
119.82 14 19 5
109.47 19 46 51
123.29 14 37 36
107.45 21 37 42
                                                                                                                                                                                                                              355.01
         90.00 13 2 31 1531.31
90.00 16 21 12 878.25
100.00 13 56 28 1357.07
100.00 18 9 55 5815.76
110.00 14 16 0 1295.76
110.00 20 6 53 5449.83
                                                                                                                                                                                 931.3
                                                                                                  1.65 136.38
123.38 145.18
                                                                           .76
                                                                                                                                                                                                                 4.54
                                                                                                                                                                                          278.3
                                                                                                                                                                                                                22.58
                                                                                                                                                                                                                                    315.68
                                                                            19.97
                                                                                                323.38
                                                                                                               134,74
                                                                                                                                                                                         757.1
                                                                                                                                                                                                                                    340.69
                                                                           -2.19
                                                                                                347.21
                                                                                                                                                                                                                 1.79
                                                                          23.14
                                                                                                276.73
                                                                                                                   146.42
                                                                                                                                                                                        5215.A
                                                                                                                                                                                                               25.59
                                                                                                                                                                                                                                    268.78
                                                                                                                131.01
                                                                                                                                                                                                               -3.60
                                                                                                                                                                                                                                    332.57
                                                                            -8.24
                                                                                                338.85
                                                                                                                                                                                        695.8
                                                                                                                                                                                        4849.8
                                                                                                                                                                                                                                    242.86
                                                                          29.87
                                                                                                251.45
                                                                                                                    148.93
                                                                                                                                                                                                               31.96
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                   SGT 5526.7 SGR 419.6 SG3 108.6

RRT -.5405 RRF -.5246 RTF .9668

SGB 5542.6 R23 -.0001 R13 -.9668

SGI 5531.4 SG2 352.7 THA 177.64
                                                                                                                                                                                ST 1760.8 SR 383.0 SS 457.6

CRT -.5891 CRS .4748 CST -.9906

LSA 1832.3 MSA 314.7 SSA 11.2
      TOE-1.2136 TRA 6.8285 TC3-1.0370 BAU .9803
     RDE .5565 RRA -.2368 RC3 .0034 FAU .00407 FDE -.2026 FRA 1.6437 FC3 -.0499 BSP 18063
                                                                                                                                                                                 EL1 1775.6 EL2 306.9 ALF 172.47
     BDE 1.3351 BRA 6.8326 BC3 1.0370 FSP -363
                                                                                                            FLIGHT TIME 212.00
                                                                                                                                                                                                   APRIVAL DATE FER 12 1968
LAUNCH DATE JUL 15 1967
                                                                                                           DISTANCE 603.760
    HELIOCENTRIC CONIC
     RL 152.06 LAL -.00 LOL 291.85 VL 25.050 GAL 16.70 AZL 91.04 HCA 311.20 SMA 118.71 ECC .39371 INC 1.0411 V1 29.298
RP 108.48 LAP .78 LOP 243.06 VP 36.454 GAP 22.68 AZP 90.69 TAL 149.82 TAP 101.03 RCA 71.97 APO 165.44 V2 34.935
RC 198.819 GL -2.77 GP 6.30 ZAL 36.19 ZAP 171.64 ETS 128.05 ZAE 127.69 ETE 174.80 ZAC 28.51 ETC 15.10 CLP 174.49
    PLANETOCENTRIC CONIC
     C3 81.372 VHL 9.021 DLA -25.44 RAL 254.20 RAD 6569.6 VEL 14.238 PTH 2.59 VHP 13.985 DPA -12.49 RAP 237.34 ECC 2.3392
     C3 81.372 VHL 9.021 OLA -25.44 RAL 254.20 RAD 6569.6 VEL 14.238 PTH 2.59 VHP 13.985 DPA -12.49 RAP 237.34 ECC 2.3392 LNCH AZHTH LNCH TIME L-T TIME IN LAT INJ LONG IN RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 56 4 1606.27 -1.66 5.83 139.26 118.27 13 22 51 1006.3 2.13 359.20 90.00 16 39 44 868.47 20.20 322.75 149.16 110.27 16 54 12 268.5 22.78 315.03 100.00 13 52 56 1422.69 -4.41 350.83 137.74 119.60 14 16 39 822.7 -.43 344.29 100.00 18 25 33 5815.32 23.15 276.70 150.31 109.45 20 2 29 5215.3 25.59 268.75 110.00 14 15 47 1350.99 -10.29 341.81 134.15 122.78 14 38 18 751.0 -5.89 335.47 110.00 20 19 11 5459.78 29.66 252.15 152.76 107.82 21 50 11 4859.8 31.81 243.60 OIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY TOTAL 1447 TRA 7.4362 TC3 -.8450 BAU .9192 SGT 5463.7
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5496.1 SGR 406.9 SG3 105.7 ST 1729.9 SR 367.5 S5 463.7 RRT -.5488 RRF -.5343 RTF .9706 CRT -.5512 CRS .4467 CST -.9924 SGB 5511.2 R23 -.0005 R13 -.9706 LSA 1801.6 MSA 311.0 SSA 10.7 SG1 5500.7 SG2 339.9 THA 177.66 EL1 1742.1 EL2 304.4 ALF 173.11
      TDE-1.1447 TRA 7.4362 TC3 -.8450 BAU .9192
      RDE .5720 RRA -.2605 RC3 .0018 FAU .00263
      FOE -.1860 FRA 1.7303 FC3 -.0280 BSP 18027
      BDE 1.2796 BRA 7.4407 BC3 .8450 FSP -353
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ARRIVAL DATE FEB 14 1968

EL1 1644.7 EL2_ 270.1 ALF 175.46

JPL TM 33-99

LAUNCH DATE JUL 15 1967

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DISTANCE 606.777
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 25.015 GAL 18.33 AZL 90.84 MCA 314.39 SMA 118.52 ECC .41360 INC .8377 V1 29.298
RP 108.51 LAP .60 LOP 246.24 VP 36.418 GAP 23.98 AZP 90.59 TAL 148.84 TAP 103.23 RCA 69.50 APO 167.53 V2 34.923
RC 200.487 GL -2.05 GP 6.22 ZAL 35.01 ZAP 170.95 ETS 133.57 ZAE 127.34 ETE 174.89 ZAC 26.56 ETC 16.29 CLP 173.41
    C3 94.135 VHL 9.702 DLA -24.84 RAL 255.54 RAD 6569.8 VEL 14.679 PTH
                                                                                                    2.66 VHP 14.767 DPA -13.13 RAP 239.39 ECC 2.5492
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   12 50 25 1676.44
16 56 3 863.31
                                                     -3.92
                                                                    9.76
                                                                                142.06
                                                                                                118.07 13 18 22
                                                                                                                              1076.4
                                                                                                                                                22.89
                    16 56 3
                                   863.31
                                                     20.32
                                                                   322.42
                                                                                 152.90
                                                                                                 110.15
                                                                                                            17 10 26
                                                                                                                                263.3
                   13 49 31 1485.68
18 39 39 5817.34
       100.00
                                                                   354.32
                                                                                 140.63
                                                                                                 119.24
                                                                                                             14 14 16
                                                                                                                                 885.7
                                                                                                                                                -2.57
                                                                                                                                                              347.75
                                                     -6.51
                                                                                                109.51 20 16 36
122.16 14 38 37
108.22 22 1 38
       100.00
                                                                  276.84
                                                                                 153.98
                                                                                                                               5217.3
                                                   23.11
                    14 15 12 1405.10
20 30 27 5470.68
       110.00
                                                  -12.26
                                                                   344.75
                                                                                137.17
                                                                                                                                805.1
                                                                                                                                                -7.93
                                                                                                                                                             338.34
                                                                                                                               4870.7
                                                                                                                                             31.64
                    20 30 27
       110.00
                                                   29.43
                                                                  252.92
                                                                                 156.39
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 5462.5 SGR 392.9 SG3 103.0
RRT -.5564 RRF -.5433 RTF .9743
SGB 5476.6 R23 -.0009 R13 -.9743
                                                                                                                           ST 1703.5 SR 351.1 SS 472.5
CRT -.5145 CRS .4203 CST -.9941
    TDE-1.0749 TRA 8.0951 TC3 -.6692 BAU .8422
    RDE .5871 BRA -.2842 RC3 .0000 FAU .00104
FDE -.1704 FRA 1.8257 FC3 -.0096 BSP 17910
                                                                                                                           LSA 1776.4 MSA 304.7 SSA 10.2
                                                                      SG1 5466.9 SG2 326.2 THA 177.70
                                                                                                                           EL1 1713.4 ELZ 299.4 ALF 173.75
    BOE 1.2248 BRA 8.1001 BC3 .6692 FSP
                                                       -342
                                                                                                                                      ARRIVAL DATE FEB 16 1968
LAUNCH DATE JUL 15 1967
                                                                          FLIGHT TIME 216.00
                                                                          DISTANCE 609.240
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 24.980 GAL 20.13 AZL 90.61 MCA 317.57 SMA 118.34 ECC .43590 INC .6110 V1 29.298
RP 108.55 LAP .41 LOP 249.42 VP 36.383 GAP 25.43 AZP 90.45 TAL 148.00 TAP 105.57 RCA 66.75 APO 169.92 V2 34.911
RC 202.138 GL -1.37 GP 6.14 ZAL 33.99 ZAP 170.13 ETS 138.51 ZAE 126.92 ETE 175.00 ZAC 24.70 ETC 17.66 CLP 172.26
   PLANETOCENTRIC CONIC
    C3 109.514 VHL 10.465 DLA -24.26 RAL 256.70 RAD 6570.1 VEL 15.194 PTH
                                                                                                    2.73 VHP 15.647 DPA -13.72 RAP 241.38 ECC 2.8023
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 45 11 1742.69 -6.03 13.48 144.74 117.72 13 14 14 1142.7 -2.27 6.81
        90.00
                    17 10 30
                                    861.39
                                                     20.37
                                                                   322.30
                                                                                 156.40
                                                                                                  110.11
                                                                                                             17 24 52
                                                                                                                                 261.4
                                                                                                                                                22.93
                                                                                                                                                              314.56
                                                                                                 118.76 14 11 49
109.61 20 29 20
121.44 14 38 30
108.64 22 12 1
                    13 46 3 1546.18
       100,00
                                                     -8.51
                                                                  357.70
                                                                                 143,40
                                                                                                                                 946.2
                                                                                                                                                -4.51
                                                                                                                                                              351.08
                    18 52 19 5821.17
14 14 12 1457.88
20 40 39 5482.23
                                                                                 157.43
                                                                                                                                               25.48
                                                                                                                                                              269.15
       100.00
                                                    23.02
                                                                  277.09
                                                                                                                               5221.2
                                                                                                                                857.9
       110.00
                                                   -14.16
                                                                   347.67
                                                                                140.06
                                                                                                                                                -9.89
                                                                                                                                                              341.17
       110.00
                   20 40 39
                                                    29.19
                                                                  253.72
                                                                                 159.81
                                                                                                                               4882.2
                                                                                                                                                31.45
                                                                                                                                                              245.25
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5423.4 SGR 377.7 SG3 100.4
RRT -.5630 RRF -.5515 RTF .9779
                                                                                                                           ST 1680.6 SR 334.3 SS 484.2
CRT -.4814 CRS .3982 CST -.9955
    TOE-1.0126 TRA 8.8048 TC3 -.5122 BAU .7499
    RDE .6021 RRA -.3069 RC3 -.0017 FAU-.00066
FDE -.1577 FRA 1.9297 FC3 .0052 8SP 17884
BDE 1.1781 BRA 8.8101 BC3 .5122 FSP -334
                                                                                                                           LSA 1755.8 MSA 296.0 SSA 9.6
EL1 1688.5 EL2 291.6 ALF 174.36
                                                                      SGB 5436.5 R23 -. 0011 R13 -. 9779
                                                                      SG1 5427.6 SG2 311.9 THA 177.75
                                                                          FLIGHT TIME 214.00
                                                                                                                                     ARRIVAL DATE FEB 18 1968
LAUNCH DATE JUL 15 1967
                                                                         DISTANCE 611.010
   HELIOCENTRIC CONIC
    RL 152.06 LAL -.00 LOL 291.85 VL 24.948 GAL 22.13 A7L 90.36 MCA 320.75 SMA 118.17 ECC .46099 INC .3548 V1 29.298 RP 108.59 LAP .22 LOP 252.60 VP 36.350 GAP 27.08 A7P 90.28 TAL 147.33 TAP 108.08 RCA 63.69 APO 172.64 V2 34.899 RC 203.771 GL -.72 GP 6.06 ZAL 33.14 ZAP 169.18 ETS 142.92 ZAE 126.41 ETE 175.11 ZAC 22.93 ETC 19.21 CLP 171.02
   PLANETOCENTRIC CONIC
    C3 128.184 VHL 11.322 DLA -23.69 RAL 257.66 RAD 6570.4 VEL 15.796 PTH 2.80 VHP 16.643 DPA -14.26 RAP 243.30 ECC 3.1096
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             117.25 13 10 10
110.11 17 37 39
118.18 14 9 10
109.75 20 40 44
120.64 14 37 54
109.06 22 21 22
       90.00 12 40 5 1805.46

90.00 17 23 17 861.71

100.00 13 42 26 1604.21

100.00 19 3 38 5826.24

110.00 14 12 45 1509.12

110.00 20 49 48 5494.09
                                                                                                                           1205.5
261.7
                                                                              147.28
                                                                                                                                                          10.33
                                                                                                                                           -4.29
                                                   -8.00
                                                                  17.04
                                                                                                                                               22.92
                                                                                 159.62
                                                                                                                                                             314.58
                                                   20.36
                                                                  322.32
                                                                                                                               1004.2
                                                                                                                                                             354.30
                                                                                                                                               -6.55
      100.00
                                                  -10.40
                                                                     .97
                                                                                 146.01
                                                                 277.42
                                                                                 160.61
                                                                                                                               5226.2
                                                                                                                                              25.39
                                                                                                                                                             269.50
                                                  22.90
      100.00
                                                                                                                                           -11.77
31.25
                                                                                                                                                             343.94
      110.00
                                                  -15.96
                                                                  350.55
                                                                                 142.79
                                                                                                                               9/19.1
                                                                                                                                                             246.12
      110.00
                                                28.93
                                                                 254.55
                                                                                 162.97
                                                                                                                               4894.1
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ST 1659.8 SR 316.8 SS 499.1

CRT - 4509 CRS .3785 CST -.9967

LSA 1738.6 MSA 285.3 SSA 9.1

EL1 1666.1 EL2 281.7 ALF 174.94
                                                                     SCT 5380.3 SCR 361.1 SC3 97.9
RRT -.5683 RRF -.5583 RTF .9814
SCB 5392.4 R23 -.0014 R13 -.9814
    TOE -.9543 TRA 9.5772 TC3 -.3706 BAU .6352
    RDE .6168 RRA -.3282 RC3 -.0035 FAU-.00260
    FOE -.1467 FRA 2.0452 FC3 .0176 BSP 17821
BOE 1.1363 BRA 9.5828 BC3 .3706 FSP -325
                                                                      SG1 5384.3 SG2 296.9 THA 177.81
                                                                                                                                      ARRIVAL DATE FEB 20 1968
LAUNCH DATE JUL 15 1967
                                                                          FLIGHT TIME 220.00
  HELIOCENTRIC CONIC
                                                                         DISTANCE 611.903
   RL 152.06 LAL -.00 LOL 291.85 VL 24.918 GAL 24.38 AZL 90.06 MCA 323.92 SMA 118.01 ECC .48931 INC .0618 V1 29.298
RP 108.62 LAP .04 LOP 255.77 VP 36.319 GAP 28.97 AZP 90.05 TAL 146.87 TAP 110.79 RCA 60.27 APO 175.75 V2 34.888
RC 205.386 GL -.11 GP 5.98 ZAL 32.49 ZAP 168.09 ETS 146.85 ZAE 125.79 ETE 175.22 ZAC 21.28 ETC 20.96 CLP 169.68
   PLANETOCENTRIC CONIC
    C3 151.037 VHL 12.290 OLA -23.13 RAL 258.42 RAO 6570.6 VEL 16.504 PTH 2.88 VHP 17.778 DPA -14.76 RAP 245.12 ECC 3.4857
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              116.69 13 6 0
110.16 17 48 54
                                                                                                                             1265.0
                   12 34 55 1864.98
                                                                                149.64
                                                                                                                                                              13.68
                                                    -9.84
                                                                   20.44
                                                                                                                                               -6.18
       90.00
                   17 34 31
                                                                                                                                               22.88
       90.00
                                   863.50
                                                    20.32
                                                                  322.44
                                                                                 162.56
                                                                                                                                263.5
                                                                                                                                                             314.70
                   13 38 30 1659.73
19 13 36 5832.03
                                                                                                 117.52 14 6 10
                                                                                                                                                             357.40
                                                                                                                               1059.7
                                                                                                                                                -8.38
      100.00
                                                  -12.16
                                                                    4.15
                                                                                 148.43
                                                                                                            20 50 48
                                                                                                                                               25.28
      100.00
                                                  22.77
                                                                  277.80
                                                                                 163.52
                                                                                                 109.91
                                                                                                                               5232.0
                                                                                                                                                             269.89
                                                                                                                                             -13,56
                                                                                                 119.76 14 36 44
109.48 22 29 36
                                                                                                                                958.6
      110.00
                   14 10 45 1558.61
                                                  -17.65
                                                                  355.39
                                                                                 145.33
                                                                                                                                                             346.66
                   20 57 51
                                                                 255.37
                                                                                                                              4905.9
                                                                                                                                                             246.98
      110.00
                                                                                                                                               31.04
                                  5505.92
                                                  28.66
                                                                                 165.86
  DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 1639.7 SR 299.0 SS 517.4
CRT -.4234 CRS .3613 CST -.9976
    TOE -.9034 TRAID.4189 TC3 -.2440 BAU .4927
                                                                     SGT 5332.6 SGR 343.2 SG3 95.6
RRT -.5717 RRF -.5631 RTF .9846
SGB 5343.7 R23 -.0016 R13 -.9846
    ROE .6314 RRA -.3472 RC3 -.0050 FAU-.00486
                                                                                                                        LSA 1723.7 MSA 273.0 SSA 8.5
    FOE -.1380 FRA 2.1741 FC3 .0279 BSP 17747
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FLIGHT TIME 214.00

SG1 5336.3 SG2 281.4 THA 177.89

BOE 1.1021 BRA10.4247 BC3 .2440 FSP -318

ARRIVAL CATE SEP 24 1967

LAUNCH DATE JUL 16 1967

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DISTANCE 187.799
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 26.935 GAL -10.61 AZL 92.98 MCA 82.96 SMA 130.09 ECC .24785 INC 2.9814 VI 29.300 RP 108.52 LAP --2.96 LOP 15.75 VP 37.759 GAP -10.77 AZP 90.37 TAL 217.37 TAP 300.33 RCA 97.85 APO 162.34 V2 34.920 RC 54.330 GL -13.70 GP -10.38 ZAL 146.89 ZAP 20.23 ETS 29.10 ZAE 149.93 ETE 359.63 ZAC 89.83 ETC 13.80 CLP -17.47
   PLANETOCENTRIC CONIC
                                                       .80 RAL 141.12 RAO 6568.3 VEL 12.457 PTH 2.25 VHP 7.288 DPA
     C3 33.795 VHL 5.813 DLA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         107.01 1 47 23
71.66 14 40 32
                       1 7 54 2368.64
13 17 49 4962.96
2 29 37 2105.06
14 38 47 4701.77
                                                                                                   11.55
                                                                                                                                                                 1768.6
                                                                                                                                                                                   -20.44
                                                                 -22.98
                                                                                    51.48
          90.00
                                                                                                                                                                  4363.0
                                                                  21.96
                                                                                    217.16
                                                                                                         11.04
          90.00
                                                                                                                           108.11 3 4 42

70.55 15 57 9

111.21 4 10 12

67.44 17 1 2
                                                                                                                                            3 4 42
                                                                                                                                                                 1505.1
                                                                                                                                                                                                          23.93
                                                                -24.20
                                                                                     31.68
                                                                                                         11.13
         100.00
                                                                                                                                                                 4101.8
                                                                                                                                                                                                         189.88
                                                                  23.16
                                                                                    197.50
                                                                                                         10.60
        100.00
                                                                                                                                                                 1288.8
                                                                                                                                                                                 -24.32
23.10
                                                                                                                                                                                                          6.20
                           3 38 43 1868.77
15 46 11 4490.83
                                                                                     13.97
                                                                                                         9.84
        110.00
                                                                -27.45
                                                                                                                                                                 3890.8
                                                                                    180.13
                                                                                                           9.23
        110.00
                        15 46 11
                                                                  26.39
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 243.3 SR 395.5 SS 135.6

CRT -.8738 CRS -.6905 CST .2778

LSA 460.3 MSA 146.5 SSA 25.8
                                                                                         $6T 594.5 $6R 431.4 $63 132.7

RRT -.2089 RRF .3020 RTF -.5759

$6B 734.5 R23 -.0699 R13 .6011
     TOE .2298 TRA - .2976 TC3 .3998 BAU .1812
     ROE -.3976 RRA -.1792 RC3 -.0308 FAU .04779
     FOE -.1290 FRA -.5698 FC3-1.2242 BSP 1511
BOE .4593 BRA .3474 BC3 .4010 FSP -338
                                                                                                                                                            EL1 452.7 EL2 103.4 ALF 119.99
                                                                                         SG1 607.5 SG2 412.8 THA 163.68
                                                                                                                                                                           ARRIVAL DATE SEP 26 1967
                                                                                              FLIGHT TIME 72.00
LAUNCH DATE JUL 16 1967
                                                                                              DISTANCE 194.595
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 27.073 GAL -10.52 AZL 92.87 MCA 86.14 SMA 131.05 ECC .24119 INC 2.8683 V1 29.300 RP 108.48 LAP -2.86 LOP 18.94 VP 37.869 GAP -9.87 AZP 90.19 TAL 218.69 TAP 304.84 RCA 99.45 APO 162.66 V2 34.932 RC 56.016 GL -13.47 GP -11.10 ZAL 148.07 ZAP 23.26 ETS 26.44 ZAE 150.16 ETE 357.60 ZAC 89.93 ETC 13.81 CLP -20.57
   PLANETOCENTRIC CONIC
                                                                                                                                                                      -6.42 RAP 175.25 ECC 1.5383
    C3 32.709 VHL 5.719 DLA 1.40 RAL 140.07 RAD 6568.3 VEL 12.413 PTH 2.24 VHP 6.826 DPA -6.42 RAP 175.25 ECC 1.5383 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 59 18 2378.87 -23.19 52.17 10.12 106.73 1 38 57 1778.9 -20.68 44.39 90.00 13 18 3 4936.26 21.37 215.41 9.25 70.97 14 40 20 4336.3 18.58 207.85 100.00 2 21 18 2114.39 -24.39 32.31 9.71 107.84 2 56 32 1514.4 -21.72 24.52 100.00 14 38 45 4675.97 22.56 195.82 8.79 69.86 15 56 41 4076.0 19.62 188.26 110.00 3 31 2 1896.12 -27.63 14.47 8.44 110.97 4 2 38 1296.1 -24.53 6.67 110.00 15 45 30 4467.01 25.76 178.56 7.40 66.71 16 59 57 3867.0 22.38 171.03
                                                     1.40 RAL 140.07 RAD 6568.3 VEL 12.413 PTH
     C3 32.709 VHL 5.719 DLA
                                                                                                                                2.24 VHP 6.826 DPA
                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 599.2 SGR 439.2 SG3 150.5
RRT -.2364 RRF .3474 RTF -.5777
SGB 743.0 R23 -.0853 R13 .6112
SG1 616.3 SG2 415.0 THA 161.58
                                                                                                                                                             ST 239.8 SR 397.5 SS 142.4

CRT -.8733 CRS -.6315 CST .1995

LSA 459.6 MSA 154.5 SSA 26.2
     TOE .2232 TRA -.2842 TC3 .4174 BAU .1838
      ROE -.3928 RRA -.1861 RC3 -.0500 FAU .05298
     FDE -.1251 FRA -.6678 FC3-1.4022 BSP 1570
BDE .4518 BRA .3397 BC3 .4204 FSP -394
                                                                                                                                                             EL1 452.8 EL2 102.6 ALF 119.44
     BOE .4518 BRA .3397 BC3 .4204 FSP
                                                                                                                                                                           ARRIVAL DATE SEP 28 1967
                                                                                              FLIGHT TIME 74.00
LAUNCH DATE JUL 16 1967
                                                                                              DISTANCE 201.371
    RL 152.05 LAL -.00 LOL 292.80 VL 27.194 GAL -10.45 AZL 92.76 MCA 89.33 SMA 131.91 ECC .23543 INC 2.7560 V1 29.300 RP 108.45 LAP -2.76 LOP 22.13 VP 37.967 GAP -9.02 AZP 90.03 TAL 219.92 TAP 309.25 RCA 100.85 APO 162.96 V2 34.945 RC 57.772 GL -13.19 GP -11.89 TAL 149.17 TAP 26.49 ETS 24.28 ZAE 150.64 ETE 355.32 ZAC 90.20 ETC 13.80 CLP -23.84
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 31.775 VHL 5.637 DLA 2.00 RAL 139.14 RAD 6568.3 VEL 12.375 PTH 2.23 VHP 6.397 DPA -7.10 RAP 174.85 ECC 1.5229
     C3 31.775 VHL 5.637 OLA 2.00 RAL 139.14 RAD 6568.3 VEL 12.375 PTH 2.23 VHP 6.397 OPA -7.10 RAP 174.85 ECC 1.5229 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LAT INJ 2 LONG 90.00 0 51 10 2390.15 -23.41 52.92 8.88 106.41 1 31 0 1790.1 -20.93 45.12 90.00 13 18 48 4910.39 20.79 213.74 7.65 70.33 14 40 39 4310.4 17.92 206.24 100.00 2 13 26 2124.78 -24.61 33.00 8.48 107.53 2 48 51 1524.8 -21.98 25.19 100.00 14 39 13 4651.00 21.97 194.20 7.19 69.20 15 56 44 4051.0 18.94 186.71 110.00 3 23 49 1904.50 -27.84 15.03 7.23 110.69 3 55 34 1304.5 -24.77 7.21 110.00 15 45 20 4444.04 25.13 177.07 5.77 66.03 16 59 24 3844.0 21.68 169.62
                        3 23 49 1904.50
15 45 20 4444.04
                                                                  25.13
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SGT 598.4 SGR 448.4 SG3 170.4
RRT -.2600 RRF .3963 RTF -.5705
SGB 747.7 R23 -.1072 R13 .6164
                                                                                                                                                             ST 234.1 SR 398.4 55 149.3
      TOE .2144 TRA -.2759 TC3 .4271 BAU .1840
                                                                                                                                                           CRT -.8675 CRS -.5669 CST .1075
LSA 456.4 MSA 163.9 SSA 26.5
      ROE - .3876 RRA - .1945 RC3 - .0726 FAU .05873
      FOE -.1170 FRA -.7749 FC3-1.6001 BSP 1582
                                                                                          SG1 620.1 SGZ 417.8 THA 159.18
                                                                                                                                                           EL1 450.5 EL2 103.0 ALF 118.64
      BDE .4430 BRA .3376 BC3 .4332 FSP
                                                                                                                                                                            ARRIVAL DATE SEP 30 1967
                                                                                               FLIGHT TIME 76.00
LAUNCH DATE JUL 16 1967
                                                                                               OISTANCE 208.125
     RL 152.05 LAL -.00 LOL 292.80 VL 27.299 GAL -10.38 AZL 92.64 MCA 92.52 SMA 132.66 ECC .23046 INC 2.6438 V1 29.300 RP 108.41 LAP -2.64 LOP 25.32 VP 38.054 GAP -8.20 AZP 89.88 TAL 221.02 TAP 313.55 RCA 102.09 APO 163.24 V2 34.957 RC 59.590 GL -12.86 GP -12.75 ZAL 150.16 ZAP 29.92 ETS 22.47 ZAE 151.37 ETE 352.71 ZAC 90.67 ETC 13.75 CLP -27.30
    HEI TOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 43 30 2402.25 -23.64 53.73 7.82 106.06 1 23 33 1402 2 21 21
     PLANETOCENTRIC CONIC
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2 6 3 2135.97
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          100.00
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3 17 5 1913.68
15 45 40 4421.81
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110.39 16 59 22
          100.00
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20.98
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          110.00
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                                                                                     175.65
                                                                  24.51
                                                                                                            4.33
          110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 227.8 SR 398.3 SS 157.1

CRT -.8573 CRS -.5014 CST .0097

LSA 451.6 MSA 174.7 SSA 26.7

EL1 446.8 EL2 104.5 ALF 117.77
                                                                                          SCT 593.0 SGR 459.8 SG3 192.5
RRT -.2811 RRF .4496 RTF -.5556
SGB 750.4 R23 -.1339 R13 .6198
       TDE .2051 TRA -.2718 TC3 .4296 BAU .1825
      TOE -.3819 RRA -.2048 RC3 -.0991 FAU .06513
FOE -.1057 FRA -.8928 FC3-1.8212 BSP 1579
BOE .4355 BRA .3403 BC3 .4409 FSP -521
                                                                                           SG1 620.8 SG2 421.5 THA 156.24
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FLIGHT TIME 70.00

ARRIVAL DATE OCT 2 1967

EL1 419.2 EL2 127.2 ALF 114.20

LAUNCH DATE JUL 16 1967

DISTANCE 214.854 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.389 GAL -10.31 AZL 92.53 MCA 95.71 SMA 133.32 ECC .22617 INC 2.5309 V1 29.300 RP 108.37 LAP -2.52 LOP 28.52 VP 38.130 GAP -7.43 AZP 89.75 TAL 222.01 TAP 317.72 RCA 103.17 APO 163.48 V2 34.970 RC 61.464 GL -12.50 GP -13.70 ZAL 151.07 ZAP 33.58 ETS 20.88 ZAE 152.33 ETE 349.66 ZAC 91.35 ETC 13.65 CLP -30.96 PLANETOCENTRIC CONIC 3.20 RAL 137.66 RAD 6568.2 VEL 12.313 PTH 2.22 VHP 5.637 OPA -8.46 RAP 173.44 ECC 1.4977 C3 30.240 VHL 5.499 DLA INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 0 36 20 2414.97 13 21 49 4860.70 6.93 105.70 1 16 34 1815.0 -23.A7 54.59 90.00 14 42 50 4260.7 16.61 203.18 90.00 19.62 210.57 5.03 69.16 2 34 57 1547.8 26.68 6.55 106.84 -22.52 1 59 10 2147.79 14 41 40 4603.11 100.00 -25.07 34.56 68.01 15 58 23 4003.1 17.51 100.00 20.78 191.14 4.54 3 42 53 -25.29 110.05 1323.5 110.00 3 10 50 1923.48 -28.29 16.33 5.35 16 59 49 3800.2 64.79 20.29 110.00 15 46 29 4400.19 23.89 174.27 3.07 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 583.0 SGR 474.0 SG3 217.0 RRT -.2964 RRF .5062 RTF -.5301 SGB 751.4 R23 -.1652 R13 .6224 ST 221.4 SR 397.0 SS 165.6 CRT -.8417 CRS -.4361 CST -.0943 TOE .1956 TRA -.2725 TC3 .4240 BAU .1793 ROE - .3754 RRA - .2171 RC3 - .1299 FAU .07218 LSA 445.5 MSA 186.7 SSA 26.7 FDE -.0905 FRA-1.0205 FC3-2.0665 BSP 1566 BDE .4233 BRA .3484 BC3 .4434 FSP -596 SG1 618.4 SG2 426.8 THA 152.56 EL1 441.7 EL2 107.5 ALF 116.86 ARRIVAL DATE OCT 4 1967 FLIGHT TIME 80.00 LAUNCH DATE JUL 16 1967 DISTANCE 221.556 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.466 GAL -10.25 AZL 92.42 HCA 98.91 SMA 133.89 ECC .22249 INC 2.4167 VI 29.300 RP 108.33 LAP -2.39 LOP 31.72 VP 38.197 GAP -6.68 AZP 89.63 TAL 222.87 TAP 321.77 RCA 104.10 APO 163.68 VZ 34.983 RC 63.388 GL -12.09 GP -14.74 ZAL 151.88 ZAP 37.46 ETS 19.44 ZAE 153.51 ETE 346.02 ZAC 92.24 ETC 13.49 CLP -34.84 PLANETOCENTRIC CONIC 2.21 VHP 5.306 DPA -9.13 RAP 172.39 ECC 1.4870 C3 29.591 VHL 5.440 DLA 3.79 RAL 137.10 RAD 6568.2 VEL 12.287 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 29 37 2428.18 13 24 3 4836.61 1 52 44 2160.09 14 43 38 4579.94 3 5 3 1933.75 -21.78 1828.2 105.31 1 10 5 90.00 -24.11 55.4A 6.20 68.63 14 44 40 4236.6 15.96 201.72 90.00 19.03 209.05 3.97 2 28 44 1560.1 -22.81 27.48 100.00 -25.31 35.39 5.83 106.46 67,47 15 59 57 182.37 3.47 3979.9 16.95 100.00 20.18 189.68 110.00 3 37 17 1333.7 -25.57 109.69 -28.52 17.03 4.65 64.22 17 0 47 15 47 48 3779.0 19.61 110.00 4379.05 23.27 172.94 1.99 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 569.6 SGR 492.5 SG3 244.1 RRT -.3038 RRF .5658 RTF -.4931 SGB 753.0 R23 -.1985 R13 .6280 ST 216.1 SR 394.7 SS 175.4 CRT -.8205 CRS -.3772 CST -.1961 TOE .1870 TRA -.2779 TC3 .4107 BAU .1752 RDE -.3682 RRA -.2314 RC3 -.1656 FAU .07996 LSA 438.8 MSA 200.0 SSA 26.7 FDE -.0726 FRA-1.1587 FC3-2.3394 BSP 1571 BDE .4130 BRA .3616 BC3 .4428 FSP -684 EL1 435.9 EL2 111.9 ALF 116.03 SG1 614.9 SG2 434.7 THA 147.83 ARRIVAL DATE OCT 6 1967 FLIGHT TIME 82.00 LAUNCH DATE JUL 16 1967 DISTANCE 228.230 RL 152.05 LAL -.00 LOL 292.80 VL 27.530 GAL -10.19 A7L 92.30 MCA 102.10 SMA 134.37 ECC .21931 INC 2.3004 V1 29.300 RP 108.29 LAP -2.25 LOP 34.91 VP 38.255 GAP -5.97 A7P 89.52 TAL 223.59 TAP 325.70 RCA 104.90 APO 163.83 V2 34.996 RC 65.357 GL -11.65 GP -15.85 7AL 152.61 ZAP 41.57 ETS 18.09 ZAE 154.85 ETE 341.60 ZAC 93.37 ETC 13.26 CLP -38.95 PLANETOCENTRIC CONIC 4.39 RAL 136.66 RAD 6568.2 VEL 12.263 PTH 2.21 VMP 5.006 DPA -9.79 RAP 171.11 ECC 1.4772 C3 28.995 VHL 5.385 DLA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 23 22 2441.78 13 26 47 4812.82 1841.8 -24.35 5.61 104.91 1 4 4 -22.07 48.48 56.41 90.00 68.12 14 47 0 200.28 13 26 47 18.43 207.56 3.06 4212.8 15.30 90.00 1 46 46 2172.77 14 46 4 4557.07 28.31 5.25 106.07 2 22 59 1572.8 -23.10 100.00 -25.55 36.26 16 2 1 181.00 100.00 14 46 4 19.58 188.25 2.56 66.95 3957.1 16.29 2 59 45 1944.38 15 49 35 4358.22 -28.77 17,76 4.10 109.32 3 32 9 1344.4 -25.86 9.79 110.00 63.68 17 2 14 3758.2 18.92 164.49 22.65 171.65 1.05 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 210.6 SAM=2390.9 SS 185.2 CRT -.7878 CRS -.3155 CST -.3133 LSA 429.8 MSA 214.5 SSA 26.7 SGT 551.0 SGR 515.3 SG3 272.8 RRT - 2896 RRF .6242 RTF - .4332 SGB 754.4 R23 - .2307 R13 .6371 TOE .1771 TRA -.2908 TC3 .3848 BAU .1692 RDE -.3597 RRA -.2475 RC3 -.2062 FAU .08819 FDE -.0472 FRA-1.3012 FC3-2.6332 BSP 1544 BDE .4009 BRA .3818 BC3 .4366 FSP -776 EL1 427.9 EL2 118.5 ALF 115.03 SG1 607.4 SG2 447.4 THA 141.51 BDE .4009 BRA .3818 BC3 .4366 FSP FLIGHT TIME 84.00 ARRIVAL DATE OCT 8 1967 LAUNCH DATE JUL 16 1967 DISTANCE 234.875 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.583 GAL -10.13 AZL 92.18 MCA 105.30 SMA 134.76 ECC .21656 INC 2.1812 VI 29.300 RP 108.25 LAP -2.10 LOP 38.11 VP 38.305 GAP -5.29 AZP 89.42 TAL 224.18 TAP 329.48 RCA 105.58 APO 163.94 VZ 35.009 RC 67.365 GL -11.17 GP -17.05 ZAL 153.24 ZAP 45.92 ETS 16.77 ZAE 156.29 ETE 336.19 ZAC 94.72 ETC 12.94 CLP -43.31 PLANETOCENTRIC CONIC 4.99 RAL 136.33 RAD 6568.1 VEL 12.240 PTH 2.20 VHP 4.740 DPA -10.42 RAP 169.59 ECC 1.4680 C3 28.437 VHL 5.333 DLA INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -24.60 57.36 5.16 104.49 0 58 28 1855.7 -22.36 49.40 LNCH AZMTH LNCH TIME L-I TIME 1855.7 -22.36 104.49 0 58 28 67.63 14 49 50 0 17 32 2455.75 13 30 1 4789.15 5.16 -24.60 57,36 198.86 17.82 206.08 2.30 4149.1 14.64 2 17 40 16 4 35 1 41 14 2185.80 37.15 4.81 105.66 1585.8 -23.40 29.17 -25.79 18.97 1.79 66.45 3934.3 15.62 179.64 100.00 14 49 1 4534.33 186.84 3 27 27 17 4 10 1955.35 4337.55 10.51 2 54 52 -29.01 18.52 3.68 108.93 1355.3 -26.15 170.37 110.00 15 51 52 22.02 .26 63.16 3737.5 18.24 163.28 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 207.4 SR 385.9 SS 196.0 CRT -.7455 CRS -.2620 CST -.4267 SGT 531.6 SGR 544.1 SG3 303.7 RRT -.2515 RRF .6813 RTF -.3493 SGB 760.7 R23 -.2422 R13 .6628 TOE .1687 TRA -.3095 TC3 .3487 BAU .1637 ROE -.3501 RRA -.2655 RC3 -.2525 FAU .09696 LSA 420.3 MSA 230.2 SSA 26.6 FOE -.0182 FRA-1.4489 FC3-2.9518 BSP 1547 BOE .3886 BRA .4078 BC3 .4306 FSP -879

FLIGHT TIME 78.00

SG1 602.0 SG2 465.0 THA 132.37

ARRIVAL DALE. OCT 10 1967

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LAUNCH CATE JUL 16 1967
                                                                                   DISTANCE 241.489
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 27.625 GAL -10.07 AZL 92.06 MCA 108.50 SMA 135.08 ECC .21419 INC 2.0582 VI 29.300 RP 108.20 LAP -1.95 LOP 41.31 VP 38.348 GAP -4.64 AZP 89.35 TAL 224.64 TAP 333.14 RCA 106.15 APO 164.01 V2 35.023 RC 69.409 GL -10.66 GP -18.32 ZAL 153.80 ZAP 50.47 ETS 15.43 ZAE 157.74 ETE 329.51 ZAC 96.31 ETC 12.51 CLP -47.90
   PLANETOCENTRIC CONIC
    C3 27.904 VHL 5.282 DLA 5.60 RAL 136.12 RAD 6568.1 VEL 12.218 PTH 2.20 VHP 4.506 DPA -11.04 RAP 167.83 ECC 1.4592 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   H LNCH TIME L-I TIME

0 12 6 2470.08

13 33 46 4765.37

1 36 5 2199.18

14 52 28 4511.51

2 50 23 1966.62

15 54 39 4316.83
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67.16 14 53 11
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                                                         -24.84
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         90.00
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       100.00
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62.67 17 6 35
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                                                          21.37
                                                                          169.11
       110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE .1596 TRA -.3371 TC3 .2972 BAU .1585

RDE -.3385 RRA -.2845 RC3 -.3037 FAU .10572

FDE .0214 FRA-1.5903 FC3-3.2799 BSP 1541

BDE .3742 BRA .4411 BC3 .4250 FSP -979
                                                                              SGT 513.4 SGR 577.8 SG3 334.8
RRT -.1699 RRF .7329 RTF -.2248
SGB 772.9 R23 -.1921 R13 .7145
                                                                                                                                        ST 205.4 SR 378.8 SS 206.6
CRT -.6860 CRS -.2031 CST -.5535
                                                                                                                                          LSA 408.3 MSA 247.0 SSA 26.5
                                                                                                                                         EL1 408.0 EL2 138.8 ALF 113.25
                                                                              SG1 600.1 SG2 487.1 THA 117.56
                                                                                                                                                       ARRIVAL DATE OCT 12 1967
                                                                                   FLIGHT TIME 88.00
LAUNCH DATE JUL 16 1967
                                                                                   DISTANCE 248.073
  HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 27.657 GAL -10.00 AZL 91.93 MCA 111.71 SMA 135.32 ECC .21213 INC 1.9304 V1 29.300 RP 108.16 LAP -1.79 LOP 44.52 VP 38.383 GAP -4.02 AZP 89.29 TAL 224.97 TAP 336.67 RCA 106.62 APO 164.03 V2 35.036 RC 71.485 GL -10.10 GP -19.66 ZAL 154.26 ZAP 55.23 ETS 14.03 ZAE 159.05 ETE 321.32 ZAC 98.10 ETC 11.95 CLP -52.73
  PLANETOCENTRIC CONIC
                                                                                                                 2.19 VHP 4.305 DPA -11.64 RAP 165.84 ECC 1.4507
    C3 27.386 VHL 5.233 DLA 6.22 RAL 136.02 RAD 6568.1 VEL 12.197 PTH 2.19 VHP 4.305 DPA -11.64 RAP 165.84 ECC 1.4507 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                             6.22 RAL 136.02 RAD 6568.1 VEL 12.197 PTH
                   0 6 59 2484.87
13 38 3 4741.26
1 31 17 2212.98
14 56 27 4488.37
                                                                           59.35
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                                                                                                            103.60
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3888.4
14.24
-26.75
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                                                          -26.28
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108.10 3 19 15
62.18 17 9 32
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       100.00
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15 57-86 4295.86
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                                                         -29.51
       110.00
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167.84 359.08
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       110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 504.5 SGR 617.3 SG3 365.8

RRT -.0422 RRF .7790 RTF -.0594

SGB 797.3 R23 -.0384 R13 .7785

SG1 618.4 SG2 503.2 THA 95.87
                                                                                                                                          ST 206.9 SR 370.0 SS 217.6
CRT -.6122 CRS -.1475 CST -.6740
    TOE .1518 TRA -.3723 TC3 .2316 BAU .1568
    ROE -. 3251 RRA -. 3043 RC3 -. 3602 FAU .11437
                                                                                                                                        LSA 395.3 MSA 264.8 SSA 26.4
EL1 395.3 EL2 153.1 ALF 112.45
    FDE .0682 FRA-1.7227 FC3-3.6154 BSP 1587
    BDE .3588 BRA .4808 BC3 .4283 FSP -1080
                                                                                                                                                      ARRIVAL DATE OCT 14 1967
                                                                                   FLIGHT TIME 90.00
LAUNCH DATE JUL 16 1967
                                                                                   DISTANCE 254.626
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 27.680 GAL -9.93 AZL 91.80 MCA 114.91 SMA 185.50 ECC .21034 INC 1.7966 VI 29.300 RP 108.12 LAP -1.63 LOP 47.72 VP 38.412 GAP -3.42 AZP 89.24 TAL 225.17 TAP 340.08 RCA 107.00 APO 164.00 V2 35.049 RC 73.590 GL -9.49 GP -21.05 ZAL 154.65 ZAP 60.16 ETS 12.54 ZAE 160.05 ETE 311.52 ZAC 100.07 ETC 11.26 CLP -57.78
   PLANETOCENTRIC CONIC
    C3 26.876 VHL 5.184 DLA 6.85 RAL 136.02 RAD 6568.1 VEL 12.176 PTH 2.19 VHP 4.137 CPA -12.21 RAP 163.66 ECC 1.4423
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                    0 2 8 2500.24

13 42 55 4716.54

1 26 45 2227.34

15 1 0 4464.68

2 42 28 1990.37

16 1 46 4274.41
                                                                                                                                                           -23.26
                                                                                        4.55
                                                                                                          1900.2
                                                         -25.32
                                                                           60.42
         90.00
                                                                                                                                                                                194.56
                                                                                                                                              4116.5
                                                                                                                                                                12.54
                                                                          201.64
                                                                                              .78
                                                          15.89
         90.00
                                                                                                                                                                                  31.93
                                                                                                                                              1627.3
                                                                                                                                                                -24.30
                                                                                              4.22
                                                         -26.52
                                                                           40.02
        100.00
                                                                                                              65.05 16 15 24
                                                                                                                                                                13.51
                                                                                                                                                                               175.54
                                                         17.02
                                                                          182.58
                                                                                               .25
                                                                                                                                              3864.7
        100.00
                                                                                                                                                                -27.06
                                                                                                                                                                                  12.83
                                                         -29.76
                                                                            20.98
                                                                                              3.17
                                                                                                             107.65 3 15 39
61.70 17 13 0
                                                                                                                                              1390.4
        110.00
                                                                                                                                                              16.09
                                                                                        358.66
                                                                                                                                              3674.4
                                                                                                                                                                                 159.64
                                                          20.03
                                                                          166.55
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 213.1 SR 359.6 SS 229.2 CRT -.5298 CRS -.1017 CST -.7741 LSA 382.5 MSA 283.4 S5A 26.3 EL1 381.8 EL2 170.3 ALF 112.03
                                                                             SGT 513.5 SGR 663.0 SG3 396.1
RRT .1235 RRF .8192 RTF .1363
SGB 838.6 R23 .1028 R13 .8135
SG1 670.2 SG2 504.1 THA 77.23
    TOE .1467 TRA -.4141 TC3 .1521 BAU .1612

ROE -.3100 RRA -.3247 RC3 -.4221 FAU .12268

FOE .1186 FRA-1.8432 FC3-3.9519 BSP 1717
     BOE .3430 BRA .5262 BC5 .4487 FSP =-1187
                                                                                                                                                       ARRIVAL DATE OCT 16 1967
                                                                                    FLIGHT TIME 92.00
LAUNCH DATE JUL 16 1967
                                                                                  DISTANCE 261.148
   HELIOCENTRIC CONTC
    RL 152.05 LAL -.00 LOL 292.80 VL 27.695 GAL -9.86 AZL 91.66 HCA 118.12 SMA 135.61 ECC .20878 INC 1.6557 VI 29.300 RP 108.08 LAP -1.46 LOP 50.93 VP 38.434 GAP -2.85 AZP 89.22 TAL 225.24 TAP 343.36 RCA 107.30 APO 163.93 V2 35.062 RC 75.721 GL -8.83 GP -22.48 ZAL 154.96 ZAP 65.21 ETS 10.92 ZAE 160.53 ETE 300.32 ZAC 102.19 ETC 10.43 CLP -63.01
   PLANETOCENTRIC CONIC
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 53 34 2516.39 -25.56 61.54 4.57 102.61 24 35 31 1916.4 -23.57 53.43 90.00 13 48 26 4690.90 15.18 200.09 .51 65.80 15 6 37 4090.9 11.78 193.05 100.00 1 22 27 2242.41 -26.77 41.07 4.25 103.81 1 59 49 1642.4 -24.61 32 04
     C3 26.367 VHL 5.135 DLA 7.50 RAL 136.13 RAD 6568.1 VEL 12.155 PTH 2.18 VHP 4.001 DPA -12.76 RAP 161.31 ECC 1.4339
                                                                                                              103.81 1 59 49
64.60 16 20 10
                     15 6 10 4440.12
2 38 55 2003.08
16 6 11 4252.18
                                                                                           359.97
                                                                                                                                               3840.1
                                                                                                                                                                12.75
                                                                                                                                                                                 174.12
                                                          16.31
                                                                           181.11
        100.00
                                                                                                                                                                -27.37
                                                                                                             107.18 3 12 19
61.23 17 17 3
                                                                                                                                               1403.1
                                                                                                                                                                                   13.68
                                                                                             3.23
                                                          -30.02
        110.00
                                                                                                                                               3652.2
                                                                                                                                                                 15.31
                                                          19.30
                                                                           165.24
                                                                                            358.36
        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 223.7 SR 346.5 SS 240.7
CRT -.4373 CRS -.0508 CST -.8621
LSA 369.9 MSA 300.8 SSA 26.3
     TOE .1430 TRA -.4640 TC3 .0553 BAU .1729
                                                                               SGT 549.0 SGR 711.8 SG3 423.0
     ROE -.2923 RRA -.3438 RC3 -.4874 FAU .12989
FOE .1802 FRA-1.9355 FC3-4.2647 BSP 1912
BOE .3254 BRA .5775 BC3 .4905 FSP -1276
                                                                             RRT .3112 RRF .8522 RTF .3425
SGB 898.9 R23 .1719 R13 .8386
                                                                                                                                        EL1 365.7 EL2 190.5 ALF 112-03
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FLIGHT TIME 86.00

SG1 750.4 SG2 494.9 THA 65.08

ARRIVAL DATE OCT 18 1967

EL1 325.4 EL2 262.9 ALF 163.31

LAUNCH DATE JUL 16 1967

HELIOCENTRIC CONIC DISTANCE 267.640 RL 152.05 LAL -.00 LOL 292.80 VL 27.702 GAL -9.78 AZL 91.51 MCA 121.33 SMA 135.67 ECC .20740 INC 1.5058 V1 29.300 RP 108.04 LAP -1.29 LOP 54.14 VP 38.451 GAP -2.30 AZP 89.22 TAL 225.20 TAP 346.53 RCA 107.53 APO 163.81 V2 35.075 RC 77.874 GL -8.11 GP -23.92 ZAL 155.19 ZAP 70.32 ETS 9.17 ZAE 160.34 ETE 288.40 ZAC 104.40 ETC 9.46 CLP -68.39 PLANETOCENTRIC CONIC C3 25.855 VHL 5.085 DLA 8.19 RAL 136.34 RAD 6568.0 VEL 12.134 PTH 2.17 VHP 3.899 DPA -13.29 RAP 158.85 ECC 1.4255 UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 49 3 2533.60 -25.81 62.73 4.71 102.06 24 31 16 1933.6 -23.89 54.59 90.00 13 54 40 4663.98 14.42 198.47 .35 65.36 15 12 24 4064.0 10.98 191.49 1 18 17 2258.47 15 12 3 4414.35 2 35 34 2016.61 16 11 15 4228.96 100.00 -27.03 42.19 4.40 103.28 1 55 55 1658.5 -24.93 34.02 64.14 16 25 37 3814.3 172.63 15.55 179.57 359.80 11.94 106.67 3 9 11 60.75 17 21 44 110.00 -30.29 22.84 106.67 1416.6 -27.71 14.59 110.00 18.54 163.87 358.17 3629.0 14.50 157.08 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 615.4 SGR 764.2 SG3 446.4 RRT .4807 RRF .8795 RTF .5204 ST 239.9 SR 331.5 SS 252.5 TOE .1433 TRA -.5192 TC3 -.0560 BAU .1933 RRT .4807 RRF .8795 RTF .5204 SGB 981.2 R23 .1964 R13 .8645 ROE -. 2725 RRA -. 3618 RC3 -. 5564 FAU .13596 CRT -.3479 CRS -.0094 CST -.9223 FOE .2441 FRA-2.0009 FC3-4.5524 BSP 2207 LSA 365.2 MSA 311.6 SSA 26.3 SG1 854.2 SG2 482.8 THA 57.21 EL1 349.0 EL2 213.6 ALF 113.29 BOE .3079 BRA .6328 BC3 .5592 FSP -1363 FLIGHT TIME 96.00 ARRIVAL DATE OCT 20 1967 LAUNCH DATE JUL 16 1967 HELIOCENTRIC CONIC DISTANCE 274.100 RL 152.05 LAL -.00 LOL 292.80 VL 27.703 GAL -9.69 AZL 91.35 MCA 124.54 SMA 135.67 ECC .20619 INC 1.3453 V1 29.300 RP 108.00 LAP -1.11 LOP 57.35 VP 38.464 GAP -1.77 AZP 89.24 TAL 225.05 TAP 349.59 RCA 107.70 APO 163.65 V2 35.088 RC 80.046 GL -7.32 GP -25.37 ZAL 155.33 ZAP 75.44 ETS 7.26 ZAE 159.38 ETE 276.75 ZAC 106.64 ETC 8.36 CLP -73.85 PLANETOCENTRIC CONIC 15 18 58 90.00 14 1 43 4635.34 13.60 196.77 .29 64.92 4035.3 10.11 1 14 10 2275.85 -27.30 43.42 4.67 102.68 1 52 6 1675.8 -25.28 100.00 63.69 16 31 49 106.10 3 6 11 60.27 17 27 7 100.00 15 18 42 4386.96 14.73 177.95 359.73 3787.0 11.08 171.06 2 32 20 2031.26 -30.57 23.89 3.71 106.10 1431.3 -28.06 110.00 110.00 16 17 2 4204.31 17.71 358.08 3604.3 13.62 162.44 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 713.1 SGR 816.0 SG3 463.7 RRT .6161 RRF .9011 RTF .6559 SGB 1083.7 R23 .2055 R13 .8866 ST 261.2 SR 313.1 SS 264.9 TOE .1471 TRA -.5798 TC3 -.1836 BAU .2210 ROE -.2496 RRA -.3763 RC3 -.6261 FAU .14010 FOE .3172 FRA-2.0251 FC3-4.7871 BSP 2567 BOE .2898 BRA .6912 BC3 .6524 FSP -1422 CRT -.2618 CRS .0352 CST -.9635 LSA 377.7 MSA 305.1 SSA 26.3 SG1 976.9 SG2 469.2 THA 51.19 EL1 330.5 EL2 238.9 ALF 117.59 ARRIVAL DATE OCT 22 1967 FLIGHT TIME 98.00 LAUNCH CATE JUL-16 1967 DISTANCE 280.531 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.697 GAL -9.60 AZL 91.17 MCA 127.76 SMA 135.63 ECC .20512 INC 1.1718 V1 29.300 RP 107.96 LAP -.93 LOP 60.56 VP 38.471 GAP -1.27 AZP 89.28 TAL 224.80 TAP 352.55 RCA 107.81 APO 163.45 V2 35.101 RC 82.236 GL -6.44 GP -26.82 ZAL 155.40 ZAP 80.50 ETS 5.19 ZAE 157.73 ETE 266.21 ZAC 108.85 ETC 7.13 CLP -79.34 PLANETOCENTRIC CONTC. C3 24.811 VHL 4.981 DLA 9.72 RAL 137.09 RAC 6568.0 VEL 12.091 PTH 2.16 VHP 3.789 DPA -14.37 RAP 153.81 ECC 1.4083 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -24.59 100.78 24 22 48 1972.8 90.00 23 39 55 2572.81 -26.34 65.48 5.33 188.05 14 9 44 4604.43 1 9 59 2295.03 15 26 29 4004.4 9.16 90.00 12.70 194.95 . 35 64.48 1695.0 36.51 100.00 -27.58 44.77 5.05 102.02 1 48 14 -25.64 15 26 18 4357.44 2 29 6 2047.43 16 23 40 4177.81 63.23 16 38 55 10.13 169.38 100.00 13.63 176.22 359.78 3757.4 3 3 14 1447.4 16.70 110.00 -30.67 25.05 4.13 105.47 -28.44 59.79 17 33 17 3577.8 12.67 154.25 110.00 16.81 160.91 358.10 WID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .7123 RRF .9188 RTF .7486 SGB 1205.6 R23 .2075 R13 .9050 SGI 1115.7 SGZ 456.9 THA 46.52 ST 288.2 SR 292.9 SS 277.6 CRT -.1869 CRS .0664 CST -.9838 TDE .1564 TRA - .6427 TC3 - .3242 BAU .2551 RDE -.2249 RRA -.3878 RC3 -.6973 FAU .14252 LSA 402.3 MSA 288.7 SSA 26.4 FOE .3877 FRA-2.0151 FC3-4.9729 BSP 3004 BOE .2739 BRA .7506 BC3 .7690 FSP -1473 EL1 316.6 EL2 261.9 ALF 132.56 ARRIVAL DATE OCT 24 1967 LAUNCH DATE JUL 16 1967 FLIGHT TIME 100.00 HELIOCENTRIC CONIC DISTANCE 286.933 RL 152.05 LAL -.00 LOL 292.80 VL 27.685 GAL -9.50 AZL 90.98 MCA 130.97 SMA 135.54 ECC .20417 INC .9822 V1 29.300 RP 107.92 LAP -.74 LOP 63.78 VP 38.474 GAP -.78 AZP 89.36 TAL 224.44 TAP 355.41 RCA 107.87 APO 163.21 V2 35.113 RC 84.440 GL -5.45 GP -28.27 ZAL 155.38 ZAP 85.41 ETS 2.96 ZAE 155.51 ETE 257.26 ZAC 110.96 ETC 5.80 CLP -84.79 PLANETOCENTRIC CONIC C3 24.277 VHL 4.927 DLA 10.59 RAL 137.63 RAD 6568.0 VEL 12.069 PTH 2.16 VHP 3.781 DPA -14.96 RAP 151.35 ECC 1.3995 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24 18 18 23 35 2 2595.97 14 18 55 4570.58 100.01 -24.97 90.00 -26.63 67.12 5.84 1996.0 58.84 11.70 192.96 .53 64.03 15 35 6 3970.6 8.11 186.12 90.00 1 5 35 2316.62 15 34 59 4325.17 2 25 48 2065.62 16 31 16 4148.93 1 44 12 1716.6 -26.03 37.99 100.00 -27.87 46.31 5.58 101.26 15 34 59 16 47 4 62.77 3725.2 167.56 100.00 12.83 174.34 359.95 9.08 26.37 104.76 104.76 3 0 14 59.29 17 40 25 17.95 110.00 1465.6 -28.85 -31.19 4.70 16 31 16 358.24 159.27 3548.9 11.62 110.00 15.81 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 980.1 SGR 916.2 SG3 479.1 RRT .7792 RRF .9326 RTF .8104 SGB 1341.6 R23 .2088 R13 .9187 SG1 1265.8 SG2 444.6 THA 42.53 TOE .1714 TRA -. 7067 TC3 -. 4779 BAU .2931 ST 320.7 SR 268.6 SS 292.2 CRT -.1174 CRS .0968 CST -.9922 LSA 434.6 MSA 266.1 SSA 26.6 ROE -.1963 RRA -.3939 RC3 -.7663 FAU .14254 FDE .4666 FRA-1.9586 FC3-5.0832 8SP 3474 BOE .2606 BRA .8091 BC3 .9032 FSP -1487

FLIGHT TIME 94.00

ARRIVAL DATE OCT 26 1967

LAUNCH DATE JUL 16 1967

DISTANCE 293.306 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.668 GAL -9.39 AZL 90.77 HCA 134.19 SMA 135.41 ECC .20332 INC .7730 VI 29.300 RP 107.89 LAP -.55 LOP 67.00 VP 38.473 GAP -.31 AZP 89.46 TAL 223.99 TAP 358.18 RCA 107.88 APO 162.94 VZ 35.125 RC 86.655 GL -4.34 GP -29.74 ZAL 155.27 ZAP 90.12 ETS .56 ZAE 152.88 ETE 249.92 ZAC 112.93 ETC 4.39 CLP -90.13 PLANETOCENTRIC CONIC C3 23.738 VHL 4.872 DLA 11.55 RAL 138.29 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 3.802 DPA -15.62 RAP 149.00 ECC 1.3907 C3 23.738 VHL 4.872 DLA 11.55 RAL 138.29 RAD 6568.0 VEL 12.046 PTH 2.15 VMP 3.802 DPA -13.62 RAP 149.00 ECC 1.3907 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 29 41 2622.64 -26.93 69.01 6.50 99.10 24 13 23 2022.6 -25.39 60.68 90.00 14 29 32 4532.91 10.57 190.78 .84 63.58 15 45 5 3932.9 6.93 183.98 100.00 1 0 48 2341.46 -28.19 48.09 6.26 100.38 1 39 49 1741.5 -26.47 39.71 100.00 15 45 2 4289.33 11.71 172.27 .25 62.30 16 56 31 3689.3 7.91 165.55 110.00 2 22 15 2086.54 -31.54 27.90 5.43 103.91 2 57 2 1486.5 -29.31 19.40 110.00 16 40 3 4117.01 14.69 157.47 358.22 58.78 17 48 40 3517.0 10.45 150.93 23 29 41 2622.64 14 29 32 4532.91 1 0 48 2341.46 15 45 2 4289.33 2 22 15 2086.54 16 40 3 4117.01 358.52 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CRT -.0518 CRS .1051 CST -.9919
LSA 472.6 MSA 242.1 SSA 26.9
EL1 359.6 EL2 242.1 ALF 176.33 SGT 1137.8 SGR 962.4 SG3 476.9 RRT .8245 RRF .9440 RTF .8509 SGB 1490.2 R23 .2102 R13 .9292 SGI 1425.4 SG2 434.7 THA 39.24 TOE .1939 TRA -.7689 TC3 -.6415 BAU .3342 ROE -.1657 RRA -.3958 RC3 -.8353 FAU .14075 FDE .5392 FRA-1.8705 FC3-5.1333 BSP 3994 BDE .2551 BRA .8648 BC3 1.0532 FSP -1492 ARRIVAL DATE OCT 28 1967 FLIGHT TIME 104.00 LAUNCH DATE JUL 16 1967 DISTANCE 299.650 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.647 GAL -9.28 AZL 90.54 HCA 137.41 SMA 135.24 ECC .20257 INC .5395 V1 29.300 RP 107.85 LAP -.37 LOP 70.22 VP 38.468 GAP .15 AZP 89.60 TAL 223.45 TAP .87 RCA 107.85 APO 162.64 V2 35.137 RC 88.880 GL -3.06 GP -31.24 ZAL 155.04 ZAP 94.55 ETS 358.00 ZAE 149.97 ETE 244.05 ZAC 114.70 ETC 2.90 CLP -95.33 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 23.198 VHL 4.816 DLA 12.65 RAL 139.07 RAD 6567.9 VEL 12.024 PTH 2.15 VHP 3.852 DPA -16.40 RAP 146.78 ECC 1.3818
LNCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 23 34 2654.03 -27.25 71.26 7.34 98.02 '24 7 48 2054.0 -25.86 62.86
90.00 14 41 56 4490.27 9.27 188.32 1.32 63.12 15 56 46 3890.3 5.59 181.57
100.00 0 55 21 2370.67 -28.53 50.19 7.12 99.32 1 34 52 1770.7 -26.95 41.75
100.00 15 56 45 4248.86 10.42 169.96 .71 61.82 17 7 34 3648.9 6.57 163.29
110.00 2 18 18 2111.13 -31.93 29.71 6.35 102.91 2 53 29 1511.1 -29.83 21.13
110.00 16 50 18 4081.17 13.42 155.47 358.94 58.26 17 58 19 3481.2 9.13 149.01 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1304.8 SCR 1002.1 SC3 466.9 RRT .8559 RRF .9532 RTF .8778 SCB 1645.2 R23 .2134 R13 .9367 SCI 1589.2 SC2 425.5 THA 36.34 ST 404.6 SR 213.1 SS 327.3 CRT .0260 CRS .0919 CST -.9872 LSA 518.9 MSA 215.2 SSA 27.2 TOE .2250 TRA -.8272 TC3 -.8134 BAU .3763 RDE -.1309 RRA -.3914 RC3 -.9004 FAU .13670 FDE .6172 FRA-1.7427 FC3-5.1018 BSP 4519 BDE .2603 BRA .9151 BC3 1.2133 FSP -1463 EL1 404.7 EL2 213.0 ALF 1.09 ARRIVAL DATE OCT 30 1967 FLIGHT TIME 106.00 LAUNCH DATE JUL 16 1967 **DISTANCE 305.967** HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 27.621 GAL -9.15 AZL 90.28 MCA 140.63 SMA 135.05 ECC .20189 INC .2755 V1 29.300 RP 107.82 LAP -.17 LOP 73.44 VP 38.460.GAP .58 AZP 89.79 TAL 222.84 TAP 3.47 RCA 107.78 APO 162.31 V2 35.149 RC 91.113 GL -1.58 GP -32.82 ZAL 154.69 ZAP 98.66 ETS 355.26 ZAE 146.90 ETE 239.40 ZAC 116.24 ETC 1.36 CLP-100.32 PLANETOCENTRIC CONIC C3 22.664 VHL 4.761 DLA 13.91 RAL 140.01 RAD 6567.9 VEL 12.002 PTH 2.14 VHP 3.932 OPA -17.33 RAP 144.72 ECC 1.3730 ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG 96.70 24 1 9 62.68 16 10 40 98.03 1 29 1 61.35 17 20 40 101.67 2 49 21 57.73 18 9 43 -26.36 8.40 65.52 -27.58 73.98 2091.9 90.00 23 16 18 2691.92 178.81 14 56 39 4441.05 0 48 55 2405.86 16 10 38 4202.34 2 13 40 2140.71 17 2 23 4040.26 1.99 3841.1 4.02 7.74 185.51 90.00 44.23 1805.9 -27.48 -28.89 52.75 8.21 100.00 160.71 5.02 1.36 3602.3 8.91 167.33 100.00 23.24 -30.41 1540.7 -32.36 31.91 7.51 110.00 7.60 3440.3 146.82 11.94 153.22 359.55 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1477.6 SGR 1040.8 SG3 452.1 RRT .8775 RRF .9611 RTF .8960 SGB 1807.3 R23 .2179 R13 .9424 SG1 1758.0 SG2 419.5 THA 33.91 ST 458.6 SR 183.7 SS 348.9 CRT .1329 CRS .0262 CST -.9821 LSA 574.0 MSA 188.5 SSA 27.7 TDE .2660 TRA -.8794 TC3 -.9918 BAU .4194 ROE - .0938 RRA - .3826 RC3 - .9657 FAU .13128 FOE .6855 FRA-1.5937 FC3-5.0146 BSP 5082 BOE .2821 BRA .9590 BC3 1.3843 FSP -1428 EL1 459.4 EL2 181.8 ALF 3.61 ARRIVAL DATE NOV 1 1967 FLIGHT TIME 108.00 LAUNCH DATE JUL 16 1967 HELIOCENTRIC CONIC DISTANCE 312.259 RL 152.05 LAL -.00 LOL 292.80 VL 27.591 GAL -9.02 AZL 89.97 MCA 143.86 SMA 134.82 ECC .20130 INC .0156 V1 29.300 RP 107.78 LAP .02 LOP 76.66 VP 38.449 GAP 1.00 AZP 90.02 TAL 222.14 TAP 6.00 RCA 107.68 APO 161.96 V2 35.160 RC 93.352 GL .16 GP -34.53 ZAL 154.17 ZAP 102.39 ETS 352.32 ZAE 143.71 ETE 235.77 ZAC 117.51 ETC 359.75 CLP-105.10 PLANETOCENTRIC CONIC C3 22.148 VHL 4.706 DLA 15.40 RAL 141.11 RAD 6567.9 VEL 11.980 PTH 2.14 VHP 4.042 DPA -18.47 RAP 142.82 ECC 1.3645
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 7 17 2738.84 -27.90 77.37 9.74 95.03 23 52 56 2138.8 -26.91 68.85
90.00 15 14 28 4362.96 5.91 182.22 2.92 62.26 16 27 31 3783.0 2.15 175.56 47.32 96.39 1 21 48 1849.3 -28.07 0 40 59 2449.34 -29.26 55.92 9.58 100.00 60.89 17 36 30 100.11 2 44 16 57.20 18 23 24 157.69 3.18 16 27 23 4147.69 7.11 164.27 2.27 3547.7 100.00 -31.08 2 7 59 2177.12 17 16 52 3992.68 -32.83 34.65 8.98 1577.1 - 25.86 110.00 . 39 3392.7 5.81 144.30 150.64 110.00 10.20 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCUMAC-SGT 1651.5 SGR 1072.6 SG3 430.8 RRT .8925 RRF .9675 RTF .9083 SGB 1969.2 R23 .2246 R13 .9463 DIFFERENTIAL CORRECTIONS ST 524.8 SR 154.8 SS 377.4
CRT .3123 CRS -.1259 CST -.9769
LSA 644.3 MSA 160.9 SSA 28.1
EL1 527.2 EL2 146.3 ALF 5.70 TDE .3205 TRA -.9223 TC3-1.1728 BAU .4614 ROE -.0508 RRA -.3666 RC3-1:0259 FAU .12397 FDE .7623 FRA-1.4155 FC3-4.8457 BSP 5617 SG1 1925.0 SG2 415.1 THA 31.75 BOE .3245 BRA .9925 BC3 1.5582 FSP -1361

FLIGHT TIME 102.00

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LAUNCH DATE JUL 16 1967
                                                                         FLIGHT TIME 110.00
                                                                                                                                    ARRIVAL DATE NOV 3 1967
   HELIOCENTRIC CONTC
                                                                         DISTANCE 318.524
    RL 152.05 LAL -.00 LOL 292.80 VL 27.558 GAL -8.88 AZL 89.62 MCA 147.08 SMA 134.57 ECC .20077 INC .3813 VI 29.300 RP 107.75 LAP .21 LOP 79.88 VP 38.434 GAP 1.41 AZP 90.32 TAL 221.38 TAP 8.46 RCA 107.55 APO 161.59 V2 35.170 RC 95.596 GL 2.23 GP -36.42 ZAL 153.45 ZAP 105.69 ETS 349.17 ZAE 140.44 ETE 232.98 ZAC 118.51 ETC 358.08 CLP-109.64
   PLANETOCENTRIC CONIC
    C3 21.671 VHL 4.655 DLA 17.17 RAL 142.42 RAD 6567.9 VEL 11.960 PTH 2.13 VHP 4.186 DPA -19.86 RAP 141.06 ECC 1.3567
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   22 55 35 2798.79
                                                   -28.18
                                                                  81.74
                                                                               11.42
                                                                                                92.85 23 42 14
                                                                                                                           2198.8
                                                                                                                                            -27.49
                   15 36 36 4312.49
                                                                                                          16 48 29
                                                                                                                                                           171.63
        90.00
                                                     3.66
                                                                  178.26
                                                                                 4.22
                                                                                                 61.90
                                                                                                                             3712.5
                                                                                                                                                            51.31
       100.00
                     0 30 44 2504.64
                                                   -29.61
                                                                   60.00
                                                                                 11.31
                                                                                                 94.28
                                                                                                             1 12 28
                                                                                                                             1904.6
                   16 48 4 4081.88
                                                                                                          17 56 6
       100.00
                                                     4.92
                                                                  160.62
                                                                                  3.53
                                                                                                 60.48
                                                                                                                             3481.9
                                                                                                                                               .95
                                                                                                                                                           154.08
       110.00
                     2 0 43
                                   2223.09
                                                                                                            2 37 46
                                                                                                                             1623.1
                                                                                                                                                            29.23
                                                  -33.32
                                                                   36.14
                                                                                10.84
                                                                                                 98.10
                                                                                                                                            -31.85
                                                                                                 98.10 2 37 46
56.68 18 40 11
                   17 34 35 3936.19
       110.00
                                                                 147.61
                                                                                  1.57
                                                                                                                             3336.2
                                                    8.10
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     $6T 1826.5 $GR 1104.6 $G3 405.8

RRT .9028 RRF .9732 RTF .9170

$GB 2134.6 R23 .2320 R13 .9493
                                                                                                                        ST 606.5 SR 137.1 SS 410.3
CRT .5806 CRS -.4029 CST -.9745
    TOE .3899 TRA -.9546 TC3-1.3559 BAU .5033
    RDE -. 0037 RRA -. 3457 RC3-1.0857 FAU .11568
    FOE .8307 FRA-1.2272 FC3-4.6213 BSP 6185
                                                                                                                         LSA 731.9 MSA 136.0 SSA 28.3
                                                                     SG1 2094.0 SG2 414.3 THA 29.93
    BDE .3899 BRA 1.0153 BC3 1.7370 FSP -1292
                                                                                                                         EL1 611.9 EL2 110.6 ALF
                                                                                                                                                              7.73
LAUNCH DATE JUL 16 1967
                                                                         FLIGHT TIME 112.00
                                                                                                                                    ARRIVAL DATE NOV 5 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 324.764
    RL 152.05 LAL -300 LOL 292.80 VL 27.521 GAL -8.75 AZL 89.20 MCA 150.31 SMA 134.30 ECC .20031 INC .8030 V1 29.300 RP 107.72 LAP .40 LOP 83.11 VP 38.418 GAP 1.80 AZP 90.70 TAL 220.54 TAP 10.85 RCA 107.40 APO 161.20 V2 35.180 RC 97.843 GL 4.74 GP -38.58 ZAL 152.43 ZAP 108.50 ETS 345.75 ZAE 137.07 ETE 230.88 ZAC 119.21 ETC 356.30 CLP-113.95
   PLANETOCENTRIC CONIC
    C3 21.267 VHL 4.612 DLA 19.31 RAL 143.99 RAD 6567.9 VEL 11.943 PTH
                                                                                                   2.13 VMP 4.369 OPA -21.58 RAP 139.39 ECC 1.3500
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 39 31 2878.46 -28.32 87.56 13.54 89.94 23 27 29 2278.5 -28.03 78.91
                                                                                                          17 15 35
0 40
                   16 5 11
                                   4223.73
                                                      .80
                                                                 173.30
                                                                                  6.06
                                                                                                 61.69
                                                                                                                             3623.7
                                                                                                                                             -2.99
                                                                                                                                                           166.67
                    0 16 47
                                                                                                                             1977.5
                                   2577.46
                                                   -29.86
                                                                   65.40
                                                                                 13.52
                                                                                                 91.45
                                                                                                                                            -29.34
                                                                                                                                                            56.63
                                                                                                          18 21 12
2 29 1
19 1 18
                   17 14 32
       100.00
                                  3999.97
                                                     2.15
                                                                 156.11
                                                                                  5.31
                                                                                                 60.18
                                                                                                                             3400.0
                                                                                                                                             -1.83
                                                                                                                                                           149.59
                    1 50 58
       110.00
                                  2282.83
                                                   -33.80
                                                                   42.74
                                                                                 13.24
                                                                                                 95.42
                                                                                                                             1682.8
                                                                                                                                            -32.68
                                                                                                                                                            33.68
       110.00
                   17 56 51
                                   3867.36
                                                     5.51
                                                                 143.97
                                                                                                 56.21
                                                                                                                             3267.4
                                                                                  3.22
                                                                                                                                              1.03
                                                                                                                                                           137.74
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     SGT 1998.8 SGR 1131.8 SG3 375.9
RRT .9095 RRF .9779 RTF .9229
SGB 2297.0 R23 .2406 R13 .9513
SGI 2258.9 SG2 416.3 THA 28.30
    TOE .4812 TRA -.9719 TC3-1.5335 BAU .5430
RDE .0518 RRA -.3168 RC3-1.1387 FAU .10605
                                                                                                                         ST 711.7 SR 144.2 SS 452.7
CRT .8560 CRS -.7321 CST -.9741
    FOE .9036 FRA-1.0226 FC3-4.3172 BSP 6715
BOE .4839 BRA 1.0222 BC3 1.9100 FSP -1198
                                                                                                                         LSA 847.4 MSA 115.4 SSA 27.4
EL1 722.4 EL2 73.4 ALF 9.94
LAUNCH DATE JUL 16 1967
                                                                         FLIGHT TIME 114.00
                                                                                                                                   ARRIVAL DATE NOV 7 1967
   HELIOCENTRÍC CONIC
                                                                        DISTANCE 330.979
    RL 152.05 LAL -.00 LOL 292.80 VL 27.482 GAL -8.57 AZL 88.68 MCA 153.53 SMA 134.00 ECC .19991 INC 1.3178 V1 29.300 RP 107.69 LAP .59 LOP 86.34 VP 38.398 GAP 2.19 AZP 91.18 TAL 219.65 TAP 13.18 RCA 107.22 APO 160.79 V2 35.190 RC 100.092 GL 7.84 GP -41.10 ZAL 150.99 ZAP 110.76 ETS 342.03 ZAE 133.56 ETE 229.35 ZAC 119.62 ETC 354.39 CLP-118.06
   PLANETOCENTRIC CONTC
    C3 20.993 VHL 4.582 DLA 21.97 RAL 145.90 RAD 6567.9 VEL 11.932 PTH 2.12 VHP 4.603 DPA -23.71 RAP 137.75 ECC 1.3455
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 22 15 36 2990.81
90.00 16 44 22 4105.15
100.00 23 52 32 2678.26
                                                                                              85.84 23 5 27
61.83 17 52 47
                                                                                                                           2390.8
                                                                                                                                         -28.32
                                                                             16.22
                                                  -28.03
                                                                 95.76
                                                                                                                                                           87.11
                                                                                                                             3505.2
                                                                                                                                                          160.01
                                                   -3.02
                                                                166.69
                                                                                 8.77
                                                                                                                                            -6.76
                                                                                                87.51
                                                                                                          24 37 10
                                                                                                                            2078.3
                                                                                                                                           -29.83
                                                                                                                                                           64.08
       100.00
                                                 -29.80
                                                                  72.89
                                                                                16.34
                   17 50 7 3892.94
1 37 9 2363.28
18 25 56 3780.68
                                                                                                          18 55 0
                                                                                                 60.14
                                                                                                                                                          143.69
       100.00
                                                   -1.47
                                                                150.23
                                                                                 7.91
                                                                                                                            3292.9
                                                                                                                                            -5.44
                                                                                                          2 16 32
       110.00
                                                  -34.14
                                                                  49.00
                                                                                16.37
                                                                                                91.73
                                                                                                                            1763.3
                                                                                                                                           -33.53
                                                                                                                                                           39.A1
                                                                                                          19 28 56
                                                                                                                                           -2.28
      110.00
                                                    2.21 -
                                                                 139.42
                                                                                 5.61
                                                                                                 55.88
                                                                                                                            3180.7
                                                                                                                                                          133.22
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SCT 2170.8 SCR 1159.9 SC3 343.1
RRT .9132 RRF .9820 RTF .9273
SC8 2461.2 R23 .2487 R13 .9530
SC1 2424.6 SC2 423.1 THA 26.90
                                                                                                                        ST 848.4 SR 186.8 SS 502.5
CRT .9764 CRS -.9185 CST -.9761
    TDE .6001 TRA -.9718 TC3-1.7017 BAU .5821
    RDE .1157 RRA -.2808 RC3-1.1860 FAU .09572
                                                                                                                     LSA 998.0 MSA 102.7 SSA 24.6
EL1 867.9 EL2 39.5 ALF 12.16
    FOE .9714 FRA -.8160 FC3-3.9477 BSP 7274
BOE .6111 BRA 1.0116 BC3 2.0743 FSP -1102
LAUNCH DATE JUL 16 1967
                                                                         FLIGHT TIME 116.00
                                                                                                                                    ARRIVAL DATE NOV 9 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 337.169
   RL 152.05 LAL -.00 LOL 292.80 VL 27.440 GAL -8.41 AZL 88.04 MCA 156.76 SMA 133.69 ECC .19957 INC 1.9642 V1 29.300 RP 107.66 LAP .78 LOP 89.57 VP 38.377 GAP 2.55 AZP 91.80 TAL 218.69 TAP 15.45 RCA 107.01 APO 160.38 V2 35.199 RC 102.344 GL 11.73 GP -44.11 ZAL 148.94 ZAP 112.37 ETS 337.94 ZAE 129.82 ETE 228.28 ZAC 119.72 ETC 352.28 CLP-122.01
   PLANETOCENTRIC CONIC
   C3 20.956 WHL 4.578 DLA 25.31 RAL 148.30 RAD 6567.9 VEL 11.930 PTH 2.12 VHP 4.906 DPA -26.34 RAP 136.04 ECC 1.3449 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  21 33 44
17 45 21
                                                  -26.47
                                                                                                79.56 22 26 34
                                                                                                                           2570.6
       90.00
                                  3170.57
                                                                108.67
                                                                                                                                                           100.20
                                                                                19.39
                                                                                                                                           -27.64
                                                                                                          18 50 45
        90.00
                                  3924.54
                                                  -A.73
                                                                156.49
                                                                                13.10
                                                                                                 62.96
                                                                                                                             3324.5
                                                                                                                                            -12.29
                                                                                                                                                           149.62
                   23 19 3
18 42 42
                                                                                                81.68
                                                                                                           24 0 14
                                                                                                                                                            75.42
      100.00
                                  2831.01
                                                 -28.81
                                                                  84.12
                                                                                19.82
                                                                                                                             2231.0
                                                                                                                                           -29.66
                                                                                                          19 45 2
      100.00
                                  3739.34
                                                   -6.64
                                                                 141.76
                                                                                11.97
                                                                                                 60.79
                                                                                                                             3139.3
                                                                                                                                            -10.49
                                                                                                                                                           135.08
      110.00
                    1 16 0
                                  2477.40
                                                 -34.02
                                                                  57.90
                                                                                20.46
                                                                                                86.47
                                                                                                            1 57 18
                                                                                                                             1877.4
                                                                                                                                           -34.14
                                                                                                                                                            48.66
                   19 6 10
                                                                                                          20 7 16
      110.00
                                  3665.71
                                                                                                                             3065.7
                                                                                                                                                           127.18
                                                  -2.18
                                                                 133.43
                                                                                 9.22
                                                                                                55.88
                                                                                                                                            -6.65
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
    TOE .7612 TRA -.9469 TC3-1.8430 BAU
                                                                    SCT 2359.6 SCR 1182.7 SC3 306.3
RRT .9141 RRF .9853 RTF .9304
SGB 2621.5 R23 .2568 R13 .9541
                                                                                                                       ST 1032.0 SR 263.3 SS 564.2
CRT .9969 CRS -.9808 CST -.9795
                                                      .6183
    RDE .1939 RRA -.2326 RC3-1.2144 FAU .08431
   FDE 1.0416 FRA -.6021 FC3-3.4832 BSP 7787
BDE .7855 BRA .9750 BC3 2.2071 FSP -986
                                                                                                                       LSA 1200.9 MSA 100.3 SSA 19.4
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SG1 2585.4 SG2 433.9 THA 25.58

EL1 1064.9 EL2 20.1 ALF 14.28

ARRIVAL DATE NOV. 11 1967

LAUNCH DATE JUL 16 1967

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DISTANCE 343.335
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 27.396 GAL -8.23 AZL 87.19 HCA 159.98 SNA 133.37 ECC .19929 INC 2.8061 V1 29.300 RP 107.63 LAP .96 LOP 92.80 VP 38.353 GAP 2.91 AZP 92.64 TAL 217.68 TAP 17.66 RCA 106.79 APO 159.95 V2 35.208 RC 104.596 GL 16.69 GP -47.75 ZAL 145.99 ZAP 113.21 ETS 333.41 ZAE 125.73 ETE 227.53 ZAC 119.50 ETC 349.87 CLP-125.89
    PLANETOCENTRIC CONIC
      C3 21.366 VHL 4.622 DLA 29.57 RAL 151.41 RAD 6567.9 VEL 11.948 PTH 2.13 VHP 5.313 DPA -29.58 RAP 134.08 ECC 1.3516 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             18 39 12 3787.16
21 4 43 3317.27
                                                                                                    151.83
                                                                                                                            21.37
                                                                                                                                                      67.81
                                                                                                                                                                      19 42 19
                                                                              -20.06
            81.10
                                                                                                                                                                                                                                                 109.69
                                                                                                                                                       67.80 22 0 1
                                                                                                                                                                                                   2717.3
                                                                                                                                                                                                                          -22.89
                                                                                                     117.31
                                                                                                                              21.36
                                                                              -20.05
            98.90
                                                                                                                                                                                                                                                   99.85
                                                                                                     107.79
                                                                                                                              22.63
                                                                                                                                                       70.53
                                                                                                                                                                      22 43 1
                                                                                                                                                                                                   2572.0
                                                                                                                                                                                                                          -25.58
                            21 50 9 3171.97
20 36 28 5407.69
                                                                              -23.14
          100.00
                                                                                                                                                       65.06 21 33 16
78.50 1 22 45
56.79 21 6 49
                                                                                                                                                                                                                         -20.25
                                                                                                                                                                                                                                               115.31
                                                                                                                                                                                                   2807.7
                                                                                                     122.63
                                                                                                                              19.98
          100.00
                                                                             -17.03
                                                                                                                                                                                                                                                   62.62
                                                                                                                                                                                                  2056.8
                                                                                                                                                                                                                         -33.66
                                                                                                        71.64
                                                                                                                            25.53
          110.00
                              0 38 28 2656.76
                                                                            -32.42
                                                                                                                                                                                                                                                 118.02
                                                                                                                                                                                                  2895.7
                                                                                                                                                                                                                        -12.93
                                                                                                                              15.18
                                                                                                     124.46
                             20 8 33
                                                     3495.67
                                                                              -8.62
          110.00
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                            ST 1278.8 SR 366.2 SS 633.7
CRT .9937 CRS -.9963 CST -.9838
                                                                                                           SGT 2510.5 SGR 1202.4 SG3 266.6
RRT .9121 RRF .9876 RTF .9333
SGB 2783.6 R23 .2627 R13 .9553
      TOE .9840 TRA -.8900 TC3-1.9368 BAU .6529
RDE .2882 RRA -.1707 RC3-1.2138 FAU .07230
                                                                                                                                                                                            LSA 1469.7 MSA 105.2 SSA 13.9
EL1 1329.6 EL2 39.5 ALF 15.90
      FOE 1.1036 FRA -.3938 FC3-2.9296 BSP 8338
                                                                                                           SGI 2746.9 SGZ 450.5 THA 24.29
      BOE 1.0254 BRA .9062 8C3 2.2857 FSP -868
                                                                                                                                                                                                              ARRIVAL DATE NOV 13 1967
                                                                                                                  FLIGHT TIME 120.00
LAUNCH DATE JUL 16 1967
                                                                                                                 DISTANCE 349.475
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 27.350 GAL -8.04 AZL 86.04 HCA 163.20 SMA 133.03 ECC .19906 INC 3.9562 VI 29.300 RP 107.61 LAP 1.14 LOP 96.04 VP 38.328 GAP 3.25 AZP 93.79 TAL 216.62 TAP 19.82 RCA 106.55 APO 159.51 V2 35.216 RC 106.849 GL 23.10 GP -52.23 ZAL 141.71 ZAP 113.13 ETS 328.34 ZAE 121.09 ETE 226.92 ZAC 118.95 ETC 346.99 CLP-129.89
    PLANETOCENTRIC CONIC
                                                                                                                                                           2.14 VHP 5.886 DPA -33.56 RAP 131.61 ECC 1.3731
      C3 22.672 VHL 4.761 DLA 35.02 RAL 155.69 RAD 6567.9 VEL 12.002 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       62.88 18 38 22
62.87 23 38 34
62.88 18 38 22
62.87 23 38 34
62.88 18 38 22
62.87 23 38 34
                                                                                                                                                                                                                                              167.24
                                                                                                                                                                                                   3469.5
                                                                                                                                                                                                                         -26.51
                                                                                                                           28.28
                                                                                                     174.78
                              17 30 32 4069.53
                                                                              -23.07
            68.47
                             22 47 30 3063.60
17 30 32 4069.53
22 47 30 3063.60
17 30 32 4069.53
                                                                                                                                                                                                   2463.6
                                                                                                                                                                                                                           -26.50
                                                                                                                                                                                                                                                    91.98
                                                                                                        99.52
                                                                                                                               28.28
                                                                              -21.05
          111.53
                                                                                                                                                                                                                                                  167.24
                                                                                                                                                                                                   3469.5
                                                                                                                                                                                                                          -26.51
                                                                                                      174.78
                                                                                                                              28.28
                                                                              -23.07
            68.47
                                                                                                                                                                                                                                                    91.98
                                                                                                                                                                                                   2463.6
                                                                                                                                                                                                                          -26.50
                                                                             -23.05
                                                                                                        99.52
                                                                                                                              28.28
          111.53
                                                                                                                                                                                                   3469.5
                                                                                                                                                                                                                         -26.51
                                                                                                                                                                                                                                                 167.24
                                                                             -23.07
                                                                                                      174.78
                                                                                                                              28.28
            68.47
                                                                                                        99.52
                                                                                                                              28.28
                                                                                                                                                                                                   2463.6
                                                                                                                                                                                                                         -26.50
          111.55
                             22 47 30
                                                     3063.60
                                                                             -23.05
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                          HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                          SGT 2683.2 SGR 1204.6 SG3 223.3

RRT .9056 RRF .9882 RTF .9361

SG8 2941.2 R23 .2668 R13 .9564

SG1 2903.1 SG2 472.1 THA 22.76
                                                                                                                                                                                             ST 1615.9 SR 490.6 S5 711.6
CRT .9898 CRS -.9996 CST -.9878
      TOE 1.3112 TRA -.7818 TC3-1.9337 BAU .6818
RDE .4056 RRA -.0841 RC3-1.1491 FAU .05934
FOE 1.1596 FRA -.1872 FC3-2.2658 BSP .8835
BDE 1.3725 BRA .7863 BC3 2.2493 FSP .731
                                                                                                                                                                                             LSA 1828.9 MSA 115.5 SSA
                                                                                                                                                                                                                                                         9.1
                                                                                                                                                                                             EL1 1687.4 EL2 66.9 ALF 16.75
                                                                                                                                                                                                             ARRIVAL DATE NOV 15 1967
                                                                                                                  FITCHT TIME 122.00
LAUNCH DATE JUL 16 1967
                                                                                                                 DISTANCE 355.585
      RL 152.05 LAL -.00 LOL 292.80 VL 27.302 GAL -7.85 AZL 84.37 MCA 166.41 SMA 132.68 ECC .19888 INC 5.6327 V1 29.300 RP 107.59 LAP 1.32 LOP 99.28 VP 38.300 GAP 3.59 AZP 95.48 TAL 215.51 TAP 21.92 RCA 106.30 APO 159.07 V2 35.223 RC 109.101 GL 31.40 GP -57.80 ZAL 135.55 ZAP 111.90 ETS 322.48 ZAE 115.65 ETE 226.02 ZAC 118.05 ETC 343.28 CLP-134.42
     PLANETOCENTRIC CONIC
       C3 25.962 VHL 5.095 DLA 41.89 RAL 161.99 RAD 6568.0 VEL 12.138 PTH 2.18 VHP 6.758 DPA -38.42 RAP 128.14 ECC 1.4273
      C3 23.962 VML 3.095 DLA 41.89 RAL 161.99 RAD 6368.0 VEL 12.138 PTH 2.18 VMP 6.758 DPA -38.42 RAP 128.14 ECC 1.4273

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

57.74 17 2 31 4256.65 -25.86 192.03 39.29 55.82 18 13 28 3656.6 -30.15 184.80

122.26 0 9 45 2942.99 -25.85 91.39 39.28 55.81 0 58 48 2343.0 -30.14 84.16

57.74 17 2 31 4256.65 -25.86 192.03 39.29 55.82 18 13 28 3656.6 -30.15 184.80

122.26 0 9 45 2942.99 -25.85 91.39 39.28 55.81 0 58 48 2343.0 -30.14 84.16
                                                                                                                                                                                                                          -30.15
                                                                                                                                                        55.82 18 13 28
                              17 2 31 4256.65
0 9 45 2942.99
                                                                               -25.86
                                                                                                      192.03
                                                                                                                               39.29
             57.74
                                                                                                                                                                                                                         -30.14
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                                                                                                                                                                        0 58 48
                                                                                                                                                                                                   2343.0
                                                                                                        91.39
                                                                                                                               39.28
                                                                                                                                                        55.81
                                                                              -25.85
           122.26
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                           RET .8905 REF .9851 RTF .9402
SGB 3098.4 R23 .2669 R13 .9583
SGI 3057.8 SGZ 499.8 THA 20.55
                                                                                                                                                                                            ST 2061.2 SR 605.1 SS 783.3
CRT .9872 CRS -.9995 CST -.9913
       TOE 1.8168 TRA -.5917 TC3-1.7709 BAU .7030
       RDE .5372 RRA .0373 RC3 -.9827 FAU .04591
FDE 1.1923 FRA .0049 FC3-1.5308 BSP 9379
                                                                                                                                                                                           LSA 2282.9 MSA 127.7 SSA 5.8
                                                                                                                                                                                             EL1 2146.1 EL2 92.6 ALF 16.19
       BOE 1.8945 BRA .5928 BC3 2.0253 FSP
                                                                                      - 593
                                                                                                                                                                                                               ARRIVAL DATE NOV 17 1967
                                                                                                                   FLIGHT TIME 124.00
 LAUNCH DATE JUL 16 1967
                                                                                                                   DISTANCE 361.657
       RL 152.05 LAL -.00 LOL 292.80 VL 27.253 GAL -7.64 AZL 81.68 HCA 169.61 SHA 132.33 ECC .19873 INC 8.3201 V1 29.300 RP 107.57 LAP 1.50 LOP 102.51 VP 38.271 GAP 3.90 AZP 98.19 TAL 214.34 TAP 23.94 RCA 106.03 APO 158.63 V2 35.230 RC 111.351 GL 41.81 GP -64.73 ZAL 127.04 ZAP 109.31 ETS 315.06 ZAE 108.96 ETE 223.77 ZAC 116.82 ETC 337.75 CLP-140.76
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 34.373 WHL 5.863 DLA 49.90 RAL 172.13 RAD 6568.4 VEL 12.480 PTH 2.26 VHP 8.225 DPA -44.20 RAP 122.65 ECC 1.5657 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 47.03 17 3 17 4428.98 -26.72 208.88 57.06 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 17 6 3829.0 -32.10 202.50 46.15 18 
        C3 34.373 VHL 5.863 DLA 49.90 RAL 172.13 RAD 6568.4 VEL 12.480 PTH 2.26 VHP 8.225 DPA -44.20 RAP 122.65 ECC 1.5657
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                          ST 2600.5 SR 609.0 SS 827.9

CRT .9793 CRS -.9958 CST -.9936

LSA 2792.5 MSA 145.0 SSA 3.6

EL1 2668.2 EL2 120.3 ALF 12.94
                                                                                                            SGT 3074.8 SGR 1041.4 SG3 131.8
RRT .8450 RRF .9656 RTF .9472
SGB 3246.4 R23 .2620 R13 .9612
SGI 3202.0 SG2 534.8 THA 16.44
         TOE 2.6584 TRA -. 2323 TC3-1.3701 BAU .7007
       ROE :6146 RRA .2163 RC3 -.6694 FAU .03213
FOE 1.1886 FRA .1843 FC3 -.8093 BSP 9854
BOE 2.7285 BRA .3174 BC3 1.5249 FSP -446
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 19 1967

LAUNCH DATE JUL 16 1967

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DISTANCE 367.668
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 292.80 VL 27.202 GAL -7.41 AZL 76.66 MCA 172.76 SMA 131.97 ECC .19856 INC13.3359 V1 29.300 RP 107.55 LAP 1.67 LOP 105.75 VP 38.241 GAP 4.20 AZP 103.23 TAL 213.10 TAP 25.86 RCA 105.76 APO 158.17 V2 35.236
   RC 113.598 GL 53.63 GP -73.16 7AL 116.26 7AP 105.15 ETS 302.34 7AE 100.25 ETE 215.99 7AC 115.49 ETC 326.32 CLP-154.43
  PLANETOCENTRIC CONIC
                                                                                         2.46 VMP 11.111 DPA -50.53 RAP 112.78 ECC 1.9828
   C3 59.718 VHL 7.728 DLA 57.14 RAL 189.19 RAD 6569.1 VEL 13.456 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       38.04
                 17 44 56
                              4625.16
                                              -22.09
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      141.96
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                 17 44 56
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      141.96
                                              -22.08
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              RRT .3301 RRF .7312 RTF .9637
SGB 3375.9 R23 .2406 R13 .9687
SGI 3325.6 SGZ 581.0 THA 6.51
                                                                                                              ST 3009.8 SR 202.3 SS 808.5
CRT .6127 CRS -.6885 CST -.9950
   TDE 4.0472 TRA .5631 TC3 -.7448 BAU .6268
RDE .1500 RRA .4113 RC3 -.2482 FAU .01873
   FOE 1.1181 FRA .3609 FC3 -.2715 BSP 10251
BDE 4.0500 BRA .6973 BC3 .7851 FSP -309
                                                                                                              LSA 3118.0 MSA 177.0 SSA 2.0
                                                                                                              EL1 3012.3 EL2 159.8 ALF 2.37
                                                                  FLIGHT TIME 128.00
                                                                                                                        ARRIVAL DATE NOV 21 1967
LAUNCH DATE JUL 16 1967
                                                                  DISTANCE 373.519
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 292.80 VL 27.150 GAL -7.15 AZL 64.29 HCA 175.78 SHA 131.60 ECC .19817 INC25.7107 V1 29.300 RP 107.53 LAP 1.83 LOP 109.00 VP 38.209 GAP 4.45 AZP 115.65 TAL 211.74 TAP 27.52 RCA 105.52 APO 157.68 VZ 35.241 RC 115.842 GL 62.80 GP -79.01 ZAL 104.49 ZAP 99.50 ETS 256.55 ZAE 87.11 ETE 174.39 ZAC 115.14 ETC 280.20 CLP [49.96]
  PLANETOCENTRIC CONIC
                                                                                         2.94 VMP 18.522 DPA -54.96 RAP 92.01 ECC 3.8418
   C3 172.675 VHL 13.141 DLA 58.07 RAL 211.75 RAD 6570.9 VEL 17.146 PTH
   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        32.44 20 32 52
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                                               -9.65
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       36.92
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19 11 57 4854.31
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      143.08
  DIFFERENTIAL CORRECTIONS
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                             ST 2024.5 SR 1785.0 SS 780.3
CRT -.9882 CRS .9821 CST -.9994
LSA 2801.0 MSA 219.6 SSA 1.0
                                                              SGT 2819.9 SGR 1985.0 SG3 61.8
RRT -.9400 RRF -.9203 RTF .9982
   TOE 4.4255 TRA 2.4758 TC3 -.0944 BAU .2178
   ROE-4.0457 RRA-1.1039 RC3 -.0006 FAU .00388
   FOE 1.0532 FRA .6629 FC3 -.0195 BSP 10265
BOE 5.9960 BRA 2.7108 BC3 .0944 FSP -201
                                                               SGB 3448.5 R23 -.1649 R13 -.9858
                                                               SG1 3402.5 SG2 561.4 THA 145.43
                                                                                                             EL1 2691.2 EL2 205.7 ALF 138.64
                                                                                                                       ARRIVAL DATE NOV 23 1967
                                                                  FLIGHT TIME 130.00
LAUNCH DATE JUL 16 1967
                                                                 DISTANCE 378.453
  HELTOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 292.80 VL 27.097 GAL -6.69 A7L 15.79 MCA 177.93 SMA 131.22 ECC .19608 INC74.2093 VI 29.300 RP 107.52 LAP 1.99 LOP 112.24 VP 38.176 GAP 4.44 AFP 164.20 TAL 209.79 TAP 27.72 RCA 105.49 APO 156.95 V2 35.246 RC 118.080 GL 49.41 GP -54.12 TAL 95.16 TAP 93.80 ETS 189.42 TAE 56.66 ETE 111.99 TAC 120.78 ETC 203.75 CLP 96.50
  PLANETOCENTRIC CONIC
   C31163.043 VHL 34.103 OLA 39.08 RAL 215.89 RAD 6573.1 VEL 35.838 PTH 3.53 VHP 45.764 DPA -40.44 RAP 52.21 ECC20.1407
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      50.93 22 16 20
                                               .53
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       61.87 20 56 4 4816.23
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20 56 4 4816.23
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                                                             MID-COURSE EXECUTION ACCURACY
                  3 26 13 3606.47
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  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 689.3 SR 1607.3 SS 1191.1
CRT .9359 CRS .9986 CST .9156
LSA 2101.4 MSA 248.1 SSA .9
                                                              SGT 842.0 SGR 2857.4 SG3 49.6
RRT .7520 RRF -.9982 RTF -.7118
    TOE-4.0997 TRA -.3258 TC3 -.0702 BAU 3.2448
   RDE-8.8433 RRA-9.4256 RC3 -.1965 FAU-.05204
                                                              SGB 2978.9 R23 -.1013 R13 -.9948
   FOE 1.6182 FRA 1.9944 FC3 .0387 BSP 7870
BDE 9.7474 BRA 9.4312 BC3 .2087 FSP -140
                                                              SG1 2929.3 SG2 541.3 THA 77.06
                                                                                                              EL1 1734.3 EL2 225.0 ALF 67.74
                                                                                                                        ARRIVAL DATE NOV 25 1967
                                                                  FLIGHT TIME 132.00
LAUNCH DATE JUL 16 1967
  HELIOCENTRIC CONIC
                                                                  DISTANCE 386.847
   RL 152.05 LAL -.00 LOL 292.80 VL 27.044 GAL -6.93 AZL 128.64 HCA 183.43 SMA 130.85 ECC .20107 INC38.6381 V1 29.300 RP 107.50 LAP 2.14 LOP 115.48 VP 38.141 GAP 5.41 AZP 51.41 TAL 209.93 TAP 33.36 RCA 104.54 APO 157.16 V2 35.250 RC 120.312 GL -62.00 GP 75.40 ZAL 99.62 ZAP 99.14 ETS 154.29 ZAE 79.35 ETE 232.84 ZAC 89:46 ETC 122.57 CLP 129.03
  PLANETOCENTRIC CONTC
   C3 360.442 VHL 18.985 DLA -54.73 RAL 144.35 RAD 6572.0 VEL 21.949 PTH 3.23 VHP 23.039 DPA 75.62 RAP 311.30 ECC 6.9320
   LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                            64.85
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       40.99
                                                                                       144.64 12 6 56
                                                           296.33
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                                                                                                                   86.9
                                                3.76
      139.01
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                          ORBIT DETERMINATION ACCURACY
                                                              SGB 3572.6 R23 -.1176 R13 .9927
                                                                                                        ST 482.1 SR 2789.1 SS 1199.4
CRT .9317 CRS -.9986 CST -.9493
LSA 3068.9 MSA 179.1 SSA 1.1
   TOE-1.5837 TRA .4026 TC3 -.0157 BAU .6374
   ROE-8.9799 RRA-4.2357 RC3 .1313 FAU-.00683
FDE-1.9613 FRA -.7195 FC3 .0164 89P 10725
80E 9.1145 BRA 4.2548 BC3 .1323 FSP -188
                                                               SG1 3541.1 SG2 473.5 THA 86.27
                                                                                                             EL1 2825.2 EL2 172.9 ALF 80.82
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FLIGHT TIME 126.00

ARRIVAL DATE NOV 27 1967

LAUNCH DATE JUL 16 1967

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DISTANCE 392.545
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 26.989 GAL -6.61 A7L 111.15 HCA 186.35 SMA 130.47 ECC .20069 INC21.1475 VI 29.300 RP 107.49 LAP 2.29 LOP 118.73 VP 38.106 GAP 5.61 A7P 68.97 TAL 208.41 TAP 34.77 RCA 104.29 APO 156.65 VZ 35.253 RC 122.538 GL -61.51 GP 72.31 ZAL 105.92 ZAP 107.38 ETS 86.76 ZAE 95.42 ETE 167.48 ZAC 88.73 ETC 55.55 CLP-169.41
   PLANETOCENTRIC CONIC
     C3 121.116 VHL 11.005 DLA -49.99 RAL 136.47 RAD 6570.3 VEL 15.571 PTH 2.77 VHP 12.644 DPA 76.87 RAP 232.76 ECC 2.9933 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2.77 VMP 12.644 DPA 76.87 RAP 232.76 ECC 2.9933
                        2 42 32 2082.46
11 6 6 5850.48
2 42 32 2082.46
11 6 6 5850.48
2 42 32 2082.46
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11 6 6 5850.48
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         46.92
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        133.08
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       RET .8780 REF .7940 REF .9874
SGB 3772.6 R23 -1888 R13 .9810
SGI 3738.2 SGZ 507.9 THA 15.26
                                                                                                                                                          ST 2547.4 SR 422.8 SS 893.2
CRT .8576 CRS -.8159 CST -.9971
     TDE-4.6537 TRA-3.2386 TC3 -.2392 BAU
                                                                     . 3888
     RDE -.5334 RRA-1.3124 RC3 -.0204 FAU .01425
                                                                                                                                                          LSA 2722.8 MSA 227.7 SSA 1.4
     FOE-1.5263 FRA -.7927 FC3 -.1019 BSF 11578
BOE 4.6841 BRA 3.4944 BC3 .2401 FSP -287
                                                                                                                                                          EL1 2573.2 EL2 215.3 ALF
                                                                                                                                                                                                         8.15
                                                                                                                                                                        ARRIVAL DATE NOV 29 1967
                                                                                             FLIGHT TIME 136,00
                                                                                             DISTANCE 398.449
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 26.934 GAL -6.34 A7L 104.88 MCA 189.49 SNA 130.09 ECC .20086 INC14.8803 V1 29.300 RP 107.49 LAP 2.43 LOR 121.98 VP 38.069 GAP 5.87 A7P 75.31 TAL 207.00 TAP 36.49 RCA 103.96 APO 156.22 V2 35.256 RC 124.755 GL -56.91 GP 61.96 ZAL 110.57 ZAP 115.45 ETS 66.15 ZAE 105.14 ETE 150.43 ZAC 90.42 ETC 35.25 CLP-156.09
   PLANETOCENTRIC CONIC
                                                                                                                             2.51 VHP 9.148 DPA 68.76 RAP 201.15 ECC 2.1080
    C3 67.322 VHL 8.205 DLA -44.77 RAL 137.24 RAO 6569.3 VEL 13.736 PTH 2.51 VHP 9.148 DPA 68.76 RAP 201.15 ECC 2.1080 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 53.75 3 936 1893.31 17.05 40.63 29.22 132.04 3 41 9 1293.3 22.30 34.63 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 12 21 35 5181.0 22.32 264.18 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 3 41 9 1293.3 22.30 34.63 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 12 21 35 5181.0 22.32 264.18 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 12 21 35 5181.0 22.32 264.18 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 3 41 9 1293.3 22.30 34.63 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 3 41 9 1293.3 22.30 34.63 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 3 41 9 1293.3 22.30 34.65 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 12 21 35 5181.0 22.32 264.18 126.25 10 45 14 5781.02 17.07 270.18 29.23 132.04 12 21 35 5181.0 22.32 264.18
     C3 67.322 VHL 8.205 DLA -44.77 RAL 137.24 RAD 6569.3 VEL 13.736 PTM
                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2403.9 SR 468.4 SS 878.6
CRT -.8902 CRS .9462 CST -.9897
                                                                                       SGT 3835.5 SGR 509.9 SG3 128.3
RRT -.3730 RRF -.5916 RTF .9658
     TOE-3.2084 TRA-2.9509 TC3 -.6862 BAU .6218
     ROE .6673 RRA -.1622 RC3 .0804 FAU .02748
FDE-1.5507 FRA -.8484 FC3 -.3534 BSP 11904
BDE 3.2771 BRA 2.9554 BC3 .6909 FSP -411
                                                                                     SGB 3869.3 R23 .2434 R13 -.9673
SG1 3840.3 SG2 472.5 THA 177.12
                                                                                                                                                         LSA 2591.3 MSA 235.4 SSA
                                                                                                                                                        EL1 2440.1 EL2 210.2 ALF 170.09
                                                                                                                                                                       ARRIVAL DATE DEC 1 1967
                                                                                             FLIGHT TIME 138.00
LAUNCH DATE JUL 16 1967
                                                                                            DISTANCE 404.396
   HELTOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 26.879 GAL -6.06 AZI 101.73 MCA 192.68 SMA 129.71 ECC .20123 INC11.7255 VI 29.300 RP 107.48 LAP 2.56 LOP 125.22 VP 38.032 GAP 6.14 AZP 78.55 TAL 205.60 TAP 38.28 RCA 103.61 APO 155.81 VZ 35.258 RC 126.964 GL -52.52 GP 52.85 ZAL 113.68 ZAP 122.62 ETS 59.15 ZAE 112.00 ETE 148.08 ZAC 92.06 ETC 28.55 CLP-153.21
    PLANETOCENTRIC CONIC
     C3 46.854 VML 6.845 DLA -40.63 RAL 139.50 RAD 6568.8 VEL 12.970 PTH 2.36 VMP 7.596 DPA 60.43 RAP 189.47 ECC 1.7711
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
                                                                                       SCT 3904.0 SCR 601.8 SC3 164.0
RRT -.6927 RRF -.6683 RTF .9525
SCB 3950.1 R23 .2777 R13 -.9559
SCI 3926.5 SC2 431.6 THA 173.83
                                                                                                                                                         ST 2290.3 SR 556.3 SS 894.8
CRT -.9322 CRS .9815 CST -.9842
     TOE-2.5321 TRA-2.6187 TC3-1.1329 BAU .7173
     RDE .6644 RRA .0301 RC3 .1663 FAU .03800
FDE-1.5926 FRA -.8601 FC3 -.7022 BSP 12147
BDE 2.6178 BRA 2.6189 BC3 1.1451 FSP -526
                                                                                                                                                        LSA 2509.9 MSA 236.7 SSA
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                                                                                                                                                        EL1 2348.7 EL2 196.3 ALF 167.15
                                                                                                                                                                        ARRIVAL DATE DEC 3 1967
                                                                                             FLIGHT TIME 140.00
LAUNCH DATE JUL 16 1967
                                                                                            DISTANCE 410.351
   HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 26.823 GAL -5.78 AZL 99.83 MCA 195.89 SMA 129.35 ECC .20176 INC 9.8272 VI 29.300 RP 107.48 LAP 2.68 LOP 128.47 VP 37.993 GAP 6.42 AZP 80.54 TAL 204.18 TAP 40.08 RCA 103.24 APO 155.43 V2 35.259 RC 129.165 GL -48.84 GP 45.35 ZAL 115.59 ZAP 128.71 ETS 55.17 ZAE 116.91 ETE 149.25 ZAC 93.16 ETC 24.91 CLP-152.85
    PLANETOCENTRIC CONIC
     C3 36.604 VML 6.050 DLA -37.51 RAL 142.01 RAD 6568.4 VEL 12.569 PTH 2.28 VMP 6.811 DPA 53.15 RAP 184.06 ECC 1.6024
     C3 36.804 WIL 6.090 DLA -37.51 RAL 142.01 RAU 0908.4 VEL 12.399 TH 21.20 VIV CHAZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 64.30 4 15 13 1612.4 20.39 19.17 23.04 122.19 4 42 6 1012.4 24.49 12.15 115.70 10 17 39 5759.49 20.40 271.00 23.05 122.18 11 53 39 5159.5 24.50 263.98
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    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 3995.3 SGR 594.9 SG3 192.4

RRT -.7474 RRF -.9090 RTF .9438

SGB 4039.3 R23 .2961 R13 -.9471

SGI 4020.2 SG2 392.8 THA 173.59
                                                                                                                                                        ST 2231.0 SR 534.7 SS 904.2

CRT - 9378 CRS 9880 CST - 9801

LSA 2454.6 MSA 236.7 93A 4.0

EL1 2287.1 EL2 181.1 ALF 167.25
                                                                      .7736
      TOE-2.1751 TRA-2.3875 TC3-1.5670 BAU
      RDE .5641 RRA .0581 RC3 .2086 FAU .04577
      FDE-1.5917 FRA -.8251 FC3-1.0825 89P 12482
      BDE 2.2471 BRA 2.3882 BC3 1.5808 FSP -621
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FLIGHT TIME 134.00

ARRIVAL DATE DEC 5 1967

LAUNCH DATE JUL 16 1967

HELIOCENTRIC CONIC DISTANCE 416.302 RL 152.05 LAL -.00 LOL 292.80 VL 26.767 GAL -5.50 AZL 98.56 MCA 199.12 SMA 128.96 ECC .20240 INC 8.5550 VI 29.300 RP 107.48 LAP 2.79 LOP 131.72 VP 37.994 GAP 6.70 AZP 81.91 TAL 202.76 TAP 41.87 RCA 102.86 APO 155.06 V2 35.259 RC 131.355 GL -45.82 GP 39.26 ZAL 116.60 ZAP 133.80 ETS 52.24 ZAE 120.42 ETE 151.48 ZAC 93.66 ETC 22.37 CLP-153.36 PLANETOCENTRIC CONIC C3 30.548 VHL 5.527 DLA -35.18 RAL 144.55 RAD 6568.2 VEL 12.326 PTH 2.22 VHP 6.391 DPA 46.97 RAP 181.38 ECC 1.5027 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.48 21.97 119.05 5 11 28 119.04 11 43 1 904.4 4 46 24 1504.42 20.77 10.74 68.20 5176.3 265.33 21.98 24.50 10 6 45 5776.34 20.79 272.60 111.80 119.05 5 11 28 119.04 11 43 1 119.05 5 11 28 119.04 11 43 1 3.48 1504.42 20.77 10.74 21.97 904.4 24.48 4 46 24 68.20 10 -6 45 5776.34 20.79 272.60 21.98 5176.3 24.50 265.33 111.60 904.4 24.48 3.48 20.77 10.74 21.97 4 46 24 1504.42 66.20 265.33 272.60 5176.3 24.50 10 6 45 5776.34 20.79 21.98 111.60 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RET -.7563 RRF -.9124 RTF ..9375 SGB 4130.6 R23 .3024 R13 -.9403 SG1 4114.9 SG2 359.6 THA 174.13 ST 2198.9 SR 493.6 \$\$ 903.9 CRT -.9384 CRS .9906 CST -.9768 TOE-1.9592 TRA-2.2081 TC3-1.9798 BAU .8134 RDE .4757 RRA .0514 RC3 .2176 FAU .05087 FDE-1.5540 FRA -.7550 FC3-1.4417 BSP 12807 BDE 2.0161 BRA 2.2087 BC3 1.9918 FSP -692 LSA 2416.6 MSA 236.0 SSA 5.0 EL1 2247.4 EL2 166.9 ALF 168.04 FLIGHT TIME 144.00 ARRIVAL DATE DEC 7 1967 LAUNCH DATE JUL 16 1967 DISTANCE 422.243 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.711 GAL -5.20 ATL 97.64 MCA 202.35 SMA 128.58 ECC .20316 INC 7.6390 V1 29.300 RP 107.48 LAP 2.90 LOP 134.97 VP 37.914 GAP 6.97 AZP 82.93 TAL 201.31 TAP 43.66 RCA 102.46 APO 154.70 V2 35.259 RC 133.537 GL -43.33 GP 34.33 TAL 116.91 TAP 136.04 ETS 49.85 TAE 122.89 ETE 153.97 TAC 93.63 ETC 20.38 CLP-154.23 PLANETOCENTRIC CONIC C3 26.557 VHL 5.153 DLA -33.46 RAL 147.09 RAD 6568.1 VEL 12.163 PTH 2.18 VHP 6.167 DPA 41.76 RAP 180.12 ECC 1.4371 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMTH INJ TIME
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116.71 11 34 33
116.72 5 39 0
116.71 11 34 33
120.64 9 23 55
112.93 12 32 57 5 15 29 21.71 811.8 24.34 356.16 1411.79 20.93 3.58 71.38 5199.1 24.35 267.03 20.94 274.46 21.72 5799.07 106.62 811.8 24.34 356.16 20.93 3.58 21.71 71.36 5 15 29 1411.79 5199.1 24.35 267.03 20.94 274.46 21.72 5799.07 108.62 9 57 54 9 13 7 48.3 19.91 297.44 15.96 304.34 18.85 110.00 648.27 5010.6 28.95 254.40 262.41 24.31 10 59 26 5610.58 26.08 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2197.3 SR 457.8 SS 903.8 CRT -.9394 CRS .9922 CST -.9746 TOE-1.8301 TRA-2.0661 TC3-2.3883 BAU .A512 SGT 4216.7 SGR 508.6 SG3 227.5 RRT -.7521 RRF -.9020 RTF .9338 SGB 4247.3 R23 .2963 R13 -.9360 SG1 4234.1 SG2 333.8 THA 174.78 RDE .4114 RRA .D415 RC3 .2089 FAU .D5424 FDE-1.5055 FRA -.6744 FC3-1.7682 BSP 13364 LSA 2408.2 MSA 234.5 SSA 6.0 EL1 2239.2 EL2 154.0 ALF 168.87 BDE 1.8758 BRA 2.0665 BC3 2.3974 FSP -758 ARRIVAL DATE DEC 9 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 16 1967 DISTANCE 428.179 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.655 GAL -4.90 AZL 96.94 HCA 205.59 SMA 128.21 ECC .20403 INC 6.9443 V1 29.300 RP 107.48 LAP 2.99 LOP 138.22 VP 37.873 GAP 7.25 AZP 83.73 TAL 199.84 TAP 45.43 RCA 102.05 APO 154.37 V2 35.257 RC 135.709 GL -41.25 GP 30.32 ZAL 116.67 ZAP 141.62 ETS 47.83 ZAE 124.65 ETE 156.39 ZAC 93.17 ETC 18.75 CLP-155.24 PLANETOCENTRIC CONIC C3 23.714 VHL 4.870 DLA -32.23 RAL 149.64 RAD 6568.0 NEL 12.045 PTH 2.15 VHP 6.056 DPA 37.33 RAP 179.73 ECC 1.3903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.01 6 4 16 115.00 11 28 44 22.06 6 4 16 5 42 3 1333.20 9 51 42 5821.86 357.59 73.93 21.03 268.73 22.07 21.04 276.26 106.07 350.06 22.06 115.01 6 4 16 733.2 24.22 5 42 3 1333.20 21.03 357.59 73.93 115.01 6 4 16 115.00 11 28 44 5221.9 24.23 268.73 9 51 42 5821.86 21.04 276.26 22.07 106.07 9 1 29 126.9 17.30 302.04 121.83 9 1 29 108.42 13 14 50 8 49 22 726.86 13.19 308.74 17.63 11 43 33 5476.20 4876.2 244.81 29.32 253.30 25.70 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4216.9 SGR 445.6 SG3 224.9 RRT -.7051 RRF -.8648 RTF ..9240 SGB 4240.3 R23 ..2956 R13 -.9257 SGI 4228.6 SG2 315.1 THA 175,72 ST 2148.4 SR 414.3 SS 862.8 CRT -.9372 CRS .9934 CST -.9707 TOE-1.6977 TRA-1.8865 TC3-2.6984 BAU .8571 RDE .3520 RRA .0197 RC3 .1663 FAU .05319 FOE-1.3884 FRA -.5227 FC3-1.9417 BSP 12660 7.1 LSA 2340.5 MSA 232.5 SSA EL1 2183.4 EL2 142.2 ALF 169.71 BOE 1.7338 BRA 1.8866 BC3 2.7035 FSP -684 ARRIVAL DATE DEC 11 1967 FLIGHT TIME 144.00 LAUNCH DATE JUL 16 1967 **DISTANCE 434.097** MELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.599 GAL -4.58 AZL 96.40 HCA 208.82 SHA 127.84 ECC .20503 INC 6.3964 V1 29.300 RP 107.49 LAP 3.08 LOP 141.48 VP 37.832 GAP 7.52 AZP 84.39 TAL 198.36 TAP 47.19 RCA 101.63 APO 154.05 V2 35.255 RC 137.871 GL -39.48 GP 27.02 ZAL 115.99 ZAP 144.67 ETS 46.11 ZAE 125.89 ETE 158.60 ZAC 92.37 ETC 17.38 CLP-156.33 PLANETOCENTRIC CONIC C3 Z1.580 WHL 4.645 DLA -31.37 RAL 152.23 RAD 6567.9 VEL 11.957 PTH 2.13 VHP 6.016 DPA 33.54 RAP 179.90 ECC 1.3552 C3 21.580 WHL 4.645 DLA -31.37 RAL 152.23 RAD 6567.9 VEL 11.957 PTH 2.13 VHP 6.016 DPA 33.54 RAP 179.90 ECC 1.3552 LNON AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.90 6 5 49 1268.22 21.13 352.71 22.87 113.74 6 26 57 668.2 24.16 345.10 75.90 6 5 49 1268.22 21.13 352.71 22.87 113.73 11 25 56 5241.0 24.17 270.16 104.10 9 48 35 5841.03 21.15 277.77 22.87 113.74 6 26 57 668.2 24.16 345.10 104.10 9 48 35 5841.03 21.15 277.77 22.87 113.73 11 25 56 5241.0 24.17 270.16 110.00 8 42 31 759.20 12.02 310.51 17.82 122.24 8 55 10 159.2 16.19 303.89 110.00 12 11 4 5398.05 30.87 247.75 26.72 105.47 13 41 2 4798.1 32.68 239.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4356.9 SCR 419.4 SC3 232.1 RRT -.6872 RRF -.8348 RTF .9231 SCB 4377.1 R23 .2716 R13 -.9244 SCI 4366.5 SC2 304.1 THA 176.20 ST 2184.9 SR 397.1 SS 865.7 CRT -.9420 CRS .9950 CST -.9702 LSA 2372.4 MSA 229.3 SSA 8.2 TOE-1.6566 TRA-1.7731 TC3-3.0909 BAU .8927 ROE .3219 RRA .0169 RC3 .1431 FAU .05420 FDE-1.3406 FRA -.4391 FC3-2.1743 8SP 13411 EL1 2216.8 EL2 131.4 ALF 170.25 BOE 1.6878 BRA 1.7732 BC3 3.0942 FSP -75A

FLIGHT TIME 142.00

ARRIVAL DATE DEC 13 1967

LAUNCH DATE JUL 16 1967

DISTANCE 440.003 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.543 GAL -4.26 AZL 95.95 MCA 212.06 SMA 127.47 ECC .20615 INC 5.9507 VI 29.300 RP 107.50 LAP 3.16 LOP 144.73 VP 37.790 GAP 7.79 AZP 84.95 TAL 196.86 TAP 48.93 RCA 101.19 APO 153.75 VZ 35.253 RC 140.023 GL -37.95 GP 24.30 ZAL 114.94 ZAP 147.31 ETS 44.66 ZAE 126.77 ETE 160.57 ZAC 91.31 ETC 16.20 CLP-157.43 PLANETOCENTRIC CONIC C3 19.912 VHL 4.462 OLA -30.81 RAL 154.89 RAD 6567.8 VEL 11.887 PTH 2.11 VHP 6.022 DPA 30.23 RAP 180.47 ECC 1.3277 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T77,31 6 26 25 1217.43 21.29 348.96 24.07 112.82 6 46 42 617.4 24.20 341.30 102.69 9 49 12 5853.28 21.31 278.77 24.07 112.80 11 26 45 5253.3 24.21 271.10 77.31 6 26 25 1217.43 21.29 348.96 24.07 112.80 11 26 45 64 42 617.4 24.20 341.30 112.82 6 46 42 112.80 11 26 45 122.39 8 56 16 103.43 14 0 29 9 49 12 5853.28 271.10 21.31 278.77 24.07 5253.3 24.21 102.69 304.59 110.00 8 43 25 771.57 11.57 311.19 18.77 171.6 15.76 110.00 12 31 22 5347.14 235.13 31.73 244.03 27.88 4747.1 33.25 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 4457.0 SCR 395.6 SC3 233.0 RRT -.6532 RRF -.7913 RTF .9205 SCB 4474.5 R23 .2473 R13 -.9214 SCI 4464.5 SC2 299.0 THA 176.67 ST 2213.8 SR 382.5 SS 858.0 CRT -.9472 CRS .9966 CST -.9695 LSA 2394.3 MSA 225.3 SSA 9.4 EL1 2243.4 EL2 121.0 ALF 170.68 TDE-1.6239 TRA-1.6456 TC3-3.4471 BAU .9181 ROE .2978 RRA .0132 RC3 .1114 FAU .05359 FQE-1.2778 FRA -.3384 FC3-2.3301 BSP 13769 BDE 1.6510 BRA 1.6457 BC3 3.4489 FSP -746 FLIGHT TIME 152.00 ARRIVAL DATE DEC 15 1967 HELIOCENTRIC CONIC DISTANCE 445.895 RL 152.05 LAL -.00 LOL 292.80 VL 26.487 GAL -3.93 AZL 95.58 HCA 215.30 BMA 127.11 ECC .20740 INC 5.5790 VI 29.300 RP 107.51 LAP 3.22 LOP 147.98 VP 37.748 GAP 8.07 AZP 85.44 TAL 195.35 TAP 50.66 RCA 100.75 APO 153.47 V2 35.249 RC 142.165 GL -36.59 GP 22.02 ZAL 113.57 ZAP 149.63 ETS 43.44 ZAE 127.40 ETE 162.31 ZAC 90.04 ETC 15.19 CLP-158.54 PLANETOCENTRIC CONIC C3 18.374 VHL 4.310 DLA -30.50 RAL 157.64 RAD 6567.8 VEL 11.830 PTH 2.10 VHP 6.061 DPA 27.31 RAP 181.32 ECC 1.3057 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.16 6 43 35 1181.30 101.84 9 53 56 5856.52 78.16 6 43 35 1181.30 101.84 9 53 56 5856.52 110.00 8 49 16 771.90 110.00 12 47 25 5313.92 112.16 7 3 16 112.14 11 31 32 25.61 7 3 16 581.3 24.33 338.64 21.51 346.35 5256.5 271.39 21.53 279.11 25.61 24.34 112.16 7 3 16 112.14 11 31 32 122.40 9 2 8 102.05 14 15 59 21.51 346.35 25.61 581.3 24.33 334.64 21.53 279.11 25.61 5256.5 24.34 271.39 110.00 771.90 11.56 311.21 20.26 171.9 15.75 304.61 4713.9 33.56 232.59 32.23 241.57 29.30 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4549.3 SGR 379.4 SG3 231.5 RRT -.6145 RRF -.7410 RTF .9180 SG8 4565.1 R23 .2211 R13 -.9187 SG1 4555.3 SG2 298.9 THA 177.05 ST 2250.6 SR 372.9 SS 850.0 CRT -.9538 CRS .9980 CST -.9692 TOE-1.6069 TRA-1.5148 TC3-3.7895 BAU .9412 ROE .2804 RRA .0115 RC3 .0791 FAU .05236 FOE-1.2173 FRA -.2390 FC3-2.4405 BSP 14072 BOE 1.6312 BRA 1.5148 BC3 3.7903 FSP -742 LSA 2424.5 MSA 220.2 SSA 10.5 EL1 2278.6 EL2 110.7 ALF 171.00 ARRIVAL DATE DEC 17 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 16 1967 HELIOCENTRIC CONIC DISTANCE 451.772 RL 152.05 LAL -.00 LOL 292.80 VL 26.431 GAL -3.58 AZL 95.26 HCA 218.54 SMA 126.75 ECC .20879 INC 5.2624 VI 29.300 RP 107.52 LAP 3.28 LOP 151.23 VP 37.704 GAP 8.34 AZP 85.88 TAL 193.82 TAP 52.37 RCA 100.29 APO 153.22 VZ 35.245 RC 144.295 GL -35.36 GP 20.10 ZAL 111.92 ZAP 151.69 ETS 42.44 ZAE 127.85 ETE 163.82 ZAC 88.59 ETC 14.30 CLP-159.63 PLANETOCENTRIC CONIC C3 17.482 VHL 4.181 DLA -30.38 RAL 160.49 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 6.122 DPA 24.70 RAP 182.38 ECC 1.2877 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 27.47 111.71 6 57 26 1159.35 10 2 51 5850.20 21.80 78.50 5250.2 24.56 278.76 27.47 101.50 21.81 6 57 26 1159.35 10 2 51 5850.20 8 58 49 763.86 13 0 39 5293.69 559.4 24.55 78.50 27.47 21.80 344.83 5250.2 24.56 21.81 278.76 27.47 101.50 122.30 9 11 33 101.20 14 28 52 163.9 16.03 11.85 310.77 22.1A 110,00 33.71 4693.7 32.51 240.06 31.02 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4639.7 SCR 370.7 SC3 228.9 RRT -.5754 RRF -.6886 RTF .9160 SCB 4654.5 R23 .1947 R13 -.9166 SCI 4644.6 SC2 302.8 THA 177.36 ST 2298.3 SR 368.0 SS 844.4 CRT -.9614 CRS .9989 CST -.9696 LSA 2466.7 NSA 214.3 SSA 11.7 TOE-1.6052 TRA-1.3808 TC3-4.1212 BAU .9633 ROE .2685 RRA .0115 RC3 .0485 FAU .05079 FOE-1.1631 FRA -.1443 FC3-2.5151 BSP 14377 EL1 2325.5 EL2 100.1 ALF 171.23 BOE 1.6275 BRA 1.3809 BC3 4.1215 FSP -734 ARRIVAL DATE DEC 19 1967 FLIGHT TIME 156.00 LAUNCH DATE JUL 16 1967 **DISTANCE 457.634** HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.375 GAL -3.22 ATL 94.99 MCA 221.78 SMA 126.40 ECC .21032 ING 4.9879 V1 29.300 RP 107.53 LAP 3.32 LOP 154.48 VP 37.661 GAP 8.62 AZP 86.28 TAL 192.28 TAP 54.07 RCA 99.81 APO 152.98 V2 35.240 RC 146.414 GL -34.21 GP 18.46 ZAL 110.00 ZAP 153.54 ETS 41.65 ZAE 128.17 ETE 165.13 ZAC 87.01 ETC 13.53 CLP-160.70 PLANETOCENTRIC CONIC C3 16.584 VHL 4.072 DLA -30.43 RAL 163.47 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 6.200 DPA 22.33 RAP 183.62 ECC 1.2729 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.38 7 8 26 1150.03 22:13 344.28 29.63 111.43 7 27 36 550.0 24.84 336.49 101.62 10 15 38 5835.24 22.14 277.78 29.64 111.42 11 52 53 5235.2 24.85 269.99 7 27 36 336.49 1150.03 5835.24 550.0 24.84 7 8 26 22.13 344.28 29.63 111.43 111.42 11 52 53 122.12 9 23 52 100.77 14 39 56 24.85 269.99 277.78 5235.2 101.62 10 15 38 22.14 29.64 16.52 149.5 9 11 22 749.54 12.37 309.99 24.49 13 11 53 5283.73 4683.7 33.78 32.64 239.31 33.04 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4718.0 SGR 367.1 SG3 224.7 RRT -.5364 RRF -.6358 RTF .9138 SGB 4732.3 R23 .1701 R13 -.9143 SG1 4722.2 SG2 309.6 THA 177.60 ST 2349.9 SR 366.3 SS 838.0 CRT -.9693 CRS .9993 CST -.9701 TOE-1.6118 TRA-1.2387 TC3-4.4323 BAU .9827 RDE .2603 RRA .0125 RC3 .0196 FAU .04887 FDE-1.1109 FRA -.0516 FC3-2.5509 BSP .14602 BDE 1.6327 BRA 1.2387 BC3 4.4324 FSP .718 LSA 2513.0 MSA 207.5 SSA 12.9 EL1 2376.6 EL2 89.1 ALF 171.40

FLIGHT TIME 150.00

LAUNCH DATE JUL 16 1967

DISTANCE 463.479 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 292.80 VL 26.320 GAL -2.85 A7L 94.75 MCA 225.02 SMA 126.05 ECC .21200 INC 4.7461 V1 29.300 RP 107.55 LAP 3.36 LOP 157.73 VP 37.617 GAP 8.90 AZP 86.64 TAL 190.73 TAP 55.76 RCA 99.33 APO 152.77 V2 35.234 RC 148.521 GL -33.12 GP 17.06 ZAL 107.86 ZAP 155.22 ETS 41.05 ZAE 128.41 ETE 166.28 ZAC 85.31 ETC 12.85 CLP-161.75 PLANETOCENTRIC CONIC C3 15.849 VHL 3.981 DLA -30.59 RAL 166.59 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 6.292 DPA 20.16 RAP 184.98 ECC 1.2608 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ MT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.29 7 36 36 111.28 12 8 26 7 36 36 550.6 336.66 77.91 7 17 26 1150.64 22.50 344,48 32.09 7 56 36 25.19 10 31 32 5813.95 22.51 276.34 32.10 5213.9 25.20 268.52 102.09 7 36 36 336.66 77.91 7 17 26 1150.64 22.50 344.48 32.09 111.29 550.6 25.19 111.29 7 36 36 111.28 12 8 26 121.67 9 38 39 100.70 14 49 42 102.09 10 31 32 5813.95 22.51 276.34 32.10 5213.9 25.20 268.52 9 26 29 730.39 13.06 308.93 27.14 130.4 17.18 302.24 110.00 110.00 13 21 39 32.66 239.19 35.37 4682.2 33.79 230.14 5282.20 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4801.4 SGR 368.6 SG3 220.7 RRT -.5037 RRF -.5884 RTF .9127 SGB 4815.5 R23 .1466 R13 -.9130 ST 2412.8 SR 367.8 SS 834.6 CRT -.9770 CRS .9987 CST -.9713 LSA 2571.6 MSA 200.0 SSA 14.1 TDE-1.6307 TRA-1.0934 TC3-4.7332 BAU 1.0029 ROE .2555 RRA .0145 RC3 -.0053 FAU .04696 FOE-1.0658 FRA .0332 FC3-2.5652 BSP 14884 BDE 1.6506 BRA 1.0935 BC3 4.7332 FSP -706 SG1 4805.0 SG2 318.2 THA 177.78 EL1 2439.5 EL2 77.6 ALF 171.52 FLIGHT TIME 160.00 ARRIVAL DATE DEC 23 1967 HELIOCENTRIC CONIC DISTANCE 469.307 RL 152.05 LAL -.00 LOL 292.80 VL 26.265 GAL -2.47 AZL 94.53 MCA 228.26 SMA 125.70 ECC .21385 INC 4.5304 V1 29.300 RP 107.57 LAP 3.38 LOP 160.98 VP 37.573 GAP 9.18 AZP 86.98 TAL 189.17 TAP 57.43 RCA 98.82 APO 152.58 V2 35.228 RC 150.615 GL -32.05 GP 15.85 7AL 105.50 ZAP 156.76 ETS 40.63 ZAE 128.59 ETE 167.27 ZAC 83.52 ETC 12.26 CLP-162.77 PLANETOCENTRIC CONIC 15.254 VHL 3.906 DLA -30.86 RAL 169.86 RAD 6567.6 VEL 11.689 PTH 2.06 VHP 6.395 DPA 18.15 RAP 186.46 ECC 1.2510 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 25 19 345.23 34.85 7 44 38 558.3 25.59 77.19 1158.32 22.90 111.27 337.38 10 49 44 5789.00 274.64 111.25 12 26 13 5189.0 22.91 34.85 7 25 19 345.23 7 44 38 1158.32 22.90 34.85 111.27 558.3 337.38 111.25 12 26 13 121.56 9 55 40 100.95 14 58 29 10 49 44 5789.00 5189.0 266.79 102.81 22.91 274.64 34.85 25.60 9 43 52 707.48 13.88 307.66 30.14 107.5 17.96 300.92 110.00 13 30 22 5287.84 4687.8 110.00 239.62 38.00 33.75 230.58 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4881.9 SGR 373.2 SG3 216.4 RRT - .4760 RRF - .5465 RTF .9120 ST 2481.7 SR 371.6 SS 831.6 CRT -.9839 CRS .9972 CST -.9726 TDE-1.6574 TRA -.9417 TC3-5.0127 BAU 1.0222 RDE .2532 RRA .0168 RC3 -.0269 FAU .04497 FDE-1.0243 FRA .1133 FC3-2.5524 BSP 15168 BDE 1.6766 BRA .9419 BC3 5.0127 FSP -693 SGB 4896.1 R23 .1256 R13 -.9123 SG1 4885.1 SG2 328.0 THA 177.91 LSA 2636.5 MSA 191.9 SSA 15.4 EL1 2508.5 EL2 65.7 ALF 171.61 FLIGHT TIME 162.00 ARRIVAL DATE DEC 25 1967 LAUNCH DATE JUL 16 1967 DISTANCE 475.118 RL 152.05 LAL -.00 LOL 292.80 VL 26.210 GAL -2.08 AZL 94.34 HCA 231.50 SMA 125.36 ECC .21586 INC 4.3354 V1 29.300 RP 107.59 LAP 3.39 LOP 164.22 VP 37.528 GAP 9.47 AZP 87.30 TAL 187.60 TAP 59.10 RCA 98.30 APO 152.42 V2 35.221 RC 152.696 GL -30.99 GP 14.79 ZAL 102.94 ZAP 158.18 ETS 40.39 ZAE 128.72 ETE 168.14 ZAC 81.64 ETC 11.73 CLP-163.77 PLANETOCENTRIC CONIC C3 14.786 VHL 3.845 DLA -31.19 RAL 173.29 RAD 6567.6 VEL 11.669 PTH 2.05 VHP 6.509 DPA 16.27 RAP 188.03 ECC 1.2433 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 32 55 11 9 29 7 52 25 76.34 1170.53 23.31 346.32 37,90 111.33 111.33 7 52 25 111.32 12 45 32 111.33 7 52 25 111.32 12 45 32 570.5 5762.85 23.32 272.85 37.90 264.97 338.44 76.34 7 32 55 1170.53 23.31 346.32 37.90 570.5 26.00 103.66 11 9 29 5762.85 23.32 272.85 37.90 5162.9 26.01 264.97 121.17 10 14 39 101.45 15 6 37 10 3 17 681.73 14.79 306.23 33.46 81.7 299.42 110.00 5299.65 240.50 13 38 17 40.93 4699.7 110.00 32.43 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 4960.2 SCR 380.3 SC3 211.9 RRT -.4540 RRF -.5113 RTF .9118 SCB 4974.8 R23 .1070 R13 -.9121 SCI 4963.2 SC2 338.6 THA 178.00 ST 2554.4 SR 377.3 SS 828.9 CRT -. 9897 CRS .. 9947 CST -. 9741 TOE-1.6903 TRA -.7825 TC3-5.2662 BAU 1.0411 ROE .2532 RRA .0192 RC3 -.0447 FAU .04298 FDE -.9863 FRA .1889 FC3-2.5164 BSP 15458 BDE 1.7091 BRA .7827 BC3 5.2664 FSP -681 LSA 2705.6 MSA 183.6 SSA 16.6 FL1 2581.6 FL2 53.4 ALF 171.68 FLIGHT TIME 164.00 ARRIVAL DATE DEC 27 1967 LAUNCH DATE JUL 16 1967 HELIOCENTRIC CONIC DISTANCE 480.910 RL 152.05 LAL -.00 LOL 292.80 VL 26.156 GAL -1.67 AZL 94.16 MCA 234.74 SMA 125.03 ECC .21805 INC 4.1572 V1 29.300 RP 107.62 LAP 3.39 LOP 167.47 VP 37.483 GAP 9.76 AZP 87.60 TAL 186.01 TAP 60.75 RCA 97.76 APO 152.29 V2 35.214 RC 154.762 GL -29.92 GP 13.87 ZAL 100.20 ZAP 159.50 ETS 40.33 ZAE 128.81 ETE 168.90 ZAC 79.70 ETC 11.26 CLP-164.75 PLANETOCENTRIC CONIC C3 14.439 VHL 3.800 DLA -31.57 RAL 176.87 RAD 6567.6 VEL 11.654 PTH 2.05 VHP 6.631 DPA 14.50 RAP 189.68 ECC 1.2376 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.43 7 40 49 1185.34 23.71 347.61 41.23 111.48 8 0 34 585.3 26.41 339.71 104.57 11 30 10 5737.47 23.72 271.10 41.23 111.46 13 5 48 5137.5 26.43 263.20 111.48 8 0 34 111.46 13 5 48 347.61 8 0 34 7 40 49 1185.34 23.71 41.23 111.48 585.3 26.41 339.71 111.46 13 5 48 120.73 10 35 23 102.17 15 14 17 104.57 11 30 10 5737.47 23.72 271.10 41.23 5137.5 26.43 263.20 10 24 29 654.02 15.76 304.67 37.10 54.0 19.72 297.78 13 45 40 5316.78 32.19 241.78 44.13 232.61 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2626.7 SR 384.4 SS 824.7 CRT -.9942 CRS .9912 CST -.9757 LSA 2774.2 MSA 175.4 SSA 17.9 EL1 2654.3 EL2 41.1 ALF 171.72 961 5033.8 5GR 388.7 SG3 207.1 RRT -.4370 RRF -.4822 RTF .9121 SG8 5048.7 R23 .0908 R13 -.9123. TDE-1.7265 TRA -.6149 TC3-5.4852 BAU 1.0589 RDE .2548 RRA .0213 RC3 -.0568 FAU .04096 FDE -.9496 FRA .2605 FC3-2.4561 BSP 15713 BDE 1.7452 BRA .6153 BC3 5.4855 FSP -667

FLIGHT TIME 158.00

SG1 5036.6 SG2 349.4 THA 178.06

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ARRIVAL DATE DEC 29 1967
LAUNCH DATE JUL 16 1967
                                                                                 FLIGHT TIME 166.00
   HELIOCENTRIC CONIC
                                                                                DISTANCE 486.682
    RL 152.05 LAL -.00 LOL 292.80 VL 26.102 GAL -1.25 AZL 93.99 HCA 237.97 SHA 124.69 ECC .22044 INC 3.9929 V1 29.300 RP 107.64 LAP 3.38 LOP 170.71 VP 37.437 GAP 10.05 AZP 87.88 TAL 184.42 TAP 62.40 RCA 97.21 APO 152.18 V2 35.205 RC 156.813 GL -28.82 GP 13.06 ZAL 97.29 ZAP 160.73 ETS 40.44 ZAE 128.89 ETE 169.56 ZAC 77.70 ETC 10.85 CLP-165.71
   PLANETOCENTRIC CONIC
    C3 14.208 VHL 3.769 DLA -31.96 RAL 180.61 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 6.761 DPA 12.82 RAP 191.39 ECC 1.2338 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     44.84
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11 51 19 5714.39
7 49 30 1201.28
11 51 19 5714.39
10 47 14 625.25
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                                                                        243.39
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       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5092.4 SGR 397.5 SG3 201.6

RRT -.4221 RRF -.4572 RTF .9117

SGB 5107.9 R23 .0777 R13 -.9119

SG1 5095.2 SG2 360.2 THA 178.10
                                                                                                                                     ST 2690.7 SR 392.1 SS 816.2
CRT -.9971 CRS .9865 CST -.9769
    TDE-1.7615 TRA -.4541 TC3-5.6526 BAU 1.0737
    RDE .2578 RRA .0225 RC3 -.0704 FAU .03878
FDE -.9109 FRA .3328 FC3-2.3629 BSP 15873
BDE 1.7802 BRA .4347 BC3 5.6530 FSP -646
                                                                                                                                     LSA 2834.0 MSA 168.0 SSA 19.1
                                                                                                                                      ELI 2719.0 EL2 29.5 ALF 171.73
                                                                                                                                                   ARRIVAL DATE DEC 31 1967
                                                                                 FLIGHT TIME 168.00
LAUNCH DATE JUL 16 1967
                                                                                DISTANCE 492.432
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 26.048 GAL -.81 AZL 93.84 HCA 241.21 SMA 124.37 ECC .22304 INC 3.8399 VI 29.300 RP 107.67 LAP 3.36 LOP 173.96 VP 37.392 GAP 10.35 AZP 88.15 TAL 182.83 TAP 64.03 RCA 96.63 APO 152.11 V2 35.197 RC 158.850 GL -27.69 GP 12.34 ZAL 94.25 ZAP 161.89 ETS 40.73 ZAE 128.94 ETE 170.14 ZAC 75.65 ETC 10.50 CLP-166.64
   PLANETOCENTRIC CONIC
     C3 14.093 VHL 3.754 OLA -32.35 RAL 184.49 RAD 6567.6 VEL 11.640 PTH 2.04 VHP 6.900 DPA 11.22 RAP 193.16 ECC 1.2319 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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12 12 31 5694.77
7 59 16 1217.32
12 12 31 5694.77
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                                      5363.57
                                                          31.47
       110.00
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                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5160.6 SGR 407.4 SG3 196.9

RRT - 4142 RRF - 4398 RTF .9129

SG8 5176.7 R23 .0656 R13 - .9131

SG1 5163.4 SG2 370.6 THA 178.12
                                                                                                                                      ST 2755.1 SR 401.2 SS 808.4
CRT -.9985 CRS .9809 CST -.9783
     TOE-1.8009 TRA -.2490 TC3-5.7864 BAU 1.0903
    RDE .2628 RRA .0234 RC3 -.0768 FAU .03683
FDE -.8766 FRA .3975 FC3-2.2627 BSP 16138
                                                                                                                                     LSA 2894.6 MSA 161.0 SSA 20.2
EL1 2784.0 EL2 21.6 ALF 171.73
     BOE 1.8200 BRA .2501 BC3 5.7869 FSP -634
                                                                                                                                                  ARRIVAL DATE JAN 2 1968
                                                                                 FLIGHT TIME 170.00
LAUNCH DATE JUL 16 1967
                                                                                DISTANCE 498.158
    RL 152.05 LAL -.00 LOL 292.80 VL 25.995 GAL -.36 AZL 93.70 MCA 244.44 SMA 124.05 ECC .22585 INC 3.6961 VI 29.300 RP 107.70 LAP 3.33 LOP 177.20 VP 37.346 GAP 10.66 AZP 88.40 TAL 181.22 TAP 65.66 RCA 96.03 APO 152.06 V2 35.187 RC 160.871 GL -26.51 GP 11.70 ZAL 91.09 ZAP 162.98 ETS 41.21 ZAE 128.99 ETE 170.66 ZAC 73.56 ETC 10.18 CLP-167.56
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                              9.69 RAP 194.98 ECC 1.2320
     C3 14.097 VHL 3.755 DLA -32.71 RAL 188.50 RAD 6567.6 VEL 11.640 PTH 2.04 VHP 7.047 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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12 33 31 5679.30
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11 35 51 5857.15
14 7 6 5391.10
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        110.00
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                                                                        247.24
                                                                                          55.27
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        110.00
                                                          30.99
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2811.3 SR 411.1 SS 798.5

CRT -.9985 CRS .9746 CST -.9797

LSA 2947.1 MSA 154.7 SSA 21.2

EL1 2841.1 EL2 22.5 ALF 171.69
                                                                            RTI - 4097 RRF - 4277 RTF .9150
SGB 5243.4 R23 .0558 R13 - 9152
SGI 5229.6 SG2 380.6 THA 178.12
     TOE-1.8401 TRA -.0576 TC3-5.8692 BAU 1.1062
     ROE .2693 RRA .0238 RC3 -.0799 FAU .03490
FOE -.8433 FRA .4562 FC3-2.1433 BSP 16418
     BOE 1.8597 BRA .0623 BC3 5.8697 FSP -624
                                                                                                                                                   ARRIVAL DATE JAN 4 1968
                                                                                 FLIGHT TIME 172.00
 LAUNCH DATE JUL 16 1967
                                                                                DISTANCE 503.861
   HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.943 GAL .12 AZL 93.56 HCA 247.67 SMA 123.73 ECC .22891 INC 3.5600 V1 29.300 RP 107.73 LAP 3.29 LOP 180.44 VP 37.300 GAP 10.98 AZP 88.65 TAL 179.61 TAP 67.29 RCA 95.41 APO 152.06 V2 35.178 RC 162.878 GL -25.29 GP 11.13 ZAL 87.84 ZAP 164.01 ETS 41.88 ZAE 129.03 ETE 171.11 ZAC 71.43 ETC 9.91 CLP-168.46
    PLANETOCENTRIC CONIC
     C3 14.224 VHL 3.771 DLA -33.02 RAL 192.62 RAD 6567.6 VEL 11.645 PTH 2.04 VMP 7.202 DPA
                                                                                                                                               8.21 RAP 196.85 ECC 1.2341
     LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       112.50 8 43 22
112.49 14 28 32
112.50 8 43 22
112.49 14 28 32
112.49 14 28 32
118.68 13 37 54
106.30 15 45 26
                                                                                                                                             647.6
                                                                                                                                                             27.66
                                                                                       57.21
                        8 22 34 1247.60
                                                                         352.86
                                                          24.83
         72.25
                                                                                                                                                             27.67
                                                                                                                                            5064.6
                                                          24.85
                                                                         266.34
                                                                                           57.21
                                       566A . 57
                     12 54 3 5668.57
8 22 34 1247.60
        107.75
                                                                                                                                             647.6
                                                                                                                                                             27.66
                                                                                           57.21
                                                                         352.86
                                                          24.83
          72.25
                                                                                           57.21
                                                                                                                                            5068.6
                                                                                                                                                             27.67
                                                          24.85
                                                                         266.34
                     12 54 3 5668.57
12 0 42 5832.70
14 15 7 5419.52
                                       5668.57
        107.75
                                                                                                                                                             23.13
                                                                                                                                            5232.7
                                                          19.46
                                                                         276.24
                                                                                           54.43
        110.00
                                                                                                                                            4819.5
                                                                                                                                                             32.40
                                                          30.47
                                                                         249.29
                                                                                           59.45
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2833.6 SR 418.8 SS 772.6
CRT -.9970 CRS .9652 CST -.9794
LSA 2962.7 MSA 153.6 SSA 22.0
                                                                          SGT 5267.0 SGR 424.8 SG3 186.1

RRT -.4031 RRF -.4109 RTF .9133

SGB 5284.1 R23 .0445 R13 -.9134

SGI 5269.8 SGZ 388.6 THA 178.13
      TOE-1.8623 TRA .1583 TC3-5.8776 BAU 1.1178
     RDE .2755 RRA .0214 RC3 -.0611 FAU .03278
FDE -.7944 FRA .5287 FC3-1.9951 BSP 15481
BDE 1.6825 BRA .1596 BC3 5.8781 FSP -597
                                                                                                                                    EL1 2864.2 EL2 32.1 ALF 171.62
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ARRIVAL DATE JAN 6 1968
                                                                          FLIGHT TIME 174.00
LAUNCH DATE JUL 16 1967
                                                                         DISTANCE 509.537
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.891 GAL .61.A7L 93.43 MCA 250.90 SMA 123.42 ECC .23222 INC 3.4301 V1 29.300 RP 107.76 LAP 3.24 LOP 183.67 VP 37.255 GAP 11.31 AZP 88.88 TAL 178.00 TAP 68.90 RCA 94.76 APO 152.08 V2 35.167 RC 164.869 GL -24.02 GP 10.62 TAL 84.52 ZAP 164.99 ETS 42.77 ZAE 129.06 ETE 171.51 ZAC 69.26 ETC 9.69 CLP-169.34
   PLANETOCENTRIC CONIC
    C3 14.482 VHL 3.806 DLA -33.27 RAL 196.81 RAD 6567.6 VEL 11.656 PTH 2.05 VHP 7.367 DPA
                                                                                                                                   6.79 RAP 198.75 ECC 1.2383
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             27.77
                                                                                                112.80 8 57 15
112.79 14 48 14
                                                                               61.75
                                                                                                                                 661.0
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                   8 36 14 1261.04
13 13 51 5663.09
8 36 14 1261.04
                                                     24.90
                                                                  353.93
        71.76
                                                                                                                                                27.78
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                                                                                                                                5063.1
                                                                                   61.76
                                                     24.91
                                                                  265.94
       108.24
                                                                                                 112.80 8 57 15
112.79 14 48 14
118.26 14 1 42
107.33 15 55 13
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                                                                                   61.75
                                                     24.90
                                                                  353.93
        71.76
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                                                                                                                                                              258.02
                                                                                                                                5063.1
                    13 13 51
                                   5663.09
                                                     24.91
                                                                  265.94
                                                                                   61.76
       108.24
                                                                                                                                                23.69
                                                                                                                                                              267.83
                                                                                                                                5213.6
                                                     20.08
                                                                  275.11
                                                                                   59.26
                   12 24 49
                                   5813.59
       110.00
                                                                                                                                                              242.62
                                                                                                                                4846,6
                                                                                                                                                32.01
                                                                  251.22
                                                                                   63.82
       110.00
                   14 24 26
                                   5446.58
                                                    29.94
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RGT 5323.1 SGR 435.1 SG3 181.2
RRT -.4040 RRF -.4089 RTF .9160
SGB 5340.9 R23 .0402 R13 -.9161
SG1 5326.1 SG2 397.8 THA 178.10
                                                                                                                           ST 2862.2 SR - 429.6 SS 759.9
    TOE-1.8943 TRA .3719 TC3-5.8395 BAU 1.1307
                                                                                                                           CRT -.9942 CRS .9569 CST -.9807
    RDE .2853 RRA .0198 RC3 -.0785 FAU .03085
                                                                                                                           LSA 2988.5 MSA 150.7 SSA 22.5
    FDE -.7643 FRA .5828 FC3-1.8443 BSP 16690
BDE 1.9157 BRA .3724 BC3 5.8400 FSP -584
                                                                                                                           ELI 2893.9 EL2 45.7 ALF 171.51
                                                                                                                                       ARRIVAL DATE JAN 8 1968
                                                                           FLIGHT TIME 176.00
LAUNCH DATE JUL 16 1967
                                                                           DISTANCE 515.183
   HELTOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.839 GAL 1.11 AZL 93.31 MCA 254.13 SMA 123.12 ECC .23581 INC 3.3053 VI 29.300 RP 107.79 LAP 3.18 LOP 186.91 VP 37.209 GAP 11.64 AZP 89.10 TAL 176.38 TAP 70.51 RCA 94.08 APO 152.15 VZ 35.156 RC 166.846 GL -22.71 GP 10.17 ZAL 81.16 ZAP 165.92 ETS 43.89 ZAE 129.09 ETE 171.86 ZAC 67.08 ETC 9.50 CLP-170.21
   PLANETOCENTRIC CONIC
                                                                                                                                     5.42 RAP 200.69 ECC 1.2449
    C3 14.880 VHL 3.857 DLA -33.43 RAL 201.05 RAD 6567.6 VEL 11.673 PTH
                                                                                                     2.05 VHP 7.541 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.45 8 51 7 1273.23 24.85 354.85 66.46 113.11 9 12 20 673.2 27.76 346.95
                                                                                                  113.09 15 7 7
113.11 9 12 20
113.09 15 7 7
118.02 14 23 51
108.18 16 7 3
                    13 32 44
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                                                                   265.91
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                                   5662.97
                                                     24.87
       108.55
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                     8 51 7
                                                                   354.85
                                                                                    66.46
                                   1273.23
                                                     24.85
        71.45
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                   13 32 44
                                                                   265.91
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                                   5662.97
                                                     24.87
       108.55
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                                                     20.43
                                                                   274.46
                                                                                   64.16
                     12 47 8
                                    5802.76
       110.00
                                                                                                                                4869.5
                                                                                                                                                 31.66
                                  5469.48
                    14 35 54
                                                                   252.83
                                                                                   68.41
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE-1.9147 TRA .5977 TC3-5.7478 BAU 1.1435
RDE .2955 RRA .0166 RC3 -.0728 FAU .02908
                                                                       SGT 5374.3 SGR 443.4 SG3 176.1
RRT -.4061 RRF -.4056 RTF .9185
                                                                                                                            ST 2864.9 SR 438.9 SS 737.4
CRT -.9901 CRS .9466 CST -.9812
                                                                     SGB 5392.6 R23 .0333 R13 -.9186
SG1 5377.4 SG2 405.0 THA 178.07
                                                                                                                            LSA 2986.8 MSA 151.2 SSA 22.7
EL1 2897.7 EL2 61.0 ALF 171.37
    FOE -.7262 FRA .6380 FC3-1.6918 BSP 16876
BDE 1.9374 BRA .5979 BC3 5.7483 FSP -569
                                                                                                                                       ARRIVAL DATE JAN 10 1968
                                                                           FLIGHT TIME 178.00
LAUNCH DATE JUL 16 1967
                                                                          DISTANCE 520.797
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.788 GAL 1.65 AZL 93.18 HCA 257.36 SMA 122.82 ECC .23969 INC 3.1845 V1 29.300 RP 107.83 LAP 3.11 LOP 190.14 VP 37.163 GAP 12.00 AZP 89.30 TAL 174.77 TAP 72.12 RCA 93.38 APO 152.25 V2 35.145 RC 168.808 GL -21.38 GP 9.76 ZAL 77.79 ZAP 166.80 ETS 45.26 ZAE 129.11 ETE 172.18 ZAC 64.86 ETC 9.35 CLP-171.06
   PLANETOCENTRIC CONIC
                                                                                                                                   4.09 RAP 202.66 ECC 1.2539
     C3 15.429 VHL 3.928 DLA -33.49 RAL 205.29 RAD 6567.6 VEL 11.697 PTH 2.06 VHP 7.724 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.39 9 28 37
113.39 15 24 57
113.39 9 28 37
113.38 15 24 57
118.04 14 43 13
108.75 16 21 47
                                                                                71.28
                      9 7 13
                                                                   355.59
                                   1283.86
                                                     24.68
        71.32
                                                                                                                                                27.64
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                                                                                                                                5068.6
                                                      24.70
                                                                   266.27
                                                                                   71.29
                    13 50 28
                                    5668.60
        10A.6A
                                                                                                                                                 27.63
                                                                                                                                                              347.72
                                                                                                                                 683.9
                                                                                   71.28
                                   1283.86
                                                    24.68
                                                                   355.59
                     9 7 13
         71.32
                                                                                                                                                27.64
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                                                                                                                                5068.6
                                                     24.70
                    13 50 28
                                                                   266.27
                                                                                   71.29
                                    5664.60
        TOR SA
                                                                                                                                                23.99
                                                                                                                                                              267.19
                                                                                                                                5203.3
                    13 6 29 5803.32
14 50 22 5485.17
                                                                   274.50
                                                                                    69.05
       110.00
                                                                                                                                                 31.40
                                                                                                                                                              245.46
                                                                                   73.20
                                                                                                                                4885.2
                                                                   253.93
                                                    29.12
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2848.2 SR 447.6 SS 712.4
CRT -.9846 CRS .9347 CST -.9814
LSA 2965.8 MSA 154.5 SSA 22.5
                                                                       SCT 5419.8 SGR 451.0 SG3 171.1
RRT - 4094 RRF - .4048 RTF .9206
SGB 5438.5 R23 .0281 R13 - .9207
SGI 5422.9 SGZ 411.2 THA 178.04
    TDE-1.9272 TRA .6353 TC3-5.5975 BAU 1.1547
RDE .3068 RRA .0120 RC3 -.0656 FAU .02729
FDE -.6876 FRA .6925 FC3-1.5313 BSP 17078
                                                                                                                            EL1 2882.1 EL2 77.4 ALF 171.20
     BOE 1.9515 BRA .8354 BC3 5.5978 FSP -557
                                                                                                                                        ARRIVAL DATE JAN 12 1968
                                                                            FLIGHT TIME 180.00
 LAUNCH DATE JUL 16 1967
                                                                           DISTANCE 526.375
   HELIOCENTRIC CONTC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.738 GAL 2.20 AZL 93.07 MCA 260.58 SMA 122.52 ECC .24390 INC 3.0667 VI 29.300 RP 107.86 LAP 3.03 LOP 193.37 VP 37.117 GAP 12.36 AZP 89.50 TAL 173.15 TAP 73.73 RCA 92.64 APO 152.40 V2 35.134 RC 170.755 GL -20.03 GP 9.38 ZAL 74.44 ZAP 167.63 ETS 46.91 ZAE 129.13 ETE 172.46 ZAC 62.63 ETC 9.25 CLP-171.91
    PLANETOCENTRIC CONIC
                                                                                                                                    2.80 RAP 204.66 ECC 1.2657
     C3 16.144 VHL 4.018 DLA -33.46 RAL 209.50 RAD 6567.6 VEL 11.727 PTH 2.07 VHP 7.919 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  692.9
                                                                                 76.18
                                                                                                113.66 9 45 56
113.65 15 41 32
                                   1292.94
                                                      24.38
                                                                   356.15
                      9 24 23
         71.38
                                                                                                                                                  27.38
                                                                                                                                 5080.0
                    14 6 52
                                    5680.04
                                                      24.40
                                                                   267.01
                                                                                    76.19
        108.62
                                                                                                                                                  27.36
                                                                                                                                  692.9
                                                                                    76.18
                                                                                                  113.66
                                                                                                               9 45 56
                     9 24 23
                                   1292.94
                                                      24.38
                                                                   356.15
         71.38
                                                                                                   113.65 15 41 32
                                                                                                                                 5080.0
                                                                                                                                                  27.38
                                                                                                                                                               259.17
                                                                                    76.19
                                                      24.40
                                                                   267.01
                    14 6 52
                                    5680.04
        108.62
                                                                                                   118.34 14 59 3
108.98 16 39 51
                                                                                                                                 5217.2
                                                                                                                                                  23.59
                                                                                                                                                               268.06
                                                      19.96
                                                                                   ₹3.85
                    13 22 6
                                    5817.21
                                                                    275.32
        110.00
                                                                                                                                 4891.8
                                                                                                                                                  31.29
                    15 8 19
                                    5491.81
                                                     28.98
                                                                   254.39
                                                                                   78.19
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2811.0 SR 455.3 SS 685.0
CRT -.9776 CRS .9207 CST -.9814
                                                                       SGT 5460.5 SGR 457.7 SG3 166.1
RRT -.4140 RRF -.4059 RTF .9228
SGB 5479.7 R23 .0238 R13 -.9229
     TOE-1.9301 TRA 1.0848 TC3-5.3962 BAU 1.1647
     ROE .3193 RRA .0061 RC3 -.0572 FAU .02556
FOE -.6483 FRA .7462 FC3-1.3706 BSP 17247
BDE 1.9563 BRA 1.0849 BC3 5.3965 FSP -544
                                                                                                                        LSA 2924.4 MSA 160.4 SSA 22.1
                                                                                                                             EL1 2846.0 EL2 94.6 ALF 170.99
                                                                        SG1 5463.8 SG2 416.4 THA 178.00
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LAUNCH DATE JUL 16 1967

ARRIVAL CATE JAN 14 1968

EL1 2542.9 EL2 170.7 ALF 170.04

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HELIOCENTRIC CONIC
                                                                                      DISTANCE 531.915
     RL 152.05 LAL -.00 LOL 292.80 VL 25.688 GAL 2.78 AZL 92.95 MCA 263.80 SMA 122.23 ECC .24847 INC 2.9513 VI 29.300 RP 107.90 LAP 2.93 LOP 196.60 VP 37.071 GAP 12.74 AZP 89.68 TAL 171.53 TAP 75.34 RCA 91.86 APO 152.60 V2 35.122 RC 172.686 GL -18.66 GP 9.05 ZAL 71.14 ZAP 168.42 ETS 48.89 ZAE 129.14 ETE 172.71 ZAC 60.39 ETC 9.18 CLP-172.74
    PLANETOCENTRIC CONIC
                                                                                                                                                       1.55 RAP 206.69 ECC 1.2805
     C3 17.042 VHL 4.128 DLA -33.33 RAL 213.63 RAD 6567.7 VEL 11.765 PTH 2.08 VHP 8.126 DPA
     CS 17.042 VML 4.128 DLA -33.35 NAL 213.65 NAD 6567,7 VEL 11.765 PM 2.08 VMP 8.126 DMA 1.755 NAP 206.59 ECC 12.2805
LNCH ÄZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.64. 9 42 30 1300.36 23.95 356.51 81.12 113.90 10 4 11 700.4 26.97 348.72
108.36 14 21 45 5697.41 23.97 268.15 81.13 113.89 15 56 43 5097.4 26.98 260.35
71.64 9 42 30 1300.36 23.95 356.51 81.12 113.90 10 4 11 700.4 26.97 348.72
108.36 14 21 45 5697.41 23.97 268.15 81.13 113.89 15 56 43 5097.4 26.98 260.35
110.00 13 34 1 5843.82 19.09 276.90 78.53 118.91 15 11 25 5243.8 22.80 269.72
110.00 15 29 25 5889.98 29.02 254.26 83.34 108.92 17 0.55 489.00 31.32 245.82
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5490.8 SGR 463.1 SG3 161.0
RRT - 4187 RRF - 4074 RTF . .9246
SGB 5510.3 R23 .0198 R13 - .9246
SGI 5494.2 SG2 420.3 THA 177.97
                                                                                                                                               ST 2750.8 SR 461.4 SS 654.3
CRT -.9688 CRS .9037 CST -.9809
     TDE-1.9196 TRA 1.3503 TC3-5.1414 BAU 1.1714
     ROE .3324 RRA -.0015 RC3 -.0485 FAU .02379
FOE -.6064 FRA .8000 FC3-1.2083 B3P 17325
B0E 1.9481 BRA 1.3503 BC3 5.1416 FSP -527
                                                                                                                                              LSA 2859.9 MSA 169.3 SSA 21.4
                                                                                                                                              EL1 2787.0 EL2 112.9 ALF 170.76
                                                                                       FLIGHT TIME 184.00
                                                                                      DISTANCE 537.411
   HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.638 GAL 3.38 AZL 92.84 HCA 267.02 SMA 121.95 ECC .25342 INC 2.8373 V1 29.300 RP 107.94 LAP 2.83 LOP 199.82 VP 37.025 GAP 13.14 AZP 89.85 TAL 169.92 TAP 76.94 RCA 91.04 APO 152.85 V2 35.110 RC 174.603 GL -17.30 GP 8.774 ZAL 67.90 ZAP 169.16 ETS 51.23 ZAE 129.15 ETE 172.93 ZAC 58.13 ETC 9.15 CLP-173.57
   PLANETOCENTRIC CONIC
     C3 18.142 VHL 4.259 DLA -33.10 RAL 217.67 RAD 6567.7 VEL 11.812 PTH
                                                                                                                     2.09 VHP 8.346 DPA
    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                               SGT 5522.5 SGR 467.7 SG3 156.2
RRT - .4252 RRF - .4115 RTF .9268
SGB 5542.3 R23 .0166 R13 - .9268
SG1 5526.1 SG2 423.1 THA 177.93
                                                                                                                                               ST 2679.9 SR 466.3 SS 624.8
CRT -.9582 CRS .8847 CST -.9804
     TOE-1.9030 TRA 1.6252 TC3-4.8590 BAU 1.1785
     ROE .3466 RRA -.0102 RC3 -.0392 FAU .02214
     FOE -.5667 FRA .8531 FC3-1.0567 BSP 17468
                                                                                                                                              LSA 2785.1 MSA 180.1 SSA 20.5
     BOE 1.9343 BRA 1.6253 BC3 4.8592 FSP
                                                                                                                                               EL1 2716.9 EL2 131.6 ALF 170.51
                                                                                                                                                           ARRIVAL DATE JAN 18 1968
                                                                                      FLIGHT TIME 186.00
LAUNCH DATE JUL 16 1967
                                                                                     DISTANCE 542.858
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.590 GAL 4.02 ATL 92.72 MCA 270.24 SMA 121.67 ECC .25879 INC 2.7240 V1 29.300 RP 107.97 LAP 2.72 LOP 203.04 VP 36.979 GAP 13.56 AZP 90.01 TAL 168.32 TAP 78.55 RCA 90.18 APO 153.15 V2 35.097 RC 176.504 GL -15.96 GP 8.46 ZAL 64.75 ZAP 169.86 ETS 53.97 ZAE 129.15 ETE 173.13 ZAC 55.86 ETC 9.17 CLP-174.39
    PLANETOCENTRIC CONIC
     C3 19.469 VHL 4.412 DLA -32.79 RAL 221.56 RAD 6567.8 VEL 11.868 PTH 2.11 VHP 8.581 DPA
                                                                                                                                                       -.84 RAP 210.82 ECC 1.3204
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             114.29 10 42 58

114.28 16 22 15

114.29 10 42 58

114.28 16 22 15

120.44 14 0 19

108.24 17 48 12
                      10 21 8 1309.93
14 46 25 5750.09
                                                                                           90.99
                                                                                                                                                                  25.81
                                                             22.73
                                                                            356.66
                                                                                                                                                    709.9
         72.73
                                                             22.74
                                                                             271.61
                                                                                               90.99
                                                                                                                                                    5150.1
                                                                                                                                                                      25.82
                                                                                                                                                                                      263.92
                      10 21 8 1309.93
14 46 25 5750.09
                                                                                               90.99
                                                                                                                                                    709.9
                                                                                                                                                                      25.81
                                                                                                                                                                                      348.97
         72.73
                                                             22.73
                                                                             356.66
        107.27
                                                             22.74
                                                                            271.61
                                                                                               90.99
                                                                                                                                                    5150.1
                                                                                                                                                                      25.82
                                                                                                                                                                                      263.92
                                                                                            87.49
93.88
                      13 49 42
                                          636.82
                                                             16.36
                                                                             303.69
                                                                                                                                                     36.8
                                                                                                                                                                       20.28
                                                                                                                                                                                      296.76
        110.00
                                     5471.19
                                                                                                                                                                    31.63
                     16 17 1
                                                                                                                                                   4871.2
                                                                                                                                                                                      244.44
                                                                             252.95
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5548.5 SGR 471.3 SG3 151.5
RRT - 4324 RRF - .4167 RTF .9290
SGB 5568.5 R23 .0140 R13 - .9291
SGI 5552.2 SG2 424.6 THA 177.88
                                                                                                                                              ST 2596.2 SR 469.5 SS 595.7
CRT -.9453 CRS .8627 CST -.9799
     TDE-1.8767 TRA 1.9142 TC3-4.5475 BAU 1.1836
    RDE .3615 RRA -.0205 RC3 -.0302 FAU .02054
FOE -.5275 FRA .9053 FC3 -.9132 BSP 17598
                                                                                                                                              LSA 2697.8 MSA 192.8 SSA 19.6
                                                                                                                                               EL1 2634.0 EL2 151.0 ALF 170.27
     BDE 1.9112 BRA 1.9143 BC3 4.5476 FSP
                                                               - 500
LAUNCH DATE JUL 16 1967
                                                                                      FLIGHT TIME 188.00
                                                                                                                                                            ARRIVAL DATE JAN 20 1968
                                                                                      DISTANCE 548.251
   MELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.542 GAL 4.68 AZL 92.61 HCA 273.45 SMA 121.39 ECC .26463 INC 2.6108 V1 29.300 RP 108.01 LAP 2.61 LOP 206.26 VP 36.934 GAP 14.01 AZP 90.16 TAL 166.72 TAP 80.17 RCA 89.27 APO 153.52 V2 35.084 RC 178.389 GL -14.64 GP 8.21 ZAL 61.71 ZAP 170.50 ETS 57.18 ZAE 129.15 ETE 173.31 ZAC 53.59 ETC 9.23 CLP-175.21
   PLANETOCENTRIC CONIC
    C3 21.051 VHL 4.588 OLA -32.40 RAL 225.31 RAO 6567.9 VEL 11.934 PTH 2.12 VHP 8.832 OPA -1.98 RAP 212.92 ECC 1.3464
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.57 10 41 28 1311.79 21.95 356.42 95.85 114.44 11 3 20 711.8 25 06 344 70
                                                                                                              114.44 11 3 20
114.43 16 32 21
        106.43
                      14 55 55
                                       5785.51
                                                             21.96
                                                                             273.94
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                                                                                13.94 95.85 114.44 11 3 20

13.94 95.86 114.43 16 32 21

16.47 91.79 121.24 14 6 22

152.11 99.16 107.80 18 12 37

MID-COURSE EXECUTION ACCURACY
                                      1311.79
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                      10 41 28
                                                             21.95
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         73.57
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                                       5785.51
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        106.43
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        110.00
                      13 54 56
                                          686.05
                                                             14.64
                                                                             306.47
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                      16 41 37
                                         5459.24
                                                                             252.11
                                                                                                                                                    4859.2
                                                                                                                                                                       31.82
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 5570.1 SGR 473.7 SG3 146.9
RRT -.4403 RRF -.4230 RTF .9314
SGB 5590.2 R23 .0117 R13 -.9315
                                                                                                                                              ST 2504.7 SR 471.1 SS 568.2
CRT -.9299 CRS .8377 CST -.9793
LSA 2602.9 MSA 207.0 SSA 18.7
     TDE-1.8422 TRA 2.2173 TC3-4.2178 BAU 1.1870
     ROE .3770 RRA -.0321 RC3 -.0218 FAU .01899
FDE -.4894 FRA .9574 FC3 -.7810 BSP 17717
BDE 1.8804 BRA 2.2175 BC3 4.2179 FSP -488
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FLIGHT TIME 182.00

SG1 5574.0 SG2 425.0 THA 177.84

ARRIVAL DATE JAN 22 1968

LAUNCH DATE JUL 16 1967

HELIOCENTRIC CONIC DISTANCE 553.581 RL 152.05 LAL -.00 LOL 292.80 VL 25.494 GAL 5.38 AZL 92.50 MCA 276.67 SMA 121.13 ECC .27097 INC 2.4969 V1 29.300 RP 108.05 LAP 2.48 LOP 209.48 VP 36.889 GAP 14.48 AZP 90.29 TAL 165.13 TAP 81.80 RCA 88.30 APO 153.95 VZ 35.071 RC 180.257 GL -13.35 GP 7.98 ZAL 58.78 ZAP 171.09 ETS 60.91 ZAE 129.13 ETE 173.47 ZAC 51.31 ETC 9.34 CLP-176.03 PLANETOCENTRIC, CONIC C3 22.922 VHL 4.788 DLA -31.93 RAL 228.87 RAD 6567.9 VEL 12.013 PTH 2.14 VHP 9.100 DPA -3.09 RAP 215.03 ECC 1.3772 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.58 11 2 30 1311.16 21.08 355.94 100.65 114.56 11 24 21 711.2 24.22 348.38 114.56 11 24 21 114.55 16 40 27 114.55 16 40 27 114.55 16 40 27 121.98 14 11 26 107.38 18 36 41 24.22 5227.3 24.23 269.14 105.42 15 3 20 5827.33 21.09 276.70 100.65 11 2 30 348.38 74.58 21.08 355.94 100.65 711.2 24.22 1311.16 21.09 276.70 100.65 5227.3 24.23 269.14 15 3 20 5827.33 105.42 13 59 7 302.72 12.76 309.39 95.98 138.7 16.90 738.67 110.00 31.99 4847.8 242.71 110.00 17 5 53 5447.82 29 - 91 251.31 104.39 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5584.8 SGZ 424.0 THA 177.81 ST 2405.8 SR 470.5 SS 541.6 CRT -.9110 CRS .8080 CST -.9785 LSA 2500.5 MSA 222.8 SSA 17.8 TOE-1.7964 TRA 2.5391 TC3-3.8722 BAU 1.1867 ROE .3928 RRA -.0454 RC3 -.0147 FAU .01742 FOE -.4509 FRA 1.0113 FC3 -.6580 BSP 17747 BOE 1.8388 BRA 2.5395 BC3 3.8723 FSP -472 EL1 2443.9 ELZ 191.0 ALF 169.84 FLIGHT TIME 192,00 ARRIVAL DATE JAN 24 1968 LAUNCH DATE JUL 16 1967 **DISTANCE 558.841** HELIOCENTRIC CONTC RL 152.05 LAL -.00 LOL 292.80 VL 25.447 GAL 6.12 A7L 92.38 MCA 279.88 SNA 120.86 ECC .27789 INC 2.3816 VI 29.300 RP 108.09 LAP 2.35 LOP 212.69 VP 36.844 GAP 14.98 A7P 90.41 TAL 163.56 TAP 83.43 RCA 87.28 APO 154.45 VZ 35.058 RC 182.108 GL -12.11 GP 7.77 ZAL 55.99 ZAP 171.62 ETS 65.21 ZAE 129.11 ETE 173.62 ZAC 49.03 ETC 9.50 CLP-176.85 PLANETOCENTRIC CONIC C3 25.124 VHL 5.012 DLA -31.42 RAL 232.25 RAD 6568.0 VEL 12.104 PTH 2.17 VHP 9.388 DPA -4.16 RAP 217.16 ECC 1.4135 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.64 11 46 2 114.63 16 46 27 114.64 11 46 2 114.63 16 46 27 122.64 14 15 45 107.00 19 0 3 11 24 15 707.7 75.79 1307.66 20.13 355.21 105.35 105.36 5275.8 15 8 31 5875.75 279.91 104.21 20.14 11 24 15 15 8 31 14 2 31 707.7 105.35 23.28 347.71 75.79 1307.66 20.13 355.21 5875.75 105.36 5275.8 272.41 279.91 104.21 20.14 793.58 100.06 193.6 14.99 305.84 110.00 10.76 312.39 4837.8 17 29 25 32.14 110.00 5437.83 30.11 250.60 109.54 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5597.1 SCR 474.6 SC3 138.3 RRT -.4569 RRF -.4372 RTF .9362 SGB 5617.1 R23 .0079 R13 -.9363 SG1 5601.3 SG2 421.9 THA 177.77 ST 2309.5 SR 468.3 SS 518.8 CRT -.8893 CRS .7765 CST -.9782 TOE-1.7472 TRA 2.8738 TC3-3.5298 BAU 1.1856 RDE .4092 RRA -.0599 RC3 -.0083 FAU .01596 FDE -.4158 FRA 1.0642 FC3 -.5500 BSP 17848 LSA 2401.1 MSA 238.6 SSA 16.9 EL1 2347.1 EL2 210.7 ALF 169.69 BOE 1.7945 BRA 2.8744 BC3 3.5298 FSP -460 ARRIVAL DATE JAN 26 1968 LAUNCH DATE JUL 16 1967 FLIGHT TIME 194.00 DISTANCE 564.020 RL 152.05 LAL -.00 LOL 292.80 VL 25.401 GAL 6.90 AZL 92.26 HCA Z83.09 SMA 120.60 ECC .28542 INC 2.2641 V1 29.300 RP 108.13 LAP 2.21 LOP 215.90 VP 36.800 GAP 15.51 AZP 90.51 TAL 162.00 TAP 85.09 RCA 86.18 APO 155.03 V2 35.045 RC 183.942 GL -10.91 GP 7.58 ZAL 53.33 ZAP 172.07 ETS 70.13 ZAE 129.08 ETE 173.75 ZAC 46.76 ETC 9.72 CLP-177.67 PLANETOCENTRIC CONIC C3 27.703 VHL 5.263 DLA -30.85 RAL 235.43 RAD 6568.1 VEL 12.210 PTH 2.19 VHP 9.699 DPA -5.19 RAP 219.31 ECC 1.4559 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 114.70 12 8 37 114.69 15 21 54 114.70 12 8 37 114.69 15 21 54 123.19 14 19 30 106.70 19 22 29 22.28 109.96 700.3 346.72 77.21 11 46 57 1300.29 19.11 354.16 305.71 109.97 43.5 15 11 11 643.51 19.12 346.72 700.3 11 46 57 1300.29 354.16 109.96 22.28 19.11 643.51 gen 298.28 305.71 109.97 43.5 22.29 15 11 11 19.12 308.98 250.0 104.03 12.99 14 5 20 8.68 315.42 241.38 250.03 114.59 4829 R 32.26 17 51 59 5429.83 30.27 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2215.4 SR 464.4 SS 498.8 CRT -.8641 CRS .7422 CST -.9781 LSA 2303.8 MSA 254.5 SSA 16.1 SGT 5604.2 SGR 473.3 SG3 134.2 RRT -.4660 RRF -.4457 RTF .9390 SGB 5624.2 R23 .0064 R13 -.9391 TOE-1.6918 TRA 3.2264 TC3-3.1904 BAU 1.1816 ROE .4257 RRA -.0758 RC3 -.0030 FAU .01454 FOE -.3823 FRA 1.1183 FC3 -.4545 BSP 17927 SG1 5608.6 SG2 418.5 THA 177.73 EL1 2251.8 EL2 230.0 ALF 169.62 BOE 1.7445 BRA 3.2273 BC3 3.1904 FSP -448 ARRIVAL DATE JAN 28 1968 LAUNCH DATE JUL 16 1967 FLIGHT TIME 196.00 DISTANCE 569.105 RL 152.05 LAL -.00 LOL 292.80 VL 25.355 GAL 7.73 A7L 92.14 HCA 286.29 SHA 120.35 ECC .29365 INC 2.1436 VI 29.300 RP 108.18 LAP 2.06 LOP 219.10 VP 36.756 GAP 16.09 A7P 90.60 TAL 160.46 TAP 86.76 RCA 85.01 APO 155.69 V2 35.032 RC 185.758 GL -9.76 GP 7.40 ZAL 50.82 ZAP 172.45 ETS 75.68 ZAE 129.03 ETE 173.88 ZAC 44.49 ETC 10.00 CLP-178.49 PLANETOCENTRIC CONIC C3 30.718 VHL 5.542 DLA -30.26 RAL 238.41 RAD 6568.2 VEL 12.333 PTH 2.22 VHP 10.034 DPA -6.19 RAP 221.47 ECC 1.5055 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 10.02 114.47 114.71 12 32 29
10.02 114.47 114.71 12 32 29
10.02 114.47 114.71 12 32 29
10.02 114.47 114.71 15 22 42
10.02 114.47 114.71 15 22 42
10.02 114.47 114.71 15 22 42
10.02 119.54 106.48 19 43 50
MID-COURSE EXECUTION ACCURACY
SCT 5606.2 SCR 470 6 653 120 687.5 21.22 12 11 2 1287.52 18.03 352.68 78.87 108.0 302.64 707.99 21.23 15 10 54 18.05 310.02 345.30 18.03 352.68 687.5 21.22 12 11 2 1287.52 707.99 302.64 15 10 54 108.0 18.05 310.02 21.23 312.11 110.00 14 7 40 907.40 6.52 318.47 307.4 10.90 18 13 26 5424.14 4824.1 240.95 30.38 249.52 32.34 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5606.2 SGR 470.6 SG3 130.4 RRT -.4749 RRF -.4541 RTF .9418 SGB 5625.9 R23 .0050 R13 -.9418 SGI 5610.7 SG2 413.9 THA 177.70 ST 2124.2 SR 458.4 SS 481.6 CRT -.8344 CRS .7036 CST -.9783 LSA 2209.3 MSA 270.3 SSA 15.4 EL1 2158.8 EL2 248.6 ALF 169.65 TDE-1.6274 TRA 3.6025 TC3-2.8543 BAU 1.1722 RDE .4423 RRA -.0933 RC3 .0007 FAU .01309 FDE -.3492 FRA 1.1754 FC3 -.3689 BSP 17898

FLIGHT TIME 190.00

-433

BOE 1.6864 BRA 3.6037 BC3 2.8543 FSP

LAUNCH DATE JUL 16 1967

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DISTANCE 574.082
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.311 GAL 8.61 A7L 92.02 MCA 289.49 SMA 120.10 ECC .30266 INC 2.0192 VI 29.300 RP 108.22 LAP 1.90 LOP 222.31 VP 36.712 GAP 16.70 A7P 90.67 TAL 158.96 TAP 88.45 RCA 83.75 APO 156.46 V2 35.019 RC 187.557 GL -8.67 GP 7.24 ZAL 48.46 ZAP 172.73 ETS 81.83 ZAE 128.97 ETE 173.99 ZAC 42.24 ETC 10.34 CLP-179.33
    PLANETOCENTRIC CONIC
      C3 34.241 VHL 5.852 OLA -29.64 RAL 241.19 RAD 6568.3 VEL 12.474 PTH 2.26 VHP 10.398 DPA -7.15 RAP 223.63 ECC 1.5635
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              114.70 12 58 25
114.70 15 19 53
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                          12 37 18 1266.42
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                                                783.76
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112.73 15 57 10
123.94 14 25 42
106.36 20 4 3
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                        14 40 36
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         100.00
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                                                 965.36
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                                                                                         321.52
                                                                                                          111.69
         110.00
                                                                                                            124.37
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         110.00
                          18 33 42
                                             5420.86
                                                                      30.44
                                                                                        249.39
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SCT 5604.5 SCR 466.9 SC3 126.6
RRT -.4845 RRF -.4636 RTF .9450
SCB 5623.9 R23 .0039 R13 -.9450
SCI 5609.1 SC2 408.1 THA 177.68
                                                                                                                                                                    ST 2042.9 SR 451.1 SS 468.3

CRT -.8021 CRS .6656 CST -.9791

LSA 2124.9 MSA 284.2 SSA 14.7
      TOE-1.5634 TRA 3.9941 TC3-2.5379 BAU 1.1618
     ROE .4591 RRA -.1118 RC3 .0037 FAU .01176
FDE -.3198 FRA 1.2325 FC3 -.2973 BSP 17967
BDE 1.6295 BRA 3.9956 BC3 2.5379 FSP -422
                                                                                                                                                                    EL1 2075.2 EL2 265.2 ALF 169.79
                                                                                                                                                                                    ARRIVAL DATE FEB 1 1968
LAUNCH DATE JUL 16 1967
                                                                                                    FLIGHT TIME 200.00
                                                                                                   DISTANCE 578.933
   HELIOCENTRIC CONTC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.267 GAL 9.55 AZL 91.89 MCA 292.69 SMA 119.86 ECC .31254 INC 1.8898 V1 29.300 RP 108.26 LAP 1.74 LOP 225.51 VP 36.669 GAP 17.37 AZP 90.73 TAL 157.48 TAP 90.17 RCA 82.40 APO 157.33 V2 35.005 RC 189.337 GL -7.62 GP 7.09 ZAL 46.24 ZAP 172.90 ETS 88.50 ZAE 128.89 ETE 174.10 ZAC 40.00 ETC 10.76 CLP 179.82
     23 38.330 VML 6.193 DLA -29.00 RAL 243.78 RAD 6568.5 VEL 12.638 PTH 2.29 VMP 10.794 DPA -8.07 RAP 225.80 ECC 1.6313 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.45 13 8 3 1229.52 15.77 347.30 123.13 114.66 13 28 32 629.5 18.96 340 DR 96.55 14 56 43 878.01 15.74 301 ER
    PLANETOCENTRIC CONIC
                                                                                            21.53 123.14 114.65 15 11 21

26.77 120.27 118.26 14 38 59

21.08 125.72 111.23 18 2 58

24.57 115.38 124.13 14 28 15

19.33 129.08 106.32 20 23 5

MID-COURSE EXECUTION ACCURACY
                                             878.01
                                                 987.91
                           14 22 31
                                                                                         326.77
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5420.00
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                          18 52 45
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                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 5597.9 SGR 461.8 SG3 123.0
RRT - .4939 RRF - .4735 RTF .9483
SGB 5616.9 R23 .0031 R13 - .9483
SGI 5602.6 SG2 401.2 THA 177.65
                                                                                                                                                                    ST 1969.4 SR 442.2 SS 458.2
CRT -.7665 CRS .6270 CST -.9805
     TDE-1.4956 TRA 4.4084 TC3-2.2370 BAU 1.1471
     RDE .4759 RRA -.1315 RC3 .0056 FAU .01045
FDE -.2925 FRA 1.2920 FC3 -.2358 B3P 18029
                                                                                                                                                                    LSA 2048.4 MSA 296.3 SSA 14.0
                                                                                                                                                                    ELI 1998.9 EL2 279.8 ALF 170.04
      BOE 1.5695 BRA 4.4103 BC3 2.2570 FSP -411
                                                                                                                                                                                   ARRIVAL DATE FEB 3 1968
                                                                                                   FLIGHT TIME 202.00
LAUNCH DATE JUL 16 1967
                                                                                                   DISTANCE 583.635
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.224 GAL 10.56 AZL 91.75 MCA 295.89 SMA 119.65 ECC .32340 INC 1.7544 V1 29.300 RP 108.30 LAP 1.58 LOP 228.70 VP 36.627 GAP 18.10 AZP 90.77 TAL 156.04 TAP 91.93 RCA 80.94 APO 158.32 VZ 34.99Z RC 191.100 GL -6.64 GP 6.96 ZAL 44.17 ZAP 172.96 ETS 95.54 ZAE 128.78 ETE 174.20 ZAC 37.79 ETC 11.27 CLP 178.96
    PLANETOCENTRIC CONIC
     C3 43.170 VHL 6.570 OLA -28.36 RAL 246.17 RAD 6568.6 VEL 12.827 PTH 2.34 VHP 11.226 OPA -8.95 RAP 227.98 ECC 1.7105
     C3 43.170 VHL 6.570 OLA -28.36 RAL 246.17 RAD 6568.6 VEL 12.827 PTH 2.34 VHP 11.226 OPA -8.95 RAP 227.98 ECC 1.7105
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
88.37 13 58 8 1128.35 14.60 339.32 127.29 114.58 14 16 56 528.3 17.80 332.10
91.63 14 25 44 1038.86 14.62 332.78 127.30 114.57 14 43 3 438.9 17.82 325.56
100.00 14 13 3 1079.93 7.15 331.95 123.43 119.10 14 31 3 479.9 10.98 325.25
100.00 16 53 30 5850.54 22.34 279.00 130.66 110.40 18 31 1 5250.5 24.91 271.15
110.00 14 12 28 1081.75 -.11 327.61 118.98 124.18 14 30 30 481.7 4.37 321.39
110.00 19 10 34 5421.49 30.43 249.43 133.66 106.38 20 40 56
DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY
TOE-1 A26A TRA A 8491 TC3-1 9429 RAIL 1 1271
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                    CRT - .7284 CRS . .5884 CST - .9821
LSA 1981.8 MSA 306.2 SSA 13.4
EL1 1932.0 EL2 291.9 ALF 170.40
                                                                                             SCT 5587.8 SGR 455.3 SC3 119.5
RRT -.5035 RRF -.4835 RTF ..9518
SGB 5606.3 R23 .0021 R13 -.9519
SCI 5592.5 SG2 393.1 THA 177.64
      TDE-1.4264 TRA 4.8491 TC3-1.9529 BAU 1.1271
      RDE .4926 RRA -.1523 RC3 .0065 FAU .00915
FDE -.2669 FRA 1.3345 FC3 -.1835 BSP 18051
      BDE 1.5090 BRA 4.8515 BC3 1.9529 FSP
                                                                         -400
                                                                                                                                                                                   ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUL 16 1967
                                                                                                    FLIGHT TIME 204.00
                                                                                                   DISTANCE 588.161
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 292.80 VL 25.182 GAL 11.64 A7L 91.61 HCA 299.09 SMA 119.40 ECC .33536 INC 1.6115 V1 29.300 RP 108.34 LAP 1.41 LOP 231.90 VP 36.585 GAP 18.89 AZP 90.78 TAL 154.65 TAP 93.74 RCA 79.36 APO 159.44 V2 34.979 RC 192.846 GL -5.70 GP 6.83 ZAL 42.25 ZAP 172.90 ETS 102.73 ZAE 128.65 ETE 174.30 ZAC 35.60 ETC 11.87 CLP 178.07
    PLANETOCENTRIC CONIC
     C3 48.811 WHL 6.987 DLA -27.72 RAL 248.38 RAD 6568.8 VEL 13.045 PTH 2.38 VHP 11.699 DPA -9.79 RAP 230.14 ECC 1.8033 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 29 33 1280.97 8.72 347.57 129.01 117.05 13 50 54 681.0 12.28 340.70
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112.03 15 27 43
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           90.00
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177.71 135.34 109.87 18 54 47

130.63 122.49 124.11 14 32 27

149.70 138.11 106.52 20 57 37

MID-COURSE EXECUTION ACCURACY OR
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                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
      IFFERENTIAL CORRECTIONS
                                                                                                                                                                   ST 1849.8 SR 420.3 SS 447.1

CRT - .6883 CRS .5506 CST - .9841

LSA 1923.5 MSA 313.5 SSA 12.8

EL1 1872.9 EL2 301.1 ALF 170.87
                                                                                             SGT 5572.6 SGR 447.6 SG3 116.2

RRT -.5129 RRF -.4936 RTF ..9555

SGB 5590.5 R23 .0014 R13 -.9555

SGI 5577.3 SG2 383.9 THA 177.63
      TOE-1.3541 TRA 5.3171 TC3-1.6872 BAU 1.1010
      ROE .5091 RRA -.1740 RC3 .0066 FAU .00786
FDE -.2432 FRA 1.4205 FC3 -.1393 BSP 18068
BDE 1.4466 BRA 5.3199 BC3 1.6872 FSP -390
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FLIGHT TIME 198.00

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ARRIVAL DATE FEB 7 1968
                                                                                            FLIGHT TIME 206.00
LAUNCH DATE JUL 16 1967
                                                                                            DISTANCE 592.476
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.140 GAL 12.81 AZL 91.46 MCA 302.28 SMA 119.18 ECC .34858 INC 1.4595 V1 29.300 RP 108.38 LAP 1.23 LOP 235.09 VP 36.545 GAP 19.75 AZP 90.78 TAL 153.31 TAP 95.59 RCA 77.63 APO 160.72 V2 34.966 RC 194.574 GL -4.81 GP 6.72 ZAL 40.48 ZAP 172.71 ETS 109.85 ZAE 128.49 ETE 174.39 ZAC 33.44 ETC 12.57 CLP 177.16
   PLANETOCENTRIC CONIC
     C3 55.442 VML 7.446 DLA -27.08 RAL 250.40 RAD 6569.0 VEL 13.297 PTH 2.43 VMP 12.220 DPA -10.59 RAP 232.30 ECC 1.9124
    C3 55.442 VHL 7.446 DLA -27.08 RAL 250.40 RAD 6569.0 VEL 13.297 PTH 2.43 VHP 12.220 DPA -10.59 RAP 232.30 ECC 1.9124
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 15 18 1386.21 5.42 353.53 131.84 117.84 13 38 24 786.2 9.10 346.79
90.00 15 42 20 905.87 19.30 325.13 138.29 111.13 15 57 26 305.9 22.01 317.50
100.00 14 1 3 5 1236.69 1.89 340.61 129.90 119.84 14 22 11 636.7 5.85 334.06
100.00 17 38 45 5818.66 23.08 276.92 139.79 109.55 19 15 43 5218.7 25.53 268.98
110.00 14 14 8 1197.24 -4.52 333.64 125.91 123.92 14 34 6 597.2 -.04 327.43
110.00 19 42 40 5430.88 30.25 250.10 142.42 106.74 21 13 11 4830.9 32.24 241.46
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 1801.8 SR 407.3 SS 445.9
CRT -.6461 CRS .5130 CST -.9863
LSA 1873.5 MSA 318.1 SSA 12.3
                                                                                       SCT 5554.2 SCR 438.5 SC3 113.1
RRT -.5218 RRF -.5034 RTF .9592
SCB 5571.5 R23 .0007 R13 -.9593
SCI 5559.0 SC2 373.7 THA 177.63
     TDE-1.2774 TRA 5.8193 TC3-1.4390 BAU 1.0666
    ROE .5251 RRA -.1967 RC3 .0059 FAU .00651
FOE -.2204 FRA 1.4918 FC3 -.1017 BSP 17997
     BOE 1.3811 BRA 5.8226 BC3 1.4390 FSP -377
                                                                                                                                                          ELI 1821.5 ELZ 307.5 ALF 171.45
                                                                                                                                                                         ARRIVAL DATE FEB 9 1968
                                                                                             FLIGHT TIME 208.00
LAUNCH DATE JUL 16 1967
                                                                                             DISTANCE 596.539
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 25.100 GAL 14.07 AZL 91.30 HCA 305.47 SMA 118.96 ECC .36323 INC 1.2966 VI 29.300 RP 108.42 LAP 1.06 LOP 238.28 VP 36.505 GAP 20.71 AZP 90.75 TAL 152.05 TAP 97.52 RCA 75.75 APO 162.17 V2 34.953 RC 196.285 GL --3.97 GP 6.61 ZAL 38.85 ZAP 172.39 ETS 116.68 ZAE 128.30 ETE 174.49 ZAC 31.32 ETC 13.40 CLP 176.22
   PLANETOCENTRIC CONIC
                                                                                                                              2.48 VHP 12.796 OPA -11.34 RAP 234.45 ECC 2.0412
     C3 63.264 VHL 7.954 DLA -26.44 RAL 252.25 RAD 6569.2 VEL 13.587 PTH
    C3 63.264 VHL 7.954 OLA -26.44 RAL 252.25 RAO 6569.2 VEL 13.587 PTH 2.48 VHP 12.796 OPA -11.34 RAP 254.45 ECC 2.0412 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 6 28 882.14 19.88 323.62 142.74 110.59 16 21 10 282.1 22.50 315.94 100.00 13 57 26 1307.81 -.52 344.51 133.06 119.89 14 19 14 707.8 3.46 337.99 100.00 17 57 36 5811.92 23.23 276.48 144.05 109.36 19 34 28 5211.9 25.66 268.52 110.00 14 14 32 1254.15 -6.67 336.64 129.25 123.60 14 35 26 654.2 -2.21 330.40 110.00 19 56 59 5438.34 30.10 250.63 146.57 107.02 21 27 38 4438.3 32.13 242.01
                       13 57 26 1307.81
17 57 36 5811.92
14 14 32 1254.15
19 56 59 5438.34
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                        SCT 5530.8 SGR 428.1 SG3 110.1
RRT -.5307 RRF -.5135 RTF .9631
SGB 5547.3 R23 .0002 R13 -.9631
SGI 5535.5 SG2 362.5 THA 177.64
                                                                                                                                                          ST 1762.3 SR 393.4 S5 447.5
CRT -.6048 CRS .4795 CST -.9885
LSA 1832.7 MSA 319.3 SSA 11.7
      TDE-1.2036 TRA 6.3521 TC3-1.2126 BAU 1.0257
     RDE .5411 RRA -.2197 RC3 .0049 FAU .00520
FDE -.2005 FRA 1.5668 FC3 -.0712 BSP 18005
BDE 1.3198 BRA 6.3559 BC3 1.2128 FSP -367
                                                                                                                                                           EL1 1778.8 EL2 310.4 ALF 172.07
                                                                                                                                                                        ARRIVAL DATE FEB 11 1968
                                                                                              FLIGHT TIME 210.00
LAUNCH DATE JUL 16 1967
                                                                                             DISTANCE 600.294
    HELIOCENTRIC CONTC
     RL 152_D5 LAL -.00 LOL 292.80 VL 25.061 GAL 15.45 A7L 91.12 MCA 308.66 SMA 118.76 ECC .37952 INC 1.1205 V1 29.300 RP 108.46 LAP .87 LOP 241.46 VP 36.466 GAP 21.77 A7P 90.70 TAL 150.86 TAP 99.52 RCA 73.69 APO 163.82 V2 34.941 RC 197.979 GL -3.18 GP 6.51 ZAL 37.38 ZAP 171.93 ETS 123.09 ZAE 128.05 ETE 174.58 ZAC 29.26 ETC 14.37 CLP 175.23
    PLANETOCENTRIC CONIC
      C3 72.532 VML 8.517 DLA -25.82 RAL 253.92 RAD 6569.4 VEL 13.924 PTH 2.54 VMP 13.434 DPA -12.05 RAP 236.57 ECC 2.1937
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      INJ A7MTM INJ TIME
118.32 13 24 33
110.26 16 41 27
119.77 14 16 43
109.29 19 51 22
123.17 14 36 27
107.36 21 41 0
                                                                                                  137.73
                                                                                                                                                           953.6
                                                                                                                                                                                     3.82
          90.00 12 58 39 1553.64
90.00 16 27 0 867.91
                                                                     .04
                                                                                      2.90
                                                                                                                                                                  267.9
                                                                                                                                                                                     22.79
                                                                                                                                                                                                      314.99
                                                                   20.22
                                                                                   322.72
                                                                                                     146.92
         100.00 13 53 47 1375.62
100.00 18 14 33 5809.20
                                                                                                                                                                 775.6
                                                                                                                                                                                      1.16
                                                                                                                                                                                                      341.71
                                                                                                    136.15
                                                                   -2.82
                                                                                   348.23
                                                                                                                                                                5209.2
                                                                                                                                                                                    25.71
                                                                                                                                                                                                      264 34
                                                                                   276.30
                                                                                                     148.11
                                                                  23.29
                                                                                                                                                                                                      333.33
                       14 14 37 1310.26 -8.78
20 10 13 5447.32 29.92
                                                                                                                                                                 710.3
                                                                                                                                                                                     -4.35
         110.00
                                                                                   339.62
                                                                                                     132.49
                                                                                                                                                                4847.3
                                                                                                                                                                                     32.00
                                                                                                                                                                                                      242 68
                                                                                   251.27
                                                                                                      150.56
                                                                                        MID-COURSE EXECUTION ACCURACY
SCT 5503.1 SCR 416.4 SC3 107.1
RRT -.5390 RRF -.5232 RTF .9670
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1729.3 SR 378.5 SS 451.9
      TOE-1.1303 TRA 6.9235 TC3-1.0053 BAU .9748
                                                                                                                                                           CRT -.5644 CRS :4485 CST -.9906
      ROE .5568 RRA -.2431 RC3 .0035 FAU .00384 FDE -.1823 FRA 1.6478 FC3 -.0458 BSP 17997
                                                                                                                                                           LSA 1799.2 MSA 317.5 SSA 11.1
                                                                                        SGB 5518.9 R23 -.0002 R13 -.9670
                                                                                                                                                           EL1 1742.9 EL2 310.1 ALF 172.73
                                                                                        SG1 5507.7 SG2 350.4 THA 177.66
      BOE 1.2601 BRA 6.9278 BC3 1.0053 FSP -358
                                                                                                                                                                          ARRIVAL DATE FEB 13 1968
                                                                                              FLIGHT TIME 212.00
LAUNCH DATE JUL 16 1967
                                                                                              DISTANCE 603.674
     RL 152.05 LAL -.00 LOL 292.80 VL 25.024 GAL 16.96 AZL 90.93 MCA 311.84 SMA 118.56 ECC .39767 INC .9278 V1 29.300
RP 108.50 LAP .69 LOP 244.65 VP 36.429 GAP 22.95 AZP 90.62 TAL 149.77 TAP 101.62 RCA 71.41 APO 165.70 V2 34.929
RC 199.655 GL -2.43 GP 6.42 ZAL 36.06 ZAP 171.36 ETS 128.96 ZAE 127.76 ETE 174.68 ZAC 27.25 ETC 15.49 CLP. 174.20
    PLANETOCENTRIC CONIC
                                                                                                                               2.60 VHP 14.147 DPA -12.72 RAP 238.66 ECC 2.3754
      C3 83.573 VHL 9.142 DLA -25.21 RAL 255.41 RAD 6569.6 VEL 14.315 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 52 37 1627.11 -2.33 7.00 140.63 118.23 13 19 44 1027.1 1.46 .37
                                                                                                                       INJ AZMTH INJ TIME PO CST TIM

118.23 13 19 44 1027.1

110.07 16 59 15 259.8

119.51 14 14 24 840.6

109.29 20 6 40 5209.5

122.63 14 37 7 765.4

107.74 21 53 18 4857.5
                                                                                                   140.63
150.85
          90.00 12 52 37
90.00 16 44 55
                                                                                                                                                                                     22.96
                                                                   20.41
                                                                                    322.20
                                             859.75
                                                                                                                                                                                     -1.04
                                                                                                                                                                                                       345.28
                        13 50 23
                                                                                                      139.15
          100.00
                                            1440.60
                                                                   -5.01
                                                                                    351.82
                                                                                                                                                                 5209.5
                                                                                                                                                                                     25.70
                                                                                                                                                                                                       268.36
         100.00
                         18 29 50
                                            5809.53
                                                                  23.28
                                                                                    276.32
                                                                                                      151.96
                                                                                                                                                                                     -6.44
                                                                                                                                                                                                       336.23
         110.00
                                                                 -10.82
                                                                                    342.59
                                                                                                      135.62
                         14 14 22 1365.37
                                                                                                       154.37
                                                                                                                                                                                    31.85
                                                                                                                                                                                                      243.43
                                                                                    251.99
                                                                  29.71
         110.00
                         20 22 21
                                            5457.52
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1701.7 SR 362.8 S5 458.9
CRT -.5252 CRS .4199 CST -.9926
                                                                                       SGT 5471.8 SGR 403.3 SG3 104.4
RRT -.5467 RRF -.5324 RTF .9709
SGB 5486.7 R23 -.0005 R13 -.9709
      TOE-1.0568 TRA 7.5397 TC3 -.8157 BAU .9114
                                                                                                                                                     CRT -.5252 CR5 .4199 CO.
LSA 1772.0 MSA 313.0 SSA 10.6
      RDE .5721 RRA -.2665 RC3 .0018 FAU .00239
FDE -.1656 FRA 1.7360 FC3 -.0247 BSP 17958
                                                                                                                                                            EL1 1712.7 EL2 306.8 ALF 173.40
      BOE 1.2018 BRA 7.5444 BC3 .8157 FSP -348
                                                                                         SG1 5476.3 SG2 337.4 THA 177.68
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ARRIVAL CATE FEB 15 1968

LAUNCH CATE JUL 16 1967

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CISTANCE 606.592
   HELIOCENTRIC CONIC
    RL 152,05 LAL -.00 LOL 292.80 VL 24.988 GAL 18.62 A7L 90.72 HCA 315.02 SHA 118.37 ECC .41798 INC .7153 VI 29.300 RP 108.53 LAP .51 LOP 247.83 VP 36.392 GAP 24.27 A7P 90.51 TAL 148.81 TAP 103.83 RCA 68.89 APO 167.84 V2 34.917 RC 201.315 GL -1.72 GP 6.34 ZAL 34.90 ZAP 170.65 ETS 134.28 ZAE 127.40 ETE 174.78 ZAC 25.31 ETC 16.79 CLP 173.11
   PLANETOCENTRIC CONIC
    C3 96.806 VHL 9.839 DLA -24.61 RAL 256.72 RAD 6569.9 VEL 14.770 PTH 2.67 VHP 14.946 DPA -13.34 RAP 240.70 ECC 2.5932
    C3 96.806 VHL 9.839. CLA -24.61 RAL 256.72 RAD 6569.9 VEL 14.779 PTM 2.67 VMP 14.946 DPA -13.54 RAP 240.70 ECC 2.5952 LM6H AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 47 14 1696.11 -4.55 10.86 143.43 117.98 13 15 31 1096.1 -.77 4.22 90.00 17 0 45 855.78 20.50 321.94 154.55 109.97 17 15 1 255.8 23.04 314.19 100.00 13 47 4 1502.98 -7.09 355.28 142.04 119.12 14 12 7 903.0 -3.15 348.70 100.00 18 43 37 5812.19 23.22 276.50 155.60 109.37 20 20 29 5212.2 25.65 268.54 110.00 14 13 45 1419.29 -12.78 345.53 138.63 121.98 14 37 24 819.3 -8.46 339.10 110.00 20 33 25 5468.65 29.48 252.77 157.97 108.15 22 4 34 4868.6 31.67 244.25
                                                                                                                                                         31.67
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5437.4 SCR 388.9 SC3 101.7
RRT -.5536 RRF -.5408 RTF ..9747
SCB 5451.3 R23 -.0009 R13 -.9747
                                                                                                                                      ST 1678.2 SR 346.3 SS 468.7
CRT -.4875 CRS .3933 CST -.9943
    TOE - .9823 TRA 8.2079 TC3 - .6424 BAU .8315
    RCE .5870 RRA -.2896 RC3 -.0001 FAU .00079
FOE -.1499 FRA 1.8334 #C3 -.0070 BSP 17840
                                                                                                                                      LSA 1749.9 MSA 305.9 SSA 10.1
                                                                            5G1 5441.6 SG2 323.6 THA 177.72
                                                                                                                                      EL1 1686.9 EL2 300.8 ALF 174.07
    BOE 1.1443 BRA 8.2130 BC3 .6424 FSP -338
LAUNCH DATE JUL 16 1967
                                                                                 FLIGHT TIME 216.00
                                                                                                                                                  ARRIVAL DATE, FEB 17 1968
                                                                                DISTANCE 608.932
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 24.954 GAL 20.46 A7L 90.48 MCA 318.20 SMA 118.19 ECC .44078 INC .4778 VI 29.300 RP 108.57 LAP .32 LOP 251.01 VP 36.358 GAP 25.76 A7P 90.36 TAL 147.99 TAP 106.19 RCA 66.09 APO 170.28 V2 34.905 RC 202.957 GL -1.05 GP 6.26 ZAL 33.91 ZAP 169.82 ETS 139.06 ZAE 126.97 ETE 174.89 ZAC 23.46 ETC 18.29 CLP 171.95
   PLANETOCENTRIC CONTC
    C3 112.774 VHL 10.620 DLA -24.03 RAL 257.84 RAD 6570.1 VEL 15.301 PTH 2.74 VHP 15.846 DPA -13.92 RAP 242.68 ECC 2.8560
    UNCH AZMTH LUNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12.32 11 1761.36 -6.62 14.53 146.11 117.60 13 11 33 1161.4 -2.87 7.86
                                                                                                       109.95 17 29 1 254.8

118.61 14 9 44 962.9

109.49 20 32 55 5216.5

121.23 14 37 15 871.8

108.57 22 14 46 4880.4
                                                                                                                                                             23.06
        90.00
                     17 14 46
                                      854,78
                                                         20.52
                                                                        321.88
                                                                                        158.00
                                   854.78
1562.87
5816.53
1471.79
5480.38
                    13 43 41
                                                                                        144.80
                                                                                                                                                             -5.17
                                                                                                                                                                            352.01
                                                         -9.06
                                                                        358.64
       100.00
                   18 55 58
14 12 43
                                                                                     159.00
141.51
                                                                                                                                                                            268.84
                                                                                                                                                             25.57
       100.00
                                                       23.13
                                                                        276.78
                                                                                                                                                        -10.41
31.48
                                                       -14.65
                                                                        348.45
                                                                                                                                                                            341.92
                     20 43 25
                                                    29.23
                                                                        253.60
                                                                                        161.35
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                            SGT 5397.5 SGR '373.2 SG3 99.2
RRT -.5593 RRF -.5481 RTF .9783
                                                                                                                                      ST 1657.7 SR 329.3 SS 481.4
CRT -.4535 CRS .3710 CST -.9957
    TOE -.9148 TRA 8.9283 TC3 -.4877 BAU .7352
                                                                                                                               CRT -.4000 See LSA 1732.1 MSA 296.4 SSA . . . . EL1 1664.7 EL2 292.3 ALF 174.69
    RDE .6018 RRA -.3115 RC3 -.0019 FAU-.00095
    FDE -.1369 FRA 1.9396 FC3 .0073 BSP 17805
BDE 1.0950 BRA 8.9337 BC3 .4877 FSP -330
                                                                            SGB 5410.4 R23 -.0011 R13 -.9783
                                                                            SG1 5401.6 SG2 309.1 THA 177.78
                                                                                                                                                  ARRIVAL CATE FEB 19 1968
                                                                                FLIGHT TIME 218.00
LAUNCH DATE JUL 16 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 617.548
    PLANETOCENTRIC CONIC
    C3 132.192 VHL 11.497 DLA -23.46 RAL 258.77 RAD 6570.4 VEL 15.922 PTH 2.81 VHP 16.867 CPA -14.44 RAP 244.59 ECC 3.1755
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      117.10 13 7 37 1223.2

119.97 17 41 25 255.8

118.00 14 7 6 1020.3

109.64 20 44 1 5222.0

120.41 14 36 36 922.7

109.00 22 23 53 4892.4
                                                                                                                                                                             11.32
        90,00 12 37 14 1823.20
                                                        -8.55
                                                                         18.05 148.64
                                                                                                                                      1223.2 -4.85
                   17 27 10 855.83
13 40 6 1620.27
                                                                                                                                                            23.04
         90.00
                                                        20.50
                                                                       321.95
                                                                                       161.18
                                                   -10.91
23.00
-16.43
                                                                                                                                                            -7.08
                                                                                                                                                                           355.19
       100.00
                                                                         1.89
                                                                                     147.39
                                                                                                                                         1020.3
                                                                  277.14
351.32
254.43
                                     5822.04
                                                                                       162.15
                                                                                                                                                            25.47
                                                                                                                                                                           269.21
       100.00.
                     19 6 59
                    14 11 13 1522.68
20 52 21 5492.38
                                                                                      144.22
                                                                                                                                                         -12.27
31.28
                                                                                                                                                                            344.69
       110.00
                                                                                                                                                                           245.99
                                                    28.96
                                                                                        164.47
       110.00
                                                                       254.43
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 1638.9 SR 311.8 SS 497.2
CRT -.4225 CRS .3513 CST -.9968
LSA 1717.3 MSA 285.0 SSA 9.0
                                                                            SGT 5353.3 SGR 356.2 SG3 96.8
RRT -.5636 RRF -.5539 RTF .9818
SGB 5365.1 R23 -.0013 R13 -.9818
    TOE -.8518 TRA 9.7117 TC3 -.3485 BAU .6160
    ROE .6163 RRA -.3318 RC3 -.0036 FAU-.00292
FOE -.1257 FRA 2.0577 FC3 .0192 BSP 17750
BDE 1.0514 BRA 9.7174 BC3 .3485 FSP -322
                                                                                                                                      EL1 1644.3 EL2 281.7 ALF 175.26
                                                                            SG1 5357.0 SG2 294.0 THA 177.85
                                                                                                                                                  ARRIVAL CATE FEB 21 1968
                                                                                 FLIGHT TIME 220.00
LAUNCH DATE JUL 16 1967
                                                                                 DISTANCE 611.248
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 292.80 VL 24.893 GAL 24.81 AZL 89.90 HCA 324.56 SMA 117.87 ECC .49543 INC .0972 VI 29:300 RP 108.64 LAP -.06 LOP 257.36 VP 36.295 GAP 29:39 AZP 89.92 TAL 146.92 TAP 111.47 RCA 59.47 APO 176.26 V2 34.883 RC 206.187 GL .18 GP 6.10 ZAL 32.47 ZAP 167.73 ETS 147.17 ZAE 125.81 ETE 175.13 ZAC 20.10 ETC 21.91 CLP 169.34
   PLANETOCENTRIC CONIC
    C3 156.000 VHL 12.490 DLA -22.91 RAL 259.49 RAD 6570.7 VEL 16.653 PTH 2.89 VHP 18.030 DPA -14.92 RAP 246.40 ECC 3.5674
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       116.50 13 3 31
                                                                                      150.98
                                                                                                                                        1281.8
        90.00 12 32 9 1881.80
90.00 17 37 59 858.21
                                                                         21.41
                                                                                                                                                          -6.71
                                                        -10.35
                                                                                                         110.03 17 52 18 258.2

117.31 14 4 7 1075.1

109.80 20 53 46 5228.2

119.51 14 35 21 971.7

109.43 22 31 54 4904.3
                                                                                                                                                             22.99
                                                                                                                                                                            314.35
                                                                        322.10
                                                                                        164.05
                                                        20.44
                   13 36 12 1675.10
19 16 38 5828.19
14 9 10 1571.73
21 0 9 5504.33
                                                                                                                                                                            358.26
                                                                                        149.79
                                                                                                                                                            -8.88
                                                        -12.64
                                                                          5.04
       100.00
                                                                   277.55
354.15
255.26
MIO-
                                                                                                                                                                          269.63
                                                                                                                                                           25.35
                                                                                        165.00
                                                       22.86
       100.00
                                                       -18.09
                                                                                        146.73
                                                                                                                                                         -14,03
31.07
                                                                                                                                                                            347.39
       110.00
                                                                                      167.30
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RET - 5657 RRF - 5576 RTF - 59850
SGB 5315.9 R23 - .0015 R13 - .9850
SGB 5315.9 R23 - .0015 R13 - .9850
SGB 5308.6 SG2 278.4 THA 177.93
                                                                                                                                      ST 1620.5 SR 294.0 SS 516.4
CRT -.3944 CRS .3337 CST -.9977
     TOE -.7950 TRAID.5676 TC3 -.2240 BAU .4674
     ROE .6307 RRA - .3494 RC3 - .0052 FAU- .00526
                                                                                                                               LSA 1704.4 MSA 272.1 SSA 8.4
EL1 1624.8 EL2 269.5 ALF 175.79
    FOE -.1164 FRA 2.1898 FC3 .0292 BSP 17655
BOE 1.0148 BRAIO.5733 BC3 .2241 FSP -314
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FLIGHT TIME 214.00

3

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ARRIVAL DATE SEP 25 1967
LAUNCH DATE JUL 17 1967
                                                                  FLIGHT TIME 70.00
  HELIOCENTRIC CONIC
                                                                  DISTANCE 188.885
   RL 152.05 LAL -.00 LOL 293.76 VL 27.074 GAL -10.95 AZL 92.93 MCA 83.60 SMA 131.05 ECC .24659 INC 2.9297 VI 29.302
RP 108.50 LAP -2.91 LOP 17.35 VP 37.863 GAP -10.33 AZP 90.33 TAL 219.41 TAP 303.01 RCA 98.73 APO 163.36 VZ 34.926
RC 55.163 GL -13.30 GP -10.95 ZAL 148.65 ZAP 22.06 ETS 27.81 ZAE 150.28 ETE 358.22 ZAC 90.17 ETC 13.77 CLP -19.28
   PLANETOCENTRIC CONIC
    C3 34.863 VHL 5.905 DLA 1.44 RAL 140.47 RAD 6568.4 VEL 12.499 PTH 2.26 VHP 7.092 DPA -6.16 RAP 175.04 ECC 1.5738
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                  0 56 41 2396.21
                                              -23.52
                                                           53.33
                                                                        11.6A
                                                                                     106.24
                                                                                                 1 36 37
                                                                                                                1796.2 -21.07
                                                                                                                                             45.51
                 13 16 2 4951.11
2 18 42 2131.67
       90.00
                                              21.70
                                                           216.38
                                                                         10.75
                                                                                       71.35
                                                                                                14 38 33
                                                                                                                 4351.1
                                                                                                                               18.95
                                                                                                                                            20A.7A
      100.00
                                              -24.75
                                                           33.47
                                                                         11.28
                                                                                       107.32
                                                                                                 2 54 13
                                                                                                                 1531.7
                                                                                                                               -22.14
                                                                                                                                             25.64
      100.00
                 14 36 42 4690.87
                                              22.91
                                                           196.79
                                                                         10.30
                                                                                       70.26 15 54 53
                                                                                                                 4090.9
                                                                                                                              20.01
                                                                                                                                            189.19
                  3 28 28
                              1913.26
                                              -28.05
                                                            15.63
                                                                        10.02
                                                                                      110.39
                                                                                                 4 0 22
                                                                                                                 1313.3
                                                                                                                              -25.01
                                                                                                                                             7.77
      110.00
                                                                                       67,17 ,16 58 7
                             4482.05
                 15 43 25
                                                           179.55
                                                                                                                 3882.0
                                                                                                                              22.84
                                                                                                                                            171.96
      110.00
                                               26.16
                                                                          8.91
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 580.6 SGR 433.7 SG3 137.6
RRT -.2155 RRF .3221 RTF -.5587
                                                                                                             ST 233.8 SR 394.5 SS 132.2
CRT -.8680 CRS -.6038 CST .1548
    TOE .2236 TRA - .2959 TC3 .3857 BAU .1808
    RDE -.4026 RRA -.1876 RC3 -.0405 FAU .05006
                                                              SGB 724.7 R23 -.0785 R13 .5905
SGI 595.6 SG2 .412.8 THA 161.96
   FOE -.1090 FRA -.6274 FC3-1.2432 BSP 1471
BOE .4605 BRA .3504 BC3 .3878 FSP -354
                                                                                                             LSA 452.3 MSA 150.1 SSA 25.6
                                                                                                             EL1 447.0 EL2 102.5 ALF 118.89
                                                                                                                       ARRIVAL DATE SEP 27 1967
LAUNCH DATE JUL 17 1967
                                                                  FLIGHT TIME 72.00
  HELIOCENTRIC CONIC
                                                                  DISTANCE 195.678
   RL 152.05 LAL -.00 LOL 293.76 VL 27.203 GAL -10.85 AZL 92.81 MCA 86.78 SMA 131.96 ECC .24041 INC 2.8144 V1 29.302 RP 108.46 LAP -2.81 LOP 20.54 VP 37.966 GAP -9.45 AZP 90.16 TAL 220.70 TAP 307.48 RCA 100.24 APO 163.68 V2 34.938 RC 56.885 GL -13.04 GP -11.70 ZAL 149.77 ZAP 25.22 ETS 25.41 ZAE 150.66 ETE 356.03 ZAC 90.39 ETC 13.76 CLP -22.50
  PLANETOCENTRIC CONIC
    C3 33.806 VHL 5.814 DLA 2.03 RAL 139.51 RAD 6568.3 VEL 12.457 PTH 2.25 VHP 6.644 DPA
                                                                                                                  -6.84 RAP 174.70 ECC 1.5564
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                  0 48 26 2406.88
13 16 36 4924.90
                                              -23.72
                                                           54.04
                                                                       10.38
                                                                                     105.93
                                                                                                 1 28 33
                                                                                                               1806.9
                                                                                                                              -21.31
                                                                                                                                             46.20
                                                                                                                                            207.14
       90.00
                 13 16 36
                                                                                       70.69
                                                                                                 14 38 41
                                                                                                                 4324.9
                                               21.12
                                                           214.68
                                                                          9.09
                                                                                                                                18.29
                  2 10 43
                                                                                       107.03
                                                                                                 2 46 25
                                                                                                                 1541.4
                                                                                                                                             26.27
      100.00
                             2141.45
                                              -24.94
                                                           34.13
                                                                          9.98
                                                                                                                               -22.37
                                                                                                15 54 46
                 14 37 O
                              4665.55
                                               22.32
                                                                                                                 4065.6
                                                                                                                                            187.61
      100.00
                                                           195.14
                                                                          8.62
                                                                                        69.58
                                                                                                                                19.34
                                                                                       110.13 3 53 9
66.46 16 57 25
                  3 21 8
                                                                                                                 1321.0
      110.00
                              1921.05
                                              -28.23
                                                            16.16
                                                                          8.74
                                                                                       110.13
                                                                                                                               -25.23
                                                                                                                                             8.27
                                                                                                                                            170.52
      110.00
                  15 43 6
                              4458.72
                                               25.53
                                                           178.01
                                                                           7.20
                                                                                                                 3858.7
                                                                                                                               22.13
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 581.7 SGR 442.3 SG3 155.9
RRT -.2380 RRF .3683 RTF -.5535
                                                                                                             ST 229.0 SR 396.0 SS 139.2

CRT -.8632 CRS -.5353 CST .0618

LSA 450.2 MSA 159.0 SSA 25.9
    TOE .2154 TRA -.2866 TC3 .3973 BAU .1817
    ROE -.3976 RRA -.1955 RC3 -.0606 FAU .05547
    FOE -.1006 FRA -.7294 FC3-1.4206 BSP
                                                1487
-408
                                                              SGB 730.8 R23 -. 0986 R13 .5966
    BOE .4522 BRA .3470 BC3 .4019 FSP
                                                              SG1 600.9 SG2 415.9 THA 159.69
                                                                                                             EL1 445.8 EL2 102.7 ALF 118.15
                                                                                                                       ARRIVAL DATE SEP 29 1967
                                                                  FLIGHT TIME 74.00
LAUNCH DATE JUL 17 1967
   HELIOCENTRIC CONIC
                                                                  DISTANCE 202.449
   RL 152.05 LAL -.00 LOL 293.76 VL 27.315 CAL -10.77 AZL 92.70 HCA 89.97 SMA 132.77 ECC .23508 INC 2.6996 VI 29.302 RP 108.43 LAP -2.70 LOP 23.73 VP 38.058 CAP -8.61 AZP 90.00 TAL 221.87 TAP 311.84 RCA 101.56 APO 163.98 VZ 34.951 RC 58.673 GL -12.73 CP -12.54 ZAL 150.79 ZAP 28.58 ETS 23.41 ZAE 151.28 ETE 353.55 ZAC 90.79 ETC 13.72 CLP -25.89
  PLANETOCENTRIC CONIC
    C3 32.891 VHL 5.735 DLA 2.63 RAL 138.67 RAD 6568.3 VEL 12.420 PTH 2.24 VHP 6.229 DPA -7.51 RAP 174.17 ECC 1.5413
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 40 39 2418.45
13 17 41 4899.48
2 3 13 2152.12
                                                                        9.25
                                                                                     105.60
                                                                                                 1 20 58
                                                                                                               1818.4
                                                                                                                            -21.57
       90.00
                                              -23.94
                                                           54.82
                                                                          7.61 .
                                                                                        70.07
                                                                                                14 39 21
                                                                                                                 4299.5
                                                           213.04
       90.00
                                              20.54
                                                                                       106.71
                                                                                                 2 39 5
                                                                                                                1552.1
                                                                                                                              -22.63
      100.00
                                                            34.85
                                                                          8.67
                                              -25.15
                 14 37 48
                                                                                       68.95
                                                                                                15 55 9
                                                                                                                 4041.0
                                                                                                                               18.67
                                                                                                                                            186.10
      100.00
                                                           193.56
                                                                          7.14
                              4641.03
                                              21.73
                   3 14 17 1929.73
                                                                                                 3 46 26
                                                            16.75
                                                                                      109.83
                                                                                                                 1329.7
                                                                                                                               -25.46
                                                                                                                                              8.84
      110.00
                                              -28.43
                                                                          7.65
                                                           176.57
                                                                                       65.80
                                                                                                16 57 11
                                                                                                                 3836.2
                                                                                                                               21.43
      110.00
                 15 43 14
                              4436.20
                                              24.91
                                                                          5.69
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
   TOE .2080 TRA -.2798 TC3 .4044 BAU .1817
ROE -.3922 RRA -.2054 RC3 -.0845 FAU .06160
                                                              SGT 580.3 SGR 452.9 SG3 176.6
RRT -.2621 RRF .4201 RTF -.5441
                                                                                                             ST 224.6 SR 396.7 SS 147.8 CRT -.8565 CRS -.4707 CST -.0266
    FOE -.0907 FRA -.8437 FC3-1.6215 BSP 1527
                                                              SGB 736.1 R23 -.1211 R13 .6034
                                                                                                             LSA 447.6 MSA 169.2 SSA 26.1
    BDE .4440 BRA .3471 BC3 .4132 FSP
                                                              SG1 605.1 SG2 419.1 THA 156.84
                                                                                                             EL1 443.9 EL2 103.6 ALF 117.49
                                                                  FLIGHT TIME 76.00
                                                                                                                       ARRIVAL DATE OCT 1 1967
LAUNCH DATE JUL 17 1967
                                                                 DISTANCE 209.196
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 27.412 GAL -10.69 A7L 92.58 MCA 93.16 SMA 133.47 ECC .23049 INC 2.5847 VI 29.302 RP 108.39 LAP -2.58 LOP 26.92 VP 38.139 GAP -7.81 A7P 89.86 TAL 222.92 TAP 316.09 RCA 102.71 APO 164.24 V2 34.964 RC 60.521 GL -12.38 GP -13.45 ZAL 151.72 ZAP 32.15 ETS 21.70 ZAE 152.15 ETE 350.66 ZAC 91.40 ETC 13.64 CLP -29.48
  PLANETOCENTRIC CONIC
   C3 32.086 VHL 5.664 DLA
                                    3.22 RAL 137.95 RAO 6568.3 VEL 12.388 PTH 2.24 VHP 5.847 DPA
                                                                                                                   -8.19 RAP 173.44 ECC 1.5280
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             2430.69
                  0 33 22
                                              -24.16
                                                            55.65
                                                                          8.31
                                                                                      105.24
                                                                                                  1 13 52
                                                                                                                1830.7
                                                                                                                              -21.83
       90.00
                 13 19 15
                              4874.75
                                                           211.46
                                                                          6.32
                                                                                                14 40 30
                                                                                                                 4274.8
                                                                                                                               16.99
       90.00
                                              19.96
                                                                                        69.48
                   1 56 13
                              2163.47
                                              -25.37
                                                            35.62
                                                                           7.93
                                                                                       106.36
                                                                                                  2 32 16
                                                                                                                 1563.5
                                                                                                                               -22.89
                                                                                                                                             27.70
      100.00
                  14 39 5
                              4617.21
                                                           192.04
                                                                                        68.36
                                                                                                15 56 3
                                                                                                                 4017.2
                                                                                                                               18.01
                                                                                                                                            184.64
      100.00
                                              21.14
                                                                          5.84
                   3 7 54
                                                                                                  3 40 13
      110.00
                              1939.06
                                              -28.65
                                                            17.40
                                                                          6.74
                                                                                      109.50
                                                                                                                 1339.1
                                                                                        65.18 16 57 27
                 15 43 53
      110.00
                             4414.38
                                              24.30
                                                           175.17
                                                                          4.37
                                                                                                                 3814.4
                                                                                                                               20.74
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
    TOE .1987 TRA -.2792 TC3 .4023 BAU .1791
                                                              SGT 572.8 SGR 465.7 SG3 199.3
RRT -.2779 RRF .4746 RTF -.5219
SGB 738.3 R23 -.1509 R13 .6061
                                                                                                             ST 218.6 SR 396.0 SS 156.5
    ROE -.3861 RRA -.2170 RC3 -.1120 FAU .06830
                                                                                                             CRT -.8425 CRS -.4023 CST -.1292
    FOE -.0753 FRA -.9666 FC3-1.8428 BSP 1516
                                                                                                            L'SA 442.5 MSA 180.6 SSA 26.3
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SG1 604.3 SG2 424.1 THA 153.43

EL1 439.8 EL2 106.0 ALF 116.61

BOE .4342 BRA .3536 BC3 .4176 FSP

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ARRIVAL DATE OCT 3 1967
                                                                              FLIGHT TIME 78.00
LAUNCH DATE JUL 17 1967
                                                                              DISTANCE 215.916
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.494 GAL -10.62 A7L 92.47 MCA 96.36 SMA 134.08 ECC .22653 INC 2.4691 V1 29.302 RP 108.35 LAP -2.45 LOP 30.12 VP 38.210 GAP -7.04 A7P 89.73 TAL 223.84 TAP 320.20 RCA 103.71 APO 164.46 V2 34.977 RC 62.420 GL -12.00 GP -14.44 7AL 152.56 7AP 35.95 ETS 20.18 7AE 153.24 ETE 347.24 7AC 92.21 ETC 13.50 CLP -33.28
   PLANETOCENTRIC CONIC
                                                                                                         2.23 VHP 5.498 DPA -8.85 RAP 172.48 ECC 1.5162
    C3 31.366 VHL 5.601 OLA 3.82 RAL 137.36 RAD 6568.2 VEL 12.359 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH JNJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 26 33 2443.45
13 21 18 4850.58
1 49 41 2175.32
14 40 52 4593.94
3 2 1 1948.90
15 45 0 4393.12
                                                                                                                                                    -22.11
                                                                                        7.52
                                                                                                     104.86
                                                                                                                    1 7 16
                                                                                                                                     1843.4
                                                                                                                                                                       48.59
                                                                      56.52
                                                      -24.38
                                                                                                        68.94 14 42 9
                                                                                                                                      4250.6
                                                                                                                                                      16.34
                                                                                                                                                                      202.57
                                                                                        5.20
                                                      19.37
                                                                      209.93
        90.00
                                                                                                      105.99
                                                                                                                    2 25 56
                                                                                                                                      1575.3
                                                                                                                                                      -23.16
                                                                                                                                                                       28.48
                                                                                        7.15
       100.00
                                                      -25.60
                                                                       36.43
                                                                                                      67.80 15 57 25
109.16- 3 34 30
64.60 16 58 14
                                                                                                                                                     17.35
                                                                                                                                                                     183.22
                                                                                                                                      3993.9
       100.00
                                                       20.54
                                                                      190.56
                                                                                        4.71
                                                                                                                                                     -25.98
                                                                                                                                                                      10.09
                                                                                        5.98
                                                                                                                                      1348.9
       110.00
                                                      -28.87
                                                                       18.08
                                                                                                                                                    20.06
                                                                                                                                                                     166,55
                                                                                                                                      3793.1
                                                                                        3.21
                                                      23.68
                                                                      173.83
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SGT 561.0 SGR 481.8 SG3 224.3
RRT -.2847 RRF .5316 RTF -.4867
SGB 739.5 R23 -.1845 R13 .6090
                                                                                                                                  ST 212.8 SR 394.2 SS 166.1
    TOE .1893 TRA -.2840 TC3 .3916 BAU .1749
                                                                                                                                  CRT -.8219 CRS -.3357 CST -.2365
    ROE - .3790 RRA - .2305 RC3 - .1439 FAU .07562
    FOE -.0554 FRA-1.0983 FC3-2.0872 BSP 1498
BOE .4236 BRA .3657 BC3 .4172 FSP -621
                                                                                                                                  LSA 436.1 MSA 193.3 SSA 26.3
                                                                          SG1 600.6 SG2 431.4 THA 149.10
                                                                                                                                  EL1 434.2 EL2 110.1 ALF 115.70
                                                                                                                                              ARRIVAL DATE OCT 5 1967
                                                                              FLIGHT TIME 80.00
LAUNCH DATE JUL 17 1967
   RL 152.05 LAL -.00 LQL 293.76 VL 27.564 GAL -10.56 AZL 92.35 MCA 99.55 SMA 134.60 ECC .22313 INC 2.3519 VI 29.302 RP 108.31 LAP -2.32 LQP 33.31 VP 38.272 GAP -6.31 AZP 89.61 TAL 224.63 TAP 324.18 RCA 104.57 APO 164.64 V2 34.990 RC 64.367 GL -11.58 GP -15.52 ZAL 153.31 ZAP 39.97 ETS 18.76 ZAE 154.51 ETE 343.12 ZAC 93.25 ETC 13.29 CLP -37.31
                                                                              DISTANCE 222.608
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                          2.22 VHP 5.181 OPA
   C3 30.711 VHL 5.542 DLA 4.41 RAL 136.88 RAD 6568.2 VEL 12.332 PTH 2.22 VHP 5.181 OPA -9.50 RAP 171.29 ECC 1.5054 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 20 12 2456.61 -24.61 57.42 6.88 104.47 1 1 9 1856.6 -22.38 49.45 100.00 13 23 50 4826.81 18.78 208.43 4.24 68.41 14 44 17 4226.8 15.69 201.12 100.00 14 43 37 2187.57 -25.83 37.27 6.52 105.60 2 20 4 1587.6 -23.44 29.29 100.00 14 43 6 4571.08 19.95 189.12 3.74 67.27 15 59 17 3971.1 16.70 181.84 110.00 2 56 36 1959.14 -29.09 18.79 5.38 108.79 3 29 15 1359.1 -26.25 10.76 110.00 15 46 36 4372.27 23.07 172.52 2.22 64.04 16 59 29 3772.3 19.39 165.31
                                                                                                                                         -9.50 RAP 171.29 ECC 1.5054
    C3 30.711 VHL 5.542 DLA
                                           4.41 RAL 136.88 RAD 6568.2 VEL 12.332 PTH
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 546.5 SGR 502.4 SG3 251.6

RRT -.2804 RRF .5907 RTF -.4370

SGB 742.4 R23 -.2165 R13 .6181

SG1 596.6 SG2 441.8 THA 143.36
                                                                                                                                  ST 208.7 SR 391.3 SS 176.8
CRT -.7952 CRS -.2783 CST -.3382
    TOE .1812 TRA -.2935 TC3 .3731 BAU .1702
    ROE -.3711 RRA -.2461 RC3 -.1806 FAU .08362
                                                                                                                                 LSA 429.3 MSA 207.3 SSA 26.3
    FOE -.0328 FRA-1.2398 FC3-2.3574 BSP 1501
BDE .4129 BRA .3830 BC3 .4145 FSP -711
                                                                                                                                 EL1 428.1 EL2 115.7 ALF 114.93
                                                                                                                                             ARRIVAL DATE OCT 7 1967
                                                                              FLIGHT TIME 82.00
LAUNCH DATE JUL 17 1967
                                                                             DISTANCE 229.271
    RL 152.05 LAL -.00 LOL 293.76 VL 27.621 CAL -10.49 AZL 92.23 MCA 102.75 SHA 135.04 ECC .22019 INC 2.2325 V1 29.302 RP 108.27 LAP -2.18 LOP 36.51 VP 38.325 CAP -5.61 AZP 89.51 TAL 225.28 TAP 328.03 RCA 105.30 APO 164.77 V2 35.003 RC 66.336 GL -11.12 GP -16.67 ZAL 153.97 ZAP 44.22 ETS 17.40 ZAE 155.91 ETE 338.09 ZAC 94.52 ETC 13.00 CLP -41.58
   PLANETOCENTRIC CONIC
    C3 30.102 VHL 5.487 DLA 5.00 RAL 136.51 RAD 6568.2 VEL 12.308 PTH 2.22 VHP 4.898 DPA -10.13 RAP 169.86 ECC 1.4954
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 LNCH TIME L-I TIME

0 14 18 2470.11

13 26 50 4803.27

1 37 59 2200.15

14 47 49 4548.45

2 51 38 1969.69

15 48 41 4351.68
                                                                                                                                                  -22.66
                                                                                                                                 1870.1
                                                                                    6.38
                                                                                                     104.06
                                                                                                                   0 55 28
                                                      -24.84
                                                                      58.34
         90.00
                                                                                                      67.92 14 46 53
                                                                                                                                      4203.3
                                                                                                                                                      15.03
                                                                                                                                                                      199.70
                                                                                        3.43
                                                       18.19
                                                                      206.96
         90.00
                                                                                                                                      1600.2
                                                                                                                                                     -23.71
                                                                                                                                                                       30.12
                                                                                        6.03
                                                      -26.05
                                                                      38.14
       100.00
                                                                                                                                      3948.5
                                                                                                                                                       16.04
                                                                                                                                                                      180.48
                                                                                        2.91
                                                      19.35
                                                                      187.71
       100.00
                                                                                                                                                      -26.53
                                                                                                                                      1369.7
                                                                                                                                                                       11.45
                                                      -29.32
                                                                       19.52
                                                                                        4.91
       110.00
                                                                                                        63.52 17 1 12
                                                                                                                                                      18.71
                                                                                                                                                                      164.10
                                                                                                                                      3751.7
                                                                      171.24
                                                                                        1.38
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 528.4 SGR 527.3 SG3 280.3

RRT -.2478 RRF .6475 RTF -.3591

SGB 746.6 R23 -.2377 R13 .6363

SG1 589.7 SG2 457.8 THA 135.24
                                                                                                                                 ST 204.7 SR 386.6 SS 187.7
     TDE .1718 TRA -.3113 TC3 .3417 BAU .1640
                                                                                                                                CRT -.7546 CRS -.2172 CST -.4550
LSA 420.0 MSA 222.4 SSA 26.2
     RDE -.3616 RRA -.2632 RC3 -.2220 FAU .09198
    FDE -.0015 FRA-1.3826 FC3-2.6452 BSP 1475
BDE .4003 BRA .4077 BC3 .4075 FSP -802
                                                                                                                                 EL1 419.6 EL2 123.7 ALF 113.99
     BDE .4003 BRA .4077 BC3 .4075 FSP
                                                                                                                                              ARRIVAL DATE OCT 9 1967
                                                                              FLIGHT TIME 84.00
LAUNCH DATE JUL 17 1967
                                                                              DISTANCE 235.903
    RL 152.05 LAL -.00 LOL 293.76 VL 27.667 GAL -10.42 AZL 92.11 HCA 105.95 SMA 135.39 ECC .21764 INC 2.1098 V1 29.302 RP 108.22 LAP -2.03 LOP 39.71 VP 38.371 GAP -4.94 AZP 89.42 TAL 225.79 TAP 331.74 RCA 105.92 APO 164.85 V2 35.016 RC 68.382 GL -10.62 GP -17.90 ZAL 154.55 ZAP 48.70 ETS 16.05 ZAE 157.36 ETE 331.90 ZAC 96.01 ETC 12.60 CLP -46.08
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 29.526 VHL 5.434 DLA 5.59 RAL 136.26 RAD 6568.2 VEL 12.284 PTH 2.21 VHP 4.648 DPA -10.74 RAP 168.20 ECC 1.4859
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNOH AZMTH LNCH TIME L-I TIME
                                                                                                      103.63 0 50 11
67.44 14 50 0
                                                                                                                                      1883.9
                                                                                                                                                     -22.94
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                       0 8 47 2483.94
         90.00
                                                       -25.06
                                                                       59.29
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                                                                                         2.75
                     13 30 20
                                     4779.76
                                                        17.58
                                                                      205.50
         90.00
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                    1 32 46 2213.05
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66.27 16 4 28
        100.00
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                     14 49 2
2 47 4
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                                                       18.74
                                                                      186.32
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                                    4525.88
        100.00
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                                                                                        4.57
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63.01 17 3 25
                                                       -29.55
                                                                       20.28
                                    1980.52
        110.00
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                     15 51 13
                                                                                          .67
                                     4331.17
                                                       21.82
                                                                       169.98
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 511.4 SGR 557.5 SG3 310.1
RRT -.1817 RRF .7011 RTF -.2489
     TDE .1632 TRA -.3362 TC3 .2983 BAU .1584
                                                                                                                                  ST 202.8 SR 380.4 SS 199.0
                                                                                                                                CRT -.7015 CRS -.1594 CST -.5718
LSA 409.7 MSA 238.6 SSA 26.1
EL1 409.6 EL2 134.2 ALF 113.13
     RDE -.3505 RRA -.2818 RC3 -.2684 FAU .10057
                                                                          SGB 756.6 R23 -.2116 R13 .6798
SGI 586.1 SG2 478.3 THA 122.29
     FOE .0365 FRA-1.5250 FC3-2.9487 BSP 1467
BDE .3866 BRA .4387 BC3 .4013 FSP -898
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ARRIVAL DATE OCT 11 1967
                                                                                 FLIGHT TIME 86.00
LAUNCH DATE JUL 17 1967
                                                                                 DISTANCE 242.504
   HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 27.702 GAL -10.35 A7L 91.98 HCA 109.15 SHA 135.66 ECC .21544 INC 1.9831 V1 29.302 RP 108.18 LAP -1.87 LOP 42.92 VP 38.408 GAP -4.30 A7P 89.35 TAL 226.17 TAP 335.32 RCA 106.43 APO 164.88 V2 35.029 RC 70.443 GL -10.09 GP -19.19 ZAL 155.04 ZAP 53.37 ETS 14.65 ZAE 158.72 ETE 324.29 ZAC 97.72 ETC 12.09 CLP -50.82
   PLANETOCENTRIC CONIC
                                              6.19 RAL 136.12 RAD 6568.2 VEL 12.262 PTH 2.21 VHP 4.431 DPA -11.33 RAP 166.30 ECC 1.4768
    C3 28.972 VHL 5.383 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          103.19
                                                                                                                        0 45 17
                                                                                                                                           1898.1
                                                                                                                                                           -23.22
                                                                                           5.76
                                                        -25.29
                                                                         60.27
                       0 3 38 2498.15
         90.00
                                                                                                                                                             13.69
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                                                                         204.05
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         90.00
                      13 34 21
                                      4756.06
                                                         16.96
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16 7 48
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                                                                                                                                            1626.3
                                                                                                                                                                              31.86
                                                                                                           104.35
                       1 27 55 2226.30
                                                         -26.51
                                                                          39.95
                                                                                            5.42
        100.00
                                                                                                                                                                             177.60
                                                                                                                                            3903.1
                                                                                                                                                            14.69
                     14 52 45 4503.14
2 42 54 1991.67
15 54 16 4310.54
                                                          18.11
                                                                         184.92
                                                                                            1.67
                                                                                                            65.80
       100.00
                                                                                                           107.60
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17.33
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                                                         -29.79
       110.00
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                                                                                                           62.52
                                                                         168.73
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                                                          21.18
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 204.4 SR 372.8 SS 211.0
CRT -.6376 CRS -.1118 CST -.6762
                                                                             SGT 501.4 SGR 593.9 SG3 340.7
RRT -.0771 RRF .7507 RTF -.1035
SGB 777.2 R23 -.0873 R13 .7471
     TOE .1565 TRA -.3678 TC3 .2431 BAU .1557
    FDE -.3381 RRA -.3017 RC3 -.3203 FAU .10934
FDE .0761 FRA-1.6643 FC3-3.2671 BSP 1516
BDE .3726 BRA .4758 BC3 .4021 FSP -1003
                                                                                                                                      LSA 399.0 MSA 255.8 SSA 26.0
                                                                                                                                       EL1 398.9 EL2 147.2 ALF 112.50
                                                                             5G1 598.1 SG2 496.4 THA 102.18
                                                                                                                                                    ARRIVAL DATE OCT 13 1967
                                                                                  FLIGHT TIME 88.00
LAUNCH DATE JUL 17 1967
                                                                                  DISTANCE 249.074
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.729 GAL -10.28 AZL 91.85 HCA 112.36 SMA 135.86 ECC .21351 INC 1.8513 VI 29.302 RP 108.14 LAP -1.71 LOP 46.12 VP 38.439 GAP -3.69 AZP 89.30 TAL 226.42 TAP 338.78 RCA 106.85 APO 164.87 VZ 35.042 RC 72.534 GL -9.52 GP -20.54 ZAL 155.45 ZAP 58.23 ETS 13.18 ZAE 159.85 ETE 315.09 ZAC 99.62 ETC 11.45 CLP -55.79
   PLANETOCENTRIC CONIC
                                                                                                               2.20 VHP 4.247 OPA -11.89 RAP 164.20 ECC 1.4679
                                             6.80 RAT 136.08 RAD 6568.1 VEL 12.239 PTH
     C3 28.429 VHL 5.332 DLA
    C3 28.429 VML 5.332 DLA 6.80 KAE 136.08 KAD 0308.1 VEL 12.239 THE TIME FO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 54 52 2512.82 -25.51 61.29 5.62 102.73 24 36 45 1912.8 -23.50 53.19
                     23 54 52 2512.82
13 38 54 4731.94
                                                         -25.51
                                                                                                            66.53 14 57 46

103.90 2 0 43

65.34 16 11 40

107.17 3 12 27

62.04 17 9 18
                                                                                                                                             4131.9
                                                                                                                                                               12.99
                                                                                                                                                                              195.46
                                                                         202.57
                                                                                             1.76
                                                         16.31
         90.00
                                                                                                                                             1640.0
                                                                                                                                                              -24.56
                                                                                                                                                                               32.78
                                                                           40.90
                                                                                             5.30
                       1 23 23
                                       2239.99
                                                         -26.73
        100.00
                                                                                                                                             3880.0
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                                                                         183.51
                                                                                            1.23
                                       4480.00
                                                         17.46
                      14 57 D
        100.00
                       2 39 3
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                                                                                             4.26
                                       2003.18
                                                         -30.02
        110.00
                                                                                                                                                               16.61
                                                                                                                                             3689.6
                                                                                         359.63
                      15 57 49
                                                          20.51
                                                                         167.46
                                       4289.58
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 209.1 SR 362.9 SS 223.0

CRT -.5586 CRS -.0606 CST -.7780

LSA 387.0 MSA 273.5 SSA 26.0
                                                                              SGT 505.0 SGR 634.6 SG3 370.0
RRT .0747 RRF .7934 RTF .0814
     TOE .1505 TRA -.4082 TC3 .1721 BAU .1572
     RDE -. 3233 RRA -. 3216 RC3 -. 3762 FAU .11759
                                                                              SGB 811.0 R23 .0758 R13 .7901
SG1 637.6 SG2 501.2 THA 81.02
     FOE .1302 FRA-1.7871 FC3-3.5807 BSP 1602
                                                                                                                                        EL1 385.8 EL2 163.2 ALF 111.97
     BOE .3566 BRA .5197 BC3 .4137 FSP -1098
                                                                                                                                                    ARRIVAL DATE OCT 15 1967
                                                                                  FLIGHT TIME 90.00
LAUNCH DATE JUL 17 1967
                                                                                  OISTANCE 255.612
    RL 152.05 LAL -.00 LOL 293.76 VL 27.746 GAL -10.20 AZL 91.71 MCA 115.56 SMA 136.00 ECC .21182 INC 1.7131 V1 29.302 RP 108.10 LAP -1.55 LOP 49.33 VP 38.464 GAP -3.10 AZP 89.26 TAL 226.54 TAP 342.10 RCA 107.19 APO 164.80 V2 35.056 RC 74.652 GL -8.89 GP -21.93 ZAL 155.79 ZAP 63.23 ETS 11.60 ZAE 160.54 ETE 304.38 ZAC 101.67 ETC 10.68 CLP -60.95
    PLANETOCENTRIC CONIC
     C3 27.892 VML 5.281 DLA 7.43 RAL 136.15 RAD 6568.1 VEL 12.217 PTH 2.20 VMP 4.097 DPA -12.42 RAP 161.93 ECC 1.4590
     C3 27.892 VHL 5.281 DLA 7.43 RAL 136.15 RAD 6568.1 VEL 12.217 PTH 2.2U VMP 4.09 UPA -12.42 RAP 161.93 ECC 1.499 UNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 50 16 2528.13 -25.74 62.35 5.59 102.24 24 32 24 1928.1 -23.79 54.22 90.00 13 44 3 4707.11 15.63 201.06 1.44 66.08 15 2 30 4107.1 12.26 194.00 100.00 1 19 6 2254.27 -26.96 41.90 5.28 103.42 1 56 41 1654.3 -24.85 33.74 100.00 15 1 49 4456.20 16.77 182.07 .90 64.89 16 16 5 3856.2 13.25 175.05 110.00 2 35 30 2015.19 -30.26 22.74 4.27 106.72 3 9 5 1415.2 -27.67 14.50
                      2 35 30 2015.19
16 1 55 4268.05
                                                                                                             61.56 17 13 3
                                                                                                                                                            15.87
                                                                         166.18
                                                                                          359.28
                                                          19.82
         110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 218.8 SR 351.5 SS 235.3
                                                                              SCT 531.1 SGR 680.7 SG3 397.9
RRT .2490 RRF .8303 RTF .2791
SGB 863.4 R23 .1583 R13 .8185
                                                                                                                                       CRT - .4748 CR5 - .0197 CST - .8565
LSA 376.2 MSA 290.9 SSA 25.9
EL1 371.9 EL2 182.0 ALF 112.00
     TOE .1474 TRA -.4550 TC3 .0878 BAU .1662
     RDE -.3088 RRA -.3416 RC3 -.4369 FAU .12532
FDE .1850 FRA-1.8938 FC3-3.8897 BSP 1781
BDE .3404 BRA .5690 BC3 .4456 FSP -1198
                                                                              SG1 707.4 SG2 494.9 THA 67.60
                                                                                                                                                     ARRIVAL DATE OCT 17 1967
                                                                                   FLIGHT TIME 92.00
 LAUNCH DATE JUL 17 1967
                                                                                  DISTANCE 262.119
     RL 152.05 LAL -.00 LOL 293.76 VL 27.756 GAL -10.12 AZL 91.57 MCA 118.77 SMA 136.07 ECC .21034 INC 1.5672 V1 29.302 RP 108.06 LAP -1.37 LOP 52.54 VP 38.483 GAP -2.54 AZP 89.25 TAL 226.54 TAP 345.32 RCA 107.45 APO 164.69 V2 35.069 RC 76.793 GL -8.22 GP -23.33 ZAL 156.04 ZAP 68.31 ETS 9.89 ZAE 160.62 ETE 292.65 ZAC 103.84 ETC 9.76 CLP -66.27
    PLANETOCENTRIC CONIC
     C3 27.353 VHL 5.230 DLA 8.09 RAL 136.32 RAD 6568.1 VEL 12.195 PTH 2.19 VHP 3.979 DPA -12.94 RAP 159.52 ECC 1.4502
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                             -24.09
                                                                                                          101.72 24 28 14
65.64 15 7 52
                                                                           63.48
                                                          -25.96
                       23 45 50 2544.29
          90.00
                                                                                                                                             4081.2
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                                                          14.91
                      13 49 50
                                       4681.24
          90.00
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                                                                                             5.38
                                                                                                            102.91
                                                                           42.96
                        1 15 1
                                        2269.33
                                                          -27.20
         100.00
                                                                                                            64.44 16 21 8
106.24 3 5 58
61.09 17 17 22
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                                                                                                                                             3831.4
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                                                                          180.59
         100.00
                      15 7 16
                                       4431.43
                                                          16.05
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                                                                                                                                             1427.9
                                                                            23.64
                                                                                             4.40
                                                          -30.50
         110.00
                      2 32 10 2027.85
16 6 36 4245.67
                                                                                                                                             3645.7
                                                                                                                                                               15.09
                                                                          164.85
                                                                                           359.04
                                                          19.09
         110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 233.0 SR 337.1 SS 247.4
CRT -.3858 CRS .0263 CST -.9203
LSA 369.4 MSA 303.6 SSA 25.9
                                                                              SGT 586.1 SGR 728.4 SG3 421.7
RRT .4233 RRF .8603 RTF .4649
SGB 934.9 R23 .1923 R13 .8459
      TDE .1464 TRA -.5093 TC3 -.0128 BAU .1828
      RDE -.2874 RRA -.3595 RC3 -.4997 FAU .13168
FDE .2506 FRA-1.9682 FC3-4.1678 BSP 2026
BDE .3225 BRA .6234 BC3 .4999 FSP -1278
                                                                                                                                        EL1 355.5 EL2 203.8 ALF 112.80
                                                                               SGI 800.3 SGZ 483.3 THA 58.69
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LAUNCH DATE JUL 17 1967

ARRIVAL DATE OCT 19 1967

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DISTANCE 268.594
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 27.758 GAL -10.03 A7L 91.41 MCA 121.98 SMA 136.09 ECC .20903 INC 1.4119 V1 29.302 RP 108.02 LAP -1.20 LOP 55.75 VP 38.496 GAP -2.00 AZP 89.25 TAL 226.43 TAP 348.41 RCA 107.64 APO 164.53 V2 35.082 RC 78.958 GL -7.47 GP -24.74 ZAL 156.22 ZAP 73.43 ETS 8.03 ZAE 159.96 ETE 280.79 ZAC 106.06 ETC 8.72 CLP -71.70
    PLANETOCENTRIC CONIC
     C3 26.810 VHL 5.178 DLA
                                                8.78 RAL 136.59 RAD 6568.1 VEL 12.173 PTH 2.18 VHP 3.894 DPA -13.44 RAP*157.05 ECC 1.4412
      LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               101.15 24 24 10
65.21 15 13 57
102.35 1 49 6
63.99 16 26 52
105.71 3 3 2
60.62 17 22 19
                                                                                            5.87
                                                                                                                                                                    -24.40
         90.00 23 41 28 2561.60
90.00 13 56 23 4653.96
                                                             -26.20
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                                       2285.46
4405.33
         100.00
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16 11 57 4222.14
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        110.00
                                                                               163.47
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        110.00
                                                             18.31
                                                                                                                                                                                          156.70
    DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                   SGT 670.4 SGR 778.9 SG3 441.6
RRT .5665 RRF .8852 RTF .6110
SGB 1027.7 R23 .2028 R13 .8718
SG1 913.3 SG2 471.2 THA 52.44
                                                                                                                                                ST 252.8 SR 321.0 SS 260.3

CRT -.3040 CRS .0604 CST -.9589

LSA 375.3 MSA 305.2 SSA 25.9
      TOE .1498 TRA -.5682 TC3 -.1269 BAU .2077
     ROE -.2663 RRA -.3758 RE3 -.5655 FAU .13677
FOE .3154 FRA-2.0143 FC3-4.4165 BSP 2363
BOE .3055 BRA .6812 BC3 .5795 FSP -1354
                                                                                                                                                 EL1 339.1 EL2 228.0 ALF 115.79
                                                                                        FLIGHT TIME 96.00
                                                                                                                                                               ARRIVAL DATE OCT 21 1967
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 275.039
     RL 152.05 LAL -.00 LOL 293.76 VL 27.754 GAL -9.94 AZL 91.25 MCA 125.20 SMA 136.05 ECC .20786 INC 1.2453 V1 29.302 RP 107.98 LAP -1.02 LOP 58.96 VP 38.505 GAP -1.48 AZP 89.28 TAL 226.21 TAP 351.41 RCA 107.77 APO 164.33 V2 35.094 RC 81.139 GL -6.66 GP -26.15 ZAL 156.31 ZAP 78.50 ETS 6.03 ZAE 158.59 ETE 269.77 ZAC 108.27 ETC 7.55 CLP -77.17
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 26.260 VML 5.124 DLA 9.52 RAL 136.97 RAD 6568.1 VEL 12.151 PTH 2.18 VMP 3.840 DPA -13.94 RAP 154.55 ECC 1.4322

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG IN RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 23 37 5 2580.48 -26.44 66.02 6.18 100.53 24 20 5 1980.5 -24.72 57.78

90.00 14 3 46 4624.79 13.30 196.15 1.12 64.77 15 20 51 4024.8 9.79 189.22

100.00 1 7 2 2303.05 -27.69 45.34 5.90 101.74 1 45 25 1703.0 -25.79 37.06

100.00 15 20 26 4377.46 14.44 177.39 .55 63.54 16 33 24 3777.5 10.77 170.52

110.00 2 25 55 2056.19 -31.02 25.69 4.99 105.13 3 0 11 1456.2 -28.64 17.30

110.00 16 18 2 4197.08 17.46 162.02 358.87 60.14 17 27 59 3597.1 13.36 155.31
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 SGT 782.3 SGR 827.4 SG3 455.0
RRT .6748 RRF .9048 RTF .7165
SGB 1138.7 R23 .2064 R13 .8926
SG1 1042.4 SG2 458.2 THA 47.37
                                                                                                                                                 ST 277.6 SR 301.5 SS 273.5
CRT -.2272 CRS .0972 CST -.9823
     TOE .1571 TRA -.6314 TC3 -.2558 BAU .2390
     ROE -.2418 RRA -.3879 RC3 -.6308 FAU .13980
     FOE .3884 FRA-2.0175 FC3-4.6088 BSP 2755
BDE .2884 BRA .7411 BC3 .6807 FSP -1400
                                                                                                                                                LSA 395.2 MSA 293.1 SSA 26.0
                                                                                                                                                 EL1 322.8 EL2 252.5 ALF 124.99
LAUNCH DATE JUL 17 1967
                                                                                       FLIGHT TIME 98.00
                                                                                                                                                             ARRIVAL DATE OCT 23 1967
   HELTOCENTRIC CONTC
                                                                                       DISTANCE 281.454
     RL 152.05 LAL -.00 LOL 293.76 VL 27.743 GAL -9.84 AZL 91.06 MCA 128.41 SMA 135.97 ECC .20681 INC 1.0647 V1 29.302 RP 107.94 LAP -.83 LOP 62.17 VP 38.509 GAP -.98 AZP 89.34 TAL 225.89 TAP 354.30 RCA 107.85 APO 164.09 V2 35.107 RC 83.336 GL -5.75 GP -27.55 ZAL 156.33 ZAP 83.47 ETS 3.87 ZAE 156.59 ETE 260.18 ZAC 110.41 ETC 6.27 CLP -82.63
    PLANETOCENTRIC CONIC
     C3 25.702 VHL 5.070 DLA 10.33 RAL 137.45 RAD 6568.0 VEL 12.128 PTH 2.17 VHP 3.817 DPA -14.48 RAP 152.10 ECC 1.4230
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 32 31 2601.47 -26.69 67.51 6.61 99.82 24 15 53 2001.5 -25.06 59.22 90.00 14 12 10 4593.19 12.37 194.29 1.24 64.32 15 28 44 3993.2 8.82 187.41
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64.32 15 28 44
101.05 1 41 38
                         1 2 55 2322.59
15 28 23 4347.30
        100.00
                                                            -27.95
                                                                               46.74
                                                                                                 6.35
                                                                                                                                                      1722.6
                                                                                                                                                                      -26.14
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                                                                                                                   101.05 1 41 38
63.08 16 40 51
                      15 28 23
                                                           13.52
                                                                             175.62
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                                                                                                                  104.48 2 57 21
59.65 17 34 30
                                      2072.61
4170.04
        110.00
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                                                            -31.31
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                    16 25 0
                                                            16.54
                                                                                             358.95
                                                                              160.47
                                                                                                                                                     3570.0
                                                                                                                                                                         12.39
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  RCT 915.6 SGR 873.5 SG3 461.9
RCT .7509 RCF .9207 RCF .7874
SG8 1265.4 R23 .2075 R13 .9087
SG1 1184.2 SG2 446.0 THA 43.21
                                                                                                                                                ST 307.7 SR 279.3 SS 287.6
CRT -.1594 CRS .1264 CST -.9917
     TOE .1702 TRA -.6962 TC3 -.3965 BAU .2751
     RDE -.2148 RRA -.3958 RC3 -.6955 FAU .14081
FDE .4628 FRA-1.9812 FC3-4.7429 BSP 3199
                                                                                                                                                LSA 423.7 MSA 274.3 SSA 26.1
     BOE .2740 BRA .8009 BC3 .8006 FSP -1426
                                                                                                                                                EL1 320.0 EL2 265.1 ALF 150.69
LAUNCH DATE JUL 17 1967
                                                                                       FLIGHT TIME 100.00
                                                                                                                                                              ARRIVAL DATE OCT 25 1967
                                                                                      DISTANCE 287.839
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.727 GAL -9.73 AZL 90.87 MCA 131.63 SMA 135.85 ECC .20587 INC .8672 V1 29.302 RP 107.91 LAP -.65 LOP 65.39 VP 38.509 GAP -.50 AZP 89.42 TAL 225.47 TAP 357.10 RCA 107.88 APO 163.82 V2 35.119 RC 85.546 GL -4.73 GP -28.96 ZAL 156.25 ZAP 88.26 ETS 1.56 ZAE 154.14 ETE 252.23 ZAC 112.43 ETC 4.92 CLP -88.01
   PLANETOCENTRIC CONIC
     C3 25.138 VHL 5.014 DLA 11.21 RAL 138.05 RAD 6568.0 VEL 12.104 PTH 2.17 VHP 3.824 DPA -15.07 RAP 149.73 ECC 1.4137
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 27 38 2625.29 -26.96 69.20 7.18 99.01 24 11 23 2025.3 -25.43 60.86 90.00 14 21 48 4558.41 11.34 192.25 1.47 63.88 15 37 46 3958.4 7.73 185.43
                       0 58 33 2344.76
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103.72 2 54 25
59.15 17 41 59
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                         2 19 34 2091.25
                                                           -31.62
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                                      4140.45
                                                                                             359.14
                      16 32 59
                                                            15.52
                                                                             158.79
                                                                                                                                                     3540.4
                                                                                                                                                                      11.31
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                               ST 343.5 SR 255.2 SS 302.4

CRT -.0978 CRS .1390 CST -.9924

LSA 458.1 MSA 252.9 SSA 26.3
     TOE .1899 TRA -.7603 TC3 -.5474 BAU .3148
                                                                                  SGT 1064.4 SGR 918.1 SG3 463.0
                                                                                  RRT .8031 RRF .9338 RTF .8344
SGB 1405.6 R23 .2085 R13 .9212
     RDE -.1858 RRA -.3998 RC3 -.7600 FAU .14002
    FOE .5323 FRA-1.9122 FC3-4.8222 BSP 3694
    BDE .2657 BRA .8590 BC3 .9367 FSP -1441
                                                                                  SGI 1336.4 SG2 435.7 THA 39.76
                                                                                                                                                EL1 345.4 ELZ 252.5 ALF 171.01
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FLIGHT TIME 94.00

ARRIVAL DATE OCT 27 1967 FLIGHT TIME 102.00 LAUNCH DATE JUL 17 1967 HELIOCENTRIC CONIC DISTANCE 294.195 RL 152.05 LAL -.00 LOL 293.76 VL 27.707 GAL -9.62 AZL 90.65 MCA 134.85 SMA 135.69 ECC .20503 INC .6486 V1 29.302 RP 107.87 LAP -.46 LOP 68.61 VP 38.504 GAP -.03 AZP 89.54 TAL 224.96 TAP 359.81 RCA 107.87 APO 163.51 V2 35.131 RC 87.767 GL -3.58 GP -30.38 ZAL 156.08 ZAP 92.80 ETS 359.09 ZAE 151.37 ETE 245.80 ZAC 114.27 ETC 3.49 CLP -93.25 PLANETOCENTRIC CONIC C3 24.570 VHL 4.957 OLA 12.20 RAL 138.76 RAD 6568.0 VEL 12.081 PTH 2.16 VHP 3.860 OPA -15.74 RAP 147.49 ECC 1.4044 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2052.9 -25.84 7.90 90.00 23 22 11 2652.93 -27.24 98.06 24 6 24 62.79 71.18 63.43 15 48 16 3919.5 6.51 183.22 14 32 56 4519.52 0 53 42 2370.46 10.16 190.00 1.85 90.00 1 33 12 50.18 7.68 99.33 1770.5 -26.94 41.73 -28.53 100.00 62,15 16 59 20 102.84 2 51 15 58.64 17 50 40 15 48 3 4277.22 2 16 2 2112.84 16 42 12 4107.61 1.24 3677.2 7.51 164.87 11.32 171.58 100.00 1512.8 -29.86 21.25 6.90 102.84 29.84 -31.96 110.00 10.10 150.43 156.94 359.47 3507.6 14.36 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RIG-COURSE EXECUTION ACCORD.

RIGHT 1224.3 SGR 959.4 SG3 457.9

RRT .8393 RRF .9446 RTF .8659

SGB 1555.4 R23 .2108 R13 .9305

SGI 1495.7 SG2 427.0 THA 36.83 ST 385.3 SR 229.0 SS 318.4 CRT -.0342 CRS .1328 CST -.9892 TOE .2171 TRA -.8217 TC3 -.7072 BAU .3565 ROE -.1544 RRA -.3989 RC3 -.8233 FAU .13736 LSA 498.9 MSA 229.6 SSA 26.6 FDE .5986 FRA-1.8102 FC3-4.8400 BSP 4221 BDE .2664 BRA .9134 BC3 1.0853 FSP -1439 EL1 385.4 EL2 228.8 ALF 178.20 ARRIVAL DATE OCT 29 1967 FLIGHT TIME 104.00 LAUNCH DATE JUL 17 1967 DISTANCE 300.523 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 27.681 GAL -9.50 AZL 90.40 MCA 138.07 SMA 135.49 ECC .20427 INC .4040 V1 29.302 RP 107.83 LAP -.27 LOP 71.83 VP 38.497 GAP .41 AZP 89.70 TAL 224.36 TAP 2.43 RCA 107.82 APO 163.17 V2 35.143 -2.25 GP -31.85 ZAL 155.78 ZAP 97.05 ETS 356.45 ZAE 148.41 ETE 240.69 ZAC 115.89 ETC 2.01 CLP -98.31 RC 89.996 GL PLANETOCENTRIC CONIC 0 48 7 2400.93 16 0 22 4235.30 17 10 58 3635.3 1.77 61.68 6.12 162.53 9.98 169.19 100.00 2 12 1 2 47 39 23.07 -32.33 7.90 101.77 1538.4 -30.37 110.00 2138.41 31.74 58.12 18 0 48 16 52 58 359.96 3470.6 8.73 148.44 4070.58 13.04 154.89 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 1390.8 SGR 993.5 SG3 445.5 RRT .8647 RRF .9532 RTF .8870 SGB 1709.2 R23 .2154 R13 .9369 ST 434.6 SR 199.3 SS 338.8 CRT .0494 CRS .1008 CST -.9834 TDE .2536 TRA -.8781 TC3 -.8735 BAU .3983 RDE -.1184 RRA -.3912 RC3 -.8820 FAU .13253 FOE .6714 FRA-1.6705 FC3-4.7799 BSP 4739 LSA 548.9 MSA 203.4 SSA 26.9 BOE .2798 BRA .9613 BC3 1.2413 FSP -1400 SG1 1657.1 SG2 418.9 THA 34.19 EL1 434.7 EL2 199.0 ALF ARRIVAL DATE OCT 31 1967 FLIGHT TIME 106.00 LAUNCH DATE JUL 17 1967 DISTANCE 306.824 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 27.652 GAL -9.36 A7L 90.13 MCA 141.29 SMA 135.27 ECC .20359 INC .1263 VI 29.302
RP 107.80 LAP -.08 LOP 75.05 VP 38.486 GAP .84 AZP 89.90 TAL 223.69 TAP 4.98 RCA 107.73 APO 162.81 VZ 35.154
RC 92.232 GL -.72 GP -33.41 ZAL 155.35 ZAP 100.95 ETS 353.65 ZAE 145.33 ETE 236.66 ZAC 117.26 ETC .48 CLP-103.15 PLANETOCENTRIC CONIC C3 23.447 VHL 4.842 DLA 14.64 RAL 140.60 RAD 6568.0 VEL 12.034 PTH 2.15 VHP 4.016 DPA -17.52 RAP 143.50 ECC 1.3859 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 95.50 23 53 41 62.54 16 15 17 -26.77 67.91 9.95 2125.6 23 8 16 2725.61 15 1 33 4423.93 -27.82 76.41 90.00 3823.9 177.A5 7.20 184.54 3.16 90.00 46.51 0 41 24 2437.92 16 15 1 4186.85 55.09 9.78 96.82 1 22 2 1837.9 -27.92 -29.17 100.00 2.51 61.21 17 24 48 3586.8 4.50 159.85 8.40 166.46 100.00 16 15 1 -30.95 2 7 13 2169.39 17 5 41 4028.14 -32.73 100.45 2 43 23 1569.4 25.30 34.06 9.15 110.00 18 12 50 57.59 3428.1 7.14 146.18 11.50 152.56 .65 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFFRENTIAL CORRECTIONS ST 493.3 SR 169.5 SS 362.7 CRT .1763 CRS .0080 CST -.9781 SGT 1560.4 SGR 1024.4 SG3 428.1 TOE .3009 TRA -.9270 TC3-1.0443 BAU .4402 RRT .8825 RRF .9607 RTF .9014 SGB 1866.6 R23 .2217 R13 .9417 RDE -.0790 RRA -.3782 RC3 -.9389 FAU .12624 FDE .7406 FRA-1.5083 FC3-4.6609 BSP 5267 LSA 609.6 MSA 177.0 SSA 27.3 EL1 494.3 EL2 166.5 ALF 3.91 BDE .3111 BRA 1.0012 BC3 1.4043 FSP -1347 SG1 1820.3 SG2 413.0 THA 31.92 ARRIVAL DATE NOV 2 1967 FLIGHT TIME 108.00 LAUNCH DATE JUL 17 1967 DISTANCE 313.099 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 27.618 GAL -9.23 AZL 89.81 MCA 144.52 SMA 135.02 ECC .20298 INC .1914 V1 29.302 RP 107.77 LAP .11 LOP 78.27 VP 38.472 GAP 1.26 AZP 90.16 TAL 222.95 TAP 7.46 RCA 107.61 APO 162.42 VZ 35.165 RC 94.474 GL 1.10 GP -35.12 ZAL 154.74 ZAP 104.45 ETS 350.65 ZAE 142.16 ETE 233.52 ZAC 118.36 ETC 358.90 CLP-107.77 PLANETOCENTRIC CONIC C3 22.917 VHL 4.787 OLA 16.18 RAL 141.77 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 4.139 DPA -18.71 RAP 141.74 ECC 1.3772 INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 22 58 40 2775.47 11.38 93.70 23 44 56 62.14 16 33 12 -28.09 80.04 2175.5 -27.28 71.46 90.00 15 20 29 4362.91 5.27 181.09 4.20 3762.9 1.50 174 44 90.00 1884.0 -28.48 49.82 0 32 59 2484.01 -29.50 58.47 11.25 95.07 1 14 23 100.00 60.76 17 41 37 3529.6 2.56 156.70 16 32 47 4129.61 6.51 163.26 100.00 2 38 3 18 27 18 98.78 1607.8 -31.60 28.10 2 1 15 2207.81 -33.17 36.98 10.73 110.00 17 21 0 3978.57 9.68 149.88 1.60 57.05 3378.6 5.27 143.56 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 564.8 SR 144.3 SS 390.4 CRT .3808 CRS -.1860 CST -.9749 SGT 1731.0 SGR 1054.0 SG3 406.7 TDE .3615 TRA -.9664 TC3-1.2174 BAU .4817 ROE -.0360 RRA -.3603 RC3 -.9949 FAU .11883 FDE .8044 FRA-1.3322 FC3-4.4889 BSP 5811 BDE .3633 BRA 1.0314 BC3 1.5723 FSP -1288 RRT .8948 RRF .9672 RTF .9114 SGB 2026.6 R23 .2292 R13 .9452 LSA 684.4 MSA 151.7 SSA 27.6 EL1 567.6 EL2 132.8 ALF 5.88 SG1 1984.7 SG2 410.4 THA 30.00

ARRIVAL DATE NOV 4 1967

LAUNCH DATE JUL 17 1967

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DISTANCE 319.348
  HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.582 GAL -9.08 AZL 89.43 HCA 147.74 SHA 134.74 ECC .20243 INC .5669 V1 29.302 RP 107.73 LAP .30 LOP 81.50 VP 38.455 GAP 1.66 AZP 90.48 TAL 222.13 TAP 9.87 RCA 107.46 APO 162.02 V2 35.175 RC 96.719 GL 3.26 GP -37.04 ZAL 153.90 ZAP 107.51 ETS 347.42 ZAE 138.93 ETE 231.13 ZAC 119.19 ETC 357.25 CLP-112.15
   PLANETOCENTRIC CONIC
    C3 22.437 VHL 4.737 DLA 18.02 RAL 143.16 RAD 6567.9 VEL 11.992 PTH 2.14 VHP 4.297 DPA -20.19 RAP 140.11 ECC 1.3693 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        13.17
                                                                                                               91.35 23 33 20
61.82 16 55 41
        90.00 22 46 0 2839.84
90.00 15 44 13 4288.23
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60.38 18 2 34
                       0 21 56 2543.16
16 54 53 4060.15
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       100.00
                     16 54 53
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18 45 9
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                                     2256.69
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                                                                           146.72
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       110.00
                     17 39 49
                                       3919.38
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                              SGT 1901.5 SGR 1081.7 SG3 381.4
RRT .9032 RRF .9728 RTF .9185
SGB 2187.6 R23 .2377 R13 .9479
SGI 2148.7 SG2 410.8 THA 28.32
                                                                                                                                          ST 653.4 SR 132.7 SS 423.8
CRT .6664 CRS -.4966 CST -.9737
    TOE .4387 TRA -.9940 TC3-1.3906 BAU .5224

ROE .0123 RRA -.3367 RC3-1.0484 FAU .11034

FOE .8662 FRA-1.1438 FC3-4.2576 B3P 6366

BDE .4388 BRA 1.0495 BC3 1.7415 FSP -1218
                                                                                                                                           LSA 779.0 MSA 128.8 SSA 27.5
                                                                                                                                          EL1 659.5 EL2 98.0 ALF
                                                                                                                                                                                      7.88
                                                                                    FLIGHT TIME 112.00
                                                                                                                                                        ARRIVAL DATE NOV 6 1967
                                                                                    DISTANCE 325.572
  HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.542 GAL -8.92 ATL 88.98 HCA 150.97 SMA 134.44 ECC .20195 INC 1.0153 V1 29.302
RP 107.70 LAP .49 LOP 84.73 VP 38.436 GAP 2.04 ATP 90.89 TAL 221.25 TAP 12.22 RCA 107.29 APO 161.59 V2 35.185
RC 98.967 GL 5.90 GP -39.25 TAL 152.73 ZAP 110.07 ETS 343.93 ZAE 135.60 ETE 229.35 ZAC 119.72 ETC 355.49 CLP-116.31
  PLANETOCENTRIC CONIC
    C3 22.045 VHL 4.695 DLA 20.26 RAL 144.82 RAD 6567.9 VEL 11.976 PTH
                                                                                                                  2.13 VHP 4.496 DPA -22.01 RAP 138.56 ECC 1.3628
    LNCH AZMTH LINCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 28 14 2926.61 -28.26 91.08 15.43 88.17 23 17 1 2326.6 -28.22 82.42 90.00 16 15 14 4192.93 -.19 171.59 7.72 61.68 17 25 7 3592.9 -3.97 164.95
                    0 6 38 2622.00
17 23 27 3972.78
1 42 56 2320.75
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                                                          -29.89
                                                                            68.71
                                                                                             15.46
                                                                                                               89.70
                                                                                                                                                2022.0
                                                                                                                                                                 -29.61
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       100,00
                                                                                                               60.13 18 29 40
93.69 2 21 36
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                                                                           154.61
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                                                                                                                                                1720.8
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                                                          -34.01
                                                                           45.68
                                                                                             15.32
       110.00
                                                                                                                          19 7 46
                     18 3 39
                                    3846.79
                                                            4.73
                                                                           142.88
                                                                                              4.75
                                                                                                               56.11
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                                                                                                                                                                                  136.67
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                             SGT 2068.9 SGR 1105.2 SG3 351.9
RRT .9084 RRF .9775 RTF .9233
SGB 2345.6 R23 .2472 R13 .9495
SG1 2308.7 SG2 414.1 THA 26.82
                                                                                                                                          ST 767.6 SR 149.2 SS 466.8
CRT .9056 CRS -.8002 CST -.9742
    TOE .5394 TRA-1.0054 TC3-1.5566 BAU .5609
ROE .0693 RRA -.3048 RC3-1.0948 FAU .10069
                                                                                                                                          LSA 903.5 MSA 111.0 SSA 26.2
EL1 779.4 EL2 62.3 ALF 10.05
    FDE .9331 FRA -.9418 FC3-3.9541 8SP 6879
           .5439 BRA 1.0506 BC3 1.9031 FSP -1124
                                                                                    FLIGHT TIME 114.00
                                                                                                                                                       ARRIVAL DATE NOV 8 1967
LAUNCH DATE JUL 17 1967
                                                                                  DISTANCE 331.771
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.500 GAL -8.76 A7L 88.43 MCA 154.19 SMA 134.13 ECC .20152 INC 1.5653 VI 29.302

RP 107.67 LAP .68 LOP 87.96 VP 38.414 GAP 2.42 A7P 91.41 TAL 220.31 TAP 14.50 RCA 107.10 APO 161.16 V2 35.195

RC 101.218 GL 9.15 GP -41.85 ZAL 151.09 ZAP 112.06 ETS 340.11 ZAE 132.11 ETE 228.08 ZAC 119.97 ETC 353.59 CLP-120.27
   PLANETOCENTRIC CONIC
    C3 21.814 VHL 4.671 DLA 23.05 RAL 146.85 RAD 6567.9 VEL 11.966 PTH 2.13 VHP 4.749 DPA -24.25 RAP 137.00 ECC 1.3590
    C3 21.814 VHL 4.671 DLA 23.05 RAL 146.85 RAD 6567.9 VEL 11.956 PIM 2.13 VMP 4.749 DPA -24.25 RAP 157.50 ECC 13.596 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 58 50 4062.27 -4.39 164.29 10.80 62.00 18 6 52 3462.2 -28.24 91.60 100.00 23 39 47 2733.23 -29.57 76.96 18.43 85.38 24 25 20 2133.2 -29.89 68.17 100.00 18 2 36 3856.44 -2.71 148.23 9.87 60.22 19 6 52 3256.4 -6.65 141.66 110.00 1 27 40 2408.00 -34.18 52.49 18.66 89.67 2 7 48 1808.0 -33.85 43.26
                       1 27 40 2408.00
18 35 8 3754.44
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                                                                           138.05
       110.00
                                                           1.21
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 2235.8 SCR 1129.4 SC3 319.8
RRT .9108 RRF .9816 RTF .9270
SCB 2504.9 R23 .2560 R13 .9510
SCI 2469.1 SC2 422.2 THA 25.51
                                                                                                                                          ST 915.7 SR 199.2 SS 516.7
CRT .9872 CRS -.9428 CST -.9770
    TOE .6706 TRA -.9981 TC3-1.7101 BAU .5985
    RDE .1349 RRA -.2657 RC3-1.1344 FAU .09041
                                                                                                                                          LSA 1065.0 MSA 101.2 SSA 22.9
EL1 936.6 EL2 31.1 ALF 12.13
    FOE .9945 FRA -.7400 FC3-3.5883 BSP 7418
    BDE .6840 BRA 1.0328 BC3 2.0521 FSP -1030
                                                                                                                                                        ARRIVAL DATE NOV 10 1967
                                                                                    FLIGHT TIME 116.00
LAUNCH DATE JUL 17 1967
                                                                                   DISTANCE 337.946
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.456 GAL -8.58 AZL 87.74 MCA 157.42 SMA 133.80 ECC .20115 INC 2.2607 VI 29.302 RP 107.65 LAP .87 LOP 91.19 VP 38.391 GAP 2.78 AZP 92.09 TAL 219.32 TAP 16.73 RCA 106.88 APO 160.71 V2 35.204 RC 103.470 GL 13.24 GP -44.97 ZAL 148.78 ZAP 113.37 ETS 335.92 ZAE 128.37 ETE 227.21 ZAC 119.92 ETC 351.48 CLP-124.11
   PLANETOCENTRIC CONIC
    C3 21.871 VHL 4.677 DLA 26.55 RAL 149.41 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 5.077 DPA -27.02 RAP 135.33 ECC 1.3599
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    UNCH A7MTH LNCH TIME L-I TIME
90.00 21 7 42 3270.65
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63.81 19 16 30
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                      18 12 25
                                       3845.06
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         90.00
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61.25 20 4 34
                    22 59 35
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                                                                                             21.95
                                                                                                                                                2310.0
                                                                                                                                                                -29.16
                                       2909.95
                                                                            89.81
        100.00
                    19 3 13
1 3 36
                                                                           138.50
                                                                                             14.60
                                                                                                                                                3081.0
                                                                                                                                                                -12.34
                                                                                                                                                                                  131.74
                                       3680.98
                                                           -8.57
        100.00
                                                                                                                             1 45 52
                                                                                                                                                1934.1
                                                                                                                                                                -34.18
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                                                          -33.70
                                                                            62.30
                                                                                             22.97
                                                                                                                83.88
                                       2534.12
        110.00
                                                                                                                          20 20 5
                                                                           131.54
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                     19 19 36
                                       3629.58
                                                           -3.56
                                                                                             11.53
                                                                                                                55.98
                                                                                                                                                3029.6
        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 1113.5 SR 279.5 SS 577.9
CRT .9967 CRS -.9870 CST -.9806
                                                                             SGT 2400.3 SGR 1148.3 SG3 284.0
RRT .9104 RRF .9847 RTF .9297
SGB 2660.8 R23 .2644 R13 .9520
    TOE .8484 TRA -.9638 TC3-1.8328 BAU .6331
RDE .2150 RRA -.2137 RC3-1.1532 FAU .07918
                                                                                                                                          LSA 12H1.2 MSA 101.0 55A 17.7
    FOE 1.0579 FRA -.5327 FC3-3.1343 BSP 7916
BDF .8752 BRA .9872 BC3 2.1654 FSP -917
                                                                                                                                         ELI 1147.9 ELZ 22.1 ALF 14.05
    BDE .8752 BRA .9872 BC3 2.1654 FSP
                                                                               SG1 2625.1 SG2 434.4 THA 24.24
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FLIGHT TIME 110.00

ARRIVAL DATE NOV 12 1967

LAUNCH DATE JUL 17 1967

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DISTANCE 344.095
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.409 GAL -8.40 AZL 86.83 MCA 160.64 SMA 133.45 ECC .20084 INC 3.1742 V1 29.302 RP 107.62 LAP 1.05 LOP 94.42 VP 38.365 GAP 3.13 AZP 93.00 TAL 218.27 TAP 18.90 RCA 106.65 APO 160.26 V2 35.212 RC 105.723 GL 18.47 GP -48.77 ZAL 145.47 ZAP 113.90 ETS 331.28 ZAE 124.24 ETE 226.61 ZAC 119.56 ETC 349.03 CLP-127.93
   PLANETOCENTRIC CONIC
                                                                                                             2.14 VHP 5.521 DPA -30.43 RAP 133.36 ECC 1.3699
    C3 22.474 VHL 4.741 DLA 31.02 RAL 152.77 RAD 6567.9 VEL 11.994 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.79 18 8 28 3901.89 -20.66 160.66 23.96 66.33 19 13 30 3301.9 -23.68 153.08
                                                                                                                                                                            103.26
                                                                                                                                           2627.0
                                                                                                                                                            -23.67
                                                                                                            66.32
                                                                                                                      22 32 13
                      21 38 26 3227.00
                                                        -20.64
                                                                        110.84
                                                                                          23.96
       103.21
                                                                                                                                           3301.9
                                                                                                                                                           -23.68
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                      18 8 28
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                     21 38 26 3227.00
                                                        -20.64
                                                                        110.84
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                                     2743.37
                                                       -31.06
                                                                         78.02
                                                                                          28.02
                                                                                                            74.95
       110,00
                                                                                                           57.40 21 29 42
                                                                                                                                          2833.5
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                                                                        121.12
                                                                                          18.56
                    20 32 29
                                                        -10.91
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 2566.9 SCR 1161.6 SC3 245.6
RRT .9067 RRF .9867 RTF .9323
SCB 2817.5 R23 .2703 R13 .9532
SCI 2781.0 SC2 452.3 THA 22.95
                                                                                                                                      ST 1379.0 SR 382.8 SS 646.5
CRT .9924 CRS -.9978 CST -.9848
    TOE 1.0963 TRA -.8937 TC3-1.8999 BAU .6655
    ROE .3114 RRA -.1465 RC3-1.1383 FAU .06735
                                                                                                                                      LSA 1566.7 MSA 107.0 SSA 12.4
EL1 1430.4 EL2 45.4 ALF 15.42
    FOE 1.1136 FRA -.3311 FC3-2.5943 B8P 8438
BOE 1.1397 BRA .9056 BC3 2.2148 FSP -801
                                                                                                                                                   ARRIVAL DATE NOV 14 1967
                                                                                 FLIGHT TIME 120,00
LAUNCH DATE JUL 17 1967
                                                                                DISTANCE 350.218
  HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.361 GAL -8.21 AZL 85.56 MCA 163.86 SMA 133.10 ECC .20058 INC 4.4369 V1 29.302 RP 107.60 LAP 1.23 LOP 97.66 VP 38.337 GAP 3.47 AZP 94.26 TAL 217.16 TAP 21.02 RCA 106.40 APO 159.79 V2 35.220 RC 107.975 GL 25.21 GP -53.45 ZAL 140.73 ZAP 113.45 ETS 326.05 ZAE 119.52 ETE 226.03 ZAC 118.88 ETC 346.04 CLP-131.94
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 24.186 VHL 4.918 DLA 36.71 RAL 157.44 RAD 6568.0 VEL 12.065 PTH 2.16 VHP 6.156 DPA -34.60 RAP 130.77 ECC 1.3980
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
65.60 17 17 44 4132.62 -23.57 180.10 31.65 61.00 18 26 37 3532.6 -27.24 172.65
114.40 23 6 24 3032.08 -23.55 97.29 31.64 60.99 23 56 56 2432.1 -27.23 89.84
65.60 17 17 44 4132.62 -23.57 180.10 31.65 61.00 18 26 37 3532.6 -27.24 172.65
114.40 23 6 24 3032.08 -23.55 97.29 31.64 60.99 23 56 56 2432.1 -27.23 89.84
65.60 17 17 44 4132.62 -23.57 180.10 31.65 61.00 18 26 37 3532.6 -27.24 172.65
114.40 23 6 24 3032.08 -23.55 97.29 31.64 60.99 23 56 56 2432.1 -27.23 89.84
65.60 17 17 44 4132.62 -23.57 180.10 31.65 61.00 18 26 37 3532.6 -27.24 172.65
114.40 23 6 24 3032.08 -23.55 97.29 31.64 60.99 23 56 56 2432.1 -27.23 89.84
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 2738.5 SCR 1154.6 SC3 204.0
RRT .8976 RRF .9865 RTF .9353
SCB 2971.9 R23 .2738 R13 .9545
SCI 2933.7 SC2 475.1 THA 21.31
                                                                                                                                       ST 1736.3 SR 500.4 SS 720.4
CRT .9887 CRS -.9998 CST -.9886
    TDE 1.4616 TRA -.7676 TC3-1.8623 BAU .6922
    RDE .4282 RRA -.0533 RC3-1.0557 FAU .05471
                                                                                                                                       LSA 1941.7 MSA 117.6 SSA
                                                                                                                                                                                 A.2
    FOE 1.1605 FRA -.1345 FC3-1.9585 BSP 8946
                                                                                                                                       EL1 1805.6 EL2 72.1 ALF 15.93
    BOE 1.5231 BRA .7695 BC3 2.1407 FSP -672
                                                                                                                                                  ARRIVAL DATE NOV 16 1967
                                                                                 FLIGHT TIME 122.00
LAUNCH DATE JUL 17 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 356.310
    RL 152.05 LAL -.00 LOL 293.76 VL 27.310 GAL -8.00 AZL 83.69 HCA 167.06 SHA 132.73 ECC .20036 INC 6.3071 V1 29.302 RP 107.58 LAP 1.41 LOP 100.89 VP 38.308 GAP 3.79 AZP 96.15 TAL 216.01 TAP 23.08 RCA 106.14 APO 159.33 V2 35.227 RC 110.226 GL 33.88 GP -59.27 ZAL 134.02 ZAP 111.83 ETS 319.94 ZAE 113.91 ETE 224.98 ZAC 117.87 ETC 342.08 CLP-136.69
   PLANETOCENTRIC CONIC
    C3 28.407 VHL 5.330 DLA 43.77 RAL 164.43 RAD 6568.1 VEL 12.239 PTH 2.20 VHP 7.138 DPA -39.65 RAP 126.99 ECC 1.4675
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 8 LAT INJ 2 LONG
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        55.12 16 57 33 4308.05
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16 57 33 4308.05
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       124.88
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   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 2203.9 SR 591.7 SS 786.1
                                                                             SGT 2921.5 SGR 1101.5 SG3 160.6
    TOE 2.0371 TRA -.5419 TC3-1.6487 BAU .7072
                                                                                                                                       CRT .9853 CRS -.9990 CST -.9918
                                                                            RRT .8758 RRF .9804 RTF .9400
SGB 3122.2 R23 .2728 R13 .9567
SG1 3081.3 SG2 504.1 THA 18.79
    RDE .5488 RRA .0794 RC3 -.8655 FAU .04159
FDE 1.1849 FRA .0502 FC3-1.2675 BSP 9414
BDE 2.1098 BRA .5477 BC3 1.8621 FSP -537
                                                                                                                                      LSA 2410.0 MSA 130.3 SSA 5.2
                                                                                                                                       EL1 2279.9 EL2 97.6 ALF 14.85
                                                                                                                                                   ARRIVAL DATE NOV 18 1967
                                                                                 FLIGHT TIME 124.00
LAUNCH DATE JUL 17 1967
                                                                                 DISTANCE 362.360
   HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.259 GAL -7.79 AZL 80.62 MCA 170.25 SMA 132.36 ECC .20015 INC 9.3808 VI 29.302
RP 107.56 LAP 1.58 LOP 104.13 VP 38.277 GAP 4.10 AZP 99.25 TAL 214.81 TAP 25.06 RCA 105.87 APO 158.85 VZ 35.233
RC 112.475 GL 44.57 GP -66.49 ZAL 124.96 ZAP 108.80 ETS 311.83 ZAE 106.93 ETE 222.04 ZAC 116.60 ETC 335.81 CLP-143.90
   PLANETOCENTRIC CONIC
    C3 39.347 WHL 6.273 DLA 51.69 RAL 175.79 RAD 6568.5 VEL 12.677 PTH 2.30 VHP 8.835 DPA -45.56 RAP 120.84 ECC 1.6475
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       18 21 29
                                                                                                                                         3879.7
                     17 6 49
                                       4479.75
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                                                                        213.10
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       135.24
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         44.76
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                           2328.7
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                       1 47 40 2928.70
                                                        -25.78
                                                                          89.98
       135.24
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 3128.6 SGR 933.4 SG3 117.8
RRT .8025 RRF .9432 RTF .9488
SGB 3264.9 R23 .2650 R13 .9607
SGI 3219.8 SGZ 541.1 THA 13.87
                                                                                                                                     ST 2735.2 SR 522.0 55 818.4
CRT .9692 CRS -.9903 CST -.9940
    TDE 2.9936 TRA -.1133 TC3-1.2046 BAU .6941
           .5560 RRA .2687 RC3 -.5386 FAU .02836
                                                                                                                                      LSA 2898.5 MSA 149.4 SSA 3.2
EL1 2781.7 EL2 126.5 ALF 10.50
    FDE 1.1886 FRA .2215 FC3 -.6240 BSP 9887
BDE 3.0448 BRA .2916 BC3 1.3195 FSP -399
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FLIGHT TIME 118.00

ARRIVAL CATE NOV 20 1967

LAUNCH DATE JUL 17 1967

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DISTANCE 368.337
  HELIOCENTRIC CONIC
    RL 152.05 LAL -.00 LOL 293.76 VL 27.206 GAL -7.55 AZL 74.64 HCA 173.38 SMA 131.98 ECC .19991 INC15.3633 V1 29.302 RP 107.54 LAP 1.75 LOP 107.37 VP 38.245 GAP 4.39 AZP 105.27 TAL 213.53 TAP 26.91 RCA 105.60 APO 158.37 V2 35.239
                      56,17 GP -75,02 7AL 113,83 ZAP 104.22 ETS 296.07 7AE 97.65 ETE 211.07 7AC 115.39 ETC 321.13 CLP-161.85
    RC 114.720 GL
   PLANETOCENTRIC CONIC
    C3 73.995 VHL 8.602 OLA 57.98 RAL 194.50 RAO 6569.4 VEL 13.977 PTH 2.55 VHP 12.313 OPA -51.73 RAP 109.39 ECC 2.2178
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    ENCH AZMTH ENCH TIME L-I TIME
                                                                                                                                              222.88
                                                                         91.77
                                                                                        34.21 19 17 33
                                                                                                                    4081.6
                                                                                                                                -25.98
       37.03 17 59 31 4681.65
                                               -19.44
                                                            227.45
                 3 24 15 3037.28
17 59 31 4681.65
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                                                                                                                     2437.3
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                                                              93.72
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                                               -19.42
      142.97
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                                                                            91.77
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                                               -19.44
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17 59 31 4681.65
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                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                SCT 3334.7 SCR 588.6 SC3 81.2
RRT .0861 RRF .3191 RTF .9701
SCB 3386.3 R23 .2337 R13 .9708
SCI 3335.1 SG2 586.4 THA .90
                                                                                                                5T 3006.7 SR 254.7 SS 790.1
CRT -.7434 CRS .6760 CST -.9954
    TDE 4.4861 TRA .8833 TC3 -.5698 BAU .5810
    RDE -.3109 RRA .3929 RC3 -.1424 FAU .01542
   FOE 1.0911 FRA .4047 FC3 -.1805 BSP 10194
                                                                                                                 LSA 3113.6 MSA 186.2 SSA
   BOE 4.4968 BRA .9667 BC3 .5873 FSP -274
                                                                                                                 EL1 3012.6 EL2 170.0 ALF 176.39
                                                                                                  .90
                                                                    FLIGHT TIME 128.00
                                                                                                                            ARRIVAL DATE NOV 22 1967
LAUNCH DATE JUL 17 1967
                                                                    DISTANCE 374.095
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 27.152 GAL -7.26 A7L 58.64 MCA 176.33 SMA 131.60 ECC .19932 INC31.3571 V1 29.302
RP 107.52 LAP 1.91 LOP 110.62 VP 38.212 GAP 4.61 AZP 121.31 TAL 212.09 TAP 28.42 RCA 105.37 APO 157.83 V2 35.244
RC 116.961 GL 63.04 GP -77.15 ZAL 102.24 ZAP 98.29 ETS 235.14 ZAE 82.74 ETE 154.15 ZAC 115.85 ETC 259.11 CLP 130.41
  PLANETOCENTRIC CONIC
   C3 247.274 VHL 15.725 DLA 56.18 RAL 215.68 RAD 6571.4 VEL 19.199 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
                                                                                            3.09 VHP 21.908 DPA -54.42 RAP 84.94 ECC 5.0695
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-6.38 233.54 121.40 34.06 20 51 29 4296.5 -12.98 229.37
                 19 29 53 4896.45
4 42 52 3275.63
19 29 53 4896.45
4 42 52 3275.63
19 29 53 4896.45
4 42 52 3275.63
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                                                -6.36
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                                                             102.65
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                                                                          121.38
                                                                                                                     2675.6
                                                -6.36
      140.78
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 2023.5 SGR 2771.1 SG3 57.1
RRT -.9462 RRF -.9668 RTF ..9969
SGB 3431.3 R23 -.1433 R13 -.9892
    TOE 3.1085 TRA 2.5605 TC3 -.0169 BAU .1869
                                                                                                                 ST 1239.2 SR 2245.6 SS 819.1
                                                                                                                 CRT -.9821 CRS .9898 CST -.9989
    RDE-6.0034 RRA-2.5861 RC3 -.0539 FAU-.00132
    FDE 1.1066 FRA .7996 FC3 .0046 BSP 9688
BDE 6.7604 BRA 3.6393 BC3 .0565 FSP -175
                                                                                                                 LSA 2683.5 MSA 219.4 SSA 1.1
                                                                SG1 3389.2 SG2 535.5 THA 125.67
                                                                                                                 EL1 2556.6 EL2 205.3 ALF 118.66
                                                                                                                           ARRIVAL DATE NOV 24 1967
                                                                    FLIGHT TIME 130.00
LAUNCH DATE JUL 17 1967
                                                                   DISTANCE 382.736
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 27.098 GAL -7.55 AZL 177.10 HCA 182.07 SMA 131.21 ECC .20498 INC87.0791 V1 29.302
RP 107.51 LAP 2.07 LOP 113.86 VP 38.177 GAP 5.65 AZP 2.90 TAL 212.30 TAP 34.37 RCA 104.32 APO 158.11 V2 35.248
RC 119.197 GL -43.63 GP 49.97 ZAL 95.11 ZAP 94.45 ETS 178.20 ZAE 50.68 ETE 252.92 ZAC 99.98 ETC 146.83 CLP 96.93
   PLANETOCENTRIC CONIC
    C31511.989 VHL 38.884 DLA -45.70 RAL 173.11 RAD 6573.2 VEL 40.414 PTH 3.56 VHP 49.380 DPA 53.45 RAP 359.96 ECC25.8835
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                    5 24 1
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      127.50
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                                                                         84.14
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                                                                           84.16
      127.50
                                864.20
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 716.3 SR 2105.5 SS 2056.1
CRT -.9764 CRS-1.0000 CST .9749
    TOE 4.7236 TRA 2.6498 TC3 -.0961 BAU 4.3185
                                                                SGT 1164.4 SGR 2578.5 SG3 49.7
    RO-14.2833 RRA -.6310 RC3 .1908 FAU-.07053
FDE-3.2698 FRA -.0922 FC3 .0404 BSP 7009
BDE15.0441 BRA 2.7239 BC3 .2136 FSP -131
                                                                RRT -.8821 RRF .9992 RTF -.8671
SGB 2829.2 R23 -.1057 R13 .9940
                                                                                                                LSA 3024.9 MSA 153.1 SSA 1.9
EL1 2219.1 EL2 146.8 ALF 108.46
                                                                SG1 2783.2 SG2 508.1 THA 112.51
                                                                                                                           ARRIVAL DATE NOV 26 1967
                                                                    FLIGHT TIME 132.00
LAUNCH DATE JUL 17 1967
                                                                    DISTANCE 387.434
  HELLOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 27.042 GAL -7.04 AZL 123.50 MCA 184.02 SMA 130.83 ECC .20228 INC33.5030 V1 29.302 RP 107.50 LAP 2.22 LOP 117.11 VP 38.141 GAP 5.57 AZP 56.56 TAL 210.23 TAP 34.25 RCA 104.36 APO 157.29 V2 35.252 RC 121.426 GL -62.74 GP 76.68 ZAL 101.12 ZAP 100.83 ETS 140.81 ZAE 83.39 ETE 219.34 ZAC 89.07 ETC 108.20 CLP 144.64
   PLANETOCENTRIC CONIC
                                                                                            3.14 VHP 20.013 DPA 77.88 RAP 295.04 ECC 5.5706
    C3 277.719 VHL 16.665 OLA -54.28 RAL 141.66 RAD 6571.6 VEL 19.976 PTH
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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      138.46
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                              SGT 1172.0 SGR 3414.7 SG3 64.4
RRT .9031 RRF .9842 RTF .9639
SGB 3610.2 R23 -.1328 R13 .9908
    TOE-3.1951 TRA -.6923 TC3 -.0072 BAU .3102
                                                                                                                ST 1105.3 SR 2507.4 SS 1070.€
    ROE-6.9826 RRA-4.0961 RC3 .0833 FAU-.00108
FOE-1.7604 FRA -.7378 FC3 .0034 BSP 10627
                                                                                                                CRT .9835 CRS -.9967 CST -.9949
                                                                                                                LSA 2935.8 MSA 190.4 SSA
                                                                                                                                                     1.0
                                                               SG1 3578.1 SG2 480.3 THA 72.45
    BOE 7.6789 BRA 4.1542 BC3 .0836 FSP -195
                                                                                                                EL1 2734.1 EL2 183.4 ALF 66.45
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FLIGHT TIME 126.00

ARRIVAL DATE NOV 28 1967 FLIGHT TIME 134.00 LAUNCH DATE JUL 17 1967 DISTANCE 393.189 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 26.986 GAL -6.73 AZL 109.72 MCA 187.00 SMA 130.44 ECC .20201 INC19.7167 VI 29.302 RP 107.49 LAP 2.36 LOP 120.35 VP 38.104 GAP 5.79 AZP 70.42 TAL 208.74 TAP 35.74 RCA 104.09 APO 156.79 VZ 35.255 RC 123.648 GL -60.59 GP 70.27 ZAL 107.18 ZAP 109.12 ETS 81.31 ZAE 97.45 ETE 162.23 ZAC 89.04 ETC 49.11 CLP-165.97 PLANETOCENTRIC CONIC C3 107.733 VHL 10.379 OLA -48.99 RAL 136.76 RAD 6570.1 VEL 15.135 PTH 2.72 VHP 11.868 OPA 75.53 RAP 223.35 ECC 2.7730 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 18.90 1448.7 137.65 3 18 6 46.04 2048.65 13.06 51.31 35.11 48.20 2 43 57 12 36 26 5236.7 18.92 266.09 5836.66 13.08 271.36 35.12 137.65 10 59 10 131.80 1448.7 18.90 46.04 35.11 137.65 3 18 6 2 43 57 2048.65 13.06 51.31 48.20 35.12 137.65 12 36 26 5236.7 18.92 266.09 131.80 10 59 10 5836.66 13.08 271.3€ 3 18 6 12 36 26 1448.7 35.11 18.90 46.04 13.06 51.31 137.65 2 43 57 2048.65 48.20 13.08 271.36 35.12 137.65 5236.7 18.92 266.09 10 59 10 5836.66 131.40 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2506.8 SR 248.2 SS 868.0 CRT .4840 CRS -.3990 CST -.9955 SCT 3688.8 SCR 816.8 SC3 94.9 RRT .7827 RRF .6567 RTF .9823 SCB 3778.1 R23 -.2034 R13 .9778 TDE-4.2873 TRA-3.2739 TC3 -.3130 BAU .4511 RDE -.0758 RRA -.9695 RC3 -.0101 FAU .01676 FDE-1.4891 FRA -.8005 FC3 -.1347 BSP 11543 LSA 2654.3 MSA 231.6 SSA 1.6 EL1 2509.7 EL2 216.9 ALF 2.76 BOE 4.2879 BRA 3.4144 BC3 .3132 FSP -301 SG1 3744.8 SG2 500.8 THA 10.01 ARRIVAL DATE NOV 30 1967 FLIGHT TIME 136,00 LAUNCH DATE JUL 17 1967 DISTANCE 399,095 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 26.930 GAL -6.45 A7L 104.28 MCA 190.15 SMA 130.05 ECC .20218 INC14.2824 V1 29.302 RP 107.48 LAP 2.49 LOP 123.60 VP 38.066 GAP 6.05 AZP 75.93 TAL 207.31 TAP 37.46 RCA 103.75 APO 156.34 VZ 35.257 RC 125.861 GL -55.94 GP 60.16 ZAL 111.56 ZAP 117.03 ETS 65.23 ZAE 106.43 ETE 149.90 ZAC 90.64 ETC 33.32 CLP-155.97 PLANETOCENTRIC CONIC 2.49 VHP 8.896 OPA 67.0% RAP 198.37 ECC 2.0451 C3 63.506 VHL 7.969 DLA -43.95 RAL 137.99 RAD 6569.2 VEL 13.596 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 54.67 3 12 57 1867.98 17.42 38.66 28.97 131.01 3 44 1268.0 22.56 32.55 264.17 270.28 28.99 131.00 12 16 17 5178.4 10 39 58 5778.36 17.44 125.13 3 12 57 1867.98 10 39 58 5778.36 131.01 3 44 5 1268.0 22.56 32.55 17.42 34.66 28.97 54.87 12 16 17 28.99 131.00 5178.4 22.58 264.17 10 39 58 17.44 270.28 125.13 131.01 3 44 5 1268.0 22.56 32.55 3 12 57 1867.98 17.42 38.66 28.97 12 16 17 54.87 5178.4 22.58 131.00 1/1 39 5A 270.28 28.99 125.13 5778.36 17.44 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2352.0 SR 474.0 SS 862.5 CRT -.8939 CRS .9521 CST -.9881 SGT 3841.8 SGR 510.7 SG3 131.3 RRT -.4194 RRF -.6406 RTF .9622 SGB 3875.6 R23 .2545 R13 -.9640 TOF-3.0350 TRA-2.9273 TC3 -.7563 BAU .6467 ROE .6570 RRA -.1306 RC3 .0902 FAU .02918 FOE-1.5202 FRA -.8462 FC3 -.3978 BSP 11939 LSA 2538.5 MSA 237.1 SSA BOF 3.1053 BRA 2.9302 BC3 .7617 FSP -421 SG1 3847.9 SG2 462.9 THA 176.76 EL1 2390.2 EL2 209.1 ALF 169.71 ARRIVAL DATE DEC 2 1967 FLIGHT TIME 138.00 LAUNCH DATE JUL 17 1967 DISTANCE 405.034 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 26.873 GAL -6.17 AZL 101.41 MCA 193.35 SMA 129.66 ECC .20255 INC11.4148 V1 29.302 RP 107.48 LAP 2.62 LOP 126.85 VP 38.027 GAP 6.32 AZP 78.89 TAL 205.89 TAP 39.24 RCA 103.40 APO 155.92 VZ 35.258 RC 128.066 GL -51.67 GP 51.44 TAL 114.46 TAP 123.97 ETS 59.05 TAE 112.83 ETE 148.43 TAC 92.07 ETC 27.44 CLP-153.70 PLANETOCENTRIC CONIC C3 45.439 VHL 6.741 OLA -40.01 RAL 140.31 RAD 6568.7 VEL 12.915 PTH 2.35 VHP 7.522 DPA 58.93 RAP 188.60 ECC 1.7478 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.42 1120.3 23.97 60.47 3 45 58 1720.28 19.45 27.46 125.68 4 14 38 12 1 31 5160.7 23.98 10 25 30 119.53 5760.74 19.46 270.43 25.44 125.67 4 14 38 1120.3 23.97 20.77 1720.28 5760.74 60.47 3 45 58 19.45 27.46 25.42 125.68 12 1 31 5160.7 23.98 263.74 119.53 10 25 30 19.46 270.43 25.44 125.67 23.97 20.77 4 14 38 1120.3 3 45 58 1720.28 19.45 27.46 25.42 125.68 60.47 10 25 30 12 1 31 5160.7 125.67 23.98 5760.74 19.46 270.43 25.44 119.53 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3913.9 SGR 577.7 SG3 164.1 RRT -.6777 RRF -.8615 RTF ..9494 SGB 3956.4 R23 .2862 R13 -.9526 ST 2249.9 SR 532.9 SS 874.6 CRT -.9272 CRS .9806 CST -.9826 TDE-2.4399 TRA-2.6163 TC3-1.1934 BAU .7318 ROE .6269 RRA .0218 RC3 .1646 FAU .03887 FDE-1.5479 FRA -.8452 FC3 -.7405 BSP 12164 BDE 2.5192 BRA 2.6164 BC3 1.2047 FSP -526 LSA 2460.5 MSA 238.3 SSA SG1 3933.7 SG2 _ 422.7 THA 174.22 EL1 2303.9 EL2 195.0 ALF 167.52 ARRIVAL DATE DEC 4 1967 FLIGHT TIME 140.00 LAUNCH DATE JUL 17 1967 **DISTANCE 410.979** HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 26.816 GAL -5.89 AZL 99.64 HCA 196.56 SMA 129.27 ECC .20305 INC 9.6421 VI 29.302 RP 107.48 LAP 2.74 LOP 130.10 VP 37.987 GAP 6.59 AZP 80.75 TAL 204.46 TAP 41.02 RCA 103.02 APO 155.52 VZ 35.259 RC 130.261 GL -48.11 GP 44.28 ZAL 116.23 ZAP 129.85 ETS 55.32 ZAE 117.43 ETE 149.80 ZAC 92.95 ETC 24.06 CLP-153.50 PLANETOCENTRIC CONIC C3 36.021 VHL 6.002 DLA -37.03 RAL 142.83 RAD 6568.4 VEL 12.546 PTH 2.27 VHP 6.812 DPA 51.87 RAP 183.96 ECC 1.5928 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 10.79 23.45 121.66 4 45 6 996.8 65.07 4 18 29 1596.85 20.30 17.84 121.65 11 49 10 5167.0 24.35 264.50 10 13 3 5766.97 20.32 271.55 23.46 114.93 121.66 4 45 6 121.65 11 49 10 23.45 996.8 24.33 10.79 65.07 4 18 29 1596.85 20.30 17.84 5167.0 24,35 264.50 10 13 3 5766.97 4 18 29 1596.85 20.32 271.55 23.46 114.93 4 45 6 996.8 10.79 65.07 20.30 17.84 23.45 121.66 121.65 11 49 10 5167.0 24.35 264.50 271.55 20.32 23.46 114.93 10 13 3 5766.97 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4000.8 SGR 564.6 SG3 189.5 RRT - .7272 RRF - .8984 RTF .9407 ST 2192.3 SR 509.2 SS 879.0 CRT -.9321 CRS .9869 CST -.9783 TDE-2.1122 TRA-2.3926 TC3-1.6142 BAU- .7832 RDE .5331 RRA .0452 RC3 .1986 FAU .04583 FDE-1.5547 FRA -.8002 FC3-1.1014 BSP 12426 BDE 2.1785 BRA 2.3930 BC3 1.6264 FSP -609 SGB 4040.5 R23 .3029 R13 -.9437 LSA 2404.5 MSA 238.3 SSA SG1 4022.0 SG2 385.5 THA 174.09 EL1 2243.4 EL2 180.3 ALF 167.70

ARRIVAL DATE DEC 6 1967

LAUNCH DATE JUL 17 1967

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DISTANCE 416.920
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.759 GAL -5.60 A7L 98.43 MCA 199.79 SMA 128.89 ECC .20368 INC 8.4336 VI 29.302 RP 107.48 LAP 2.85 LOP 133.35 VP 37.947 GAP 6.86 AYP 82.06 TAL 203.01 TAP 42.80 RCA 102.63 APO 155.14 V2 35.259 RC 132.447 GL -45.19 GP 38.46 7AL 117.13 ZAP 134.76 ETS 52.51 ZAE 120.72 ETE 152.04 ZAC 93.27 ETC 21.64 CLP-154.05
    PLANETOCENTRIC CONIC
                                                                                                                                         2.22 VHP 6.428 OPA 45.90 RAP 181.56 ECC 1.4989
     C3 30.312 VML 5.506 DLA -34.81 RAL 145.37 RAD 6568.2 VEL 12.316 PTH 2.22 VMP 6.428 DPA 45.90 RAP 181.66 ECC 1.4989 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.85 4 49 24 1491.30 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 68.85 4 49 24 1491.30 20.64 9.63 22.54 118.68 5 14 15 891.3 24.31 2.35 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 68.85 4 49 24 1491.30 20.64 9.63 22.54 118.68 5 14 15 891.3 24.31 2.35 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 68.85 4 49 24 1491.30 20.64 9.63 22.54 118.68 5 14 15 891.3 24.31 2.35 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.56 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 111.15 10 2 21 5785.60 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 112.50 20.66 273.25 22.55 118.67 11 38 46 5185.6 24.32 265.96 112.50 20.66 273.25 22.55 118.67 11 38 46 20.60 20.60 273.25 22.55 118.67 11 38 46 20.60 20.60 273.25 22.55 118.67 11 38 46 20.60 20.60 273.25 22.55 118.67 11 38 46 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.60 20.
      C3 30.312 VHL 5.506 OLA -34.81 RAL 145.37 RAD 6568.2 VEL 12.316 PTH
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 4102.9 SGR 524.9 SG3 207.7

RRT -.7353 RRF -.9004 RTF ..9345

SGB 4136.4 R23 .3070 R13 -.9370

SGI 4121.2 SG2 354.2 THA 174.59
                                                                                                                                                                        ST 2164.4 SR 472.1 SS 877.0

CRT -.9329 CRS .9896 CST -.9749

LSA 2370.7 MSA 237.6 SSA 5.2
     TDE-1.9140 TRA-2.2197 TC3-2.0205 BAU .8230
      RBE .4534 RRA .0406 RC3 .2037 FAU .05042
      FDE-1.4931 FRA -.7274 FC3-1.4399 BSP 12797
                                                                                                                                                                         EL1 2209.0 EL2 166.6 ALF 168.43
     BOE 1.9670 BRA 2.2201 BC3 2.0308 FSP -674
                                                                                                                                                                                        ARRIVAL DATE DEC 8 1967
                                                                                                      FLIGHT TIME 144.00
LAUNCH DATE JUL 17 1967
                                                                                                     DISTANCE 422.851
   HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.701 GAL -5.30 AZL 97.55 MCA 203.02 SMA 128.50 ECC .20443 INC 7.5526 V1 29.302 RP 107.48 LAP 2.95 LOP 136.60 VP 37.905 GAP 7.14 AZP 83.04 TAL 201.54 TAP 44.56 RCA 102.23 APO 154.77 V2 35.258 RC 134.624 GL -42.77 GP 33.73 ZAL 117.37 ZAP 138.86 ETS 50.20 ZAE 123.06 ETE 154.46 ZAC 93.09 ETC 19.73 CLP-154.91
    PLANETOCENTRIC CONIC
     C3 26.482 VHL 5.146 DLA -33.18 RAL 147.90 RAD 6568.1 VEL 12.160 PTH 2.18 VHP 6.222 DPA 40.85 RAP 180.63 ECC 1.4358
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SCT 4224.7 SCR 484.9 SC3 221.0

RRT -.7301 RRF -.8882 RTF ..9307

SCB 4252.4 R23 .2993 R13 -.9327

SCI 4239.6 SC2 330.2 THA 175.18
                                                                                                                                                                        ST 2163.7 SR 440.4 SS 875.3
CRT -.9343 CRS .9915 CST -.9726
      TOE-1.7935 TRA-2.0790 TC3-2.4215 BAU .8600
     RDE .3953 RRA .0330 RC3 .1931 FAU .05336
FDE-1.4431 FRA -.6453 FC3-1.7446 BSP 13344
                                                                                                                                                                        LSA 2363.4 HSA 236.2 SSA
                                                                                                                                                                                                                              6.2
                                                                                                                                                                        ELI 2202.7 EL2 154.2 ALF 169.18
      BOE 1.8365 BRA 2.0792 BC3 2.4292 FSP -734
                                                                                                                                                                                       ARRIVAL DATE DEC 10 1967
                                                                                                     FLIGHT TIME 146.00
LAUNCH DATE JUL 17 1967
                                                                                                    DISTANCE 428.775
     RL 152.05 LAL -.00 LOL 293.76 VL 26.644 GAL -4.98 AZL 96.88 MCA 206.26 SMA 128.12 ECC .20529 INC 6.8785 V1 29.302 RP 107.48 LAP 3.04 LOP 139.85 VP 37.864 GAP 7.41 AZP 83.83 TAL 200.06 TAP 46.31 RCA 101.82 APO 154.43 V2 35.256 RC 136.791 GL -40.75 GP 29.88 ZAL 117.08 ZAP 142.33 ETS 48.25 ZAE 124.72 ETE 156.79 ZAC 92.51 ETC 18.16 CLP-155.90
    PLANETOCENTRIC CONIC
      C3 23.719 VHL 4.870 DLA -32.02 RAL 150.46 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.121 OPA 36.55 RAP 180.39 ECC 1.3903
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
           74.40 5 44 29 1323.47
105.60 9 47 53 5831.68
74.40 5 44 29 1323.47
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107.89 13 18 27
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8 44 7 741.48
11 47 26 5461.67
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                                                                                              HID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                       ST 2133.3 SR 405.5 SS 845.3
CRT -.9338 CRS ..9930 CST -.9692
                                                                                               SGT 4258.7 SGR 434.1 SG3 221.1

RRT - .6905 RRF - .8525 RTF .9229

SGB 4280.8 R23 .2929 R13 - .9244

SGI 4269.3 SG2 313.2 TMA 175.95
      TOE-1.6808 TRA-1.9139 TC3-2.7500 BAU
     ROE .3446 RRA .0175 RC3 .1573 FAU .05290
FDE-1.3455 FRA -.5133 FC3-1.9310 BSP 12997
                                                                                                                                                                       LSA 2318.5 MSA 233.9 SSA
                                                                                                                                                                        EL1 2166.8 EL2 142.8 ALF 169.89
      BOE 1.7157 BRA 1.9140 BC3 2.7545 FSP -693
                                                                                                                                                                                        ARRIVAL DATE DEC 12 1967
                                                                                                      FLIGHT TIME 148.00
LAUNCH DATE JUL 17 1967
                                                                                                    DISTANCE 434.684
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.587 GAL -4.67 AZL 96.34 MCA 209.50 SMA 127.75 ECC .20627 INC 6.3431 VI 29.302
RP 107.49 LAP 3.12 LOP 143.10 VP 37.821 GAP 7.68 AZP 84.47 TAL 198.56 TAP 48.05 RCA 101.40 APO 154.10 V2 35.254
RC 138.949 GL -39.02 GP 26.70 ZAL 116.35 ZAP 145.30 ETS 46.59 ZAE 125.91 ETE 158.93 ZAC 91.62 ETC 16.84 CLP-156.96
    PLANETOCENTRIC CONIC
      C3 21.623 VHL 4.650 DLA -31.21 RAL 153.06 RAO 6567.9 VEL 11.958 PTH 2.13 VHP 6.087 DPA 32.84 RAP 180.66 ECC 1.3559
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.30 6 7 57 1259.96 21.02 352.04 23.67 113.62 6 28 57 660.0 24.03 344.43 103.70 9 45 10 5850.25 21.03 278.41 23.68 113.61 11 22 40 5250.2 24.04 270.80
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                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 4365.6 SGR 406.4 SG3 224.8

RRT -.6633 RRF -.8163 RTF .9200

SGB 4384.5 R23 .2714 R13 -.9212

SG1 4374.0 SG2 303.5 THA 176.45
                                                                                                                                                                      ST 2153.9 SR 387.7 S5 838.E
CRT -.9382 CRS ..9948 CST -.9680
      TDE-1.6305 TRA-1.7862 TC3-3.1166 BAU .9017
      ROE .3146 RRA .0132 RC3 .1296 FAU .05307
                                                                                                                                                                     LSA 2332.3 MSA 230.7 SSA 8.5
EL1 2184.5 EL2 132.3 ALF 170.38
      FOE-1.2850 FRA -.4162 FC3-2.1249 BSP 13422
      BDE 1.6605 BRA 1.7862 BC3 3.1192 FSP -714
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 14 1967

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LAUNCH DATE JUL 17 1967
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   HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.530 GAL -4.34 AZL 95.91 HCA 212.73 SMA 127.38 ECC .20738 INC 5.9051 V1 29.302 RP 107.50 LAP 3.19 LOP 146.35 VP 37.778 GAP 7.95 AZP 85.03 TAL 197.04 TAP 49.78 RCA 100.96 APO 153.79 V2 35.251
     RC 141.095 GL -37.51 GP 24.07 ZAL 115.26 ZAP 147.87 ETS 45.19 ZAE 126.75 ETE 160.82 ZAC 90.49 ETC 15.71 CLP-158.04
    PLANETOCENTRIC CONIC
      C3 19.974 VML 4.469 DLA -30.69 RAL 155.73 RAD 6567.8 VEL 11.889 PTM 2.11 VMP 6.096 DPA 29.60 RAP 181.30 ECC 1.3287
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           RIT -6209 RRT -.7717 RTF ..9175
SCB 4482.8 R23 .2461 R13 -.9184
SCI 4472.8 SCZ 299.6 THA 176.87
                                                                                                                                                                 ST 2184.1 SR 375.6 SS 831.8
CRT -.9442 CRS .9965 CST -.9674
      TOE-1.6008 TRA-1.6578 TC3-3.4711 BAU .9273
     ROE .2930 RRA .0109 RC3 .0995 FAU .05244
FDE-1.2260 FRA -.3169 FC3-2.2728 BSP 13795
BDE 1.6274 BRA 1.6579 BC3 3.4725 FSP -722
                                                                                                                                                                 LSA 2356.2 MSA 226.5 SSA
                                                                                                                                                                                                                    9.6
                                                                                                                                                                  EL1 2212.8 EL2 122.1 ALF 170.75
                                                                                                                                                                                 ARRIVAL DATE DEC 16 1967
                                                                                                 FLIGHT TIME 152.00
LAUNCH DATE JUL 17 1967
                                                                                                 DISTANCE 446.461
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.473 GAL -4.00 AZL 95.54 MCA 215.97 SMA 127.01 ECC .20863 INC 5.5381 V1 29.302 RP 107.51 LAP 3.25 LOP 149.60 VP 37.734 GAP 8.22 AZP 85.51 TAL 195.51 TAP 51.49 RCA 100.51 APO 153.51 V2 35.247 RC 143.232 GL -36.17 GP 21.86 ZAL 113.85 ZAP 150.13 ETS 44.03 ZAE 127.37 ETE 162.49 ZAC 89.15 ETC 14.73 CLP-159.12
    PLANETOCENTRIC CONIC
     **LANETOCENTRIC CONIC C3 18.644 VHL 4.318 DLA -30.41 RAL 158.49 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 6.135 DPA 26.74 RAP 182.21 ECC 1.5000 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ TIME PO CST TIME INJ 2 LAT INJ 2 LONG INJ TIME PO CST TIME INJ 2 LAT INJ 
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                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 4558.1 SGR 373.3 SG3 224.3
RRT -.5923 RRF -.7212 RTF .9150
                                                                                                                                                                  ST 2221.8 SR 368.2 SS 825.0
CRT -.9516 CRS .9980 CST -.9673
      TOE-1.5863 TRA-1.5252 TC3-3.8122 BAU .9503
      ROE .2775 RRA .0101 RC3 .0690 FAU .05121
                                                                                           SGB 4573.3 R23 .2196 R13 -.9157
SG1 4563.5 SG2 300.4 THA 177.21
                                                                                                                                                                  LSA 2388.2 MSA 221.3 SSA 10.8
     FOE-1.1694 FRA -.2222 FC3-2.3778 BSP 14106
BOE 1.6104 BRA 1.5252 BC3 3.8128 FSP -719
                                                                                                                                                                  EL1 2249.3 EL2 111.8 ALF 171.02
                                                                                                                                                                                ARRIVAL DATE DEC 18 1967
                                                                                                  FLIGHT TIME 154.00
LAUNCH DATE JUL 17 1967
                                                                                                 DISTANCE 452.328
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 26.416 GAL -3.64 AZL 95.22 MCA 219.21 SMA 126.64 ECC .21001 INC 5.2242 V1 29.302 RP 107.53 LAP 3.30 LOP 152.85 VP 37.690 GAP 8.49 AZP 85.95 TAL 193.97 TAP 53.18 RCA 100.05 APO 153.24 V2 35.243 RC 145.356 GL -34.95 GP 19.99 ZAL 112.16 ZAP 152.14 ETS 43.08 ZAE 127.81 ETE 163.95 ZAC 87.65 ETC 13.88 CLP-160.18
    PLANETOCENTRIC CONIC
      C3 17.554 VHL 4.190 DLA -30.32 RAL 161.37 RAD 6567.7 VEL 11.787 PTH 2.08 VMP 6.197 DPA 24.16 RAP 183.32 ECC 1.2889
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.67 11 38 42
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          110.00
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                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            RGT 4645.1 SGR 366.7 SG3 221.7

RRT -.5545 RRF -.6691 RTF .9129

SGB 4659.6 R23 .1931 R13 -.9135

SG1 4649.6 SG2 304.9 THA 177.48
                                                                                                                                                                  ST 2268.4 SR 364.8 SS 819.4
CRT -.9598 CRS .9990 CST -.9677
      TOE-1.5853 TRA-1.3863 TC3-4.1409 BAU .9718
      RDE .2667 RRA .0108 RC3 .0399 FAU .04962
FDE-1.1174 FRA -.1296 FC3-2.4472 BSP 14395
BDE 1.6075 BRA 1.3863 BC3 4.1411 FSP -711
                                                                                                                                                                  LSA 2429.8 MSA 215.1 SSA 12.0
                                                                                                                                                                  EL1 2295.4 EL2 101.2 ALF 171.21
                                                                                                                                                                                 ARRIVAL DATE DEC 20 1967
 LAUNCH DATE JUL 17 1967
                                                                                                  FLIGHT TIME 156,00
                                                                                                  DISTANCE 458.179
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 28.359 GAL -3.28 AZL 94.95 MCA 222.45 MAA 126.29 ECC .21154 INC 4.9512 VI 29.302 RP 107.54 LAP 3.34 LOP 156.10 VP 37.646 GAP 8.77 AZP 86.34 TAL 192.42 TAP 54.87 RCA 99.57 APO 153.00 V2 35.237 RC 147.469 GL -33.82 GP 18.39 ZAL 110.22 ZAP 153.95 ETS 42.34 ZAE 128.14 ETE 185.22 ZAC 86.02 EFC 13.14 CLP-161.23
    PLANETOCENTRIC CONIC
      C3 16.656 VHL 4.081 DLA -30.39 RAL 164.37 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 6.275 DPA 21.82 RAP 184.59 ECC 1.2741 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                           SGT 4731.4 SGR 365.6 SG3 218.5

RRT -.5204 RRF -.6196 RTF ..9115

SGB 4745.5 R23 .1678 R13 -.9119

SGI 4735.3 SG2 311.9 THA 177.69
                                                                                                                                                              ST 2324.8 SR 364.9 SS 816.1
CRT -.9683 CRS ..9992 CST -.9686
LSA 2482.0 MSA 208.0 SSA 13.2
      TDE-1.5963 TRA-1.2473 TC3-4.4585 BAU .9928
      ROE .2599 RRA .0127 RC3 .0137 FAU .04788
FOE-1.0712 FRA -.0428 FC3-2.4889 BSP 14687
BOE 1.6173 BRA 1.2473 BC3 4.4585 FSP -701
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FLIGHT TIME 150.00

LAUNCH DATE JUL 17 1967

ARRIVAL DATE DEC 22 1967

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DISTANCE 464.015
     HELIOCENTRIC CONIC
      RL 192.03 LAL -.00 LOL 293.76 VL 26.303 GAL -2.91 AZL 94.71 MCA 225.69 SMA 125.93 ECC .21322 INC 4.7100 V1 29.302 RP 107.56 LAP 3.37 LOP 159.35 VP 37.601 GAP 9.04 AZP 86.71 TAL 190.85 TAP 56.54 RCA 99.08 APO 152.78 VZ 35.231 RC 149.570 GL -32.73 GP 17.02 ZAL 108.04 ZAP 155.60 ETS 41.78 ZAE 128.38 ETE 166.32 ZAC 84.28 ETC 12.48 CLP-162.25
     PLANETOCENTRIC CONIC
       C3 15.010 VML 3.900 DLA -30.57 RAL 167.53 RAD 6567.6 VEL 11.718 PTH
                                                                                                                                                                       2.06 VHP 6.367.0PA 19.67 RAP 185.99 ECC 1.2620
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG THU RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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           110.00
     DIFFERENTIAL CORRECTIONS
                                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                    RET - 4809.3 SGR 367.8 SG3 214.1
RRT - 4804 RRF - .5729 RTF .9099
SGB 4820.0 R23 .1451 R13 -.9102
SG1 4809.3 SG2 320.8 THA 177.85
                                                                                                                                                                                                            ST 2363.9 SR 367.0 SS 611.3
CRT -.9763 CRS .9986 CST -.9697
       TOE-1.6135 TRA-1.0970 TC3-4.7522 BAU 1.0114
      ROE .2555 RRA .0147 RC3 -.0105 FAU .04589
FOE-1.0261 FRA .0423 FC3-2.4959 BBP 14907
BOE 1.6336 BRA 1.0971 BC3 4.7522 FSP -685
                                                                                                                                                                                                            LSA 2536.9 MSA 200.2 SSA 14.5
EL1 2410.7 EL2 78.5 ALF 171.44
                                                                                                                                                                                                                               ARRIVAL DATE DEC 24 1967
                                                                                                                            FLIGHT TIME 160.00
LAUNCH DATE JUL 17 1967
                                                                                                                            DISTANCE 469.834
     HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 295.76 VL 26.247 GAL -2.52 AZL 94.49 HCA 228.93 SMA 125.58 ECC .21507 INC 4.4941 V1 29.302
RP 107.58 LAP 3.39 LOP 162.60 VP 37.556 GAP 9.32 AZP 87.04 TAL 189.27 TAP 58.20 RCA 98.57 APO 152.59 V2 35.225
RC 151.657 GL -31.66 GP 15.84 ZAL 105.64 ZAP 157.11 ETS 41.41 ZAE 128.56 ETE 167.29 ZAC 82.45 ETC 11.91 CLP-163.26
     PLANETOCENTRIC CONIC
      LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T7.21 7 25 22 1158.93 22.87 345.26 35.88 111.29 7 44 41 558.9 25.56 337.41 102.79 10 49 32 5790.39 22.88 274.73 35.89 111.28 12 26 2 5190.4 25.57 266.88 110.00 9 45 41 708.83 13.83 307.74 31.16 121.58 9 55 30 108.8 17.01
                                                                                                                                                                        2.06 WHP 6.470 DPA
                                                                                                                                                                                                                       17.67 RAP 187.49 ECC 1.2522
                                                                                                                                                                 111.26 12 26 2
121.58 9 55 30
100.97 14 58 32
                                                        5288.48
                                                                                                              239.67
                                                                                                                                          39.05
                                                                                                                                                                                                                    4688.5
                                                                                                                                                                                                                                                33.75
                                13 30 24
                                                                                        32.50
           110.00
                                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    SGT 4884.7 SGR 373.5 SG3 210.0
RRT -.4633 RRF -.5333 RTF .9092
                                                                                                                                                                                                           $T 2452.4 $R 371.7 $5 808.9

CRT -.9836 CRS .9969 CST -.9712
       TOE-1.6407 TRA -.9424 TC3-5.0308 BAU 1.0305
      ROE .2536 RRA .0172 RC3 -.0306 FAU .04395
FOE -.9866 FRA .1206 FC3-2.4835 BSP 15183
BOE 1.6402 BRA .9426 BC3 5.0309 FSP -673
                                                                                                                    SGB 4899.0 R23 .1243 R13 -.9095
SG1 4887.8 SG2 330.8 THA 177.96
                                                                                                                                                                                                           LSA 2601.8 MSA 192.0 SSA
                                                                                                                                                                                                            EL1 2479.5 EL2 66.3 ALF 171.52
                                                                                                                                                                                                                               ARRIVAL DATE DEC 26 1967
                                                                                                                           FLIGHT TIME 1.62.00
LAUNCH DATE JUL 17 1967
                                                                                                                          DISTANCE 475.634
     HELIOCENTRIC CONIC
      RL 152.05 LAL -.00 LOL 293.76 VL 26.192 GAL -2.12 AZL 94.30 MCA 232.17 SMA 125.24 ECC .21708 INC 4.2987 VI 29.302
RP 107.60 LAP 3.39 LOP 165.85 VP 37.510 GAP 9.61 AZP 87.36 TAL 187.68 TAP 59.85 RCA 98.05 APO 152.42 VZ 35.217
RC 153.750 GL -30.60 GP 14.81 ZAL 103.04 ZAP 158.50 ETS 41.22 ZAE 128.70 ETE 168.13 ZAC 80.55 ETC 11.40 CLP-164.24
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 14.853 VHL 3.854 DLA -51.20 RÅL 174.29 RAD 6567.6 YEL 11.672 PTH 2.05 VHP 6.583 DPA 15.80 RAP 189.09 ECC 1.2444
LNCH.AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.33 7 32 54 1171.80 23.29 346.40 38.97 111.37 7 52 26 571.8 25.98 336.53
103.67 11 9 38 5763.59 23.30 272.89 38.97 111.37 7 52 26 571.8 25.98 338.53
103.67 11 9 38 5763.59 23.30 272.89 38.97 111.37 7 52 26 571.8 25.98 338.53
103.67 11 9 38 5763.59 23.30 272.89 38.97 111.35 12 45 42 5163.6 25.99 265.02
110.00 10 3 26 682.45 14.77 306.27 34.53 121.18 10 14 49 82.5 18.79 299.46
110.00 13 38 16 5300.93 32.41 240.60 42.01 101.50 15 637 4700.9 33.66 231.59
                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    RGT 4961.3 SGR 381.2 SG3 205.8
RRT -,4439 RRF -.5004 RTF ..9092
SGB 4975.9 R23 .1060 R13 -.9094
SG1 4964.2 SG2 341.4 THA 178.04
                                                                                                                                                                                                          ST 2524.9 SR 378.1 SS 806.6

CRT -.9896 CRS ..9942 CST -.9728

LSA 2671.1 MSA 183.4 SSA 17.0

EL1 2552.4 EL2 53.8 ALF 171.57
       TOE-1.6741 TRA -.7803 TC3-5.2828 BAU 1.0490
       RDE .2542 RRA .0196 RC3 -.0470 FAU .04200
       FOE -.9508 FRA .1945 FC3-2.4482 BSP 15450
BOE 1.6933 BRA .7806 BC3 5.2830 FSP -660
                                                                                                                                                                                                                               ARRIVAL DATE DEC 28 1967
LAUNCH DATE JUL 17 1967
                                                                                                                            FLIGHT TIME 164.00
                                                                                                                          DISTANCE 481.416
     HELIOCENTRIC CONIC
      RL 152.05 LAL -.00 LOL 293.76 VL 26.137 GAL -1.70 AZL 94.12 MCA 235.41 SMA 124.90 ECC .21929 INC 4.1197 V1 29.302
RP 107.63 LAP 3.39 LOP 169.09 VP 37.465 GAP 9.90 AZP 87.66 TAL 186.09 TAP 61.49 RCA 97.51 APO 152.29 V2 35.210
RC 155.789 GL -29.53 GP 13.90 ZAL 100.27 ZAP 159.80 ETS 41.21 ZAE 128.81 ETE 168.87 ZAC 78.58 ETC 10.95 CLP-165.20
     PLANETOCENTRIC CONIC
       C3 14.505 VHL 3.809 DLA -31.58 RAL 177.92 RAD 6567.6 VEL 11.657 PTH 2.05 VHP 6.704 DPA 14.04 RAP 190.75 ECC 1.2387
      C3 14.3U3 VPL 3.8U9 ULA -31.38 RAL 177.92 RAD 6567.6 VEL 11.657 PTH 2.D5 VPP 6.704 DPA 14.04 RAP 190.75 ECC 1.2387 LNON AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.40 7 40 51 1186.98 23.69 347.73 42.35 111.51 8 0 38 587.0 26.40 339.83 104.60 11 30 36 5737.86 23.71 271.12 42.35 111.50 13 6 14 5137.9 26.41 263.23 104.60 11 30 36 5737.86 23.71 271.12 42.35 111.50 13 6 14 5137.9 26.41 263.23 104.60 11 30 36 5737.86 23.71 271.12 42.35 111.50 13 6 14 5137.9 26.41 263.23 104.60 11 30 36 5737.86 23.71 271.12 42.35 111.50 13 6 14 5137.9 26.41 263.23 104.60 11 30 36 5737.86 23.71 271.12 42.35 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 263.23 111.50 13 6 14 5137.9 26.41 
                                                                                                                                                                 120.73 10 35 52
102.25 15 14 18
                                                                                                                                                                                                                        54.2
                                                                                                                                                                                                                                               19.72
                                                                                                                                                                                                                                                                      297.60
                               10 24 58
                                                             654.25
                                                                                       15.76
                                                                                                              304.66
                                                                                                                                         36.21
           110.00
                                                                                                                                                                                                                    4718.6
                                                                                                              241.92
                                                                                                                                                                                                                                               33.52
                                                                                                                                                                                                                                                                      232.95
           110.00
                                13 45 39
                                                          5318.59
                                                                                       32.17
                                                                                                                                         45.25
                                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                 SCT 5032.1 SGR 389.9 SG3 201.2
RRT - 4287 RRF - 4729 RTF - 9094
SGB 5047.2 R23 .0898 R13 - 9096
SGI 5034.9 SG2 352.1 THA 178.09
                                                                                                                                                                                                            ST 2595.6 SR 385.5 SS 802.0
CRT -.9941 CRS ..9905 CST -.9745
        TOE-1.7099 TRA -. 8095 TC3-5.4993 BAU 1.0665
       ROE .2561 RRA .0216 RC3 -.0599 FAU .04002
FOE -.9148 FRA .2651 FC3-2.3885 BSP 15706
BOE 1.7290 BRA .8099 BC3 5.4997 FSP -648
                                                                                                                                                                                                          LSA 2738.2 MSA 175.0 SSA 18.2
                                                                                                                                                                                                           EL1 2623.7 EL2 41.3 ALF 171.60
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FLIGHT TIME 158.00

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LAUNCH DATE JUL 17 1967
                                                                            FLIGHT TIME 166.00
                                                                                                                                         ARRIVAL DATE DEC 30 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 487.178
    RL 152.05 LAL -.00 LOL 293.76 VL 26.082 GAL -1.28 AZL 93.95 MCA 238.64 SMA 124.56 ECC .22169 INC 3.9543 VI 29.302 RP 107.65 LAP 3.38 LOP 172.34 VP 37.418 GAP 10.19 AZP 87.94 TAL 184.49 TAP 63.13 RCA 96.95 APO 152.18 V2 35.201 RC 157.834 GL -28.42 GP 13.10 ZAL 97.33 ZAP 161.01 ETS 41.37 ZAE 128.89 ETE 169.51 ZAC 76.56 ETC 10.56 CLP-166.14
   PLANETOCENTRIC CONIC
    C3 14.275 VML 3.778 DLA -31.98 RAL 181.70 RAD 6567.6 VEL 11.647 PTH 2.04 VHP 6.835 DPA 12.37 RAP 192.49 ECC 1.2349 LNCH AZMTH LNCH-TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    7 49 36 1203.11
11 51 57 5714.65
                                                                                 46.00
        74.48
                                                      24.07
                                                                                                                                   603.1
                                                                   349.11
                                                                                                 111.72
                                                                                                                8 9 41
                                                                                                                                                   26.80
                                                                                                                                                                 341.20
       105.52
                                                      24.08
                                                                    269.52
                                                                                     46.01
                                                                                                    111.71
                                                                                                               13 27 12
                                                                                                                                  5114.7
                                                                                                                                                   26.81
                                                                                                                                                                 261.61
                    7 49 36 1203.11
11 51 57 5714.65
                                                                                                   111.72 8 9 41
111.71 13 27 12
         74.48
                                                      24.07
                                                                    349.11
                                                                                     46.00
                                                                                                                                   603.1
                                                                                                                                                   26.80
                                                                                                                                                                 341.20
       105.52
                                                      24.08
                                                                    269.52
                                                                                     46.01
                                                                                                                                  5114.7
                                                                                                                                                   26.81
                                                                                                                                                                 261.61
                                                                                                    120.24 10 58 24
103.16 15 21 48
       110.00
                    10 47 59
                                     625.14
                                                      16.76
                                                                    303.02
                                                                                     42.21
                                                                                                                                    25.1
                                                                                                                                                   20.65
                                                                                                                                                                 296.06
                    13 52 47
                                   5340.61
       110.00
                                                      31.84
                                                                    243.55
                                                                                    48.76
                                                                                                                                  4740.6
                                                                                                                                                   33.32
                                                                                                                                                                 234.64
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    TOE-1.7468 TRA -.4278 TC3-5.6695 BAU 1.0821

ROE .2596 RRA .0228 RC3 -.0698 FAU .03796

FDE -.8796 FRA .3343 FC3-2.3023 BSP 15910

BOE 1.7660 BRA .4284 BC3 5.6699 FSP -631
                                                                        SGT 5094.7 SGR 399.3 SG3 196.3
RRT -.4170 RRF -.4509 RTF .9095
                                                                                                                              ST 2662.0 SR 393.9 SS 795.4
CRT -.9971 CRS .9856 CST -.9759
                                                                       SGB 5110.3 R23 .0767 R13 -.9097
                                                                                                                              LSA 2801.0 MSA 167.4 SSA 19.4
                                                                        SG1 5097.4 SG2 362.8 THA 178.12
                                                                                                                              EL1 2690.9 EL2 29.6 ALF 171.61
LAUNCH DATE JUL 17 1967
                                                                            FLIGHT TIME 168.00
                                                                                                                                          ARRIVAL DATE JAN 1 1968
   HELIOCENTRIC CONIC
                                                                            DISTANCE 492.917
    RL 152.05 LAL -.00 LOL 293.76 VL 26.028 GAL -.83 AZL 93.80 MCA 241.87 SMA 124.24 ECC .22430 INC 3.7999 V1 29.302
RP 107.68 LAP 3.35 LOP 175.58 VP 37.372 GAP 10.49 AZP 88.21 TAL 182.88 TAP 64.75 RCA 96.37 APO 152.10 V2 35.192
RC 159.863 GL -27.28 GP 12.39 ZAL 94.25 ZAP 162.15 ETS 41.72 ZAE 128.96 ETE 170.08 ZAC 74.49 ETC 10.22 CLP-167.06
   PLANETOCENTRIC CONIC
    C3 14.163 WHL 3.763 DLA -32.37 RAL 185.62 RAD 6567.6 VEL 11.643 PTH
                                                                                                        2.04 VHP 6.973 DPA
    LNOW AZMTH LNOW TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      7 59 34 1219.24
        73.62
                                                     24.39
                                                                   350.48
                                                                                    49.93
                                                                                                   111.97
                                                                                                                8 19 53
                                                                                                                                    619.2
                                                                                                                                                  27.15
                                                                                                                                                                 342.56
                    12 13 21 5695.04
7 59 34 1219.24
12 13 21 5695.04
11 12 9 5884.31
       106.34
                                                      24.40
                                                                    268.17
                                                                                    49.94
                                                                                                    111.96
                                                                                                               13 48 16
                                                                                                                                   5095.0
                                                                                                                                                   27.16
        73.62
                                                      24.39
                                                                    350.48
                                                                                     49.93
                                                                                                    111.97
                                                                                                                 8 19 53
                                                                                                                                    619.2
                                                                                                                                                   27.15
                                                                                                                                                                  342.56
       106.38
                                                                                                    111.96 13 48 16
                                                      24.40
                                                                    268.17
                                                                                    49.94
                                                                                                                                  5095.0
                                                                                                                                                   27.16
                                                                                                                                                                 260.24
                                                      17.74
                                                                                                   119.71 12 50 14
104.20 15 29 22
       110.00
                                                                    279.27
                                                                                    46.48
                                                                                                                                  5284.3
                                                                                                                                                   21.56
                                                                                                                                                                 272.21
                   13 59 56
       110.00
                                   5366.01
                                                      31.43
                                                                    245.42
                                                                                    52.53
                                                                                                                                 4766.0
                                                                                                                                                 33.06
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SGT 5158.8 SGR 409.2 SG3 191.6
RRT -.4099 RRF -.4344 RTF .9107
SG8 5175.0 R23 .0648 R13 -.9109
SG1 5161.6 SG2 373.0 THA 178.13
                                                                                                                             ST 2723.6 SR 403.2 SS 786.8
CRT -.9985 CRS .9797 CST -.9773
    TOE-1.7849 TRA -.2399 TC3-5.7977 BAU 1.0979
    RDE .2647 RRA .0235 RC3 -.0755 FAU .03601
    FOE -.8454 FRA .3978 FC3-2.2010 8SP 16130
                                                                                                                             LSA 2858.9 NSA 160.3 SSA 20.6
    BOE 1.8044 BRA .2410 BC3 5.7982 FSP -616
                                                                                                                              EL1 2753.2 EL2 21.8 ALF 171.59
LAUNCH DATE JUL 17 1967
                                                                           FLIGHT TIME 170.00
                                                                                                                                        ARRIVAL DATE JAN 3 1968
  HELIOCENTRIC CONIC
                                                                           DISTANCE 498.634
   RL 152.05 LAL =.00 LOL 293.76 VL 25.975 GAL -.37 AZL 93.65 MCA 245.11 SMA 123.91 ECC .22713 INC 3.6547 VI 29.302
RP 107.71 LAP 3.31 LOP 178.82 VP 37.326 GAP 10.80 AZP 88.46 TAL 181.26 TAP 66.37 RCA 95.77 APO 152.06 V2 35.183
RC 161.876 GL -26.09 GP 11.77 ZAL 91.06 ZAP 163.22 ETS 42.26 ZAE 129.01 ETE 170.58 ZAC 72.37 ETG 9.92 CLP-167.96
   PLANETOCENTRIC CONIC
    C3 14.172 VHL 3.765 OLA -32.73 RAL 189.67 RAD 6567.6 VEL 11.643 PTH 2.04 VHP 7.120 OPA
                                                                                                                                     9.25 RAP 196.11 ECC 1.2332
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  54.11
                                                                                                 112.25
                                                                                                                                                 27.44
        72.86
                      8 10 47
                                  1234.72
                                                     24.65
                                                                   351.78
                                                                                                                8 31 22
                                                                                                                                   634.7
                                                                                                  112.24 14 9 8
112.25 6 31 22
112.24 14 9 8
                    12 34 28
                                  5679.84
                                                      24.66
                                                                   267.12
                                                                                    54.11
                                                                                                                                  5079.8
        72.86
                      8 10 47
                                  1234.72
                                                     24.65
                                                                   351.78
                                                                                    54.11
                                                                                                                8 31 22
                                                                                                                                   634.7
                                                                                                                                                  27.44
                                                                                                                                                                343.86
       107.14
                   12 34 28
                                  5679.84
                                                     24.66
                                                                   267.12
                                                                                    54.11
                                                                                                                                  5079.4
                                                                                                                                                  27.45
                                                                                                                                                                 259.19
                                 5857.01
5393.59
                                                                                                   119.18 13 14 37
105.29 15 37 19
                   11 37 0
                                                      18.66
                                                                   277.68
                                                                                    51.01
                                                                                                                                  5257.0
                                                                                                                                                  22.40
                                                     30.95
                                                                   247.42
                                                                                    56.53
                                                                                                                                  4793.6
                                                                                                                                                  32.74
  DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SCT 5220.4 SGR 418.8 SG3 186.8

RRT -.4062 RRF -.4218 RTF .9127

SGB 5237.2 R23 .0536 R13 -.9129

SGI 5223.2 SG2 382.5 THA 178.12
                                                                                                                            ST 2773.0 SR 412.8 SS 774.1
CRT -.9984 CRS .9729 CST -.9786
LSA 2904.2 MSA 154.4 SSA 21.6
EL1 2803.4 EL2 23.2 ALF 171.55
    TOE-1.8198 TRA -. 0426 TC3-5.8764 BAU 1.1135
   ROE .2711 RRA .0234 RC3 -.0774 FAU .03416
FDE -.8100 FRA .4579 FC3-2.0866 BSP 16369
BDE 1.8399 BRA .0486 BC3 5.8769 FSP -605
LAUNCH DATE JUL 17 1967
                                                                            FLIGHT TIME 172.00
                                                                                                                                         ARRIVAL DATE JAN 5 1968
  HELIOCENTRIC CONIC
                                                                           DISTANCE 504.326
   RL 152.05 LAL -.00 LOL 293.76 VL 25.922 GAL .11 AZL 93.52 HCA 248.34 SMA 123.59 ECC .23021 INC 3.5169 V1 29.302 RP 107.74 LAP 3.27 LOP 182.06 VP 37.280 GAP 11.11 AZP 88.70 TAL 179.64 TAP 67.98 RCA 95.14 APO 152.05 V2 35.172 RC 163.875 GL -24.86 GP 11.21 ZAL 87.77 ZAP 164.24 ETS 43.00 ZAE 129.06 ETE 171.02 ZAC 70.23 ETC 9.67 CLP-168.84
  PLANETOCENTRIC CONIC
    C3 14.307 VHL 3.782 OLA -33.03 RAL 193.83 RAD 6567.6 VEL 11.649 PTH
                                                                                                      2.04 VHP 7.275 DPA
                                                                                                                                     7.78 RAP 197.99 ECC 1.2355
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.23 8 23 22 1249.24 24.81 352.97 58.51 112.55 8 44 11 649.2 27.64 345.05
                                                                                                                 8 44 11
                                                                                                                                                27.64
                                                                                   58.51
                                                                                                112.55
       107.77
                   12 55 4
                                   5669.51
                                                     24.82
                                                                   266.40
                                                                                    58.52
                                                                                                   112.53
                                                                                                               14 29 34
                                                                                                                                  5069.5
                                                                                                                                                  27.65
                                                                                                                                                                 258.47
                    8 23 22
        72.23
                                  1249.24
                                                     24.81
                                                                   352.97
                                                                                    58.51
                                                                                                   112.55
                                                                                                                 8 44 11
                                                                                                                                   649.2
                                                                                                                                                  27.64
                                                                                                                                                                 345.05
                                                                                                   112.53 14 29 34
118.68 13 39 6
106.39 15 46 5
       107.77
                    12 55 4
                                   5669.51
                                                     24.82
                                                                   266.40
                                                                                    58.52
                                                                                                                                  5069.5
                                                                                                                                                  27.65
                                                                                                                                                                 258.47
       110.00
                   12 1 53
                                   5833.08
                                                                   276.27
                                                                                    55.74
                                                     19.44
                                                                                                                                  5233.1
                                                                                                                                                  23.12
                                  5421.70
       110.00
                    14 15 43
                                                     30.43
                                                                   249.45
                                                                                    60.75
                                                                                                                                  4821.7
                                                                                                                                                  32.37
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SGT 5264.1 SGR 426.5 SG3 181.4
RRT -.4007 RRF -.4071 RTF .9111
SGB 5281.4 R23 .0437 R13 -.9112
                                                                                                                           ST 2795.9 SR 420.9 SS 750.4

CRT -.9968 CRS .9631 CST -.9783

LSA 2921.2 MSA 153.3 SSA 22.3
    TDE-1.8426 TRA .1747 TC3-5.8852 BAU 1.1258
    ROE .2778 RRA .0209 RC3 -.0780 FAU .03207
   FOE -.7645 FRA .5284 FC3-1.9405 BSP 16425
BOE 1.8634 BRA .1759 BC3 5.8857 FSP -575
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SG1 5266.9 SG2 390.6 THA 178.13

EL1 2827.2 EL2 33.3 ALF 171.46

ARRIVAL DATE JAN 7 1968

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FLIGHT TIME 174.00
LAUNCH DATE JUL 17 1967
   RL 152.05 LAL -.00 LOL 293.76 VL 25.869 GAL .60 A7L 93.39 HCA 251.57 SMA 123.28 ECC .23355 INC 3.3853 V1 29.302 RP 107.78 LAP 3.21 LOP 185.29 VP 37.233 GAP 11.44 A7P 88.93 TAL 178.01 TAP 69.58 RCA 94.49 APO 152.07 V2 35.162 RC 165.860 GL -23.58 GP 10.70 ZAL 84.42 ZAP 165.20 ETS 43.96 ZAE 129.10 ETE 171.42 ZAC 68.05 ETC 9.45 CLP-169.71
                                                                            DISTANCE 509.991
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                        6.36 RAP 199.90 ECC 1.2399
    C3 14.575 VHL 3.818 OLA -33.27 RAL 198.07 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 7.440 DPA
    LNCH APHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 112.85 8 58 20
112.83 14 49 19
112.85 8 58 20
112.83 14 49 19
112.83 14 49 19
116.30 14 2 48
107.38 15 56 17
                                                                                63.11
                                                     24.87
        71.76
                                                                     354.02
                      8 37 17 1262.48
                                                                                                                                                      27.75
                                                                                                                                     5064.5
                    13 14 55 5664.51
8 37 17 1262.48
                                                                                      63.11
                                                      24.88
                                                                     266.04
       108.24
                                                                                                                                                      27.74
                                                                                                                                                                    346.11
                                                                                                                                      662.5
                                                                     354.02
                                                                                      63.11
                                                     24.87
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                                                                                      63.11
                                                                                                                                     5064.5
                                                                     266.04
                                                     24.88
                    13 14 55 5664.51
       108.24
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                                                                                                                                                                    267.92
                  12 25 53 5814.99
14 25 29 5448.03
                                                                                      60,60
                                                                                                                                     5215.0
                                                                     275.19
                                                      20.03
                                                                                                                                                      31.99
                                                                                                                                     4848.0
                                                                     251.32
                                                                                      65.18
       110.00
                                                      29.91
                                                                        NID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2824.0 SR 431.9 SS 738.1
CRT -.9939 CRS .9546 CST -.9797
                                                                         SGT 5319.4 SGR 436.8 SG3 176.8
    TOE-1.8744 TRA .3904 TC3-5.8412 BAU 1.1383
                                                                         RRT -_4035 RRF --4065 RTF --9144
SGB 5337.3 R23 --0388 R13 --9145
SGI 5322.4 SGZ 399.5 THA 178.09
    ROE .2877 RRA .0190 RC3 -.0744 FAU .03024
FOE -.7357 FRA .5810 FC3-1.7962 8SP 16685
                                                                                                                               LSA 2946.7 MSA 150.6 SSA 22.8
EL1 2856.4 EL2 47.2 ALF 171.35
    BOE 1.8963 BRA .3908 BC3 5.8417 FSP
                                                        -570
                                                                                                                                            ARRIVAL DATE JAN 9 1968
                                                                             FLIGHT TIME 176.00
                                                                             DISTANCE 515.626
   TELIUCERIRIC CURIC

RL 152.05 LAL -.00 LOL 293.76 VL 25.817 GAL 1.12 AZL 93.26 MCA 254.79 SMA 122.97 ECC .23717 INC 3.2586 VI 29.302

RP 107.81 LAP 3.14 LOP 188.52 VP 37.187 GAP 11.78 AZP 89.14 TAL 176.39 TAP 71.18 RCA 93.81 APO 152.14 V2 35.151

RC 167.829 GL -22.27 GP 10.25 ZAL 81.03 ZAP 166.10 ETS 45.15 ZAE 129.13 ETE 171.76 ZAC 65.85 ETC 9.28 CLP-170.57
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                         4.99 RAP 201.85 ECC 1.2466
                                                                                                          2.05 VHP 7.614 DPA
    C3 14.987 WHL 3.871 OLA -33.41 RAL 202.34 RAD 6567.6 VEL 11,678 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   113.14
                                                                                      67.85
                                                                                                                   9 13 45
                      8 52 30 1274.28
13 33 46 5665.12
                                                       24.80
                                                                     354.90
        71.47
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                                                                                                      113.13 15 8 11
                                                                     266.05
                                                       24.81
       108.53
                    13 33 46
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                                                       24.80
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                                    1274.28
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                   13 33 46
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       108.53
                                   5665.12
                                                                                                                                     5205.7
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                   12 47 54
                                                       20.33
                                                                     274.64
       110.00
                                    5805.74
                                                                                                                                     4869.7
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                                   5469.69
                                                                                       69.82
                                                                     252.85
                    14 37 33
                                                       29.46
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RRT --4057 RRF --4037 RTF -9164
SGB 5384.8 R23 .0326 R13 -9165
SGI 5369.5 SG2 406.5 THA 178.06
                                                                                                                                 ST 2822.7 SR 441.1 SS 715.6
CRT -.9895 CRS .9436 CST -.9801
     TOE-1.8920 TRA .6202 TC3-5.7396 BAU 1.1501
    RDE .2960 RRA .0152 RC3 -.0667 FAU .02843
FDE -.6960 FRA .6367 FC3-1.6423 BSP 16862
                                                                                                                                 LSA 2941.2 MSA 151.8 SSA 23.0
EL1 2856.2 EL2 62.9 ALF 171.81
     BOE 1.9153 BRA .6203 BC3. 5.7400 FSP -556
                                                                                                                                            ARRIVAL DATE JAN 11 1968
                                                                              FLIGHT TIME 178.00
LAUNCH DATE JUL 17 1967
                                                                             DISTANCE 521.228
    RL 152.05 LAL -.00 LOL 293.76 VL 25.766 GAL 1.66 AZL 93.14 MCA 258.02 SMA 122.67 ECC .24109 INC 3.1359 VI 29.302 RP 107.84 LAP 3.07 LOP 191.76 VP 37.140 GAP 12.13 AZP 89.35 TAL 174.76 TAP 72.78 RCA 93.10 APO 152.25 V2 35.139 RC 169.783 GL -20.93 GP 9.84 ZAL 77.64 ZAP 166.96 ETS 46.61 ZAE 129.16 ETE 172.07 ZAC 63.63 ETC 9.15 CLP-171.41
    PLANETOCENTRIC CONIC
     C3 15.553 VHL 3.944 DLA -33.46 RAL 206.61 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 7.799 DPA 3.66 RAP 203.84 ECC 1.2560 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     72.72
                                                                                                   113.42
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                                                                     355.61
                       9 8 55 1284.58
13 51 27 5671.49
         71.37
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                     13 51 27
        108.63
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                     13 6 47 5808.37
14 52 45 5483.74
                                                                     274.80
                                                       20.25
        110.00
                                                                                                                                     4883.7
                                                                                                                                                      31.42
                                                                                       74.68
                                                                      253.85
                                                       29.15
        110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2803.0 SR 449.6 SS 691.1
CRT -.9838 CRS .9311 CST -.9803
                                                                          SCT 5410.9 SCR 452.5 SC3 167.1
RRT -.4096 RRF -.4037 RTF .9187
SCB 5429.8 R23 .0276 R13 -.9188
    TOE-1.9022 TRA .8605 TC3-5.5834 BAU 1.1610
RDE .3095 RRA .0103 RC3 -.0612 FAU .02668
FDE -.6604 FRA .6907 FC3-1.4852 BSP 17041
BDE 1.9272 BRA .8606 BC3 5.5837 FSP -543
                                                                                                                                 LSA 2917.5 MSA 155.5 SSA 22.7
EL1 2837.7 EL2 79.7 ALF 171.02
                                                                          SG1 5414.1 SG2 412.6 THA 178.03
                                                                                                                                             ARRIVAL DATE JAN 13 1968
                                                                               FLIGHT TIME 180.00
 LAUNCH DATE JUL 17 1967
                                                                              DISTANCE 526.795
     RL 152.05 LAL -.00 LOL 293.76 VL 25.715 GAL 2.22 A7L 93.02 MCA 261.24 SMA 122.38 ECC .24534 INC 3.0161 V1 29.302 RP 107.88 LAP 2.98 LOP 194.98 VP 37.094 GAP 12.50 A7P 89.54 TAL 173.13 TAP 74.37 RCA 92.35 APO 152.40 V2 35.128 RC 171.722 GL -19.57 GP 9.48 ZAL 74.26 ZAP 167.78 ETS 48.36 ZAE 129.19 ETE 172.34 ZAC 61.38 ETC 9.06 CLP-172.25
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 16.289 VHL 4.036 DLA -33.42 RAL 210.84 RAD 6567.7 VEL 11.733 PTH 2.07 VHP 7.994 DPA
                                                                                                                                         2.38 RAP 205.85 ECC 1.2681
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.47 9 26 24 1293.25 24.29 356.13 77.65 113.68 9 47 57 693.3 27.28 348.30
                                                                                                                  15 42 29
                                                                                                                                                       27.29
                                                                      267.26
                                                                                       77.66
                                                                                                       113.67
                     14 7 45 5683.81
                                                        24.31
        108.53
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15 42 29
                                                                                                                                                       27.28
                                                                                                                                                                      348.30
                                                                                                                                       693.3
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                                                                                       77.65
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                       9 26 24
                                     1293.25
                                                        24.29
          71.47
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                                      5683.81
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108.87 16 42 54
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                                                        19.73
                                                                      275.75
                                                                                       75.24
                     13 21 54 5824.38
15 11 26 5488.71
        110.00
                                                                                                                                      4888.7
                                                                                                                                                       31.34
                                                                                        79.72
                                                                      254.18
                                                        29.04
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5444.9 SGR 458.8 SG3 162.2 ST 2758.2 SR 456.8 SS 662.5 RRT -.4136 RRF -.4041 RTF .9206 CRT -.9763 CR3 .9156 CST -.9801 SGB 5448.3 SG2 417.5 THA 177.99 ELI 2794.1 EL2 97.6 ALF 170.80
      TDE-1.8988 TRA 1.1166 TC3-5.3679 BAU 1.1690
      RDE .3218 RRA .0037 RC3 -.0531 FAU .02490
FDE -.6198 FRA .7454 FC3-1.3235 BSP 17135
BDE 1.9259 BRA 1.1166 BC3 5.3682 FSP -528
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ARRIVAL DATE JAN 15 1968

LAUNCH DATE JUL 17 1967

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DISTANCE 532.322
 -MELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 25.664 GAL 2.81 AZL 92.90 HCA 264.46 SMA 122.08 ECC .24996 INC 2.8984 VI 29.302
RP 107.92 LAP 2.88 LOP 198.21 VP 37.047 GAP 12.88 AZP 89.72 TAL 171.51 TAP 75.97 RCA 91.57 APO 152.60 V2 35.116
RC 173.647 GL -18.21 GP 9.14 ZAL 70.94 ZAP 168.55 ETS 50.43 ZAE 129.20 ETE 172.59 ZAC 59.13 ETC 9.00 CLP-173.07
  PLANETOCENTRIC CONIC
   C3 17.212 VML 4.149 DLA -33.27 RAL 215.00 RAD 6567.7 VEL 11.773 PTH 2.08 VMP 8.202 DPA
                                                                                                                                    1.14 RAP 207.89 ECC 1.2833
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.91
                                                                                                             10 6 32
                                                                                                                                  700.1
                                                                                                                                                               344.66
                   9 44 52 1300.11
14 22 28 5702.26
                                                                  356.44
                                                                                  82.63
                                                    23.85
       71.77
                                                                                                             15 57 30
                                                                                                  113.90
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      108.23
                     9 44 52 1300.11
14 22 26 5702.26
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      108.23
                   14 22 28
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                                                                   268.47
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108.76 17 4 32
                                                                                                                                 5252.8
                                                                                                                                                 22.53
                                                                                                                                                               270.26
                   13 33 24 5852.84
                                                    18.80
                                                                   277.43
                                                                                   79.93
      110.00
                                                                                                                                                 31.39
                                  5485.56
                                                                                                                                4885.6
                   15 33 6
                                                     29.11
                                                                   253.96
                                                                                   84.93
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SCT 5480.7 SGR 464.3 SG3 157.5
RRT -4197 RRF -4073 RTF .9230
SGB 5500.3 R23 .0194 R13 -.9231
                                                                                                                            ST 2700.1 SR 462.9 SS 634.1
CRT -.9672 CRS .8983 CST -.9797
   TOE-1.8890 TRA 1.3815 TC3-5.1167 BAU 1.1775
   RDE .3352 RRA -.0040 RC3 -.0439 FAU .02326
FDE -.5808 FRA .7979 FC3-1.1700 BSP 17292
                                                                                                                            LSA 2806.6 MSA 171.5 SSA 21.4
                                                                                                                            EL1 2737.1_EL2 116.1 ALF 170.57
                                                                       8G1 5484.2 SG2 421.2 THA 177.95
   BOE 1.9185 BRA 1.3816 BC3 5.1169 FSP -515
                                                                                                                                        ARRIVAL DATE JAN 17 1968
                                                                           FLIGHT TIME 184.00
                                                                          DISTANCE 537.804
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 25.615 GAL 3.42 AZL 92.78 MCA 267.68 SMA 121.80 ECC .25497 INC 2.7821 V1 29.302
RP 107.96 LAP 2.78 LOP 201.43 VP 37.001 GAP 13.28 AZP 89.89 TAL 169.89 TAP 77.57 RCA 90.74 APO 152.85 V2 35.103
RC 175.555 GL -16.84 GP 8.84 ZAL 67.68 ZAP 169.27 ETS 52.88 ZAE 129.22 ETE 172.81 ZAC 56.86 ETC 9.00 CLP-173.89
  PLANETOCENTRIC, CONIC
                                                                                                                                      -.07 RAP 209.96 ECC 1.3019
   C3 18.343 WHL
                        4.283 OLA -33.02 RAL 219.05 RAD 6567.7 VEL 11.821 PTH 2.09 VHP 8.424 OPA
   LNON AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.26 10 4 8 1305.26 23.27 356.56 87.60 114.11 10 25 54 705.3 26.32 348.83 107.74 14 35 29 5726.69 23.28 270.07 87.61 114.10 16 10 56 5126.7 26.34 262.34
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                   10 4 8 1305.28
14 35 29 5726.69
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                                                                   270.07
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      107.74
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                    13 42 2
                                    603.05
                                                     17.51
                                                                   301.75
                                                                                   84.48
      110.00
                                5476.92
                                                                                                                                 4876.9
                   15-56 46
                                                     29.30
                                                                   253.35
                                                                                   90.22
                                                                                                                                                  31.54
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      RRT -.4264 RRF -.4117 RTF .9254

SGB 5531.8 R23 .0163 R13 -.9255

SGI 5515.6 SG2 423.7 THA 177.91
                                                                                                                            ST 2627.1 SR 467.4 SS 605.4
CRT -.9560 CRS .8782 CST -.9792
   TOE-1.8696 TRA 1.6592 TC3-4.8301 BAU 1.1845
    ROE .3494 RRA -.0132 RC3 -.0347 FAU .02166
                                                                                                                            LSA 2730.0 MSA 182.8 9SA 20.5
EL1 2664.9 EL2 135.2 ALF 170.32
   FOE -.5421 FRA .8497 FC3-1.0222 89P 17444
    BOE 1.9019 BRA 1.6593 BC3 4.8302 FSP -503
                                                                                                                                        ARRIVAL DATE JAN 19 1968
                                                                           FLIGHT TIME 186.00
LAUNCH DATE JUL 17 1967
                                                                          DISTANCE 543.237
   HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 25.565 GAL 4.06 A7L 92.67 MCA 270.89 SMA 121.52 ECC .26040 INC 2.6664 VI 29.302 RP 107.99 LAP 2.67 LOP 204.65 VP 36.955 GAP 13.70 A7P 90.04 TAL 168.28 TAP 79.17 RCA 89.87 APO 153.16 VZ 35.091 RC 177.448 GL -15.50 GP 8.57 ZAL 64.52 ZAP 169.94 ETS 55.74 ZAE 129.23 ETE 173.01 ZAC 54.58 ETC 9.03 CLP-174.71
   PLANETOCENTRIC CONIC
    C3 19.707 VHL 4.439 DLA -32.68 RAL 222.96 RAD 6567.8 VEL 11.878 PTH 2.11 VHP 8.660 DPA -1.24 RAP 212.04 ECC 1.3243
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 114.28 10 45 59
114.27 16 22 35
                   10 24 10 1308.46
14 46 38 5757.33
10 24 10 1308.46
14 46 38 5757.33
                                                                                                                                  708.5
                                                                                                                                              25.66 348.80
                                                     22.58
                                                                  356.47
                                                                                92.54
        72.95
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108.03 17 52 28
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       110.00
                    13 48 37
                                     648.27
                                                     15.96
                                                                   304.34
                                                                                   88.90
                   16 21 22 5465.52
                                                                                                                                 4665.5
                                                                                                                                                  31.72
                                                                   252.56
                                                                                   95.54
                                                     29.54
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5536.4 SGR 472.0 SG3 148.4

RRT -.4337 RRF -.4169 RTF ..9278

SGB 5556.5 R23 .0135 R13 -.9278

SGI 5540.2 SG2 425.0 THA 177.87
                                                                                                                            ST 2541.1 SR 470.2 SS 576.9

CRT -.9423 CRS .8546 CST -.9785

LSA 2640.5 MSA 196.2 SSA 19.6

EL1 2579.6 EL2 155.1 ALF 170.07
    TDE-1.8395 TRA 1.9517 TC3-4.5135 BAU 1.1892
    ROE .3642 RRA -.0239 RC3 -.0260 FAU .02008
    FOE -.5031 FRA .9020 FC3 -.8822 BSP 17567
    BOE 1.8752 BRA 1.9518 BC3 4.5135 FSP -490
                                                                                                                                        ARRIVAL DATE JAN 21 1968
LAUNCH DATE JUL 17 1967
                                                                           FLIGHT TIME 188.00
                                                                           DISTANCE 548.614
  HELIOCENTRIC CONIC
   RL 152.05 LAL -.00 LOL 293.76 VL 25.517 GAL 4.74 AZL 92.55 MCA 274.11 SMA 121.24 ECC .26631 INC 2.5506 VI 29.302

RP 108.03 LAP 2.54 LOP 207.87 VP 36.909 GAP 14.15 AZP 90.18 TAL 166.67 TAP 80.78 RCA 88.95 APO 153.53 V2 35.078

RC 179.325 GL -14.18 GP 8.32 ZAL 61.47 ZAP 170.56 ETS 59.06 ZAE 129.23 ETE 173.18 ZAC 52.30 ETC 9.11 CLP-175.52
   PLANETOCENTRIC CONIC
    C3 21.333 VHL 4.619 DLA -32.27 RAL 226.70 RAD 6567.9 VEL 11.946 PTH 2.13 VHP 8.912 DPA -2.37 RAP 214.15 ECC 1.3511 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                97.42
                                                                                                 114.42 11 6 43
114.41 16 32 22
                                                                                                                                   709.5
       73.84 10 44 53 1309.46
106.16 14 55 47 5794.24
                                                     21.78
                                                                   356.16
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                                                                                    97.43
       106.16
                                                      21.80
                                                                   274.53
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114.41 16 32 22
121.42 14 5 23
107.59 18 17 0
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                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2444.5 SR 470.9 SS 549.0
CRT -.9253 CRS .8263 CST -.9776
                                                                      SGT 5553.7 SGR 473.9 SG3 144.0
RRT -.4409 RRF -.4224 RTF .9299
SGB 5573.9 R23 .0110 R13 -.9300
    TOE-1.7973 TRA 2.2620 TC3-4.1730 BAU 1.1902
    ROE .3794 RRA -.0363 RC3 -.0183 FAU .01848
FDE -.4637 FRA .9558 FC3 -.7500 BSP 17592
BOE 1.8369 BRA 2.2623 BC3 4.1730 FSP -475
                                                                                                                            LSA 2540.4 MSA 211.7 SSA 18.6
                                                                                                                             EL1 2483.2 EL2 175.8 ALF 169.84
                                                                      SG1 5557.7 SG2 425.0 THA 177.83
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FLIGHT TIME 182.00

ARRIVAL DATE JAN 23 1968

LAUNCH DATE JUL 17 1967

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CISTANCE 553.927
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.469 GAL 5.45 AZL 92.43 MCA 277.32 SMA 120.97 ECC .27274 INC 2.4339 VI 29.302 RP 108.07 LAP 2.41 LOP 211.08 VP 36.864 GAP 14.62 AZP 90.31 TAL 165.07 TAP 82.39 RCA 87.98 APO 153.97 V2 35.065 RC 181.185 GL -12.90 GP 8.09 ZAL 58.54 ZAP 171.12 ETS 62.91 ZAE 129.22 ETE 173.35 ZAC 50.02 ETC 9.24 CLP-176.33
     PLANETOCENTRIC CONIC
      C3 23.237 VHL 4.823 DLA -31.79 RAL 230.27 RAD 6567.9 VEL 12.026 PTH 2.15 VHP 9.183 DPA -3.47 RAP 216.27 ECC 1.3827 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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177.41 102.24 114.51 16 40 4

155.59 102.23 114.52 11 28 8

17.41 102.24 114.51 16 40 4

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10.90 106.08 107.16 18 41 7

MID-COURSE EXECUTION ACCURACY C
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                                                     5442.04
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    DIFFERENTIAL CORRECTIONS
                                                                                                         SGT 5570.4 SGR 474.8 SG3 139.8

RRT -.4494 RRF -.4297 RTF .9326

SGB 5590.6 R23 .0092 R13 -.9326

SGI 5574.5 SG2 423.9 THA 177.79
                                                                                                                                                                                       ST 2348.9 SR 470.1 S5 524.7
CRT -.9056 CRS .7961 CST -.9771
LSA 2441.6 MSA 227.5 SSA 17.7
      TDE-1.7517 TRA 2.5834 TC3-3.8318 BAU 1.1914
      RDE .3953 RRA -.0498 RC3 -.0112 FAU .01702
FDE -.4278 FRA 1.0080 FC3 -.6334 BSP 17712
BDE 1.7957 BRA 2.5839 BC3 3.8318 FSP -463
                                                                                                                                                                                        EL1 2387.4 EL2 195.1 ALF 169.66
                                                                                                                FLIGHT TIME 192.00
                                                                                                                                                                                                           ARRIVAL DATE JAN 25 1968
                                                                                                                DISTANCE 559.168
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.422 GAL 6.20 AZL 92.32 MCA 280.53 SMA 120.71 ECC .27975 INC 2.3157 V1 29.302 RP 108.11 LAP 2.28 LOP 214.29 VP 36.819 GAP 15.13 AZP 90.42 TAL 163.50 TAP 84.02 RCA 86.94 APO 154.48 VZ 35.052 RC 183.028 GL -11.66 GP 7.88 ZAL 55.75 ZAP 171.62 ET5 67.31 ZAE 129.20 ETE 173.49 ZAC 47.74 ETC 9.42 CLP-177.14
     RC 183.028 GL -11.66 GP
    PLANETOCENTRIC CONIC
      C3 25.519 VHL 5.052 DLA -31.26 RAL 233.64 RAD 6568.0 VEL 12.120 PTH
                                                                                                                                                         2,17 VHP 9.474 OPA -4.53 RAP 218.42 ECC 1.4200
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.18 11 28 36 1302.91 19.92 354.75 106.95 114.59 11 50 19 702.9 23.07 347.26
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114.58 15 17 24
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106.79 19 4 29
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                                                                                                                          111.24
          110.00
                                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                         SGT 5581.5 SGR 474.5 SG3 135.7
RRT -.4581 RRF -.4376 RTF .9354
SGB 5601.6 R23 .0075 R13 -.9354
SGI 5585.7 SG2 421.5 THA 177.76
                                                                                                                                                                                        ST 2252.6 SR 467.4 SS 502.9
CRT -.8823 CRS .7625 CST -.9768
LSA 2342.2 MSA 243.8 SSA 16.9
      TDE-1.6983 TRA 2.9219 TC3-3.4873 BAU 1.1897
      RDE .4115 RRA -.0647 RC3 -.0052 FAU .01559
      FDE -.3931 FRA 1.0612 FC3 -.5289 BSP 17802
BDE 1.7475 BRA 2.9227 BC3 3.4873 FSP -452
                                                                                                                                                                                        EL1 2290.4 EL2 216.4 ALF 169.53
                                                                                                                                                                                                          ARRIVAL DATE JAN 27 1968
                                                                                                               FLIGHT TIME 194.00
LAUNCH DATE JUL 17 1967
                                                                                                              DISTANCE 564.326
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.376 GAL 6.99 AZL 92.20 HCA 283.74 SMA 120.45 ECC .28739 INC 2.1950 V1 29.302 RP 108.16 LAP 2.13 LOP 217.50 VP 36.774 GAP 15.67 AZP 90.52 TAL 161.93 TAP 85.67 RCA 85.83 APO 155.07 V2 35.039 RC 184.853 GL -10.47 GP 7.69 ZAL 53.10 ZAP 172.05 ETS 72.31 ZAE 129.17 ETE 173.63 ZAC 45.46 ETC 9.66 CLP-177.96
    PLANETOCENTRIC CONIC
      C3 28.171 VHL 5.308 DLA -30.68 RAL 236.81 RAD 6568.1 VEL 12.229 PTH 2.20 VHP 9.788 DPA -5.55 RAP 220.57 ECC 1.4636
     C3 28,171 VML 5.308 OLA -30.68 RAL 236.81 RAD 6568.1 VEL 12.229 PTM 2.20 VMP 9.788 DPA -5.55 RAP 220.57 ECC 1.4636 LNCH AZMTM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.68 11 51 55 1293.73 18.89 353.56 111.57 114.63 12 13 29 693.7 22.05 346.13 102.32 15 9 22 658.44 18.90 306.73 111.57 114.62 15 20 20 58.4 22.06 299.30 77.68 11 51 55 1293.73 18.89 353.56 111.57 114.63 12 13 29 693.7 22.05 346.13 102.32 15 9 22 658.44 18.90 306.73 111.57 114.63 12 13 29 693.7 22.05 346.13 102.32 15 9 22 658.44 18.90 306.73 111.57 114.62 15 20 20 58.4 22.06 299.30 110.00 14 4 0 863.73 8.16 316.15 105.47 123.51 14 18 23 265.7 12.49 309.73 110.00 17 56 27 5424.47 30.37 249.68 INC. COMPACT 
                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                       ST 2159.9 SR 462.9 SS 484.2

CRT -.8551 CRS .7259 CST -.9768

LSA 2246.3 MSA 260.1 SSA 16.1

EL1 2196.3 EL2 236.0 ALF 169.49
                                                                                                       SGT 5587.8 SGR 472.9 SG3 131.8
RRT -.4670 RRF -.4460 RTF .9383
SG8 5607.8 R23 .0060 R13 -.9383
SG1 5592.2 SG2 417.9 THA 177.72
      TDE-1.6392 TRA 3.2785 TC3-3.1470 BAU 1.1852
     RDE .4279 RRA -.0810 RC3 -.0004 FAU .01420
FOE -.3601 FRA 1.1156 FC3 -.4363 BSP 17875
      BOE 1.6941 BRA 3.2795 BC3 3.1470 FSP -440
                                                                                                                                                                                                          ARRIVAL DATE JAN 29 1968
LAUNCH DATE JUL 17 1967
                                                                                                                FLIGHT TIME 196.00
                                                                                                               DISTANCE 569.389
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.330 GAL 7.83 AZL 92.07 HCA 286.94 SMA 120.20 ECC .29575 INC 2.0711 V1 29.302 RP 108.20 LAP 1.98 LOP 220.70 VP 36.730 GAP 16.25 AZP 90.60 TAL 160.39 TAP 87.33 RCA 84.65 APO 155.75 V2 35.025 RC 186.660 GL -9.33 GP 7.51 ZAL 50.59 ZAP 172.39 ETS 77.91 ZAE 129.12 ETE 173.75 ZAC 43.20 ETC 9.97 CLP-178.78
    PLANETOCENTRIC CONIC
      C3 31.273 VHL 5.592 DLA -30.07 RAL 239.77 RAD 6568.2 VEL 12.355 PTH 2.23 VHP 10.128 DPA -6.54 RAP 222.74 ECC 1.5147
     T9.44 12 16 49 1278.41
                                                                           INJ LAT INJ LONG INJ RT ASC INJ ÄZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 17.80 351.89 116.07 114.64 12 38 7 678.4 20.97 344.52 17.81 311.26 116.08 114.63 15 20 15 126.1 20.99 303.89
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                                                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                       SGT 5588.6 SGR 469.9 SG3 128.1
RRT -.4758 RRF -.4543 RTF .9412
SGB 5608.3 R23 .0046 R13 -.9413
                                                                                                                                                                                       ST 2070.7 SR 456.5 SS 468.2
CRT -.8233 CRS .6852 CST -.9770
LSA 2153.9 MSA 276.1 SSA 15.3
      TDE-1.5710 TRA 3.6583 TC3-2.8109 BAU 1.1752
      ROE .4442 RRA -.0988 RC3 .0029 FAU .01277
FOE -.3275 FRA 1.1730 FC3 -.3535 BSP 17848
BOE 1.6326 BRA 3.6597 BC3 2.8109 FSP -426
                                                                                                       SG1 5593.1 SG2 413.0 THA 177.70
                                                                                                                                                                                       EL1 2105.1 EL2 254.9 ALF 169.56
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FLIGHT TIME 190.00

ARRIVAL DATE JAN 31 1968

EL1 1830.3 EL2 306.8 ALF 171.02

LAUNCH DATE JUL 17 1967

DISTANCE 574.339 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 25.285 GAL 8.73 AZL 91.94 HCA 290.14 SMA 119.95 ECC .30490 INC 1.9429 VI 29.302 RP 108.24 LAP 1.82 LOP 223.91 VP 36.687 GAP 16.87 AZP 90.67 TAL 158.88 TAP 89.02 RCA 83.38 APO 156.52 V2 35.012 RC 188.449 GL -8.25 GP 7.35 ZAL 48.23 ZAP 172.64 ETS 84.06 ZAE 129.06 ETE 173.87 ZAC 40.94 ETC 10.35 CLP-179.61 PLANETOCENTRIC CONIC C3 34.898 VHL 5:907 OLA -29.44 RAL 242.54 RAD 6568.4 VEL 12.501 PTH 2.26 VHP 10.497 DPA -7.48 RAP 224.91 ECC 1.5743 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 19.86 114.62 13 5 22 114.61 15 16 0 652.9 12 44 29 1252.88 120.47 16.67 349.45 16.69 316.71 120.47 206.9 19.87 15 2 33 806.91 117.29 14 46 10 112.02 16 9 9 124.00 14 24 34 106.17 20 8 15 307.9 315.20 16.26 100.00 14 31 2 907.86 12.70 322.19 118.47 297.56 100.00 15 58 42 627.15 20.74 305.23 122.32 27.1 23.55 316.00 14 8 14 3.78 322.28 113.14 379.7 8.22 110.00 979.68 18 37 59 5416.14 240.35 249.05 126.07 4815.1 32.44 110.00 30.53 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1992.3 SR 448.7 SS 456.2 CRT -. 7887 CRS .6453 CST -. 9781 SCT 5586.6 SCR 465.8 SC3 124.5 RRT -.4850 RRF -.4638 RTF .9445 SC8 5605.9 R23 .0037 R13 -.9446 SCI 5591.2 SG2 407.0 TMA 177.67 TOE-1.5034 TRA 4.0547 TC3-2.4955 BAU 1.1643 RDE .4608 RRA -.1176 RC3 .0054 FAU .01145 FDE -.2987 FRA 1.2306 FC3 -.2842 BSP 17906 BDE 1.5725 BRA 4.0564 BC3 2.4955 FSP -415 LSA 2072.3 MSA 290.1 SSA 14.6 EL1 2024.0 EL2 271.5 ALF 169.74 FLIGHT TIME 200.00 ARRIVAL DATE FEB 2 1968 **DISTANCE 579.160** HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 25.241 GAL 9.68 AZL 91.81 MCA 293.34 SMA 119.71 ECC .31494 INC 1.8096 VI 29.302 RP 108.28 LAP 1.66 LOP 227.11 VP 36.643 GAP 17.55 AZP 90.72 TAL 157.40 TAP 90.74 RCA 82.01 APO 157.41 VZ 34.999 RC 190.221 GL -7.22 GP 7.21 ZAL 46.02 ZAP 172.78 ETS 90.65 ZAE 128.98 ETE 173.97 ZAC 38.70 ETC 10.80 CLP 179.54 PLANETOCENTRIC CONIC C3 39.136 WHL 6.256 OLA -28.79 RAL 245.11 RAD 6568.5 VEL 12.669 PTH 2.30 VHP 10.898 DPA -8.39 RAP 227.09 ECC 1.6441 LNCM ATMITH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 84.56 13 18 25 1205.65 15.52 345.42 124.74 114.56 13 38 30 605.7 18.70 338.16 95.44 14 49 7 912.04 15.53 323.92 124.75 114.55 15 4 19 312.0 18.72 316.65 114.56 13 38 30 114.55 15 4 19 118.54 14 34 0 110.79 18 10 54 124.15 14 27 7 106.15 20 27 9 14 17 5 1015.23 16 33 8 5865.74 328.32 121.55 415.2 13.02 321.53 100.00 9.28 16 33 B 5265.7 24.60 272.17 100.00 21.97 279.98 127.59 14 9 49 1038.09 18 56 54 5415.65 1.56 438.1 6.03 319.10 110.00 325.33 116.83 4815.6 32.45 240.32 110.00 30.54 249.01 130.78 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT -.4944 RRF -.4734 RTF ..9480 SGB 5597.1 R23 ..0026 R13 -.9480 SGI 5582.8 SGZ 399.8 THA 177.65 ST 1922.4 SR 439.4 SS 447.4 CRT -.7509 CRS .6048 CST -.9796 TDE-1.4328 TRA 4.4731 TC3-2.1947 BAU 1.1483 RDE .4774 RRA -.1375 RC3 .8069 FAU .01016 FDE -.2717 FRA 1.2908 FC3 -.2248 BSP 17978 LSA 1999.3 MSA 302.0 SSA 14.0 BDE 1.5102 BRA 4.4752 BC3 2.1947 FSP -405 EL1 1951.1 EL2 285.9 ALF 170.05 ARRIVAL DATE FEB 4 1968 FLIGHT TIME 202.00 LAUNCH DATE JUL 17 1967 DISTANCE 583.827 HELIOCENTRIC CONTC RL 152.05 LAL -.00 LOL 293.76 VL 25.598 GAL 10.71 AZL 91.67 MCA 296.54 SMA 119.48 ECC .32598 INC 1.6697 V1 29.302
RP 108.32 LAP 1.49 LOP 230.30 VP 36.601 GAP 18.28 AZP 90.75 TAL 155.96 TAP 92.50 RCA 80.53 APO 158.42 V2 34.986
RC 191.975 GL -6.24 GP 7.07 ZAL 43.97 ZAP 172.81 ETS 97.55 ZAE 128.87 ETE 174.08 ZAC 36.49 ETC 11.35 CLP 178.68 PLANETOCENTRIC CONIC C3 44.096 VHL 6.640 DLA -28.14 RAE 247.49 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 11.336 DPA -9.26 RAP 229.27 ECC 1.7257 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.92 14 51 14 113.06 14 57 33 119.27 14 27 15 110.06 18 37 36 124.18 14 29 21 106.23 20 44 52 15.22 127.68 578.7 334.62 13 45 35 1178.71 11.83 341.66 90.00 14 40 54 999.18 16.91 330.93 130.07 399.2 19.89 323.52 90.00 6:37 333.25 503.4 10.23 326.59 100.00 14 8 52 1103.40 124.79 100.00 17 0 19 5837.76 22.64 278.17 132.47 5237.8 25.16 270.28 17 U ... 14 11 5 1096.43 -.67 328.37 120.44 496.4 3.81 322.16 110.00 19 14 35 30.51 249.15 4817.5 32.43 240.46 135.35 110.00 5417.50 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5567.6 SGR 453.6 SG3 117.7 RRT -.5035 RRF -.4832 RTF .9517 SGB 5586.0 R23 .0019 R13 -.9517 SGI 5572.3 SG2 391.5 THA 177.64 ST 1861.5 SR 428.6 SS 441.6 CRT -.7102 CRS .5646 CST -.9816 TDE-1.3584 TRA 4.9195 TC3-1.9126 BAU 1.1275 RDE .4938 RRA -.1585 RC3 .0075 FAU .00888 FDE -.2465 FRA 1.3541 FC3 -.1744 BSP 17992 LSA 1935.6 MSA 311.7 SSA 13.3 BOE 1.4454 BRA 4.9220 BC3 1.9126 FSP -394 EL1 1886.8 EL2 297.7 ALF 170.47 ARRIVAL DATE FEB 6 1968 LAUNCH DATE JUL 17 1967 FLIGHT TIME 204.00 DISTANCE 588.313 HELIOCENTRIC CONIC RL 152.05 LAL -.00 LOL 293.76 VL 25.155 GAL 11.81 AZL 91.52 HCA 299.73 SMA 119.25 ECC .33816 INC 1.5219 V1 29.302 RP 108.36 LAP 1.32 LOP 233.49 VP 36.560 GAP 19.08 AZP 90.75 TAL 154.57 TAP 94.30 RCA 78.92 APO 159.57 VZ 34.973 RC 193.712 GL -5.31 GP 6.95 ZAL 42.06 ZAP 172.71 ETS 104.55 ZAE 128.74 ETE 174.18 ZAC 34.30 ETC 12.00 CLP 177.80 PLANETOCENTRIC CONIC C3 49.914 VHL 7.065 DLA -27.49 RAL 249.67 RAD 6568.8 VEL 13.087 PTH 2.39 VHP 11.817 DPA -10.08 RAP 231.45 ECC 1.8215 C3 49.914 VML 7.065 DLA -27.49 RAL 249.67 RAD 6568.8 VEL 13.087 PM 2.39 VMP 11.817 DPA -10.08 RAP 231.49 ECC 1.3215 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 21 59 1315.44 7.65 349.53 130.21 117.35 13 43 55 715.4 11.25 342.71 90.00 15 21 57 924.57 18.84 326.30 135.42 111.54 15 37 21 324.6 21.60 318.72 100.00 14 3 0 1182.87 3.71 337.65 128.06 119.68 14 22 43 582.9 7.63 331.06 100.00 17 23 37 5820.40 23.04 277.04 137.11 109.59 19 0 37 5220.4 25.50 269.10 110.00 14 12 3 1154.49 -2.89 331.40 123.95 124.08 14 31 17 554.5 1.60 325.20 110.00 19 31 4 5421.55 30.45 249.44 139.79 106.38 21 1 25 4821.6 32.37 240.76 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5552.5 SGR 445.4 SG3 114.5 RRT -.5123 RRF -.4927 RTF .9554 ST 1808.5 SR 416.5 SS 438.6 CRT -.6665 CRS .5236 CST -.9837 LSA 1880.1 MSA 318.8 SSA 12.7 TOE-1.2782 TRA 5.3974 TC3-1.6458 BAU 1.0983 ROE .5099 RRA -.1806 RC3 .0072 FAU .00754 FOE -.2217 FRA 1.4225 FC3 -.1308 BSP 17912 BOE 1.3761 BRA 5.4004 BC3 1.6458 FSP -381 SGB 5570.3 R23 .0011 R13 -.9554 SG1 5557.2 SG2 382.2 THA 177.64

FLIGHT TIME 198.00

ARRIVAL DATE FEB 8 1968

LAUNCH DATE JUL 17 1967

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HELIOCENTRIC CONIC
                                                                                                                          DISTANCE 592.581
      RL 152.05 LAL -.00 LOL 293.76 VL 25.114 GAL 13.00 AZL 91.36 MCA 302.92 SMA 119.02 ECC .35163 INC 1.3645 V1 29.302 RP 108.40 LAP 1.15 LOP 236.68 VP 36.519 GAP 19.97 AZP 90.74 TAL 153.24 TAP 96.16 RCA 77.17 APO 160.88 V2 34.960 RC 195.431 GL -4.44 GP 6.83 ZAL 40.30 ZAP 172.49 ETS 111.43 ZAE 128.58 ETE 174.27 ZAC 32.15 ETC 12.77 CLP 176.88
     PLANETOCENTRIC CONIC
      LNCH APRITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 9 57 1413.53 4.54 355.07 133.14 117.98 13 33 30 813.5 8.25 348.35 90.00 15 49 58 890.08 19.69 324.13 140.12 110.77 16 4 48 290.1 22.34 316.46 100.00 13 58 25 1256.98 1.20 341.72 131.29 119.87 14 19 22 657.0 5.17 335.18
                                                                                                                                                           117.98 13 33 30
110.77 16 4 48
119.87 14 19 22
109.31 19 21 1
123.85 14 32 55
106.61 21 16 49
                              17 44 11 5809.91
14 12 43 1212.06
19 46 22 5427.59
                                                                                                             276.35
                                                                                                                                    141.53
                                                                                                                                                                                                                  5209.9
                                                                                                                                                                                                                                             25.69
                                                                                                                                                                                                                                                                   268.38
                                                                                       23.28
           100.00
                                                                                                                                                                                                                                                                     328.20
                                                                                                                                   127.38
                                                                                                                                                                                                                    612.1
                                                                                                                                                                                                                                               -.60
                                                                                       -5.08
                                                                                                              334.42
           110.00
                                                                                                                                                                                                                                              32.29
                                                                                                                                                                                                                  4827.6
                                                                                                                                                                                                                                                                    241.21
                                                                                       30.31
                                                                                                             249.87
                                                                                                                                      144.08
           110.00
                                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                   SCT 5532.2 SGR 435.9 SG3 111.5
RRT -.5210 RRF -.5026 RTF ..9593
SGB 5549.4 R23 .0006 R13 -.9594
SGI 5536.9 SG2 371.8 THA 177.64
                                                                                                                                                                                                         ST 1765.3 SR 403.3 SS 438.6
CRT -.6234 CRS .4870 CST -.9861
      TOE-1.2015 TRA 5.9012 TC3-1.4028 BAU 1.0645
      RDE .5259 RRA -.2031 RC3 .0064 FAU .00627
FDE -.2003 FRA 1.4934 FC3 -.0957 BSP 17938
BDE 1.3116 BRA 5.9047 BC3 1.4029 FSP -372
                                                                                                                                                                                                         LSA 1835.0 MSA 322.3 SSA 12.2
                                                                                                                                                                                                         EL1 1783.7 EL2 312.1 ALF 171.64
                                                                                                                           FLIGHT TIME 208.00
                                                                                                                                                                                                                              ARRIVAL DATE FEB 10 1968
LAUNCH DATE JUL 17 1967
                                                                                                                           DISTANCE 596.586
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.074 GAL 14.28 AZL 91.20 MCA 306.11 SMA 118.81 ECC .36656 INC 1.1954 V1 29.302
RP 108.44 LAP .97 LOP 239.87 VP 36.479 GAP 20.94 AZP 90.70 TAL 151.98 TAP 98.09 RCA 75.26 APO 162.36 V2 34.947
RC 197.134 GL -3.61 GP 6.73 ZAL 38.69 ZAP 172.14 ETS 118:01 ZAE 128.38 ETE 174.37 ZAC 30.04 ETC 13.67 CLP 175.94
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 64.839 VHL 8.058 DLA -26.21 RAL 253.50 RAD 6569.2 VEL 13.645 PTH 2.49 VHP 12.933 DPA -11.60 RAP 235.76 ECC 2.0671
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 1 31 1498.44 1.82 359.82 136.13 118.26 13 26 29 898.4 5.58 355.16
90.00 16 12 56 869.85 20.17 322.84 144.51 110.31 16 27 26 269.9 22.76 315.12
100.00 13 54 32 1327.20 -1.18 345.57 134.46 119.87 14 16 39 727.2 2.80 339.05
100.00 18 2 35 5804.37 23.40 275.98 145.76 109.15 19 39 20 5204.4 25.80 268.00
110.00 14 13 6 1268.95 -7.23 337.42 130.72 123.50 14 34 15 669.0 -2.78 331.17
110.00 20 0 31 5435.38 30.16 250.42 148.22 106.91 21 31 7 4835.4 32.18 241.79
                                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                  RET - 1508 O SGR 425.1 SG3 108.5

RRT - 15294 RRF - 15122 RTF .9633

SGB 5524.4 R23 .0001 R13 - 19633

SGI 5512.6 SG2 360.4 THA 177.65
                                                                                                                                                                                                          ST 1729.4 SR 389.2 SS 441.3
CRT -.5803 CRS .4527 CST -.9885
      TDE-1.1236 TRA 6.4409 TC3-1.1789 BAU 1.0219
      RDE .5417 RRA - .2860 RC3 .0052 FAU .00496
FDE -.1805 FRA 1.5697 FC3 -.0663 BSP 17940
BDE 1.2473 BRA 6.4449 BC3 1.1789 FSP -362
                                                                                                                                                                                                          LSA 1798.0 MSA 322.7 SSA 11.6
                                                                                                                                                                                                          EL1 1744.6 EL2 314.2 ALF 172.31
                                                                                                                                                                                                                             ARRIVAL DATE FEB 12 1968
LAUNCH DATE JUL 17 1967
                                                                                                                          FLIGHT TIME 210.00
                                                                                                                         DISTANCE 600.273
    HELIOCENTRIC CONIC
     RL 152.05 LAL -.00 LOL 293.76 VL 25.035 GAL 15.69 AZL 91.01 MCA 309.30 SMA 118.60 ECC .38317 INC 1.0121 VI 29.302 RP 108.48 LAP .78 LOP 243.06 VP 36.441 GAP 22.02 AZP 90.64 TAL 150.80 TAP 100.10 RCA 73.16 APO 164.05 V2 34.935 RC 198.819 GL -2.83 GP 6.63 ZAL 37.24 ZAP 171.67 ETS 124.17 ZAE 128.13 ETE 174.47 ZAC 27.98 ETC 14.72 CLP 174.95
     PLANETOCENTRIC CONIC
       C3 74.425 VHL 8.627 DLA -25.58 RAL 255.14 RAD 6569.4 VEL 13.992 PTH 2.55 VHP 13.584 DPA -12.30 RAP 237.88 ECC 2.2249
      C3 74.425 VHL 8.627 DLA -25.58 RAL 255.14 RAD 6569.4 VEL 13.992 PTH 2.55 VMP 13.586 DPA -12.50 RAP 257.88 ECC 2.2249 LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 32 42 857.78 20.45 322.07 148.64 110.02 16 47 0 257.8 23.00 314.32 100.00 13 51 4 1394.28 -3.45 349.26 137.56 119.7j 14 14 18 794.3 .53 342.74 100.00 18 19 10 5802.59 23.44 275.87 149.79 109.10 19 55 52 5202.6 25.83 267.88 110.00 14 13 9 1324.98 -9.32 340.41 133.96 123.04 14 35 14 725.0 -4.91 334.10 110.00 20 13 34 5444.66 29.97 251.08 152.19 107.26 21 44 18 4844.7 32.04 242.48
                                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                          ST 1699.8 SR 374.0 SS 446.7

CRT -.5382 CRS .4211 CST -.9908

LSA 1768.1 MSA 320.1 SSA 11.1

EL1 1712.1 EL2 313.0 ALF 173.01
                                                                                                                   SGT 5479.6 SGR 413.0 SG3 105.7
RRT -.5371 RRF -.5215 RTF .9673
SGB 5495.1 R23 -.0002 R13 -.9673
       TOE-1.0450 TRA 7.0203 TC3 -.9736 BAU .9687
      ROE .5571 RRA -.2492 RC3 .0036 FAU .00360
FDE -.1622 FRA 1.6523 FC3 -.0418 83P 17920
80E 1.1843 BRA 7.0247 BC3 .9736 FSP -353
                                                                                                                   SG1 5484.1 SG2 348.1 THA 177.67
                                                                                                                           FLIGHT TIME 212.00
                                                                                                                                                                                                                              ARRIVAL DATE FEB 14 1968
LAUNCH DATE JUL 17 1967
                                                                                                                           DISTANCE 603.570
    HELTOCENTRIC CONTC
      TEL 152.05 LAL -.00 LOL 293.76 VL 24.997 GAL 17.23 AZL 90.81 MCA 312.48 5MA 118.40 ECC .40170 INC .8115 VI 29.302 RP 108.51 LAP .60 LOP 246.24 VP 36.403 GAP 23.22 AZP 90.55 TAL 149.72 TAP 102.20 RCA 70.84 APO 165.97 V2 34.923 RC 200.487 GL -2.09 GP 6.54 ZAL 35.94 ZAP 171.07 ETS 129.83 ZAE 127.83 ETE 174.57 ZAC 25.98 ETC 15.94 CLP 173.91
     PLANETOCENTRIC CONIC
       C3 85.860 VML 9.266 DLA -24.97 RAL 256.60 RAD 6569.7 VEL 14.395 PTH 2.62 VMP 14.312 DPA -12.95 RAP 239.97 ECC 2.4130
      C3 85.860 VHL 9.266 DLA -24.97 RAL 256.60 RAD 6569.7 VEL 14.395 PTM 2.62 VMP 18.312 DMA -12.95 MMP 2.93.93 FCC 2.4365 LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TÎM ÎNJ 2 LAT ÎNJ 2 LONG 90.00 12 49 11 1647.90 -3.00 8.16 142.00 118.17 13 16 38 1047.9 .79 1.53 90.00 16 50 3 851.13 20.61 321.64 152.54 109.86 17 4 14 251.1 23.13 313.88 100.00 13 47 48 1458.62 -5.61 352.81 140.56 119.41 14 12 7 858.6 -1.65 346.26 100.00 18 34 6 5803.68 23.42 275.94 153.61 109.13 20 10 50 5203.7 25.81 267.96 110.00 14 12 53 1379.94 -11.35 343.38 137.09 122.46 14 35 53 779.9 -6.99 337.00 110.00 20 25 31 5455.12 29.76 251.82 155.97 107.65 21 56 26 4855.1 31.88 243.26
                            H LNCH TIME L-I TIME
12 49 11 1647.90
16 50 3 851.13
13 47 48 1458.62
18 34 6 5803.68
14 12 53 1379.94
20 25 31 5455.12
                                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                 SGT 5447.2 SGR 399.6 SG3 103.0
RRT - .5442 RRF - .5501 RTF .9712
SG8 5461.9 R23 - .0005 R13 - .9713
SG1 5451.6 SG2 334.9 THA 177.71
                                                                                                                                                                                                         ST 1675.4 SR 358.2 SS 454.6
CRT -.4980 CRS .3925 CST -.9928
LSA 1744.3 MSA 314.6 SSA 10.5
        TDE -.9676 TRA 7.6443 TC3 -.7868 BAU .9031
       ROE .5722 RRA -.2722 RC3 .0018 FAU .00215
FOE -.1455 FRA 1.7421 FC3 -.0216 BSP 17692
BOE 1.1241 BRA 7.6492 BC3 .7868 FSP -344
                                                                                                                                                                                                        EL1 1685.2 EL2 308.8 ALF 173.71
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FLIGHT TIME 206.00

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LAUNCH DATE JUL 17 1967
                                                                        FLIGHT TIME 214.00
                                                                                                                                  ARRIVAL DATE FEB 16 1968
   HELIOCENTRIC CONIC
                                                                        DISTANCE 606.385
    RL 152.05 LAL -.00 LOL 293.76 VL 24.962 GAL 18.92 AZL 90.59 MCA 315.66 SMA 118.22 ECC .42245 INC .5895 V1 29.302 RP 108.55 LAP .41 LOP 249.42 VP 36.367 GAP 24.57 AZP 90.42 TAL 148.77 TAP 104.44 RCA 68.28 APO 168.16 V2 34.911 RC 202.138 GL -1.40 GP 6.45 ZAL 34.80 ZAP 170.35 ETS 134.96 ZAE 127.46 ETE 174.67 ZAC 24.07 ETC 17.36 CLP 172.81
   PLANETOCENTRIC CONIC
    C3 99.383 VHL 9.979 DLA -24.38 RAL 257.89 RAD 6569.9 VEL 14.864 PTH 2.68 VMP 15.128 DPA -13.55 RAP 242.01 ECC 2.6389 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 12 44 3 1715.78
90.00 17 5 24 848.29
                                                                            144.80
                                                                                                                         1115.8
                                                   -5.17
                                                                 11.96
                                                                                            117.88 13 12 39
                                                                                                                                         -1.40
                                                   20.67
                                                                 321.46
                                                                               156.19
                                                                                               109.79
                                                                                                         17 19 32
                                                                                                                             248.3
                                                                                                                                            23.19
                  13 44 35 1520.39
18 47 34 5806.95
                                                                                               118.98 14 9 55
       100.00
                                                   -7.66
                                                                 356.25
                                                                               143.45
                                                                                                                             920.4
                                                                                                                                            -3.74
                                                                                                                                                         349.66
       100.00
                                                   23.34
                                                                276.15
                                                                               157.21
                                                                                               109.22 20 24 21
                                                                                                                            5207.0
                                                                                                                                            25.75
                                                                                                                                                         268.18
                   14 12 14 1433,62
20 36 23 5466.48
                                                                                              121.79 14 36 8
108.07 22 7 30
       110.00
                                                 -13.29
                                                                 346.32
                                                                               140.09
                                                                                                                             833.6
                                                                                                                                            -8.99
                                                                                                                                                         339.86
       110.00
                                                   29.52
                                                                252.62
                                                                               159.54
                                                                                                                            4866.5
                                                                                                                                            31.71
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5412.1 SGR 384.7 SG3 100.5
RRT -.5503 RRF -.5378 RTF .9751
    TDE -.8881 TRA 8.3222 TC3 -.6160 BAU .8201
                                                                                                                        ST 1654.7 SR 341.5 SS 465.4
                                                                                                                       CRT -.4592 CRS .3657 CST -.9945
LSA 1725.5 MSA 306.7 SSA 10.0
    RDE .5868 RRA -.2947 RC3 -.0002 FAU .00053
    FDE -.1295 FRA 1.8415 FC3 -.0046 8SP 17770
                                                                    SGB 5425.8 R23 -.0008 R13 -.9751
    BDE 1.0645 BRA 8.3275 BC3 .6160 FSP -333
                                                                    SG1 5416.3 SG2 321.0 THA 177.75
                                                                                                                        EL1 1662.4 EL2 302.0 ALF 174.40
LAUNCH DATE JUL 17 1967
                                                                        FLIGHT TIME 216,00
                                                                                                                                   ARRIVAL DATE FEB 18 1968
  HELIOCENTRIC CONIC
                                                                        DISTANCE 608.598
   RL 152.05 LAL -.00 LOL 293.76 VL 24.928 GAL 20.81 AZL 90.34 HCA 318.84 SMA 118.04 ECC .44576 INC .3407 V1 29.302
RP 108.59 LAP .22 LOP 252.60 VP 36.333 GAP 26.10 AZP 90.26 TAL 147.98 TAP 106.81 RCA 65.42 APO 170.66 V2 34.899
RC 203.771 GL -.74 GP 6.37 ZAL 33.84 ZAP 169.50 ETS 139.59 ZAE 127.02 ETE 174.78 ZAC 22.24 ETC 19.00 CLP 171.64
   PLANETOCENTRIC CONIC
    C3 116.169 VHL 10.778 DLA -23.80 RAL 258.98 RAD 6570.2 VEL 15.411 PTH
                                                                                                  2.75 VHP 16.050 DPA -14.10 RAP 243.99 ECC 2.9118
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   12 39 11
                                 1780.03
                                                   -7.21
                                                                                              117.46 13 8 51
                                                                 15.59
                                                                              147.48
                                                                                                                           1180.0
                                                                                                                                          -3.47
                                                                                                                                                            A . 90
       90.00
                  17 19 0
                                  848.16
                                                   20.68
                                                                                                         17 33 8
                                                                                                                                            23.19
                                                                321.45
                                                                               159.59
                                                                                               109.79
                                                                                                                             248.2
                                                                                                                                                          313.68
                  13 41 16 1579.65
18 59 37 5811.82
14 11 11 1485.83
20 46 11 5478.40
      100.00
                                                                                                          14 7 35
                                                    -9.60
                                                                359.58
                                                                               146.19
                                                                                               118.44
                                                                                                                             979.6
                                                                                                                                            -5.73
                                                                                                                                                         352.94
      100.00
                                                   23.23
                                                                               160.57
                                                                                               109.36 20 36 29
                                                                                                                            5211.8
                                                                276.47
                                                                                                                                            25.66
                                                                                                                                                         268.51
                                                                                              121.02 14 35 56
108.50 22 17 29
      110.00
                                                 -15.15
                                                                349.24
                                                                               142.96
                                                                                                                                                         342.68
                                                                                                                             885.8
                                                                                                                                          -10.92
      110.00
                                                                253.46
                                                                               162.88
                                                                                                                            4878.4
                                                                                                                                            31.51
                                                                                                                                                         244.97
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SCT 5371.3 SCR 368.6 SC3 98.0
RRT -.5552 RRF -.5443 RTF .9788
SCB 5384.0 R23 -.0010 R13 -.9788
                                                                                                                       ST 1636.7 SR 324.4 SS 479.0
CRT -.4246 CRS .3431 CST -.9959
LSA 1710.4 MSA 296.5 SSA 9.4
    TOE -.8154 TRA 9.0532 TC3 -.4636 BAU .7199
   RDE .6014 RRA -.3158 RC3 -.0020 FAU-.00123
   FOE -.1161 FRA 1.9501 FC3 .0092 BSP 17726
BDE 1.0132 BRA 9.0587 BC3 .4636 FSP -325
                                                                    SG1 5375.3 SG2 306.4 THA 177.81
                                                                                                                        EL1 1642.6 EL2 292.6 ALF 175.03
LAUNCH DATE JUL 17 1967
                                                                        FLIGHT TIME 218.00
                                                                                                                                  ARRIVAL DATE FEB 20 1968
  HELIOCENTRIC CONIC
                                                                       DISTANCE 610.053
   RL 152.05 LAL -.00 LOL 293.76 VL 24.896 GAL 22.91 AZL 90.06 MCA 322.02 SMA 117.87 ECC .47202 INC .0585 V1 29.302 RP 108.62 LAP .04 LOP 255.77 VP 36.301 GAP 27.83 AZP 90.05 TAL 147.36 TAP 109.38 RCA 62.23 APO 173.51 V2 34.888
                                       6.29 TAL 33.05 TAP 168.51 ETS 143.75 TAE 126.47 ETE 174.90 TAC 20.52 ETC 20.88 CLP 170.37
                         -.12 GP
   PLANETOCENTRIC CONIC
    C3 136.370 VML 11.678 DLA -23.23 RAL 259.88 RAD 6570.5 VEL 16.053 PTH 2.83 VHP 17.095 DPA -14.61 RAP 245.88 ECC 3.2443
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             116.93 13 5 2
109.83 17 45 9
117.81 14 5 0
109.52 20 47 16
120.17 14 35 14
108.94 22 26 24
                                                                            149.99
                                                                                                                          1240.9
       90.00
                   12 34 21 1840.94
                                                   -9.10
                                                                 19.06
                                                                                                                                           -5.42
                                                                                                                                                          12.32
                   17 30 59
                                  849.92
                                                  20.64
                                                                321.57
                                                                              162.72
                                                                                                                                           23.15
                                                                                                                            249.9
                                                                                                                                                         313.80
      100.00
                   13 37 43
                                 1636.38
                                                 -11.42
                                                                  2.81
                                                                              148.77
                                                                                                                           1036.4
                                                                                                                                           -7.61
                                                                                                                                                         356.09
                  19 10 18
                                5817.75
                                                 23.10
                                                                276.86
                                                                              163.67
                                                                                                                           5217.7
                                                                                                                                          25.55
                                                                                                                                                         268.92
                                                                                                                                         -12.76
      110.00
                  14 9 36
                                 1536.34
                                                  -16.90
                                                                352.10
                                                                              145.65
                                                                                                                            936.3
                                                                                                                                                         345.43
                               5490.55
                   20 54 53
      110.00
                                                  29.00
                                                                254.30
                                                                              165.96
                                                                                                                           4890.6
                                                                                                                                           31.31
                                                                                                                                                         245.86
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 5326.4 SGR 351.2 SG3 95.7
RRT -.5583 RRF -.5491 RTF .9822
SGB 5538.0 R23 -.0012 R13 -.9822
   TDE -.7473 TRA 9.8488 TC3 -.3268 BAU .5958
                                                                                                                       ST 1619.8 SR 306.9 SS 495.8

CRT -.3931 CRS .3233 CST -.9970

LSA 1697.9 MSA 284.4 SSA 8.9
   RDE .6158 RRA -.3349 RC3 -.0038 FAU-.00326
FDE -.1046 FRA 2.0708 FC3 .0207 83P 17673
BDE .9683 BRA 9.8545 BC3 .3268 FSP -318
                                                                    SG1 5330.0 SG2 291.2 THA 177.89
                                                                                                                       EL1 1624.4 EL2 281.3 ALF 175.61
LAUNCH DATE JUL 17 1967
                                                                        FLIGHT TIME 220,00
                                                                                                                                  ARRIVAL DATE FER 22 1968
  HELIOCENTRIC CONIC
                                                                       DISTANCE 610.549
   RL 152.05 LAL -.00 LOL 293.76 VL 24.867 GAL 25.27 AZL 89.73 HCA 325.19 SMA 117.72 ECC .50170 INC .2649 V1 29.302
RP 108.65 LAP -.15 LOP 258.94 VP 36.270 GAP 29.82 AZP 89.78 TAL 146.97 TAP 112.16 RCA 58.66 APO 176.78 V2 34.878
RC 206.983 GL .47 GP 6.22 ZAL 32.46 ZAP 167.38 ETS 147.50 ZAE 125.82 ETE 175.03 ZAC 18.93 ETC 22.99 CLP 169.00
  PLANETOCENTRIC CONIC
   C3 161.183 VML 12.696 DLA -22.69 RAL 260.56 RAD 6570.8 VEL 16.808 PTH 2.91 VMP 18.289 DPA -15.07 RAP 247.67 ECC 3.6527
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            INJ AZMTH INJ TINE
116.31 13 1 0
109.90 17 55 39
117.10 14 2 1
109.70 20 56 42
119.25 14 33 56
109.37 22 34 9
                                                                            152.31
       90.00
                   12 29 22
                                 1898.61
                                                 -10.86
                                                                 22.39
                                                                                                                          1298.6
                                                                                                                                          -7.24
                                                                                                                                                          15.58
       90.00
                   17 41 26
                                  852.87
                                                  20.57
                                                                321.76
                                                                              165.54
                                                                                                                             252.9
                                                                                                                                           23.09
                                                                                                                                                         313.99
                 13 33 50
      100.00
                                 1690.50
                                                 -13.12
                                                                  5.93
                                                                              151.14
                                                                                                                            1090.5
                                                                                                                                           -9.39
                                                                                                                                                         359.13
      100.00
                  19 19 36
                                 5824.26
                                                  22.95
                                                                277.29
                                                                                                                                           25.42
                                                                              166.46
                                                                                                                            5224.3
                                                                                                                                                         269.36
                 14 7 31
      110.00
                                 1584.91
                                                  -18.53
                                                                354.92
                                                                              148.13
                                                                                                                            984.9
                                                                                                                                          -14.50
                                                                                                                                                         348.13
      110.00
                  21 2 27
                                 5502.61
                                                  28.73
                                                                255.14
                                                                                                                           4902.6
                                                                              168.74
                                                                                                                                           31.10
                                                                                                                                                         246.74
  DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 1602.9 SR 289.0 SS 516.0

CRT - .3647 CRS .3056 CST - .9979

LSA 1686.9 MSA 270.9 SSA 8.3

EL1 1606.5 EL2 268.5 ALF 176.13
                                                                   SGT 5277.2 SGR 332.4 SG3 93.5
RRT -.5591 RRF -.5513 RTF .9854
   TDE -.6853 TRAID.7174 TC3 -.2046 BAU
   RDE .6301 RRA -.5509 RC3 -.0053 FAU-.00566
FDE -.0948 FRA 2.2061 FC3 .0304 BSP 17582
BDE .9310 BRA10.7232 BC3 .2047 FSP -311
                                                                   SGB 5287.6 R23 -.0013 R13 -.9854
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SG1 5280.5 SG2 275.5 THA 177.98

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ARRIVAL DATE SEP 26 1967
                                                                                 FLIGHT TIME 70.00
LAUNCH DATE JUL 18 1967
                                                                                DISTANCE 189.982
    RL 152.04 LAL -.00 LOL 294.71 VL 27.212 GAL -11.28 AZL 92.88 HCA 84.24 SMA 132.01 ECC .24572 INC 2.8763 V1 29.304 RP 108.48 LAP -2.86 LOP 18.94 VP 37.966 GAP -9.90 AZP 90.29 TAL 221.47 TAP 305.71 RCA 99.57 APO 164.45 V2 34.932 RC 56.016 GL -12.89 GP -11.53 ZAL 150.35 ZAP 23.99 ETS 26.62 ZAE 150.74 ETE 356.71 ZAC 90.61 ETC 13.72 CLP -21.18
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                             2.06 RAL 139.90 RAD 6568.4 VEL 12.546 PTH 2.27 VHP 6.903 DPA -6.57 RAP 174.53 ECC 1.5929
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     C3 36.023 VHL .6.002 OLA
                                                                                                        INJ AZHTH INJ TIME

105.44 1 26 14

71.07 14 36 45

106.52 2 44 7

69.98 15 52 49

109.55 3 50 53

66.92 16 55 25
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                                     2423.76
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         90.00
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                                     4940.08
         90.00
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                      2 8 9 2158.30
                                                        -25.27
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       100.00
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       100.00
                     14 34 48 4680.78
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                                                                        196.13
                                                                                                                                                            -25.68
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                                                                                                                                           1337.8
                      3 18 35 1937.81
                                                         -28.62
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       110.00
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                                                         25.95
                                                                         179.02
                                                                                           8.69
                                      4474.04
                     15 40 51
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 225.0 SR 393.3 SS 130.3

CRT -.8605 CR3 -.5079 CST .0247

LSA 444.8 MSA 154.1 SSA 25.3
                                                                             SGT 566.2 SGR 436.4 SG3 142.7
RRT -.2203 RRF .3428 RTF -.5363
SGB 714.9 R23 -.0886 R13 .5786
SG1 583.4 SG2 413.1 THA 160.04
     TOE .2177 TRA - .2967 TC3 .3698 BAU
                                                             .1796
     RDE -.4077 RRA -.1967 RC3 -.0503 FAU .05247
    FOE -.0874 FRA -.6866 FC3-1.2609 BSP 1427
                                                                                                                                       EL1 441.4 EL2 102.1 ALF 117.82
     BOE .4622 BRA .3560 BC3 .3732 FSP
                                                                                                                                                    ARRIVAL DATE SEP 28 1967
                                                                                  FLIGHT TIME 72.00
LAUNCH DATE JUL 18 1967
                                                                                  DISTANCE 196.770
    RL 152.04 LAL -.00 LOL 294.71 VL 27.332 GAL -11.18 AZL 92.76 MCA 87.43 3MA 132.88 ECC .24001 INC 2.7586 VI 29.304 RP 108.45 LAP -2.76 LOP 22.13 VP 38.063 GAP -9.03 AZP 90.12 TAL 222.71 TAP 310.13 RCA 100.98 APO 164.77 V2 34.945 RC 57.772 GL -12.60 GP -12.33 ZAL 151.39 ZAP 27.27 ETS 24.42 ZAE 151.26 ETE 354.33 ZAC 90.95 ETC 13.69 CLP -24.52
   HELIOCENTRIC CONIC
    C3 34.988 VHL 5.915 DLA 2.65 RAL 139.02 RAD 6568.4 VEL 12.504 PTH 2.26 VHP 6.468 DPA -7.24 RAP 174.06 ECC 1.5758 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 37 57 2434.76 -24.23 55.93 10.74 105.19 1 18 49
   PLANETOCENTRIC CONIC
                                                          20.88
                                                                         214.00
                                    4914.36
         90.00
                      13 15 19
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14 35 26 4655.95
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        100.00
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                                                                         194.52
                                                                                            8.55
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                                    1945.92
4451.19
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                                                         -28.80
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        110.00
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                                                                         177.53
                                                                                             7.11
                                                          25.33
        110.00
                      15 40 50
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 220.0 SR 394.4 SS 138.4
CRT -.8530 CRS -.4354 CST -.0725
                                                                              SGT 565.3 SGR 446.0 SG3 161.6
     TDE .2093 TRA -.2901 TC3 .3774 BAU .1797
                                                                              RRT -.2402 RRF .3908 RTF -.5283
SG8 720.1 R23 -.1113 R13 .5836
     RDE - . 4025 RRA - . 2059 RC3 - . 0713 FAU . 05818
                                                                                                                                       LSA 442.4 MSA 163.7 55A 25.6
     FOE -.0757 FRA -.7941 FC3-1.4395 BSP 1438
BOE .4537 BRA .3557 BC3 .3841 FSP -427
                                                                                                                                        EL1 439.7 EL2 103.0 ALF 117.05
                                                                              SG1 587.2 SG2 416.9 THA 157.44
                                                                                                                                                   ARRIVAL DATE SEP 30 1967
                                                                                  FLIGHT TIME 74.00
 LAUNCH DATE JUL 18 1967
                                                                                  DISTANCE 203.535
     RL 152.04 LAL -.00 LOL 294.71 VL 27.436 GAL -11.09 A7L 92.64 MCA 90.61 SMA 133.63 ECC .23508 INC 2.6414 VI 29.304 RP 108.41 LAP -2.64 LOP 25.32 VP 38.149 GAP -8.20 A7P 89.97 TAL 223.82 TAP 314.44 RCA 102.22 APO 165.05 V2 34.957 RC 59.590 GL -12.27 GP -13.21 ZAL 152.35 ZAP 30.76 ETS 22.57 ZAE 152.03 ETE 351.59 ZAC 91.48 ETC 13.62 CLP -28.04
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 34.084 VHL 5.838 DLA 3.24 RAL 138.27 RAD 6568.3 VEL 12.468 PTH 2.26 VHP 6.068 DPA -7.90 RAP 173.40 ECC 1.5609
     C3 34.084 VML 5.838 DLA 5.24 RAL 138.27 RAD 6568.3 VEL 12.468 PTH 2.26 VMP 6.068 DPA -7.90 RAP 173.40 ECC 1.5609

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 30 33 2446.49 -24.44 56.73 9.73 104.77 1 11 19 1846.5 -22.17 48.79

90.00 13 16 43 4889.40 20.30 212.39 7.67 69.83 14 38 12 4289.4 17.37 204.95

100.00 1 53 24 2179.24 -25.67 36.70 9.35 105.86 2 29 44 1579.2 -23.25 28.74

100.00 14 36 33 4651.89 21.50 192.97 7.18 68.72 15 53 44 4031.9 18.42 185.54

110.00 3 5 7 1954.78 -29.00 18.48 8.18 108.95 3 37 42 1354.8 -26.14 10.47

110.00 15 41 19 4429.12 24.71 176.11 5.71 65.60 16 55 8 3829.1 21.21 168.72
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 214.9 SR 394.4 SS 147.4
                                                                              SGT 560.5 SGR 457.7 SG3 182.6
RRT -.2564 RRF .4428 RTF -.5091
SG8 723.6 R23 -.1390 R13 .5868
      TOE .2006 TRA -.2881 TC3 .3784 BAU .1779
                                                                                                                                        CRT -.8407 CRS -.3642 CST -.1728
      RDE - .3966 RRA - .2168 RC3 - .0960 FAU .06452
                                                                                                                                        LSA 438.5 MSA 174.6 SSA 25.8
      FOE -.0602 FRA -.9116 FC3-1.6387 BSP 1434
BDE .4444 BRA .3606 BC3 .3903 FSP -491
                                                                                                                                        EL1 436.7 EL2 105.1 ALF 116.24
                                                                              SG1 588.1 SG2 421.6 THA 154.25
                                                                                                                                                     ARRIVAL DATE OCT 2 1967
                                                                                   FLIGHT TIME 76.00
 LAUNCH DATE JUL 18 1967
                                                                                   DISTANCE 210.273
     RL 152.04 LAL -.00 LOL 294.71 VL 27.524 GAL -11.01 A7L 92.52 HCA 93.81 SHA 134.29 ECC .23084 INC 2.5239 VI 29.304 RP 108.37 LAP -2.52 LOP 28.52 VP 38.225 GAP -7.41 A7P 89.83 TAL 224.81 TAP 318.61 RCA 103.29 APO 165.29 V2 34.970 RC 61.464 GL -11.90 GP -14.16 ZAL 153.21 ZAP 34.48 ETS 20.94 ZAE 153.02 ETE 348.37 ZAC 92.22 ETC 13.50 CLP -31.77
     PLANETOCENTRIC CONIC
      C3 33.282 VML 5.769 DLA 3.83 RAL 137.63 RAD 6568.3 VEL 12.436 PTH 2.25 VMP 5.700 DPA -8.56 RAP 172.52 ECC 1.5477
      LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       0 23 36 2456.79
13 18 35 4865.09
                                                          -24.65
                                                                            57.57
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                       1 46 46 2190.64
14 38 8 4608.47
2 59 7 1964.19
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          100.00
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108.61 3 31 51
64.99 16 55 43
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                                                           -29.20
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                                                                                              4.49
                                                                           174.75
                                                          24.10
          110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                             SGT 552.6 SGR 472.4 SG3 206.1
RRT -.2690 RRF .4993 RTF -.4813
SGB 727.0 R23 -.1691 R13 .5920
                                                                                                                                       ST 210.6 SR 393.5 SS 157.7
CRT -.8247 CRS -.3018 CST -.2660
       TOE .1929 TRA -.2898 TC3 .3732 BAU .1751
      ROE -.3901 RRA -.2299 RC3 -.1247 FAU .07158
FOE -.0426 FRA-1.0409 FC3-1.6619 BSP 1453
BDE .4352 BRA .3699 BC3 .3935 FSP -567
                                                                                                                                     LSA 434.2 MSA 186.8 SSA 25.8
EL1 433.0 EL2 108.3 ALF 115.53
                                                                              SG1 587.9 SG2 427.7 THA 150.17
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ARRIVAL DATE OCT 4 1967 FLIGHT TIME 78.00 LAUNCH DATE JUL 18 1967 HELIOCENTRIC CONIC DISTANCE 216.984 RL 152.04 LAL -.00 LOL 294.71 VL 27.599 GAL -10.93 AZL 92.41 MCA 97.00 SMA 134.85 ECC .22719 INC 2.4055 VI 29.304 RP 108.33 LAP -2.39 LOP 31.72 VP 38.290 GAP -6.66 AZP 89.71 TAL 225.66 TAP 322.66 RCA 104.22 APO 165.49 VZ 34.963 RC 63.388 GL -11.50 GP -15.19 ZAL 153.98 ZAP 38.42 ETS 19.45 ZAE 154.22 ETE 344.52 ZAC 93.18 ETC 13.31 CLP -35.72 PLANETOCENTRIC CONIC C3 32.557 VHL 5.706 DLA 4.41 RAL 137.12 RAD 6568.3 VEL 12.407 PTH 2.24 VHP 5.367 DPA -9.20 RAP 171.42 ECC 1.5358 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1871.5 8.19 -22.69 0 17 11 2471.51 13 20 55 4841.28 1 40 36 2202.46 50.44 -24.86 58.44 5.46 4241.3 16.08 202.00 90.00 19.14 209.34 2 17 18 30.27 -26.09 38.29 7.83 105.12 1602.5 -23.76 100.00 67.60 15 56 36 108.25 3 26 29 64.43 16 56 47 4585.56 20.33 190.03 4.96 3985.6 17.11 182.71 14, 40 11 100.00 14. 40 11 4585.56 2 53 35 1974.00 1374.0 -26.64 11.74 19.83 6.71 108.25 -29.42 110.00 3786.8 19.86 166.17 4386.78 23.50 175.43 3.44 110.00 15 43 40 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 539.7 SGR 490.3 SG3 231.3 RRT -.2649 RRF .5563 RTF -.4341 ST 205.8 SR 391.0 SS 168.3 CRT -.7984 CRS -.2363 CST -.3732 LSA 427.6 MSA 200.1 SSA 25.9 TOE .1838 TRA -.2988 TC3 .3577 BAU .1701 ROE -.3823 RRA -.2446 RC3 -.1575 FAU .07913 SGB 729.1 R23 -.2033 R13 .5971 SG1 583.4 SG2 437.3 THA 144.98 FOE -.0179 FRA-1.1756 FC3-2.1042 BSP 1428 -645 BOE .4242 BRA .3861 BC3 .3908 FSP EL1 427.0 EL2 113.5 ALF 114.65 FLIGHT TIME 80.00 ARRIVAL DATE OCT 6 1967 LAUNCH DATE JUL 18 1967 DISTANCE 223.665 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.661 GAL -10.86 AZL 92.29 MCA 100.20 SMA 135.32 ECC .22404 INC 2.2854 V1 29.304 RP 108.29 LAP -2.25 LOP 34.91 VP 38.347 GAP -5.94 AZP 89.60 TAL 226.37 TAP 326.56 RCA 105.01 APO 165.64 V2 34.996 RC 65.357 GL -11.06 GP -16.31 ZAL 154.67 ZAP 42.58 ETS 18.04 ZAE 155.56 ETE 339.83 ZAC 94.36 ETC 13.04 CLP -39.90 PLANETOCENTRIC CONIC 5.00 RAL 136.72 RAD 6568.3 VEL 12.380 PTH 2.23 VHP 5.067 OPA C3 31.889 VHL 5.647 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG 0 11 11 2484.55 13 23 42 4817.80 -25.07 7.64 0 52 36 1884.6 -22.95 51.30 90.00 59.33 103.61 14 44 0 4217.8 200.58 18.56 207.87 4.59 68.22 15.44 90.00 13 23 42 2 11 47 104.73 -24.03 31.08 1 34 53 2214.60 14 42 42 4562.99 39.13 7.29 1614.6 100.00 -26.31 67.08 15 58 45 107.88 3 21 35 63.89 16 58 19 3963.0 181.35 19.74 188.62 4.08 16.46 100.00 -26.90 19.19 1384.1 12.41 -29.63 20.54 6.19 107.88 110.00 2 48 31 1984.14 3766.2 15 45 33 172.14 2.54 164.96 110.00 4366.21 22.89 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 524.2 SGR 512.3 SG3 258.3 RRT - .2408 RRF .6132 RTF - .3650 ST 202.1 SR 387.1 SS 179.5 CRT -.7622 CRS -.1748 CST -.4822 TDE .1749 TRA -.3142 TC3 .3323 BAU .1642 RDE -.3732 RRA -.2611 RC3 -.1947 FAU .08717 FDE .0126 FRA-1.3158 FC3-2.3666 BSP 1405 BDE .4122 BRA .4085 BC3 .3852 FSP -730 SGB 733.0 R23 -.2297 R13 .6111 LSA 419.8 MSA 214.5 SSA 25.8 SG1 577.5 SG2 451.3 THA 137.70 EL1 419.6 EL2 120.6 ALF 113.79 ARRIVAL DATE OCT 8 1967 FLIGHT TIME 82.00 LAUNCH DATE JUL 18 1967 DISTANCE 230.316 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.711 GAL -10.78 AZL 92.16 MCA 103.39 SMA 135.71 ECC .22131 INC 2.1627 VI 29.304 RP 108.25 LAP -2.10 LOP 38.11 VP 38.395 GAP -5.25 AZP 89.50 TAL 226.94 TAP 330.33 RCA 105.67 APO 165.74 V2 35.009 RC 67.365 GL -10.59 GP -17.49 ZAL 155.27 ZAP 46.97 ETS 16.66 ZAE 156.99 ETE 334.09 ZAC 95.77 ETC 12.68 CLP -44.32 PLANETOCENTRIC CONIC C3 31.264 VHL 5.591 DLA 5.58 RAL 136.43 RAD 6568.2 VEL 12.355 PTH 2.23 VHP 4.800 DPA -10.43 RAP 158.51 ECC 1.5145 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 103.20 0 47 1-67.74 14 46 53 174 32 2 6 42 0 5 37 2497.91 13 26 59 4794.48 1897.9 52.19 7.22 0 47 14 -23.22 -25.28 60.26 90.00 3.66 4194.5 14.79 199.18 17.96 206.41 90.00 1 29 35 2227.04 14 45 41 4540.58 1627.0 -24.29 31.91 40.00 6.88 100.00 -26.52 16 1 21 187.22 3.34 66.59 3940.6 15.81 180.01 19.14 100.00 107.50 3 17 7 1394.6 -27.16 18.51 13.11 -29.84 5.81 2 43 52 1994.56 15 47 53 4345.83 21.27 110.00 63.37 17 0 19 163.76 3745.8 22.27 170.88 1.78 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 509.3 SGR 539.9 SG3 287.1 RRT -.1916 RRF .6692 RTF -.2703 SGB 742.2 R23 -.2226 R13 .6475 ST 200.9 SR 382.0 SS 191.7 TOE .1677 TRA -.3356 TC3 .2973 BAU .1589 RDE -.3631 RRA -.2795 RC3 -.2371 FAU .09570 FDE .0463 FRA-1.4605 FC3-2.6499 BSP 1418 BDE .3999 BRA .4367 BC3 .3803 FSP -827 CRT -.7174 CRS -.1246 CST -.5816 LSA 411.6 MSA 230.1 SSA 25.6 SG1 574.9 SG2 469.5 THA 126.54 EL1 411.6 EL2 129.9 ALF 113.11 ARRIVAL DATE OCT 10 1967 -FLIGHT TIME 84,00 LAUNCH DATE JUL 18 1967 DISTANCE 236.935 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.750 GAL -10.71 AZL 92.04 MCA 106.60 SMA 136.01 ECC .21895 INC 2.0366 V1 29.304 RP 108.20 LAP -1.95 LOP 41.32 VP 38.435 GAP -4.59 AZP 89.42 TAL 227.37 TAP 333.97 RCA 106.23 APO 165.79 V2 35.023 RC 69.409 GL -10.08 GP -18.75 ZAL 155.79 ZAP 51.56 ETS 15.26 ZAE 158.39 ETE 327.02 ZAC 97.39 ETC 12.21 CLP -48.97 PLANETOCENTRIC CONIC 6.17 RAL 136.25 RAD 6568.2 VEL 12.330 PTH 2.22 VHP 4.567 OPA -11.01 RAP 166.71 ECC 1.5047 C3 30.667 VHL 5.538 OLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 0 25 2511.58 -25.49 61.20 6.92 102.76 0 42 17 1911.6 -23.48 53.11 0 0 25 2511.58 13 30 44 4771.11 17.35 204.97 3.26 4171.1 14.12 197.76 90.00 1 24 41 1639.8 -24.55 32.76 2239.78 -26.73 40.88 6.59 100.00 3918.2 15.14 178.58 18.52 185.84 2.73 100.00 14 49 9 4518.15 -27.43 2 39 36 1405.2 13.83 -30.06 22.03 5.54 2005.23 110.00 21.64 169.63 1.15 3725.5 17.83 152.57 110.00 15 50 41 4325.46 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 498.2 SGR 571.8 SG3 316.1 RRT -.0995 RRF .7200 RTF -.1363 SGB 758.4 R23 -.1261 R13 .7119 ST 201.4 SR 374.8 SS 203.9 TOE .1601 TRA -.3658 TC3 .2486 BAU .1546 CRT -.6565 CRS -.0703 CST -.6879 RDE -.3508 RRA -.2986 RC3 -.2836 FAU .10419 FDE .0901 FRA-1.5982 FC3-2.9412 BSP 1432 BDE .3856 BRA .4722 BC3 .3772 FSP -921 LSA 401.5 MSA 246.5 SSA 25.7 EL1 401.1 EL2 141.9 ALF 112.38 SG1 579.8 SG2 488.9 THA 107.86

ARRIVAL DATE OCT 12 1967

LAUNCH DATE JUL 18 1967

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DISTANCE 243.522
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.780 GAL -10.63 A7L 91.91 HCA 109.80 SMA 136.24 ECC .21688 INC 1.9061 VI 29.304 RP 108.16 LAP -1.79 LOP 44.52 VP 38.469 GAP -3.96 A7P 89.35 TAL 227.67 TAP 337.47 RCA 106.69 APO 165.79 V2 35.036 RC 71.485 GL -9.53 GP -20.05 ZAL 156.23 ZAP 56.35 ETS 13.80 ZAE 159.61 ETE 318.42 ZAC 99.21 ETC 11.62 CLP -53.85
    PLANETOCENTRIC CONIC
                                                  6.76 RAL 136.17 RAD 6568.2 VEL 12.307 PTH 2.22 VHP 4.367 OPA -11.57 RAP 164.70 ECC 1.4952
     C3 30.087 VHL 5.485 DLA
     LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 51 37 2525.64 -25.70 62.18 6.74 102.32 24 33 43 1925.6 -23.75 54.05 90.00 13 35 0 4747.48 16.73 203.52 2.78 66.81 14 54 7 4147.5 13.45 196.38
                     23 51 37 2525.64
13 35 0 4747.48
1 20 7 2252.88
14 53 7 4495.47
2 35 45 2016.22
15 53 59 4304.89
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65.65 16 8 2
106.68 3 9 21
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                                                                                  184.45
        100.00
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        110.00
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                                                                                                                         62.39
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        110.00
                                                            21.00
                                                                                  168.36
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 498.2 SGR 609.7 SG3 345.4

RRT .0294 RRF .7668 RTF .0294

SGB 787.4 R23 .0380 R13 .7656

SGI 610.2 SG2 497.6 THA 85.89
                                                                                                                                                       ST 206.0 SR 366.4 SS 216.6
CRT -.5876 CRS -.0284 CST -.7758
    TOE .1551 TRA -.4025 TC3 .1884 BAU .1547
     ROE -.3371 RRA -.3188 RC3 -.3353 FAU .11268
                                                                                                                                                      LSA 391.6 MSA 263.8 SSA 25.6
    FOE .1362 FRA-1.7299 FC3-3.2422 BSP 1515
BOE .3711 BRA .5135 BC3 .3846 FSP -1022
                                                                                                                                                       EL1 390.1 EL2 156.5 ALF 112.00
                                                                                                                                                                      APRIVAL DATE OCT 14 1967
                                                                                           FLIGHT TIME AA.OO
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 250.077
    RL 152.04 LAL -.00 LOL 294.71 VL 27.800 GAL -10.55 AZL 91.77 MCA 113.00 SMA 136.40 ECC .21506 INC 1.7702 V1 29.304 RP 108.12 LAP -1.63 LOP 47.72 VP 38.495 GAP -3.36 AZP 89.31 TAL 227.84 TAP 340.84 RCA 107.06 APO_165.75 V2 35.049 RC 73.590 GL -8.94 GP -21.40 ZAL 156.59 ZAP 61.29 ETS 12.25 ZAE 160.48 ETE 308.24 ZAC 101.20 ETC 10.89 CLP -58.94
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 29.516 VHL 5.433 DLA 7.37 RAL 136.20 RAD 6566.2 VEL 12.284 PTH 2.21 VHP 4.201 DPA -12.09 RAP 162.50 ECC 1.4858
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 47 2 2540.20 -25.91 63.19 6.66 101.85 24 29 22 1940.2 -24.01 55.04
90.00 13 39 49 4723.32 16.07 202.05 2.41 66.37 14 58 32 4123.3 12.74 194.95
100.00 1 15 51 2266.44 -27.15 42.75 6.36 103.01 1 53 37 1666.4 -25.09 34.56
100.00 14 57 37 4472.31 17.24 183.04 1.87 65.19 16 12 9 3672.3 13.75 175.99
110.00 2 32 10 2027.60 -30.50 23.62 5.36 106.25 3 5 58 1427.6 -27.97 15.34
110.00 15 57 47 4283.91 20.33 167.12 24 61.91 17 9 11 3683.9 16.42 160.19
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SCT 517.0 SGR 651.0 SG3 372.7
RRT .1948 RRF .8058 RTF .2217
SGB 831.3 R23 .1450 R13 .7954
SG1 669.0 SG2 493.4 THA 70.02
                                                                                                                                                        ST 213.9 SR 355.4 SS 229.5
CRT -.5061 CRS .0182 CST -.8571
     TOE .1509 TRA -.4479 TC3 .1128 BAU .1603
     ROE -.3209 RRA -.3364 RC3 -.3902 FAU .12043
    FOE .1932 FRA-1.8408 FC3-3.5325 BSP 1648
BDE .3546 BRA .5614 BC3 .4062 FSP -1112
                                                                                                                                                      LSA 381.3 MSA 280.5 SSA 25.6
                                                                                                                                                       EL1 376.5 EL2 174.2 ALF 111.85
                                                                                                                                                                     ARRIVAL DATE OCT 16 1967
                                                                                           FLIGHT TIME 90.00
LAUNCH DATE JUL 18 1967
                                                                                           OISTANCE 256.599
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.812 GAL -10.47 AZL 91.63 MCA 116.21 SMA 136.49 ECC .21346 INC 1.6276 V1 29.304
RP 108.08 LAP -1.46 LOP 50.93 VP 38.516 GAP -2.78 AZP 89.28 TAL 227.88 TAP 344.10 RCA 107.35 APO 165.63 V2 35.062
RC 75.721 GL -8.30 GP -22.77 ZAL 156.87 ZAP 66.33 ETS 10.58 ZAE 160.80 ETE 296.81 ZAC 103.31 ETC 10.03 CLP -64.20
    PLANETOCENTRIC CONIC
     C3 28.947 VHL 5.380 DLA 8.00 RAL 136.33 RAD 6568.2 VEL 12.261 PTH 2.21 VHP 4.068 OPA -12.59 RAP 160.16 ECC 1.4764
     28-947 VML 5.380 DLR 8.00 RAL 136.33 RAD GOODS VEL 1247 VML 15.00 FO CST TIM INJ Z LAT INJ 2 LONG LUCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG 90.00 23 42 40 2555.43 -26.12 64.26 6.70 101.35 24 25 15 1955.4 -24.29 56.07 90.00 13 45 13 4698.34 15.39 200.54 2.16 65.93 15 3 31 4098.3 12.01 195.49
                      1 11 48 2280.63
15 2 42 4448.38
2 28 51 2039.49
16 2 8 4262.28
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        110.00
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                                                                                  165.63
                                                                19.63
        110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 561.5 SGR 695.3 SG3 397.2
RRT .3666 RRF .8390 RTF .4091
SG8 893.8 R23 .1872 R13 .8251
                                                                                                                                                      ST 226.7 SR 342.3 SS 242.4
CRT -.4213 CRS .0607 CST -.9184
      TOE .1494 TRA -.5002 TC3 .0232 BAU .1737
     RDE -.3024 RRA -.3568 RC3 -.4481 FAU .12723
                                                                                                                                                       LSA 374.1 MSA 294.5 SSA 25.6
     FOE .2557 FRA-1.9271 FC3-3.8052 BSP 1863
BOE .3373 BRA .6144 BC3 .4487 FSP -1194
                                                                                     SG1 752.0 SG2 483.1 THA 60.21
                                                                                                                                                      EL1 361.5 EL2 194.7 ALF 112.41
                                                                                                                                                                      ARRIVAL DATE OCT 18 1967
                                                                                           FLIGHT TIME 92.00
LAUNCH DATE JUL 18 1967
                                                                                          DISTANCE 263.090
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.816 GAL -10.38 AZL 91.48 MCA 119.42 SMA 136.52 ECC .21204 INC 1.4766 V1 29.304 RP 108.04 LAP -1.29 LOP 54.14 VP 38.531 GAP -2.22 AZP 89.27 TAL 227.81 TAP 347.23 RCA 107.57 APO 165.47 V2 35.075 RC 77.874 GL -7.61 GP -24.14 ZAL 157.07 ZAP 71.43 ETS 8.78 ZAE 160.43 ETE 284.89 ZAC 105.50 ETC 9.04 CLP -69.58
    PLANETOCENTRIC CONIC
     C3 28.376 VHL 5.327 DLA 8.66 RAL 136.56 RAD 6568.1 VEL 12.237 PTH 2.20 VHP 3.968 DPA -13.07 RAP 157.73 ECC 1.4670
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 38 25 2571.60 -26.33 65.40 6.84 100.82 24 21 16 1971.6 -24.57 57.17
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65.50 15 9 10
102.00 1 46 9
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1 7 53 2295.68
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          90.00
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         100.00
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105.29 2 59 56
60.97 17 17 45
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16 7 5 4239.70
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         110.00
                                                               -30.95
                                                                                  164.50
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                                                                18.89
         110.00
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 634.1 SGR 742.6 SG3 418.4
RRT .5160 RRF .8669 RTF .5644
SG8 976.5 R23 .2006 R13 .8544
SG1 854.9 SG2 471.8 THA 53.54
                                                                                                                                                    ST 244.7 SR 327.5 SS 255.4

CRT -.3418 CRS .0931 CST -.9568

LSA 375.6 MSA 301.0 SSA 25.5

EL1 346.1 EL2 217.6 ALF 114.58
      TOE .1521 TRA -.5577 TC3 -.0794 BAU .1954
      RDE -. 2821 RRA -. 3736 RC3 -. 5089 FAU .13288
     FOE .3185 FRA-1.9873 FC3-4.0542 BSP 2165
BOE .3205 BRA .6714 BC3 .5151 FSP -1273
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FLIGHT TIME 86.00

ARRIVAL DATE OCT 20 1967

LAUNCH DATE JUL 18 1967

FLIGHT TIME 94.00 **DISTANCE 269.549** HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.813 GAL -10.29 AZL 91.32 HCA 122.64 SHA 136.50 ECC .21077 INC 1.3158 VI 29.304 RP 108.00 LAP -1.11 LOP 57.35 VP 38.541 GAP -1.69 AZP 89.29 TAL 227.63 TAP 350.26 RCA 107.73 APO 165.27 V2 35.088 RC 80.046 GL -8.85 GP -25.51 ZAL 157.20 ZAP 76.52 ETS 6.83 ZAE 159.33 ETE 273.47 ZAC 107.71 ETC 7.93 CLP -75.03 PLANETOCENTRIC CONIC C3 27.799 VHL 5.272 DLA 9.35 RAL 136.89 RAD 6568.1 VEL 12.214 PTH 2.19 VHP 3.900 DPA -13.54 RAP 155.26 ECC 1.4575
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 34 12 2589.03 -26.54 66.63 7.08 100.24 24 17 21 1989.0 -24.86 58.36 23 34 12 2589.03 13 58 8 4644.54 4044.5 10.39 90.00 13.67 197.32 1.95 65.06 15 15 33 1711.9 -25.95 1 4 3 2311.90 15 14 54 4396.90 101.43 1 42 35 100.00 -27.81 45.97 6.81 63.85 16 28 11 104.75 2 57 9 60.49 17 22 59 171.63 11.39 100.00 15.03 178.54 1.38 3796.9 2 22 44 2065.71 16 12 43 4215.86 -28.85 17.96 -31.19 26.38 5.91 1465.7 110.00 3615.9 14.03 156.35 18.10 163.11 359.69 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 267.6 SR 309.5 SS 268.9 CRT - .2661 CRS .1281 CST - .9809 LSA 390.0 MSA 294.9 SSA 25.6 EL1 329.9 EL2 242.0 ALF 120.63 SCT 734.0 SGR 788.6 SG3 433.8 RRT .6341 RRF .8891 RTF .6612 SGB 1077.3 R23 .2051 R13 .8783 SG1 974.5 SG2 459.3 THA 48.23 TOE .1583 TRA -.6202 TC3 -.1960 BAU .2239 ROE -.2588 RRA -.3872 RC3 -.5697 FAU .13668 FOE .3891 FRA-2.0077 FC3-4.2565 BSP 2526 BDE .3033 BRA .7311 BC3 .6025 FSP -1326 FLIGHT TIME 96.00 ARRIVAL DATE OCT 22 1967 DISTANCE 275.977 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.804 GAL -10.19 AZL 91.14 MCA 125.85 8MA 136.43 ECC .20963 INC 1.1428 VI 29.304 RP 107.96 LAP -.93 LOP 60.56 VP 38.546 GAP -1.18 AZP 89.33 TAL 227.34 TAP 353.19 RCA 107.83 APO 165.03 V2 35.101 RC 82.236 GL -6.01 GP -26.87 ZAL 157.24 ZAP 81.52 ETS 4.74 ZAE 157.58 ETE 263.30 ZAC 109.87 ETC 6.71 CLP -80.49 PLANETOCENTRIC CONIC CO ET.ELD VML D.ZIT DLA 10.10 RAL 137.32 RAD 6566.1 VEL 12.190 PTH 2.19 VMP 3.862 DPA -14.02 RAP 152.81 ECC 1.4479 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 29 54 2608.18 -26.77 67.98 7.44 99.60 24 13 22 2008.2 -25.17 59.68 90.00 14 5 52 4614.83 13.01 195.56 2.01 64.62 18 29 47 4014.0 100.80 1 39 0 63.40 16 35 2 104.15 2 54 27 60.01 17 28 57 100.00 1 0 11 2329.72 15 22 13 4366.53 1729.7 -26.27 34.69 -28.04 47.25 7.19 100.80 3768.5 10.49 170.01 100.00 14.17 176.87 1.42 2 19 46 2080.63 16 19 7 4190.37 1480.6 -29.18 18.99 -31.44 27.47 6.32 104.15 110.00 110.00 17.24 161.63 359.71 3590.4 13.12 154.94 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 856.2 SGR 834.6 SG3 444.2 RRT .7189 RRF .9075 RTF .7616 SGB 1195.6 R23 .2057 R13 .8977 SG1 1108.5 SG2 448.1 THA 43.98 ST 295.7 SR 289.9 SS 282.2 CRT -.2008 CRS .1503 CST -.9908 LSA 413.9 MSA 281.2 SSA 25.7 EL1 321.0 EL2 261.6 ALF 137.85 TOE .1699 TRA -.6849 TC3 -.3242 BAU .2582 ROE -.2336 RRA -.3974 RC3 -.6314 FAU .13882 FOE .4552 FRA-1.9953 FC3-4.4161 BSP 2953 BOE .2890 BRA .7919 BC3 .7098 FSP -1371 ARRIVAL DATE OCT 24 1967 FLIGHT TIME 98.00 LAUNCH DATE JUL 18 1967 DISTANCE 282.375 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.790 GAL -10.08 AZL 90.96 HCA 129.07 SMA 136.32 ECC .20860 INC .9550 V1 29.304 RP 107.92 LAP -.74 LOP 63.78 VP 38.346 GAP -.69 AZP 89.40 TAL 226.95 TAP 356.01 RCA 107.88 APO 164.75 V2 35.113 RC 84.440 GL -5.07 GP -28.22 ZAL 157.20 ZAP 86.38 ETS 2.50 ZAE 155.32 ETE 254.72 ZAC 111.93 ETC 5.41 CLP -85.89 PLANETOCENTRIC CONIC C3 26.624 VHL 5.160 DLA 10.91 RAL 137.86 RAD 6568.1 VEL 12.166 PTH 2.18 VHP 3.855 DPA -14.55 RAP 150.44 ECC 1.4382 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 98.87 24 9 13 64.18 15 31 2 100.09 1 35 18 2029.6 -25.50 23 25 24 2629.62 14 14 40 4582.48 7.93 61.16 90.00 -27.00 69.51 186.60 8.48 90.00 12.05 193.66 2.18 3982.5 0 56 8 2349.65 15 30 32 4337.68 2 16 46 2097.34 16 26 24 4162.76 40.28 1749.7 -26.61 7.69 100.00 -26.29 48.68 168.26 16 42 50 3737.7 100.00 13.22 175.07 1.58 62.94 9.49 -29.54 20.16 110.00 -31.72 28.69 6.86 160.05 359.84 103.47 2 51 43 1447.3 59.52 17 35 47 12.12 3562.8 153.42 110.00 16.29 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RTU - COURSE EXECUTION ACCURACY SGT 996.1 SGR 876.0 SG3 447.6 RRT . 7790 RRT . 9221 RTF . 8160 SGB 1326.5 R23 .2066 R13 .9120 SGI 1252.5 SG2 436.8 THA 40.31 ST 328.9 SR 266.8 SS 296.9 CRT - .1406 CRS .1706 CST -.9927 LSA 445.2 MSA 261.9 SSA 25.8 ELI 334.5 EL2 259.7 ALF 163.16 TOE .1871 TRA -.7505 TC3 -.4634 BAU .2961 RDE -.2035 RRA -.4024 RC3 -.6908 FAU .13876 FDE .5266 FRA-1.9403 FC3-4.5121 BSP 3409 BDE .2779 BRA .8516 BC3 .8319 FSP -1385 ARRIVAL DATE OCT 26 1967 LAUNCH DATE JUL 18 1967 FLIGHT TIME 100.00 DISTANCE 288.744 HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 27.769 GAL -9.96 AZL 90.75 MCA 132.28 SMA 136.16 ECC .20767 INC .7492 V1 29.304 RP 107.89 LAP -.55 LOP 67.00 VP 38.543 GAP -.22 AZP 89.50 TAL 226.46 TAP 358.75 RCA 107.88 APO 164.44 V2 35.125 RC 86.655 GL -4.02 GP -29.57 ZAL 157.07 ZAP 91.02 ETS .12 ZAE 152.70 ETE 247.72 ZAC 113.82 ETC 4.04 CLP -91.17 PLANETOCENTRIC CONIC C3 26.027 VHL 5.102 DLA 11.82 RAL 138.51 RAO 6568.1 VEL 12.141 PTH 2.18 VMP 3.876 DPA -15.14 RAP 148.19 ECC 1.4283 UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 20 29 2654.15 -27.25 71.26 8.55 98.02 24 4 43 2054.1 -25.86 62.87 98.02 24 4 43 63.74 15 40 31 184.76 3946.7 7.37 90.00 14 24 45 4546.72 10.99 191.58 2.47 41.87 1772.4 -26.97 0 51 45 2372.45 -28.55 50.32 8.33 99.26 1 31 18 100.00 16 51 49 166.35 15 40 5 4303.65 12.16 173.10 1.86 62.48 3703.7 8.38 100.00 2 48 51 17 43 38 21.51 2 13 34 1516.4 -29.93 2116.44 -32.01 30.10 7.55 102.69 110.00 3532.4 11.02 110.00 16 34 46 4132.43 15.24 158.33 .09 59.02 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 367.7 SR 242.2 SS 312.0 CRT -.0834 CRS .1728 CST -.9899 LSA 482.2 MSA 240.8 SSA 26.0 EL1 368.7 EL2 240.7 ALF 174.51 SGT 1148.2 SGR 915.5 SG3 445.5 RRT .8207 RRF .9344 RTF .8523 SGB 1468.5 R23 .2085 R13 .9230 SGI 1404.9 SG2 427.5 THA 37.22 TOE .2112 TRA -.8143 TC3 -.6113 BAU .3366 ROE -.1755 RRA -.4033 RC3 -.7497 FAU .13700 FOE .5909 FRA-1.8554 FC3-4.5571 83P 3911 BOE .2746 BRA .9087 BC3 .9673 FSP -1391

ARRIVAL DATE OCT 28 1967

LAUNCH DATE JUL 18 1967

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01STANCE 295.083
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.745 GAL -9.84 AZL 90.52 HCA 135.51 SMA 135.97 ECC .20682 INC .5210 V1 29.304
RP 107.85 LAP -.37 LOP 70.22 VP 38.536 GAP .24 AZP 89.63 TAL 225.89 TAP 1.40 RCA 107.85 APO 164.09 V2 35.137
RC 88.880 GL -2.83 GP -30.95 ZAL 156.83 ZAP 95.39 ETS 357.58 ZAE 149.85 ETE 242.12 ZAC 115.52 ETC 2.62 CLP -96.29
   PLANETOCENTRIC CONIC
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.50 73.32 9.34 97.02 23.54 34 2000
    C3 25.429 VHL 5.043 OLA 12.83 RAL 139.27 RAD 6568.0 VEL 12.116 PTH
    LNCH AZMTH LNCH TIME L-I TIME
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63.29 15 51 32
98.28 1 26 49
62.01 17 2 14
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14 36 26 4506.56
0 46 50 2399.07
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       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RET .8501 RRF .949.2 8G3 436.9
RRT .8501 RRF .9443 RTF .8768
SGB 1616.3 R23 .2125 R13 .9308
SG1 1561.1 8G2 418.9 THA 34.50
                                                                                                                                         ST 413.0 SR 214.4 SS 329.8
CRT -.0174 CRS .1578 CST -.9847
    TDE .2436 TRA -.8742 TC3 -.7662 BAU .3779
    RDE -.1420 RRA -.3981 RC3 -.8053 FAU .13324
FOE .6582 FRA-1.7343 FC3-4.5361 BSP 4415
BOE .2819 BRA :9606 BC3 1.1116 FSP -1367
                                                                                                                                        LSA 526.8 MSA 216.9 SSA 26.3
                                                                                                                                         EL1 413.0 EL2 214.4 ALF 179.29
                                                                                   FLIGHT TIME 104.00
                                                                                                                                                      ARRIVAL DATE OCT 30 1967
LAUNCH DATE JUL 18 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 301.394
    RL 152.04 LAL -.00 LOL 294.71 VL 27.715 GAL -9.71 AZL 90.27 MCA 138.73 SMA 135.74 ECC .20605 INC .2645 V1 29.304 RP 107.82 LAP -.17 LOP 73.44 VP 38.525 GAP .68 AZP 89.80 TAL 225.24 TAP 3.97 RCA 107.77 APO 163.71 V2 35.149 RC 91.113 GL -1.45 GP -32.40 ZAL 156.47 ZAP 99.44 ETS 354.89 ZAE 146.86 ETE 237.67 ZAC 116.98 ETC 1.15 CLP-101.21
   PLANETOCENTRIC CONIC
    C3 24.836 VHL 4.984 DLA 14.00 RAL 140.18 RAD 6568.0 VEL 12.092 PTH
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
                                                                                                                 2.16 VHP 4.002 DPA -16.67 RAP 144.15 ECC 1.4087
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-27.76 75.80 10.32 95.80 25.53.40 21:17.1 -26.67 67.30
                    23 8 23 2717.12
14 50 10 4460.62
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        90.00
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16 4 6 4222.08
2 5 56 2165.37
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                                                                                                                                                                -27.83
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                                                         -29.12
                                                                                            10.14
       100.00
                                                                                                               61.54 17 14 28
                                                                                                                                               3622.1
                                                                                                                                                                                161.80
                                                                          168.45
                                                                                             2.89
                                                            9.55
       100.00
                                                                                                                           2 42 1
                                                                                                                                              1565.4
                                                                                                                                                               -30.67
                                                                                                                                                                                  25.01
                                                         -32.68
                                                                            33.76
                                                                                              9.50
                                                                                                            100.62
       110.00
                                                                                                             100.62 2 42 1
57.98 18 3 24
                     16 55 44
                                                                                                                                              3460.4
                                                                                                                                                                 8.35
                                                                          154.33
                                                                                              1.04
                                                                                                                                                                                147.89
       110.00
                                       4060.37
                                                          12.67
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 1473.2 SGR 980.7 SG3 423.7
RRT .8708 RRF .9529 RTF .8937
SGB 1769.7 R23 .2181 R13 .9367
SGI 1720.9 SG2 412.7 THA 32.17
                                                                                                                                         ST 465.9 SR 186.1 SS 349.3
CRT .0723 CRS .1025 CST -.9799
    TOE .2851 TRA -.9283 TC3 -.9266 BAU .4198
    ROE -.1062 RRA -.3885 RC3 -.8601 FAU .12809
FOE .7186 FRA-1.5922 FC3-4.4650 BSP 4946
                                                                                                                                         LSA 579.6 MSA 192.5 SSA 26.6
EL1 466.2 EL2 185.5 ALF 1.96
    BDE .3042 BRA 1.0063 BC3 1.2643 FSP -1335
                                                                                                                                         EL1 466.2 EL2 185.5 ALF
                                                                                                                                                     ARRIVAL DATE NOV 1 1967
                                                                                   FLIGHT TIME 106.00
LAUNCH DATE JUL 18 1967
                                                                                  DISTANCE 307.679
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.682 GAL -9.57 AZL 89.97 HCA 141.95 SMA 135.49 ECC .20535 INC .0171 V1 29.304 RP 107.78 LAP .02 LOP 76.66 VP 38.511 GAP 1.10 AZP 90.02 TAL 224.52 TAP 6.47 RCA 107.66 APO 163.31 V2 35.160 RC 93.352 GL .15 GP -33.95 ZAL 155.95 ZAP 103.13 ETS 352.03 ZAE 143.79 ETE 234.18 ZAC 118.19 ETC 359.65 CLP-105.89
   PLANETOCENTRIC CONIC
    C3 24.259 VHL 4.925 DLA 15.35 RAL 141.23 RAD 6568.0 VEL 12.068 PTH 2.16 VHP 4.107 OPA -17.69 RAP 142.38 ECC 1.3992
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM- INJ 2 LAT INJ 2 LONG
-28.02 78.85 11.54 94.29 23 46 22 2159.2 -27.13 70.30
6.67 183.58 4.38 62.42 16 20 3 3807.0 2.92 176.90
    LNCH A7MTH LNCH TIME L-I TIME
90.00 23 0 22 2759.19
90.00 15 6 36 4407.00
                     0 34 2 2469.82
16 19 33 4171.60
2 0 57 2197.84
17 9 7 4016.34
                                                                                                                                                                                 48.79
                                                                                                              95.61
                                                                                                                           1 15 12
                                                                                                                                              1869.8
                                                                                                                                                               -28.32
                                                         -29.41
                                                                           57.43
                                                                                           11.40
       100.00
                                                                                                              61.08 17 29 5
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                                                           7.90
                                                                          165.61
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       100.00
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                                                         -33.06
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                                                                                            10.84
                                                                                                              99.21
                                                                                                                           2 37 35
                                                                                                                                              1597.8
                                                                                                                                                               -31.44
       110.00
                                                                                                              57.45 18 16 4
                                                                          151.92
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                                                                                             1.81
                                                          11.07
       110.00
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RRT .8855 RRF .9602 RTF .9052
SGB 1923.6 R23 .2258 R13 .9407
SG1 1879.9 SG2 407.9 THA 30.10
                                                                                                                                         ST 529.5 SR 157.3 SS 374.0
CRT .2191 CRS -.0204 CST -.9755
     TOE .3386 TRA -.9737 TC3-1.0897 BAU .4607
    RDE -.0657 RRA -.3726 RC3 -.9112 FAU .12134
FDE .7824 FRA-1.4250 FC3-4.3305 BSP 5456
BDE .3449 BRA 1.0425 BC3 1.4204 FSP -1277
                                                                                                                                         LSA 645.2 MSA 167.2 SSA 26.9
EL1 530.7 EL2 153.2 ALF 4.06
                                                                                   FLIGHT TIME 108.00
                                                                                                                                                      ARRIVAL DATE NOV 3 1967
LAUNCH DATE JUL 18 1967
                                                                                   DISTANCE 313.937
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.646 GAL -9.43 AZL 89.64 HCA 145.17 SHA 135.21 ECC .20472 INC .3625 V1 29.304
RP 107.75 LAP .21 LOP 79.88 VP 38.495 GAP 1.51 AZP 90.30 TAL 223.72 TAP 8.90 RCA 107.53 APO 162.89 V2 35.170
RC 95.596 GL 2.03 GP -35.67 ZAL 155.25 ZAP 106.41 ETS 348.96 ZAE 140.67 ETE 231.49 ZAC 119.12 ETC 358.09 CLP-110.34
   PLANETOCENTRIC CONIC
     C3 23.716 VHL 4.870 DLA 16.94 RAL 142.47 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 4.243 DPA -18.96 RAP 140.77 ECC 1.3903
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-28.23 82.72 13.06 92.36 23 37 0 2212.2 -27.60 74.11
4.63 179.96 5.55 62.03 16 39 7 3742.8 .86 173.32
-29.68 61.04 12.97 93.73 1 7 3 1918.7 -28.85 52.33
     LNOT AZHTH LNCH TIME L-I TIME
                     22 50 8 2812.25
         90.00
                     15 26 44 4342.84
0 25 5 2518.72
         90.00
        100.00
                                                                                                               60.64 17 46 55
97.42 2 31 58
56.92 18 31 22
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                                                            5.91
                                                                          162.26
                                                                                              4.84
                     16 38 24
                                       4111.60
        100.00
                       16 38 24 -.....
1 54 40 2238.42
17 95 18 3964.66
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                                                          -33.46
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        110.00
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                                                            9.16
                                                                          149.13
                                                                                              2.86
                                                                                                                                              3364.7
        110.00
                     17 25 18
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 606.5 SR 135.4 SS 402.0
CRT .4521 CRS -.2546 CST -.9734
LSA 725.5 MSA 143.6 SSA 27.1
     TOE .4057 TRA-1.0091 TC3-1.2545 BAU .5011
                                                                             SGT 1805.8 SGR 1032.2 SG3 383.2
RRT .8957 RRF .9666 RTF .9134
SGB 2080.0 R23 .2345 R13 .9438
    ROE -.0219 RRA -.3521 RC3 -.9616 FAU .11368
FDE .8397 FRA-1.2479 FC3-4.1500 BSP 5990
BDE .4063 BRA 1.0688 BC3 1.5806 FSP -1215
                                                                                                                                        EL1 609.7 EL2 120.1 ALF 6.00
                                                                             SG1 2039.9 SG2 406.2 THA 28.34
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FLIGHT TIME 102.00

ARRIVAL DATE NOV 5 1967

EL1 1232.2 EL2 26.1 ALF 13.74

LAUNCH DATE JUL 18 1967

FLIGHT TIME 110.00

SG1 2661.6 SG2 435.1 THA 22.93

ARRIVAL DATE NOV 13 1967

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LAUNCH DATE JUL 18 1967
                                                                                                                                    DISTANCE 344.851
     HELIOCENTRIC CONIC
      RL 152.04 LAL -.00 LOL 294.71 VL 27.422 GAL -8.57 AZL 86.43 HCA 161.30 SHA 133.53 ECC .20242 INC 3.5654 VI 29.304 RP 107.61 LAP 1.14 LOP 96.04 VP 38.376 GAP 3.35 AZP 93.38 TAL 218.83 TAP 20.12 RCA 106.50 APO 160.56 V2 35.216 RC 106.849 GL 20.27 GP -49.80 ZAL 144.83 ZAP 114.46 ETS 329.13 ZAE 122.79 ETE 225.73 ZAC 119.56 ETC 348.21 CLP-129.91
     PLANETOCENTRIC CONIC
       C3 23.695 VHL 4.868 DLA 32.46 RAL 154.22 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 5.743 DPA -31.30 RAP 132.66 ECC 1.3900
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.42 17 47 15 3987.00 -21.19 167.37 26.70 64.81 18 53 42 3387.0 -24.40 159.84 106.58 22 3 20 3167.66 -21.17 106.60 26.69 64.80 22 56 7 2567.7 -24.39 99.07 73.42 17 47 15 3987.00 -21.19 167.37 26.70 64.81 18 53 42 3387.0 -24.40 159.84 106.58 22 3 20 3167.66 -21.17 106.60 26.69 64.80 22 56 7 2567.7 -24.39 99.07 106.58 22 3 20 3167.66 -21.17 106.60 26.69 64.80 22 56 7 2567.7 -24.39 99.07 106.58 22 3 20 3167.66 -21.17 106.60 26.69 64.80 22 56 7 2567.7 -24.39 99.07 100.00 23 46 40 2848.86 -28.95 85.51 30.18 70.98 24 34 8 2248.9 -31.27 77.07
                                                                                                                                                                                 70.98 24 34 8
58.41 21 59 0
                                                                                                                                                                                                                                    2753.8
                                                                                                                                                                                                                                                              -17.66
                                 21 3 6
                                                                                                                       116.75
                                                                                                                                                   22.52
            110.00
                                                              3353.80
                                                                                          -13.80
                                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                                                             DIFFERENTIAL CORRECTIONS
                                                                                                                             RET .9000 RRF .9656 RTF .9313
SGB 2849.6 R23 .2780 R13 .9510
SGI 2813.1 SGZ 454.3 THA 21.62
       TDE 1.2160 TRA -.8941 TC3-1.8556 BAU .6774
       RDE .3322 RRA -.1209 RC3-1.0630 FAU .06269
                                                                                                                                                                                                                             LSA 1663.4 MSA 108.8 SSA 11.2
       FDE 1.1184 FRA -.2732 FC3-2.2905 BSP 8549
                                                                                                                                                                                                                             ELI 1531.4 EL2 50.9 ALF 14.85
       BDE 1.2605 BRA .9023 BC3 2.1384 FSP -741
                                                                                                                                                                                                                                                  ARRIVAL DATE NOV 15 1967
                                                                                                                                      FLIGHT TIME 120.00
LAUNCH DATE JUL 18 1967
                                                                                                                                     DISTANCE 350.957
    HELIOCENTRIC CONIC
      RL 152.04 LAL -.00 LOL 294.71 VL 27.371 GAL -8.37 AZL 85.05 MCA 164.51 SMA 133.16 ECC .20211 INC 4.9542 V1 29.304 RP 107.59 LAP 1.32 LOP 99.28 VP 36.347 GAP 3.68 AZP 94.78 TAL 217.69 TAP 22.20 RCA 106.25 APO 160.07 V2 35.223 RC 109.101 GL 27.35 GP -54.70 ZAL 139.61 ZAP 113.66 ETS 323.74 ZAE 117.96 ETE 225.15 ZAC 118.76 ETC 345.10 CLP-133.98
      PLANETOCENTRIC CONIC
                                                                                                                             MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                            SGT 2789.5 SGR 1101.0 SG3 186.3
RRT .8873 RRF .9841 RTF .9345
SG8 2999.0 R23 .2808 R13 .9525
SG1 2960.6 SG2 478.4 THA 19.84
                                                                                                                                                                                                                              ST 1859.4 SR 504.0 SS 727.2
CRT .9873 CRS -.9998 CST -.9893
        TOE 1.6261 TRA -.7457 TC3-1.7802 BAU .7007
       ROE .4469 RRA -.0197 RC3 -.9617 FAU .05033
                                                                                                                                                                                                                            LSA 2055.7 MSA 119.9 SSA 7.3
       FDE 1.1585 FRA -.0844 FC3-1.6821 BSP 9019
BOE 1.6864 BRA .7459 BC3 2.0234 FSP -615
                                                                                                                                                                                                                              EL1 1924.9 EL2 77.3 ALF 15.01
                                                                                                                                                                                                                                                 ARRIVAL DATE NOV 17 1967
                                                                                                                                      FLIGHT TIME 122.00
LAUNCH DATE JUL 18 1967
                                                                                                                                     DISTANCE 357.029
       RL 152.04 LAL -.00 LOL 294.71 VL 27.319 GAL -8.16 AZL 82.95 MCA 167.71 SMA 132.78 ECC .20185 INC 7.0482 V1 29.304 RP 107.57 LAP 1.50 LOP 102.51 VP 38.316 GAP 4.00 AZP 96.89 TAL 216.50 TAP 24.22 RCA 105.98 APO 159.58 V2 35.230 RC 111.351 GL 36.38 GP -60.77 ZAL 132.36 ZAP 111.63 ETS 317.32 ZAE 112.16 ETE 223.87 ZAC 117.67 ETC 340.81 CLP-159.03
      PLANETOCENTRIC CONIC
        C3 31.298 VML 5.594 DLA 45.59 RAL 167.07 RAD 6568.2 VEL 12.356 PTH 2.23 VMP 7.557 DPA -40.89 RAP 125.78 ECC 1.5151
       C3 31.298 VML 5.594 DLA 45.59 RAL 167.07 RAD 6568.2 VEL 12.356 PTH 2.23 VMP 7.557 OPA -40.89 RAP 125.78 ECC 1.5151 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 127.36 D 42 22 2935.76 -25.84 90.74 48.76 51.04 18 7 18 3757.2 -30.70 194.25 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.95 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.95 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 12.64 16 54 41 4357.18 -25.85 201.07 48.76 51.04 18 7 18 3757.2 -30.70 194.25 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 12.64 16 54 41 4357.18 -25.85 201.07 48.76 51.04 18 7 18 3757.2 -30.70 194.25 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 D 42 22 2935.76 -25.84 90.74 48.74 51.03 1 31 18 2335.8 -30.69 83.93 127.36 127.36 127.36 127.36 127.36 127.36 127.36 127.36 127.36 127.36
                                                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                              RRT .8559 RRF .9730 RTF .9402
SGB 3145.3 R23 .2782 R13 .9553
SGI 3103.9 SG2 508.7 THA 16.94
                                                                                                                                                                                                                            ST 2340.8 SR 563.4 95 785.0
        TOE 2.2757 TRA -.4855 TC3-1.5236 BAU .7110
                                                                                                                                                                                                                            CRT .9823 CRS -.9979 CST -.9923
                                                                                                                                                                                                                            LSA 2528.9 MSA 133.1 SSA
                                                                                                                                                                                                                                                                                                    4.7
                                                                                                                                                                                                                            EL1 2405.5 EL2 102.6 ALF 13.33
        BOE 2.3405 BRA .4989 BC3 1.6991 FSP
                                                                                                                                                                                                                                                   ARRIVAL DATE NOV 19 1967
                                                                                                                                       FLIGHT TIME 124.00
 LAUNCH DATE JUL 18 1967
                                                                                                                                       DISTANCE 363.056
       RL 152.04 LAL -.00 LOL 294.71 VL 27.265 GAL -7.93 AZL 79.42 MCA 170.89 SMA 132.39 ECC .20159 INCIO.5837 VI 29.304 RP 107.55 LAP 1.67 LOP 105.75 VP 36.283 GAP 4.30 AZP 100.45 TAL 215.26 TAP 26.15 RCA 105.70 APO 159.08 V2 35.236 RC 113.598 GL 47.28 GP -68.28 ZAL 122.78 ZAP 108.18 ETS 308.30 ZAE 104.85 ETE 219.98 ZAC 116.39 ETC 333.54 CLP-147.45
      HELIOCENTRIC CONIC
        PLANETOCENTRIC CONIC

C3 45.574 VHL 6.751 DLA 53.30 RAL 179.78 RAD 6568.7 VEL 12.920 PTH 2.35 VHP 9.531 DPA -46.89 RAP 118.82 ECC 1.7500

LNCH AZHTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

42.75 17 12 46 4530.35 -24.51 216.99 69.93 41.05 18 28 16 3930.3 -30.42 211.32

42.75 17 12 46 4530.35 -24.51 216.99 69.93 41.05 18 28 16 3930.3 -30.42 211.32

42.75 17 12 46 4530.35 -24.51 216.99 69.93 41.05 18 28 16 3930.3 -30.42 211.32

137.25 2 5 43 2952.16 -24.50 90.95 69.92 41.05 2 54 55 2352.2 -30.41 85.28

42.75 17 12 46 4530.35 -24.51 216.99 69.93 41.05 18 28 16 3930.3 -30.42 211.32

42.75 17 12 46 4530.35 -24.51 216.99 69.93 41.05 18 28 16 3930.3 -30.42 211.32

137.25 2 5 43 2952.16 -24.50 90.95 69.92 41.05 2 54 55 2352.2 -30.41 85.28

137.25 2 5 43 2952.16 -24.50 90.95 69.92 41.05 2 54 55 2552.2 -30.41 85.28
      PLANETOCENTRIC CONIC
                                                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                          ST 2852.0 SR 404.2 SS 806.9

CRT .9430 CRS -.9732 CST -.9943

LSA 2987.4 MSA 154.6 SSA 2.8

ELI 2877.4 EL2 133.3 ALF · 7.63
                                                                                                                              SGT 3178.1 SGR 816.7 SG3 105.4

RRT .7305 RRF .8983 RTF .9513

SGB 3281.3 R23 .2665 R13 .9606

SG1 3235.3 SG2 547.9 THA 10.95
         TOE 3.3599 TRA .0348 TC3-1.0384 BAU .6618
RDE .4480 RRA .3192 RC3 -.4170 FAU .02485
FDE 1.1470 FRA .2577 FC3 -.4721 BSP 9892
BDE 3.3896 BRA .3211 BC3 1.1190 FSP -357
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 21 1967

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LAUNCH DATE JUL 18 1967
                                                                                             DISTANCE 368.993
    HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 27.210 GAL -7.68 AZL 72.20 MCA 174.00 SMA 132.00 ECC .20126 INC17.7992 VI 29.304 RP 107.53 LAP 1.83 LOP 109.00 VP 38.249 GAP 4.58 AZP 107.71 TAL 213.94 TAP 27.94 RCA 105.43 APO 158.56 V2 35.241 RC 115.842 GL 58.44 GP -76.67 ZAL 111.41 ZAP 103.19 ETS 287.96 ZAE 94.86 ETE 204.27 ZAC 115.40 ETC 314.02 CLP-171.75
    PLANETOCENTRIC CONIC
                                                                                                                              2.66 VHP 13.765 DPA -52.75 RAP 105.47 ECC 2.5401
     C3 93.578 VHL 9.674 DLA 58.36 RAL 199.91 RAD 6569.8 VEL 14.660 PTH
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        33.17 19 34 55
                                                                                                                                                                                  -23.14
                                                                                                                                                                                                    225.42
          36.58 18 15 58 4737.09
143.42 3 43 5 3088.11
36.58 16 15 58 4737.09
                                                                                                   99.40
                                                                                                                                                               4137.1
                                                                 -16.50
                                                                                   229.75
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                                                                                                                                                                2488.1
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                                                                 -16.49
                                                                                     95.44
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                                                                                                                            33.17
         143.42
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                                         3068.11
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         143.42
                                            3088.11
                                                                 -16.49
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 2910.5 SR 612.7 S5 775.0
CRT -.9542 CRS .9238 CST -.9960
                                                                                        SGT 3314.5 SGR 692.2 SG3 72.9
RRT - .5216 RRF - 3365 RTF .9779
SGB 3386.0 R23 - .2228 R13 - .9737
     TOE 4.8594 TRA 1.2751 TC3 -.4103 BAU .5188
     ROE-1.0221 RRA .2765 RC3 -.0606 FAU .01232
FOE 1.0691 FRA .4535 FC3 -.1140 8SP 10312
BOE 4.9657 BRA 1.3052 BC3 .4147 FSP -247
                                                                                                                                                           LSA 3067.4 MSA 195.0 SSA 1.4
                                                                                                                                                           EL1 2968.8 EL2 179.7 ALF 168.60
                                                                                         SG1 3334.8 SG2 587.0 THA 173.58
                                                                                                                                                                          ARRIVAL DATE NOV 23 1967
                                                                                              FLIGHT TIME 128.00
LAUNCH DATE JUL 18 1967
                                                                                              DISTANCE 374.620
    HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 27.154 GAL -7.37 AZL 51.13 HCA 176.83 SMA 131.60 ECC .20038 INC38.8650 V1 29.304 RP 107.52 LAP 1.99 LOP 112.24 VP 38.214 GAP 4.76 AZP 128.82 TAL 212.41 TAP 29.24 RCA 105.23 APO 157.97 V2 35.246 RC 118.080 GL 61.98 GP -73.48 ZAL 100.15 ZAP 97.08 ETS 216.21 ZAE 77.54 ETE 136.40 ZAC 117.03 ETC 240.05 CLP 115.68
     **ANETOCENTRIC CONIC

C3 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C3 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C3 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C3 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAL 218.35 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAP [7,1] ECC 7.0000

C4 366.426 VML 19.142 DLA 53.25 RAD 6572.0 VEL 22.085 PTH 3.24 VMP 26.359 DPA -52.75 RAD FROM 19.142 DPA -52.75 RAD FRO
    PLANETOCENTRIC CONIC
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SGT 1116.6 SGR TIAT
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         137.18
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    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 1116.6 SGR 3183.6 SG3 53.4
RRT -.8686 RRF -.9844 RTF ..9410
                                                                                                                                                            ST 467.8 SR 2366.3 SS 890.0
CRT -.8916 CRS .9939 CST -.9360
      TDE 1.1437 TRA 2.1245 TC3 -.0039 BAU .5920
      RDE-7.5979 RRA-4.3566 RC3 -.1208 FAU-.00829
                                                                                                                                                            LSA 2561.4 MSA 223.1 SSA
      FOE 1.2074 FRA .9906 FC3 .0196 BSP 9409
                                                                                        SGB 3373.7 R23 -.1243 R13 -.9918
                                                                                                                                                            EL1 2403.1 EL2 208.6 ALF 100.07
                                                                     -161
                                                                                          SG1 3332.1 SG2 528.6 THA 107.40
      BOE 7.6835 BRA 4.8470 BC3 .1208 FSP
                                                                                                                                                                         ARRIVAL DATE NOV 25 1967
                                                                                              FLIGHT TIME 130.00
LAUNCH DATE JUL 18 1967
                                                                                              DISTANCE 382.941
     RL 152.04 LAL -.00 LOL 294.71 VL 27.098 GAL -7.58 A7L 160.14 MCA 182.28 SMA 131.20 ECC .20541 INC70.1389 V1 29.304 RP 107.50 LAP 2.14 LOP 115.48 VP 38.177 GAP 5.71 A7P 19.87 TAL 212.39 TAP 34.67 RCA 104.25 APO 158.15 V2 35.250 RC 120.312 GL -50.98 GP 59.03 ZAL 96.12 ZAP 95.41 ETS 175.64 ZAE 60.06 ETE 251.53 ZAC 96.58 ETC 142.44 CLP 100.56
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C31057.431 VHL 32.518 OLA -51.02 RAL 165.26 RAD 6573.0 VEL 34.332 PTH 3.51 VHP 40.930 OPA 62.02 RAP 351.99 ECC18.4026
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 650.8 SR 2529.5 SS 1857.1
                                                                                         SGT 1070.9 SGR 2919.9 SG3 51.0
      TOE 3.4993 TRA 2.4719 TC3 -.0824 BAU 3.0776
                                                                                                                                                          CRT -.9701 CRS -.9999 CST .9669
LSA 3200.9 MSA 158.8 SSA 1.7
EL1 2607.4 EL2 153.3 ALF 104.06
                                                                                        RRT -.8706 RRF .9986 RTF -.8474
SGB 3110.1 R23 -.0982 R13 .9948
      R0-14.3087 RRA-2.4007 RC3 .2015 FAU-.04578
FDE-2.9735 FRA -.4202 FC3 .0375 8SP 8164
BDE14.7304 BRA 3.4458 BC3 .2177 FSP -140
                                                                                         SG1 3069.5 SG2 501.1 THA 108.21
                                                                                                                                                                          ARRIVAL DATE NOV 27 1967
                                                                                               FLIGHT TIME 132.00
 LAUNCH DATE JUL 18 1967
                                                                                              DISTANCE 388.040
     TELIOCENIRIE CONIC

RL 152.04 LAL -.00 LOL 294.71 VL 27.041 GAL -7.15 AZL 119.68 MCA 184.62 SMA 130.80 ECC .20356 INC29.6762 V1 29.304

RP 107.49 LAP 2.29 LOP 118.73 VP 36.140 GAP 5.74 AZP 60.40 TAL 210.54 TAP 35.17 RCA 104.18 APO 157.43 V2 35.253

RC 122.538 GL -62.82 GP 76.55 ZAL 102.81 ZAP 102.56 ETS 125.94 ZAE 86.76 ETE 204.48 ZAC 88.92 ETC 92.42 CLP 159.21
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 222.989 VHL 14.933 DLA -53.51 RAL 140.04 RAD 6571.3 VEL 18.555 PTH 3.05 VHP 17.768 DPA 79.00 RAP 277.16 ECC 4.6698
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.49 2 35 17 2218.56 6.95 61.53 44.85 143.20 3 12 16 1618.6 13.32 57.03
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143.20 11 36 42
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                                                                                                                                                            ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
TDE-4.3489 TRA-1.7718 TC3 -.0243 BAU .1253
RDE-4.9847 RRA-3.6370 RC3 .0343 FAU .00346
FDE-1.6243 FRA -.7526 FC3 -.0134 BSP 10899
TOE-1.6243 FRA -.7526 FC3 .0420 FSP -211
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 1703.5 SR 2038.1 SS 982.5
CRT .9888 CRS -.9924 CST -.9996
                                                                                          SGT 2024.0 SGR 3029.2 SG3 68.4
                                                                                        RRT .9569 RRF .9712 RTF .9980
                                                                                                                                                            LSA 2824.8 MSA 203.9 SSA 1.0
                                                                                         SG8 3643.2 R23 -.1486 R13 .9885
                                                                                                                                                             EL1 2649.0 EL2 195.9 ALF 50.17
                                                                                         SG1 3609.7 SG2 493.2 THA 56.70
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FLIGHT TIME 126.00

ARRIVAL DATE NOV 29 1967

LAUNCH DATE JUL 18 1967

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HELIOCENTRIC CONIC
                                                                       ISTANCE 393.832
    RL 152.04 LAL -.00 LOL 294.71 VL 26.983 GAL 6.85 AZL 108.52 MCA 187.66 SMA 130.40 ECC .20336 INC18.5175 V1 29.304
RP 107.49 LAB 2.43 LOP 121.98 VP 38.101 GAP 5.97 AZP 71.64 TAL 209.05 TAP 36.71 RCA 103.88 APO 156.92 VZ 35.256
RC 124.755 GL -59.62 GP 68.24 ZAL 108.39 ZAP 110.84 ETS 77.41 ZAE 99.29 ETE 158.58 ZAC 89.32 ETC 44.23 CLP-163.65
   PLANETOCENTRIC CONIC
    C3 97.286 VHL 9.863 DLA -48.00 RAL 137.21 RAD 6569.9 VEL 14.786 PTH 2.67 VHP 11.239 DPA 73.97 RAP 216.08 ECC 2.6011
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                  2 46 7 2016.57
10 52 45 5825.51
2 46 7 2016.57
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                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3726.6 SGR 647.3 SG3 99.1
RRT .6436 RRF .4736 RTF .9775
SGB 3782.4 R23 -.2178 R13 .9743
                                                                                                                     ST 2449.1 SR 220.6 SS 846.3
CRT -.1648 CRS .2735 CST'-.9938
LSA 2590.0 MSA 234.6 SSA 1.7
    TOE-3.9536 TRA-3.2648 TC3 -.3857 BAU
    ROE .1887 RRA - .7348 RC3 .0025 FAU .01904
    FDE-1.4561 FRA -.8055 FC3 -.1695 BSP 11510
BDE 3.9581 BRA 3.3465 BC3 .3857 FSP -313
                                                                                                                     EL1 2449.4 EL2 217.5 ALF 179.14
                                                                   SG1 3750.3 SG2 492.3 THA 6.49
                                                                       FLIGHT TIME 136,00
                                                                                                                                ARRIVAL DATE DEC 1 1967
                                                                      DISTANCE 399.737
  HELIOCENTRIC CONIC
   RL 132.04 LAL -.00 LOL 294.71 VL 26.929 GAL -6.56 AZL 103.75 MCA 190.82 SMA 130.00 ECC .20353 INC13.7484 V1 29.304 RP 107.48 LAP 2.56 LOP 125.22 VP 38.062 GAP 6.23 AZP 76.49 TAL 207.61 TAP 38.43 RCA 103.54 APO 156.46 V2 35.258
    RC 126.964 GL -54.97 GP 58.44 7AL 112.51 ZAP 118.56 ETS 64.52 ZAE 107.63 ETE 149.60 ZAC 90.80 ETC 31.60 CLP-156.00
  PLANETOCENTRIC CONIC
    C3 60.275 VHL 7.764 DLA -43.16 RAL 138.77 RAD 6569.1 VEL 13.-77 PTH
                                                                                                2.46 VHP 8.685 DPA
                                                                                                                            65.39 RAP 196.16 ECC 1.9920
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 16 29 1843.74
10 34 48 5777.31
                                                  17.72
                                                                36.76
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                  3 16 29 1843.74
10 34 48 5777.31
3 16 29 1843.74
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      124.04
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  DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 SGT 3846.3 SGR 507.1 SG3 133.7
RRT -.4445 RRF -.6699 RTF .9586
SGB 3879.6 R23 .2654 R13 -.9605
SGI 3853.0 SG2 453.5 THA 176.60
                                                                                                                     ST 2301.5 SR 472.1 SS 845.5
CRT -.8942 CRS .9555 CST -.9864
    TOE-2.8800 TRA-2.9058 TC3 -.8233 BAU .6681
    ROE .6381 RRA -.1102 RC3 .0976 FAU .03067
FDE-1.4869 FRA -.8402 FC3 -.4405 BSP 11929
                                                                                                                    LSA 2485.4 MSA 238.9 SSA
                                                                                                                                                          2.6
    BOE 2.9499 BRA 2.9079 BC3 .8291 FSP
                                                                                                                     EL1 2340.2 EL2 207.9 ALF 169.52
                                                     -429
                                                                                                                               ARRIVAL DATE DEC 3 1967
                                                                      FLIGHT TIME 138.00
LAUNCH DATE JUL 18 1967
                                                                     DISTANCE 405.669
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 26.867 GAL -6.28 AZL 101.13 HCA 194.UZ SMA 129.60 ECC .20388 INC11.1261 V1 29.304 RP 107.48 LAP 2.68 LOP 128.47 VP 38.022 GAP 6.49 AZP 79.20 TAL 206.17 TAP 40.19 RCA 103.18 APO 156.03 V2 35.259 RC 129.165 GL -50.83 GP 50.10 ZAL 115.22 ZAP 125.28 ETS 58.99 ZAE 113.61 ETE 148.82 ZAC 92.02 ETC 26.37 CLP-154.22
   PLANETOCENTRIC CONIC
    C3 44.189 VHL 6.647 DLA -39.40 RAL 141.14 RAD 6568.7 VEL 12.867 PTH 2.34 VHP 7.463 DPA 57.45 RAP 187.94 ECC 1.7272
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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124.96 11 56 46
                    3 49 32 1701.38
10 20 41 5765.61
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      118.63
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 3923.9 SGR 554.0 SG3 163.8
RRT -.6604 RRF -.8550 RTF ..9463
SGB 3962.8 R23 ..2944 R13 -.9492
SGI 3941.1 SG2 414.2 THA 174.61
                                                                                                                     ST 2210.1 SR 510.4 SS 854.1
    TOE-2.3538 TRA-2.6153 TC3-1.2520 BAU .7458
   ROE .5921 RRA .0130 RC3 .1617 FAU .03960
FOE-1.5022 FRA -.8284 FC3 -.7758 BSP 12183
                                                                                                                    CRT -.9215 CRS .9795 CST -.9808
L'SA 2411.8 MSA 240.0 SSA 3.4
EL1 2259.9 EL2 193.8 ALF 167.89
    BOE 2.4271 BRA 2.6153 BC3 1.2624 FSP
LAUNCH DATE JUL 18 1967
                                                                         IGHT TIME 140,00
                                                                                                                               ARRIVAL DATE DEC 5 1967
                                                                      DISTANCE 411.604
  HELIOCENTRIC CONIC
   RL 152.04 LAL -.00 LOL 294.71 VL 26.809 GAL -5.99 AZL 99.47 MCA 197.23 SMA 129.21 ECC .20436 INC 9.4651 VI 29.304 RP 107.48 LAP 2.79 LOP 131.72 VP 37.981 GAP 6.76 AZP 80.95 TAL 204.72 TAP 41.95 RCA 102.80 APO 155.61 V2 35.259 RC 131.355 GL -47.39 GP 43.25 ZAL 116.85 ZAP 130.95 ETS 55.48 ZAE 117.92 ETE 150.34 ZAC 92.70 ETC 23.22 CLP-154.14
  PLANETOCENTRIC CONIE
   C3 35.492 VHL 5.938 DLA -36.57 RAL 143.66 RAD 6568.4 VEL 12.524 PTH 2.27 VHP 6.820 DPA 50.62 RAP 183.96 ECC 1.5841
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.82 4 21 51 1581.39 20.20 16.53 23.90 121.15 4 48 12 981.4 24 14 4.5
                                                                                          121.15 4 48 12
121.14 11 44 42
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                                                                                                                        5175.0
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      114.18
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2157.1 SR 486.3 SS 855.3
CRT -.9261 CRS .9857 CST -.9763
                                                                  SGT 4013.0 SGR 537.1 SG3 186.7
    TDE-2.0549 TRA-2.4011 TC3-1.6640 BAU .7946
                                                                  RRT -.7062-RRF -.8869 RTF .9376
SGB 4048.8 R23 .3089 R13 -.9404
    RDE .5054 RRA .0336 RC3 .1888 FAU .04589
   FDE-1.4806 FRA -.7767 FC3-1.1194 BSP 12455
BDE 2.1161 BRA 2.4014 BC3 1.6747 FSP -601
                                                                                                                    LSA 2358.7 MSA 240.1 SSA 4.4
                                                                  SG1 4031.1 SG2 378.6 THA 174.55
                                                                                                                    ELT 2203.9 EL2 179.6 ALF 168.13
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FLIGHT TIME 134.00

ARRIVAL CATE CEC 7 1967 FLIGHT TIME 142.00 LAUNCH DATE JUL 18 1967 DISTANCE 417.534. HELIOCENTRIC CONIC RL 152.04 LAL -.00 LOL 294.71 VL 26.750 GAL -5.69 A7L 98.31 HCA 200.46 SMA 128.81 ECC .20497 INC 8.3144 VI 29.304 RP 107.48 LAP 2.90 LOP 134.97 VP 37.939 GAP 7.03 A7P 82.20 TAL 203.25 TAP 43.71 RCA 102.41 APO 155.22 V2 35.259 RC 133.537 GL -44.56 GP 37.68 TAL 117.66 TAP 135.69 ETS 52.78 TAE 121.01 ETE 152.57 TAC 92.84 ETC 20.91 CLP-154.71 PLANETOCENTRIC CONIC C3 30.094 VHL 5.486 DLA -34.46 RAL 146.19 RAD 6568.2 VEL 12.307 PTH 2.22 VHP 6.468 CPA 44.84 RAP 182.00 ECC 1.4953 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.13 23.14 118.32 5 17 9 118.31 11 34 33 878.1 4 52 31 1478.13 9 57 57 5795.10 20.51 8.52 69.49 23.15 5195.1 24.14 20.52 273.92 110.51 118.32 5 17 9 118.31 11 34 33 118.32 5 17 9 118.31 11 34 33 1.22 24.13 4 52 31 20.51 8.52 23.14 A7A.1 1478.13 69.49 266.62 273.92 23.15 5195.1 24.14 5795.10 20.52 9 57 57 110.51 1.22 878.1 24.13 23.14 20.51 8.52 1478.13 69.49 4 52 31 266.62 5195.1 24.14 273.92 23.15 5795.10 20.52 11/1/51 9 57 57 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2130.9 SR 452.5 SS 850.9 CRT -.9271 CRS .9886 CST -.9728 SGT 4114.3 SGR 499.6 SG3 202.9 TOE-1.8705 TRA-2.2319 TC3-2.0618 BAU .8330 ROE .4331 RRA .0307 RC3 .1901 FAU .04994 FOE-1.4347 FRA -.7004 FC3-1.4368 BSP 12817 BOE 1.9200 BRA 2.2321 BC3 2.0705 FSP -658 RRT -.7129 RRF -.8871 RTF .9315 SGB 4144.5 R23 .3112 R13 -.9338 SG1 4129.8 SG2 349.1 THA 175.02 LSA 2326.4 MSA 239.4 SSA 5.4 EL1 2172.1 EL2 166.4 ALF 168.79 ARRIVAL CATE CEC 9 1967 FLIGHT TIME 144.00 LAUNCH DATE JUL 18 1967 HELIOCENTRIC CONIC DISTANCE 423,455 RL 152.04 LAL -.00 LOL 294.71 VL 26.691 GAL -5.39 AZL 97.47 HCA 203.69 SMA 128.42 ECC .20570 INC 7.4661 V1 29.304 RP 107.48 LAP 2.99 LOP 138.22 VP 37.896 GAP 7.30 AZP 83.16 TAL 201.76 TAP 45.46 RCA 102.01 APO 154.84 V2 35.257 RC 135.709 GL -42.21 GP 33.15 ZAL 117.83 ZAP 139.66 ETS 50.55 ZAE 123.22 ETE 154.93 ZAC 92.52 ETC 19.09 CLP-155.57 PLANETOCENTRIC CONIC C3 26.410 VHL 5.139 DLA -32.91 RAL 148.72 RAD 6568.1 VEL 12.157 PTH 2.18 VHP 6.279 DPA 39.95 RAP 181.18 ECC 1.4346 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.48 5 21 4 1389.02 20.65 1.68 23.09 116.21 5 44 13 789.0 24.00 354.24 23.09 5 21 4 9 49 37 5 44 13 1389.02 20.65 1.68 116.21 72.48 116.20 11 26 36 5219.1 24.01 268.42 275.86 23.10 20.66 5819.08 107.52 5 44 13 789.0 24.00 354.24 20.65 1.68 23.09 116.21 5 21 4 1349.02 72.48 116.20 11 26 36 121.45 9 6 15 111.17 12 47 53 9 49 37 5219.1 24.01 268.42 275.86 23.10 5819.08 20.66 107.52 100.5 18.19 300.51 307.27 19.33 110.00 8 54 34 700.46 14.13 4955.6 30.11 250.55 258.76 26.37 11 15 17 5555.62 27.48 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2129.7 SR 424.6 SS 847.7 CRT -.9290 CRS .9908 CST -.9704 SGT 4232.2 SGR 463.4 SG3 214.8 RRT -.7066 RRF -.8730 RTF .9276 TOE-1.7567 TRA-2.0909 TC3-2.4546 BAU .8689 ROE .3807 RRA .0252 RC3 .1781 FAU .05251 F0E-1.3832 FRA -.6168 FC3-1.7212 BSP 13338 SGB 4257.5 R23 .3020 R13 -.9294 SG1 4245.0 SG2 326.9 THA 175.55 LSA 2319.0 MSA 237.9 SSA 6.5 EL1 2166.1 EL2 154.5 ALF 169.45 BDE 1.7975 BRA 2.0911 BC3 2.4610 FSP -711 ARRIVAL DATE DEC 11 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 18 1967 DISTANCE 429.369 RL 152.04 LAL --.00 LOL 294.71 VL 26.633 GAL -5.07 A7L 96.81 MCA 206.93 SMA 128.04 ECC .20655 INC 6.8113 VI 29.304 RP 107.49 LAP 3.08 LOP 141.48 VP 37.853 GAP 7.57 A7P 83.92 TAL 200.26 TAP 47.19 RCA 101.59 APO 154.48 V2 35.255 RC 137.871 GL -40.24 GP 29.44 ZAL 117.47 ZAP 143.02 ETS 48.66 ZAE 124.80 ETE 157.18 ZAC 91.83 ETC 17.58 CLP-156.54 PLANETOCENTRIC CONIC C3 23.721 VHL 4.870 DLA -31.81 RAL 151.29 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.187 DPA 35.76 RAP 181.07 ECC 1.3904 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.65 6 8 56 114.65 11 21 26 114.65 6 8 56 114.64 11 21 26 713.5 23.58 5 47 3 1313.55 20.77 355.97 74.87 5241.7 270.10 277.64 23.59 9 44 4 5841.65 20.78 105.13 348.43 713.5 23.91 5 47 3 1313.55 20.77 355.97 23.58 74.87 9 44 4 5841.65 8 39 14 755.15 11 51 4 5448.04 5241.7 23.93 270.10 20.78 277.64 23.59 105.13 18.73 122.19 8 51 49
51.32 27.46 107.38 13 21 52
HID-COURSE EXECUTION ACCURACY
SGT 4261 9 569 467 155.2 16.33 303.66 12.17 310.29 110.00 4848.0 242.73 251.32 110.00 29.91 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4261.9 SGR 417.4 SG3 214.0 RRT - .6639 RRF - .8337 RTF .9193 SGB 4282.3 R23 .2943 R13 - .9207 ST 2098.4 SR 393.3 SS 816.9 TOE-1.6479 TRA-1.9244 TC3-2.7755 BAU .8813 CRT -.9289 CRS .9925 CST -.9668 LSA 2273.8 MSA 235.5 SSA 7.6 ROE .3343 RRA .0118 RC3 .1424 FAU .05180 FOE-1.2868 FRA -.4856 FC3-1.8906 BSP 12955 EL1 2130.1 ELZ 143.5 ALF 170.08 SG1 4271.0 SG2 311.4 THA 176.26 BOE 1.6815 BRA 1.9244 BC3 2.7791 FSP -667 ARRIVAL DATE DEC 13 1967 FLIGHT TIME 148.00 LAUNCH DATE JUL 18 1967 DISTANCE 435.266 HELIOCENTRIC CONIC RL 192.04 LAL -.00 LOL 294.71 VL 26.575 GAL -4.74 AZL 96.29 HCA 210.17 SMA 127.66 ECC .20752 INC 6.2878 VI 29.304 RP 107.50 LAP 3.16 LOP 144.73 VP 37.810 GAP 7.84 AZP 84.56 TAL 198.74 TAP 48.91 RCA 101.16 APO 154.15 VZ 35.253 RC 140.023 GL -38.55 GP 26.38 ZAL 116.70 ZAP 145.91 ETS 47.07 ZAE 125.93 ETE 159.24 ZAC 90.85 ETC 16.31 CLP-157.58 PLANETOCENTRIC CONIC C3 21.663 VHL 4.654 DLA -31.05 RAL 153.90 RAD 6567.9 VEL 11.960 PTH 2.13 VHP 6.157 DPA 32.14 RAP 181.44 ECC 1.3565 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23.90 24.50 113.50 6 31 4 651.5 343.74 6 10 12 1251.45 20.91 351.34 76.70 113.48 11 19 24 5259.6 23.92 271.46 24.50 5859.65 279.07 20.92 9 41 44 343.74 113.50 6 31 4 651.5 23.90 24.50 6 10 12 1251.45 20.91 351.34 76.70 11 19 24 8 48 34 13 45 12 5259.6 23.92 271.46 24.50 113.48 279.07 103.30 9 41 44 5859.65 20.92 304.99 122.47 178.6 15.52 110.00 8 35 35 778.64 11.31 311.58 19.20 237.67 12 15 32 5380.45 104.77 4780.5 32.89 246.47 110.00 31.18 28.46 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4375.2 SGR 394.7 SG3 218.0 RRT -.6389 RRF -.7970 RTF .9169 ST 2123.5 SR 379.2 SS 812.7 CRT -.9343 CRS ..9945 CST -.9658 TDE-1.6043 TRA-1.7986 TC3-3.1436 BAU .9111 .3080 RRA .0097 RC3 .1169 FAU .05201 SGB 4393.0 R23 .2709 R13 -.9179 SG1 4382.5 SG2 303.2 THA 176.68 LSA 2293.4 MSA 232.2 SSA 8.7 FDE-1.2324 FRA -.3939 FC3-2.0786 BSP 13455 EL1 2153.0 EL2 133.3 ALF 170.49

BOE 1.6336 BRA 1.7986 BC3 3.1458 FSP -692

ARRIVAL CATE DEC 15 1967

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LAUNCH DATE JUL 18 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 441.151
    RL 152.04 LAL -.00 LOL 294.71 VL 26.516 GAL -4.41 AZL 95.86 HCA 213.41 SNA 127.28 ECC .20862 INC 5.8572 VI 29.304
RP 107.51 LAP 3.22 LOP 147.98 VP 37.766 GAP 8.10 AZP 85.11 TAL 197.21 TAP 50.62 RCA 100.72 APO 153.83 VZ 35.249
RC 142.165 GL -37.07 GP 23.83 ZAL 115.57 ZAP 148.41 ETS 45.72 ZAE 126.75 ETE 161.06 ZAC 89.64 ETC 15.22 CLP-158.63
   PLANETOCENTRIC CONIC
    C3 20.033 VHL 4.476 OLA -30.57 RAL 156.58 RAD 6567.8 VEL 11.892 PTH 2.11 VHP 6.169 OPA 28.97 RAP 182.15 ECC 1.3297
    C3 ZU.U33 VML 4.476 OLA -30.57 RAL 156.58 RAD 6567.8 VEL 11.892 PTH 2.11 VMP 6.169 OPA 28.97 RAP 182.15 ECC 1.3297 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.96 6 30 2 1203.83 21.10 347.85 25.78 112.65 6 50 6 603.8 23.99 340.19 102.04 9 43 19 5869.75 21.11 279.91 25.79 112.64 11 21 9 5269.7 24.00 272.25 110.00 8 38 21 785.96 11.04 311.97 20.32 122.56 8 51 27 186.0 15.26 305.41
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122.56 8 51 27
102.95 14 3 6
                                   5335.61
                                                                     243.18
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       110.00
                    12 34 11
                                                      31.91
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                                                                                                                                                     33.37
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4475.0 SGR 378.2 SG3 218.8
RRT -.6063 RRF -.7516 RTF .9144
SGB 4491.0 R23 .2448 R13 -.9152
                                                                                                                               ST 2154.3 5R 369.6 SS 806.9
CRT -.9412 CRS .9964 CST -.9652
LSA 2318.8 MSA 227.8 SSA 9.9
    TOE-1.5775 TRA-1.6688 TC3-3.4956 BAU .9365
    ROE .2887 RRA .0087 RC3 .0884 FAU .05133
FOE-1.1770 FRA -.2995 FC3-2.2183 BSP 13826
BOE 1.6037 BRA 1.6688 BC3 3.4967 FSP -700
                                                                         5G1 4480.9 SG2 - 300.3 THA 177.05
                                                                                                                                EL1 2182.3 EL2 123.2 ALF 170.80
LAUNCH DATE JUN 18 1967
                                                                              FLIGHT TIME 152.00
                                                                                                                                            ARRIVAL DATE DEC 17 1967
                                                                             DISTANCE 447.023
  HELIOCENTRIC CONTC
   RL 152.04 LAL -.00 LOL 294.71 VL 26.458 GAL -4.06 A7L 95.49 MCA 216.64 SMA 126.90 ECC .20986 INC 5.4947 VI 29.304 RP 107.52 LAP 3.28 LOP 151.23 VP 37.721 GAP 8.37 A7P 85.59 TAL 195.67 TAP 52.31 RCA 100.27 APO 153.54 VZ 35.245 RC 144.295 GL -35.75 GP 21.69 ZAL 114.13 ZAP 150.62 ETS 44.61 ZAE 127.35 ETE 162.67 ZAC 88.24 ETC 14.28 CLP-159.68
   PLANETOCENTRIC CONIC
    C3 18,710 VHL 4.326 DLA -30.32 RAL 159.36 RAD 6567.8 VEL 11.836 PTH
                                                                                                         2,10 VHP 6.210 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                  27.40
                                  1171.15
5870.11
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       110.00
                    12 49 13
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4563.2 SGR 367.7 SG3 217.3
RRT -.5695 RRF -.7007 RTF .9118
SGB 4578.0 R23 .2180 R13 -.9125
SG1 4568.0 SG2 301.9 THA 177.36
                                                                                                                                ST 2191.0 SR 363.9 SS 800.1
CRT -.9493 CRS .9980 CST -.9651
    TOE-1.5641 TRA-1.5334 TC3-3.8326 BAU .9588
    RDE: .2747 RRA .0088 RC3 .0592 FAU .05004
    FOE-1.1227 FRA -. 2050 FC3-2.3156 BSP 14110
                                                                                                                               LSA 2350.3 MSA 222.3 SSA [1.1
    BOE 1.5880 BRA 1.5335 BC3 3.8331 FSP -695
                                                                                                                                EL1 2218.2 EL2 113.0 ALF 171.02
                                                                                                                                           ARRIVAL DATE DEC 19 1967
                                                                             FEIGHT TIME 154.00
LAUNCH DATE JUL 18 1967
                                                                            DISTANCE 452.880
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.QO LOL 294.71 VL 26.401 GAL -3.71 AZL 95.18 MCA 219.88 SMA 126.54 ECC .21124 INC 5.1837 V1 29.304
RP 107.53 LAP 3.32 LOP 154.48 VP 37.676 GAP 8.64 AZP 86.02 TAL 194.11 TAP 53.99 RCA 99.81 APO 153.26 V2 35.240
RC 146.414 GL -34.54 GP 19.87 ZAL 112.40 ZAP 152.59 ETS 43.71 ZAE 127.79 ETE 164.08 ZAC 86.69 ETC 13.46 CLP-160.72
   PLANETOCENTRIC CONIC
    C3 17.623 VHL 4.198 DLA -30.26 RAL 162.26 RAD 6567.7 VEL 11.790 PTH 2.08 VHP 6.272 DPA 23.61 RAP 184.26 ECC 1.2900
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC THI AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.66 7 18 32
111.65 11 37 3
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                                                    32.57
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        RTI -.5342 RRF .6499 RTF .9098
SGB 4664.9 R23 .1913 R13 -.9104
SGI 4654.8 SG2 306.9 THA 177.60
                                                                                                                               ST 2238.3 SR 362.0 55 795.4

CRT -.9582 CRS ..9990 CST -.9657

LSA 2393.1 MSA 215.9 55A 12.3
    TOE-1.5649 TRA-1.3950 TC3-4.1617 BAU .9805
    ROE .2652 RRA .0102 RC3 .0320 FAU .04851
FDE-1.0738 FRA -.1153 FC3-2.3832 BSP 14406
BOE 1.5872 BRA 1.3951 BC3 4.1618 FSP -688
                                                                                                                                EL1 2265.1 EL2 102.4 ALF 171.17
LAUNCH DATE JUL 18 1967
                                                                             FLIGHT TIME 156.00
                                                                                                                                            ARRIVAL DATE DEC 21 1967
                                                                             DISTANCE 458.722
  HELIOCENTRIC CONIC
   RL 152.04 LAL -.00 LOL 294.71 VL 26.343 GAL -3.34 AZL 94.91 MCA 223.12 SMA 126.17 ECC .21276 INC 4.9121 V1 29.304
RP 107.55 LAP 3.36 LOP 157.73 VP 37.631 GAP 8.91 AZP 86.41 TAL 192.54 TAP 55.66 RCA 99.33 APO 153.02 V2 35.234
RC 148.521 GL -33.41 GP 18.32 ZAL 110.42 ZAP 154.36 ETS 43.01 ZAE 128.12 ETE 165.30 ZAC 85.02 ETC 12.74 CLP-161.75
  PLANETOCENTRIC CONIC
    C3 16.724 VHL 4.090 DLA -30.35 RAL 165.30 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 6.350 DPA 21.30 RAP 185.57 ECC 1.2752
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.61 7 9 34 1146.50 22.03 343.97 31.57 111.42 7 28 41 546.5 24.74 336.19
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                      7 9 34 1146.50
10 13 20 5842.63
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111.41
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100.67 14 40 35
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       110.00
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                    15 12 33
                                    5281.47
                                                      32.67
                                                                    239.14
                                                                                      35.01
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       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 4727.1 SGR 363.3 SG3 211.3
RRT -.5003 RRF -.6005 RTF .9078
SGB 4741.1 R23 .1666 R13 -.9082
                                                                                                                               ST 2290.4 SR 362.8 SS 790.4
CRT -.9672 CRS ..9991 CST -.9665
    TDE-1.5742 TRA-1.2485 TC3-4.4711 BAU .9997
    ROE .2589 RRA .0121 RC3 .0064 FAU .04667
                                                                                                                                LSA 2441.1 MSA 208.6 SSA 13.5
    FOE-1.0274 FRA -.0279 FC3-2.4159 BSP 14625
BDE 1.5954 BRA 1.2485 BC3 4.4711 FSP -674
                                                                        SG1 4730.7 SG2 314.3 THA 177.79
                                                                                                                             EL1 2317.2 EL2 91.1 ALF 171.28
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FLIGHT TIME 150.00

ARRIVAL DATE DEC 23 1967

LAUNCH CATE JUL 18 1967

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DISTANCE 464.547
  RL 152.04 LAL -.00 LOL 294.71 VL 26.286 GAL -2.96 AZL 94.67 HCA 226.36 SMA 125.81 ECC .21444 INC 4.6716 V1 29.304 RP 107.57 LAP 3.38 LOP 160.98 VP 37.585 GAP 9.19 AZP 86.77 TAL 190.96 TAP 57.32 RCA 98.83 APO 152.79 V2 .35.228 RC 150.615 GL -32.33 GP 16.98 ZAL 108.20 ZAP 155.97 ETS 42.51 ZAE 128.36 ETE 166.37 ZAC 83.24 ETC 12.12 CLP-162.75
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 15.986 VML 3.998 DLA -30.55 RAL 168.48 RAD 6567.6 VEL 11.720 PTH 2.07 VMP 6.442 DPA 19.17 RAP 187.00 ECC 1.2631
                                             INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZHTH LNCH TIME L-I TIME
                                                                         34.10
                                                                                                      7 37 10
                                                22.42
                                                             344.38
                                                                                        111.31
      78.03
                   7 18 0 1149.68
                                                                                          111.30 12 7 15
111.31 7 37 10
111.30 12 7 15
121.93 9 37 40
100.69 14 50 4
                                                                                                                       5218.8
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                                                                                                                                                   268.86
                                                 22.43
                                                             276.67
                                                                            34.11
      101.97
                  10 30 17
                               5818.81
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                                                             344.38
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       78.03
                   7 18 0
                               1149.68
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                  10 30 17 5818.81
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                                                 12.90
                                                              309.17
      110.00
                   9 25 25
                                 734.73
                 13 22 2 5281.75
                                                                                                                       4681.8
                                                                                                                                      33.79
                                                                                                                                                   230.11
                                                                            37.41
                                                             239.16
      110.00
                                                 32.66
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 4808.6 SGR 367.3 SG3 207.8
RRT -,4732 RRF -.5575 RTF .9068
SGB 4822.6 R23 .1435 R13 -.9072
SGI 4811.7 SG2 323.4 THA 177.92
                                                                                                                  ST 2353.6 SR 366.3 SS 788.3
CRT -.9757 CRS .9984 CST -.9680
   TOE-1.5952 TRA-1.0986 TC3-4.7711 BAU 1.0196
   RDE .2556 RRA .0148 RC3 -.0153 FAU .04485
FDE -.9874 FRA .0523 FC3-2.4292 BSP 14912
                                                                                                                   LSA 2500.9 MSA 200.5 SSA 14.8
                                                                                                                   EL1 2380.6 EL2 79.3 ALF 171.36
   BDE 1.6155 BRA 1.0987 BC3 4.7711 FSP -664
                                                                                                                              ARRIVAL DATE DEC 25 1967
                                                                     FLIGHT TIME 160.00
LAUNCH DATE JUL 18 1967
                                                                     DISTANCE 470.356
  HELIOCENTRIC CONIC
  RL 152.04 LAL -.00 LOL 294.71 VL 26.230 GAL -2.56 AZL 94.46 HCA 229.60 SMA 125.46 ECC .21629 INC 4.4557 V1 29.304 RP 107.59 LAP 3.39 LOP 164.22 VP 37.539 GAP 9.47 AZP 87.11 TAL 189.37 TAP 58.97 RCA 98.32 APO 152.60 V2 35.221 RC 152.696 GL -31.26 GP 15.82 ZAL 105.77 ZAP 157.46 ETS 42.19 ZAE 128.55 ETE 167.31 ZAC 81.38 ETC 11.56 CLP-163.73
  PLANETOCENTRIC CONIC
   C3 15.387 VHL 3.923 OLA -30.84 RAL 171.81 RAD 6567.6 VEL 11.695 PTH
                                                                                              2.06 VHP 6.544 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         111.31
                                                                                                                                    25.53
                                                                                                        7 44 53
                                                                                                                       559.3
                                                              345.27
                                                                             36.93
                                                 22.84
       77.24
                   7 25 34 1159.27
                                                                                                    12 25 53
                                                                                                                       5192.0
                                                                                                                                       25.54
                                                                                                                                                   266.99
                                                                                          111.29
                                                                             36.94
      102.76
                                                             274.84
                  10 49 21
                               5791.95
                                                 22.85
                                                                                                        7 44 53
                                                                                                                        559.3
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121.60 9 55 21
100.99 14 58 43
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      102.76
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                                5791.95
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                                                                             32.19
      110.00
                   9 43 31
                                  710.35
                                                 13.78
                                                              307.82
                                                                                                                    4688.9
                                                                                                                                      33.75
                                                                                                                                                   230.66
                                                              239.70
                                                                             40.11
      110.00
                   13 30 34
                                5288.87
                                                 32.57
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2422.9 SR 371.9 SS 786.8
CRT -.9833 CRS .9965 CST -.9697
                                                                 SGT 4887.5 SGR 373.9 SG3 204.0
RRT -.4512 RRF -.5206 RTF .9064
    TDE-1.6238 TRA -.9419 TC3-5.0497 BAU 1:0388
    RDE .2545 RRA .0175 RC3 -.0338 FAU .04297
                                                                                                                LSA 2567.2 MSA 192.0 SSA 16.0
                                                                 SGB 4901.8 R23 .1229 R13 -.9067
SG1 4890.4 SG2 333.5 THA 178.01
   FDE -.9509 FRA .1281 FC3-2.4178 BSP 15195
BDE 1.6436 BRA .9421 BC3 5.0498 FSP -654
                                                                                                                   EL1 2450.4 EL2 67.0 ALF 171.41
                                                                                                                             APRIVAL DATE DEC 27 1967
                                                                     FLIGHT TIME 162.00
LAUNCH DATE JUL 18 1967
                                                                    DISTANCE 476.146
   RL 152.04 LAL -.00 LOL 294.71 VL 26.174 GAL -2.16 AZL 94.26 HCA 232.84 SMA 125.11 ECC .21832 INC 4.2598 VI 29.304 RP 107.62 LAP 3.39 LOP 167.47 VP 37.492 GAP 9.75 AZP 87.42 TAL 187.77 TAP 60.60 RCA 97.80 APO 152.43 VZ 35.214 RC 154.762 GL -30.20 GP 14.81 ZAL 103.14 ZAP 158.83 ETS 42.05 ZAE 128.69 ETE 168.12 ZAC 79.45 ETC 11.07 CLP-164.70
   PLANETOCENTRIC CONIC
    C3 14.917 VML 3.862 DLA -31.20 RAL 175.31 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 6.657 DPA 15.33 RAP 190.15 ECC 1.2455
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        111.39 7 52 35
111.38 12 45 52
111.39 7 52 35
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                                                                           40.06
                    7 33 2 1172.79
                                                 23.27
                                                              346.47
       76.33
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                        9 47
                                5764.52
                                                 23.28
                                                              272.95
                                                                             40.06
                                                                                                                                      25.96
                                                                                                                                                   338.60
                                                                                                                        572.8
                                                                             40.06
                    7 33 2 1172.79
                                                 23.27
                                                              346.47
                                                                                                    12 45 52
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                                                                                          111.38
                  11 9 47
                                                 23.28
                                                              272.95
                                                                             40.06
      103.67
                                5764.52
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101.55 15 6 46
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                                                                                                                                      18.76
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                  10 3 36
                   10 3 36 683.39
13 38 24 5301.93
                                                 14.74
                                                              306.32
                                                                             35.61
      110.00
                                                                                                                       4701.9
                                                                                                                                                   231.66
                                                                                                                                      33.65
                                                 32.40
                                                              240.67
                                                                             43.11
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 RRT -,4336 RRF -,4893 RTF .9063
SGB 4975.4 R23 .1048 R13 -,9065
SG1 4963.5 SG2 344.0 THA 178.08
                                                                                                                   ST 2493.7 SR 378.7 SS 784.1
CRT -.9895 CRS .9936 CST -.9714
    TDE-1.6567 TRA -.7767 TC3-5.2989 BAU 1.0568
    RDE .2552 RRA .0199 RC3 -.0491 FAU .04103
                                                                                                                  LSA 2634.9 MSA 183.2 SSA 17.3
    FDE -.9146 FRA .2007 FC3-2.3813 BSP 15448
                                                                                                                   EL1 2521.7 EL2 54.2 ALF 171.45
    BDE 1.6762 BRA .7770 BC3 5.2991 FSP -641
                                                                                                                              ARRIVAL DATE DEC 29 1967
                                                                      FLIGHT TIME 164.00
LAUNCH DATE JUL 18 1967
                                                                     DISTANCE 481.918
   RL 152.04 LAL -.00 LOL 294.71 VL 26.118 GAL -1.74 A7L 94.08 MCA 236.07 SMA 124.77 ECC .22053 INC 4.0801 V1 29.304 RP 107.64 LAP 3.38 LOP 170.71 VP 37.446 GAP 10.03 A7P 87.72 TAL 186.16 TAP 62.23 RCA 97.25 APO 152.28 V2 35.205 RC 156.813 GL -29.12 GP 13.92 TAL 100.33 TAP 160.10 ETS 42.08 TAE 128.81 ETE 168.84 TAC 77.46 ETC 10.65 CLP-165.64
   PLANETOCENTRIC CONIC
    C3 14.569 VHL 3.817 DLA -31.59 RAL 178.98 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 6.778 DPA 13.58 RAP 191.83 ECC 1.2398
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.38 7 41 2 1188.32 23.68 347.82 43.48 111.55 8 0 50 588.3 26.39 339.93
                                                                                           111.54 13 6 39
                                                                                                                       5138.5
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                                5738.49
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                               1188.32
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       75.38
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                  11 31 1 5738.49
       104.62
                                                  23.69
                                                              271.16
                                                                                           120.74 10 36 20
102.31 15 14 2ª
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                                                                             39.34
      110.00
                  10 25 25
                                 654.74
                                                 15.74
                                                               304.71
                  13 45 48 5320.06
                                                                                                                      4720.1
                                                                                                                                       33.50
                                                                                                                                                    233.06
                                                              242.03
                                                                             46.39
                                                  32.14
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2565.4 SR 386.8 SS 780.E
CRT -.9941 CRS .9897 CST -.9732
LSA 2703.6 MSA 174.7 SSA 18.6
                                                                  SGT 5032.2 SGR 391.3 SG3 195.7
RRT -.4211 RRF -.4644 RTF .9067
    TOE-1.6937 TRA -.6034 TC3-5.5157 BAU 1.0744
    ROE .2576 RRA .0219 RC3 -.0606 FAU .03912
                                                                 SGB 5047.4 R23 .0890 R13 -.9069
    FOE -.8822 FRA .2699 FC3-2.3248 BSP 15706
BOE 1.7131 BRA .6038 BC3 5.5160 FSP -629
                                                                  SG1 5034.9 SG2 354.7 THA 178.12
                                                                                                                   EL1 2594.0 EL2 41.5 ALF 171.47
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FLIGHT TIME 158.00

ARRIVAL DATE DEC 31 1967

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HELIOCENTRIC CONIC
                                                                                           DISTANCE 487,670
     RL 152.04 LAL -.00 LOL 294.71 VL 26.063 GAL -1.30 AZL 93.91 MCA 239.31 SMA 124.43 ECC .22294 INC 3.9136 V1 29.304 RP 107.67 LAP 3.36 LOP 173.96 VP 37.399 GAP 10.33 AZP 88.00 TAL 184.54 TAP 63.85 RCA 96.69 APO 152.17 V2 35.197 RC 158.850 GL -28.01 GP 13.14 ZAL 97.36 ZAP 161.29 ETS 42.30 ZAE 128.90 ETE 169.47 ZAC 75.41 ETC 10.27 CLP-166.56
   PLANETOCENTRIC CONIC
     C3 14.34 WHL 3.787 DLA -31.99 RAL 182.80 RAD 6567.6 VEL 11.650 PTH 2.05 VHP 6.908 DPA 11.91 RAP 193.58 ECC 1.2360
    C3 14.34) VML 3.787 OLA -31.99 RAL 182.80 RAD 6567.6 VEL 11.650 PTH 2.05 VMP 6.908 DPA 11.91 RAP 193.58 ECC 1.2360 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.45 7 49 56 1204.69 24.05 349.22 47.18 111.76 8 10 0 604.7 26.79 341.32 105.55 11 52 36 5715.11 24.06 269.55 47.19 111.75 13 27 51 5115.1 26.80 261.64 105.55 11 52 36 5715.11 24.06 269.55 47.19 111.75 13 27 51 5115.1 26.80 261.64 110.00 10 48 42 625.38 16.75 303.03 43.39 120.24 10 59 8 25.4 20.64 296.07 110.00 13 53 0 5342.42 31.81 243.68 49.95 103.23 15 22 3 4742.4 33.30 234.77
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SCT 5092.3 SCR 400.7 SC3 191.0
RRT - 4110 RRF 4434 RTF 9069
SCB 5108.1 R23 .0754 R13 - 9071
SCI 5095.0 SC2 365.1 TMA 178.14
                                                                                                                                                        ST 2628.8 SR 395.4 SS 773.0

CRT -.9971 CRS .9845 CST -.9747

LSA 2763.3 MSA 166.9 SSA 19.8
     TOE-1.7291 TRA -.4188 TC3-5.6835 BAU 1.0898
    ROE .2612 RRA .0229 RC3 -.0692 FAU .03713
FDE -.8469 FRA .3378 FC3-2.2412 BSP 15884
BDE 1.7487 BRA .4194 BC3 5.6840 FSP -612
                                                                                                                                                        EL1 2658.2 EL2 29.7 ALF 171.47
                                                                                            FLIGHT TIME 168.00
                                                                                                                                                                       ARRIVAL DATE JAN 2 1968
LAUNCH DATE JUL 18 1967
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 493.399
    RL 152.04 LAL -.00 LOL 294.71 VL 26.008 GAL -.85 AZL 93.76 MCA 242.54 SMA 124.10 ECC .22556 INC 3.7580 V1 29.304 RP 107.70 LAP 3.33 LOP 177.20 VP 37.352 GAP 10.63 AZP 88.27 TAL 182.92 TAP 65.46 RCA 96.11 APO 152.09 VZ 35.187 RC 160.871 GL -26.86 GP 12.44 ZAL 94.25 ZAP 162.41 ETS 42.71 ZAE 128.97 ETE 170.02 ZAC 73.32 ETC 9.94 CLP-167.46
   PLANETOCENTRIC CONIC
     C3 14.235 VHL 3.773 DLA -32.38 RAL 186.77 RAD 6567.6 VEL 11.646 PTH
                                                                                                                              2.04 VHP 7.046 DPA 10.32 RAP 195.38 ECC 1.2342
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  51.16
                        8 0 2 1220.86
12 14 10 5695.59
                                                                 24.37
                                                                                                                                         8 20 23
         73.59
                                                                                  350.60
                                                                                                                       112.01
                                                                                                                                                               620.9
                                                                                                                        112.00 13 49 5
                                                                 24.39
                                                                                  268.20
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12 14 10 5695.59
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112.00 13 49 5
119.71 12 51 9
104.27 15 29 45
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                                                                 24.39
                                                                                  268.20
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                        11 13 4 5884.51
14 0 17 5367.98
                                                                 17.74
                                                                                                                                                              5284.5
                                                                                  279.28
                                                                                                      47.71
                                                                                                                                                                                  21.55
                                                                                                                                                                                                   272.23
        110.00
                                                                                                    53.76
                                                                                                                                                           4768.0
                                                                                                                                                                               33.03
                                                                                  245.56
        110.00
                                                                 31.39
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5155.9 SGR 410.9 SG3 186.5

RRT -.4056 RRF -.4289 RTF .9082

SGB 5172.2 R23 .0641 R13 -.9084

SGI 5158.6 SG2 375.4 THA 178.14
    TOE-1.7676 TRA -.2280 TC3-5.8087 BAU 1.1054
ROE .2666 RRA .0235 RC3 -.0741 FAU .03520
FDE -.8149 FRA .4001 FC3-2.1412 BSP 16122
BDE 1.7876 BRA .2292 BC3 5.8092 FSP -600
                                                                                                                                                        ST 2690.5 SR 405.1 SS 765.4
CRT -.9985 CRS .9784 CST -.9762
                                                                                                                                                        LSA 2821.8 MSA 159.8 SSA 21.0
                                                                                                                                                        EL1 2720.7 EL2 22.0 ALF 171.45
                                                                                           FLIGHT TIME 170.00
                                                                                                                                                                      ARRIVAL DATE JAN 4 1968
LAUNCH DATE JUL 18 1967
                                                                                          DISTANCE 499.106
   HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 25.954 GAL -.38 AZL 93.61 HCA 245.77 SMA 123.77 ECC .22842 INC 3.6113 V1 29.304
RP 107.73 LAP 3.29 LOP 180.44 VP 37.305 GAP 10.93 AZP 88.52 TAL 181.29 TAP 67.06 RCA 95.50 APO 152.05 V2 35.178
RC 162.878 GL -25.66 GP 11.83 ZAL 91.02 ZAP 163.46 ETS 43.31 ZAE 129.04 ETE 170.51 ZAC 71.19 ETC 9.66 CLP-168.35
   PLANETOCENTRIC CONIC
     C3 14.247 VHL 3.775 DLA -32.74 RAL 190.86 RAD 6567.6 VEL 11.646 PTH 2.04 VHP 7.193 DPA 8.80 RAP 197.23 ECC 1.2345
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T2.84 8 11 29 1236.26 24.62 351.89 55.38 112.29 8 32 5 636.3 27.42 343.97 107.16 12 35 24 5680.65 24.63 267.17 55.39 112.28 14 10 4 5080.6 27.43 259.24 72.84 8 11 29 1236.26 24.62 351.89 55.38 112.29 8 32 5 636.3 27.42 343.97 107.16 12 35 24 5680.65 24.63 267.17 55.39 112.28 14 10 4 5080.6 27.43 259.24 267.16 12 35 24 5680.65 24.63 267.17 55.39 112.28 14 10 4 5080.6 27.43 259.24
                                                                                                                        119.19 13 15 40
105.37 15 37 56
                       11 38 2 5857.47
14 8 1 5395.47
                                                                                  277.70.
                                                                                                      52.28
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                                                                 18.64
        110.00
                                                                                                                                                             4795.5 32.71
                                                                                  247.56
                                                                                                      57.81
                                                                30.92
        110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 2740.1 SR 415.1 SS 754.3
CRT -.9963 CRS .9712 CST -.9775
LSA 2667.9 MSA 154.4 S5A 22.0
EL1 2771.2 EL2 23.9 ALF 171.40
                                                                                      RET -,4038 RRF -,4185 RTF .,9101
SGB 5234.8 R23 .0535 R13 -,9103
SGI 5220.7 SGZ 384.7 THA 178.12
     TDE-1.8030 TRA -.0265 TC3-5.8845 BAU 1.1209
     RDE .2733 RRA .0229 RC3 -.0748 FAU .03343
FDE -.7819 FRA .4610 FC3-2.0311 BSP 16328
     BOE 1.8236 BRA .0351 BC3 5.8850 FSP -586
                                                                                                                                                                      ARRIVAL DATE JAN 6 1968
                                                                                            FLIGHT TIME 172.00
LAUNCH DATE JUL 18 1967
                                                                                          DISTANCE 504.787
   HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 YL 25.900 GAL .10 A7L 93.47 HCA 249.00 SMA 123.45 ECC .23152 INC 3.4720 VI 29.304 RP 107.76 LAP 3.24 LOP 183.67 VR 37.258 GAP 11.25 AZP 88.75 TAL 179.66 TAP 68.66 RCA 94.87 APO 152.04 V2 35.167 RC 164.869 GL -24.42 GP 11.27 ZA_ 87.70 ZAP 164.45 ETS 44.12 ZAE 129.09 ETE 170.94 ZAC 69.03 ETC 9.42 CLP-169.22
   PLANETOCENTRIC CONIC
     C3 14.391 VHL 3.793 OLA -33.04 RAL 195.06 RAD 6567.6 VEL 11.652 PTH 2.05 VHP 7.348 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.23 8 24 19 1250.58 24.78 353.06 59.83 112.58 8 45 9 650.6 27.61 345.14
                       8 24 19 1250.58
12 56 4 5670.74
8 24 19 1250.58
                                                                                                                      112.58 8 45 9
112.57 14 30 34
                                                                 24.79
                                                                                  266.48
                                                                                                      59.84
                                                                                                                                                              5070.7
                                                                                                                                                                                  27.62
                                                                                                                                                                                                   258.55
        107.77
                                                                                                                                                               650.6
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                                                                                                      59.83
                                                                                                                        112.58
                                                                                                                                      8 45 9
                                                                                                                                                                                  27.61
                                                                 24.78
                                                                                  353.06
         72.23
                                                                                                                        5070.7
                                                                                                                                                                                  27.62
                                                                                                                                                                                                  258.55
                                                                                  266.48
                                                                                                      59.84
                                          5670.74
                                                                 24.79
        107.77
                        12 56 4
                                                                                                      57.05
                                                                                                                                                              5234.3
                                                                                                                                                                                  23.08
                                                                                                                                                                                                   269.13
        110.00
                        12 2 53 5834.26
                                                                                  276.34
                                                                 19.41
                       14 16 39 5423.11
                                                                                  249.55
                                                                                                      62.08
                                                                                                                                                             4823.1
                                                                                                                                                                                  32.35
                                                                                                                                                                                                   240.88
        110.00
                                                                30.40
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SCT 5265.0 SGR 429.7 SC3 177.5
RRT -.4022 RRF .4091 RTF .9111
SGB 5282.5 R23 .0444 R13 -.9112
     TOE-1.8292 TRA .1888 TC3-5.8903 BAU 1.1333
                                                                                                                                                        ST 2767.9 SR 424.5 SS 736.4
                                                                                                                                                       CRT - .9966 CRS .9622 CST - .9781
LSA 2891.4 MSA 151.6 SSA 22.7
EL1 2800.0 EL2 34.5 ALF 171.31
     ROE .2810 RRA .0209 RC3 -.0737 FAU .03153
FDE -.7443 FRA .5230 FC3-1.8966 BSP 16399
BDE 1.8506 BRA .1899 BC3 5.8907 FSP -565
                                                                                      SG1 5267.8 SG2 393.2 THA 178.11
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FLIGHT TIME 166.00

ARRIVAL CATE JAN 8 1968

LAUNCH DATE JUL 18 1967

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DISTANCE 510.441
  HELIOCENTRIC CONIC
   RL 152.04 LAL -.00 LOL 294.71 VL 25.847 GAL .61 A7L 93.34 HCA 252.23 SMA 123.14 ECC .23488 INC 3.3387 V1 29.304 RP 107.79 LAP 3.18 LOP 186.91 VP 37.211 GAP 11.58 A7P 88.98 TAL 178.03 TAP 70.25 RCA 94.22 APO 152.06 V2 35.156
   RC 166.846 GL -23.14 GP 10.78 ZAL 84.31 ZAP 165.39 ETS 45.15 ZAE 129.14 ETE 171.32 ZAC 66.83 ETC 9.22 CLP-170.08
  PLANETOCENTRIC CONIC
                                                                                                                       5.92 RAP 201.06 ECC 1.2414
    C3 14.670 VHL 3.830 DLA -33.26 RAL 199.33 RAD 6567.6 VEL 11.664 PTH 2.05 VHP 7.513 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  8 38 31 1263.62
13 15 57 5666.25
                                                                                                    8 59 34
                                                                                                                     663.6
                                                                          64.47
                                                                                        112.68
       71.78
                                                24.82
                                                            354.09
                                                                                                  14 50 23
                                                                                                                                   27.71
      108.22
                                                24.83
                                                            266.15
                                                                           64.48
                                                                                         112.87
                                                                                                                    5066.2
                                                                                         112.88 8 59 34
112.87 14 50 23
                                                                                                                                                346.18
                                                                                                                     663.6
                                                                                                                                   27.70
       71.78
                  8 38 31 1263.62
                                                24.82
                                                            354.09
                                                                           64.47
                                                                                                                                                258.24
      108,22
                  13 15 57
                                5666.25
                                                24.83
                                                            266.15
                                                                           64.48
                                                                                                                    5066.2
                                                                                                                                   27.71
                                                                                         118.35 14 3 41
107.40 15 57 43
                                                                                                                                                268.07
                 12 26 44
                                                19.96
                                                            275.33
                                                                           61.95
                                                                                                                    5217.3
                                                                                                                                   23.58
      110.00
                                5817.32
                  14 26 54
                                                29.90
                                                                                                                                                242.77
                                                            251.36
                                                                           66.57
                                                                                                                    4848.5
                                                                                                                                   31.98
      110.00
                                5448.58
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5312.3 SGR 438.6 SG3 172.5
RRT -.4025 RRF .4045 RTF .9125
SGB 5330.4 R23 .0384 R13 -.9126
                                                                                                                ST 2784.3 SR 434.2 SS 717.3
CRT -.9935 CRS .9522 CST -.9788
    TDE-1.8532 TRA .4104 TC3-5.8375 BAU 1.1450
   RDE .2902 RRA .0180 RC3 -.0706 FAU .02957
                                                                                                                LSA 2903.8 MSA 150.5 SSA 23.2
   FOE -.7083 FRA .5797 FC3-1.7452 BSP 16634
BOE 1.8758 BRA .4108 BC3 5.8380 FSP -554
                                                                $G1 5315.3 SG2 401.3 THA 178.709
                                                                                                                EL1 2817.5 EL2 48.8 ALF 171.19
                                                                    FLIGHT TIME 176.00
                                                                                                                           ARRIVAL DATE JAN 10 1968
  HELIOCENTRIC CONIC
                                                                    DIS:ANCE 516.060
   RL 152.04 LAL -.00 LOL 294.71 VL 25.795 GAL 1.13 AZL 93.21 MCA 255.45 SMA 122.83 ECC .23854 INC 3.2102 V1 29.304 RP 107.83 LAP 3.11 LOP 190.14 VP 37.164 GAP 11.91 AZP 89.19 TAL 176.39 TAP 71.84 RCA 93.53 APO 152.13 V2 35.145 RC 168.808 GL -21.82 GP 10.33 ZAL 80.89 ZAP 166.28 ETS 46.42 ZAE 129.18 ETE 171.66 ZAC 64.62 ETC 9.06 CLP-170.92
  PLANETOCENTRIC CONIC
                                                                                                                        4.56 RAP 203.02 ECC 1.2484
   C3 15.096 VHL 3.885 DLA -33.39 RAL 203.64 RAD 6567.6 VEL 11.682 PTH
                                                                                             2.05 VHP 7.688 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   8 54 3
                              1275.09
                                                24.74
                                                            354.94
                                                                          69.26
                                                                                        113.17
                                                                                                     9 15 18
                                                                                                                     675.1
                                                                                                                                  27.66
                                                                                                                                                347.05
       71.52
                  13 34 47 5667.55
                                                24.76
                                                            266.22
                                                                           69.27
                                                                                         113.16 15 9 14
                                                                                                                     5067.6
                                                                                                                                    27.67
                                                                                                                                                 258.33
      108.48
                   8 54 3
                               1275.09
                                                24.74
                                                            354.94
                                                                                         113.17
                                                                                                     9 15 18
                                                                                                                     675.1
                                                                                                                                    27.66
                                                                                                                                                 347.05
       71.52
                                                                           69.26
                                                                                         113.16 15 9 14
                 13 34 47
                                                24.76
                                                                           69.27
                                                                                                                     5067.6
                                                                                                                                    27.67
                                                                                                                                                258.33
                                5667.55
                                                            266.22
                                                                                         118.18 14 25 12
108.15 16 10 46
                  12 48 23
                                5809.84
                                                20.20
                                                             274.89
                                                                           66.90
                                                                                                                    5209.8
                                                                                                                                    23.80
                                                                                                                                                267.60
      110.00
                 14 39 38
                              5468.84
                                                            252.79
                                                                           71.27
                                                                                                                    4868.B
                                                                                                                                    31.67
                                                                                                                                                244.27
      110.00
                                                29.47
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   TDE-1.8700 TRA .6420 TC3-5.7325 BAU 1.1570 RDE .3006 RRA .0140 RC3 -.0645 FAU .02781
                                                                SCT 5360.4 SCR 446.8 SC3 167.8
RRT -.4055 RRF .4028 RTF .9147
SCB 5379.0 R23 .0325 R13 -.9148
                                                                                                                ST 2781.8 SR 443.4 SS 695.6
CRT -,9890 CRS .9408 CST -.9792
   FOE -.6722 FRA .6342 FC3-1.5949 BSP 16845
BDE 1.8940 BRA .6422 BC3 5.7329 FSP -543
                                                                                                                LSA 2897.4 MSA 152.7 SSA 23.2
                                                                SG1 5363.5 SG2 408.2 THA 178.05
                                                                                                                 EL1 2816.1 EL2 64.9 ALF 171.0-
                                                                                                                          ARRIVAL DATE JAN 12 1968
                                                                   FLIGHT TIME 178.00
LAUNCH DATE JUL 18 1967
                                                                   DISTANCE 521.655
  HELIOCENTRIC CONIC
   RL 152.04 LAL -.00 LOL 294.71 VL 25.743 GAL 1.67 AZL 93.09 HCA 258.68 SMA 122.53 ECC .24250 INC 3.0855 VI 29.304 RP 107.86 LAP 3.03 LOP 193.37 VP 37.117 GAP 12.26 AZP 89.39 TAL 174.75 TAP 73.43 RCA 92.81 APO 152.24 VZ 35.134 RC 170.755 GL -20.47 GP 9.93 ZAL 77.47 ZAP 167.12 ETS 47.97 ZAE 129.22 ETE 171.97 ZAC 62.38 ETC 8.95 CLP-171.76
  PLANETOCENTRIC CONIC
                                                                                                                       3.24 RAP 205.02 ECC 1.2581
   C3 15.680 VHL 3,960 DLA -33.43 RAL 207.95 RAO 6567.6 VEL 11.707 PTH 2.06 VHP 7.873 DPA
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 27.49
                                                                                                                                              347.75
                                                                                                     9 32 12
                                                                                                                     684.9
                 9 10 47 1284.95
13 52 23 5674.79
                                                            355.60
                                                                          74.17
                                                                                        113.44
       71.45
                                                24.54
                                                                                         113.43 15 26 57
                                                                                                                    5074.8
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      108.55
                                                24.55
                                                            266.68
                                                                                                                     684.9
                                                                                                                                   27.49
                                                                                                                                                347.75
                  9 10 47 1284.95
13 52 23 5674.79
                                                24.54
                                                            355.60
                                                                           74.17
                                                                                         113.44
                                                                                                     9 32 12
       71.45
                                                                                         113.43 15 26 57
                                                                                                                    5074.8
                                                24.55
                                                            266.68
                                                                           74.17
                                                                                                                                   27,50
                                                                                                                                                258.82
      108.55
                                                                                         118.29 14 43 41
108.60 16 26 55
                  13 6 46
                                                            275.17
                                                                           71.81
                                                                                                                    5214.6
                                                                                                                                   23.66
                                                                                                                                                267.90
                                                20.05
                                5814.59
      110.00
                                                                           76.18
                                                                                                                                                245.17
                  14 55 34
                                                                                                                    4881.2
                                                                                                                                  31.47
                               5481.19
                                                29.21
                                                            253.65
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                SCT 5403.9 SCR 454.1 SG3 163.3
RRT -.4099 RRF -.4028 RTF .9170
SCB 5423.0 R23 .0271 R13 -.9171
                                                                                                                ST 2757.8 SR 451.6 SS 670.6
CRT -.9829 CRS .9273 CST -.9792
   TDE-1.8769 TRA .8862 TC3-5.5710 BAU 1.1679
   RDE .3121 RRA .0085 RC3 -.0567 FAU .02611
FDE -.6344 FRA .6885 FC3-1,4417 BSP 17023
                                                                                                                LSA 2869.5 MSA 156.4 SSA 22.9
   BOE 1.9027 BRA .8863 BC3 5.5713 FSP -531
                                                                SG1 5407.1 SG2 413.9 THA 178.02
                                                                                                                EL1 2793.4 EL2 82.0 ALF 170.85
                                                                    FLIGHT TIME 180.00
                                                                                                                           ARRIVAL DATE JAN 14 1968
AUNCH DATE JUL 18 1967
                                                                    DISTANCE 527.210
  HELIOCENTRIC CONIC
   RL 152.04 LAL -.00 LOL 294.71 VL 25.692 GAL 2.24 AZL 92.96 MCA 261.90 SMA 122.23 ECC .24680 INC 2.9636 V1 29.304 RP 107.90 LAP 2.93 LOP 196.60 VP 37.070 GAP 12.63 AZP 89.58 TAL 173.12 TAP 75.01 RCA 92.06 APO 152.39 V2 35.122 RC 172.686 GL -19.11 GP 9.57 ZAL 74.08 ZAP 167.92 ETS 49.81 ZAE 129.25 ETE 172.24 ZAC 60.13 ETC 8.87 CLP-172.58
  PLANETOCENTRIC CONIC
   C3 16.438 VHL 4.054 DLA -33.36 RAL 212.21 RAD 6567.7 VEL 11.740 PTH 2.07 VHP 8.069 DPA 1.96 RAP 207.04 ECC 1.2705
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       113.69 9 50 11
113.68 15 43 20
                                                                                                                                   27.19
       71.58
                  9 26 38
                                1293.08
                                                24.20
                                                            356.07
                                                                          79.14
                                                                                                                     693.1
                                                                                                                                                348.25
                  14 8 31
                                                24.21
                                                             267.55
                                                                            79.15
                                                                                                                     5088.1
                                                                                                                                    27.20
                                                                                                                                                 250 73
      108.42
                                5688.14
                                                                                                   9 50 11
                                                                                                                     693.1
                                                                                                                                    27.19
                                                                                                                                                 348.25
                   9 28 38
                                1293.08
                                                24,20
                                                             356.07
                                                                            79.14
                                                                                         113.69
       71.58
                                                                                         113.68 15 43 20
118.67 14 58 36
108.72 16 46 21
                                                                                                                     5088.1
                                                                                                                                    27.20
                                                                                                                                                 259.73
                  14 8 31
                                                24.21
                                                             267.55
                                                                            79.15
      108.42
                                5688.14
                                                                                                                     5232.7
                                                                                                                                    23.13
                                                                                                                                                 269.03
                  13 21 24
                                5832.68
                                                19.46
                                                             276.24
                                                                            76.63
      110.00
                                                                                                                                    31.41
      110.00
                                5484.57
                                                29.14
                                                            253.89
                                                                           81.28
                                                                                                                    4884.6
                                                                                                                                                245.42
                  15 14 56
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 5436.0 SGR 460.1 SG3 158.6
RRT -.4142 RRF -.4035 RTF .9189
SGB 5455.5 R23 .0226 R13 -.9189
                                                                                                               ST 2709.4 SR 458.4 SS 642.1
CRT -.9750 CRS .9108 CST -.9788
    TOE-1.8703 TRA 1.1457 TC3-5.3481 BAU 1.1754
   RDE .3244 RRA .0015 RC3 -.0485 FAU .02436
FDE -.5941 FRA .7434 FC3-1.2828 BSP 17100
BDE 1.8982 BRA 1.1457 BC3 5.3484 FSP -515
                                                                                                                LSA 2817.1 MSA 164.1 SSA 22.3
                                                                SG1 5439.4 SGZ 418.5 THA 177.98
                                                                                                               EL1 2746.1 EL2 100.5 ALF 170.62
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FLIGHT TIME 174.00

ARRIVAL CATE JAN 16 1968

LAUNCH DATE JUL 18 1967

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DISTANCE 532.724
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.641 GAL 2.84 A7L 92.84 HCA 265.12 SMA 121.94 ECC .25146 INC 2.8438 VI 29.304 RP 107.94 LAP 2.83 LOP 199.82 VP 37.024 GAP 13.01 AZP 89.76 TAL 171.48 TAP 76.60 RCA 91.27 APO 152.60 V2 35.110 RC 174.603 GL -17.74 GP 9.24 TAL 70.73 ZAP 168.66 ETS 51.98 TAE 129.27 ETE 172.48 TAC 57.87 ETC 8.83 CLP-173.40
    PLANETOCENTRIC CONIC
     C3 17.388 VHL 4.170 OLA -33.19 RAL 216.38 RAO 6567.7 VEL 11.780 PTH 2.08 VHP 8.278 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       9 47 25 1299.50
14 23 5 5707.56
9 47 25 1299.50
14 23 5 5707.56
14 23 5 5707.56
13 32 31 5862.84
15 37 8 5480.26
                                                                                                     84.14
                                                                                                                             113.91 10 9 4
113.90 15 58 12
                                                                                                                           113.91
                                                                                                                                                                      699.5
                                                                                                                                                                                         26.75
                                                                                      356.34
                                                                    23.73
                                                                                                                                                                     5107.6
                                                                                                                                                                                                            261.05
                                                                    23.74
                                                                                      268.82
                                                                                                          84.15
                                                                                                                            113.90 10 9 4 699.5
113.90 15 58 12 5107.6
119.29 15 10 14 5262.8
108.57 17 8 29 4880.3
                                                                                                                                                                                                            348.57
          71.92
                                                                    23.73
                                                                                      356.34
                                                                                                          84.14
                                                                                                                                                                                                           261.05
                                                                                                                                                                                         26.76
        108.08
                                                                    23.74
                                                                                      268.82
                                                                                                          84.15
                                                                                                                                                                                          22.22
                                                                                                                                                                                                           270.90
                                                                    18.46
                                                                                      278.02
                                                                                                          81.32
                                                                                                                                                                                                           245.11
                                                                   29.23
                                                                                      253.59
                                                                                                          86.53
        110,00
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 5470.7 SGR 465.4 SG3 154.1

RRT -.4205 RRF -.4068 RTF .9214

SGB 5490.5 R23 .0188 R13 -.9215

SGI 5474.2 SG2 422.0 THA 177.94
                                                                                                                                                              ST 2648.3 SR 464.1 SS 614.0
CRT -.9654 CRS .8923 CST -.9784
     TOE-1.8572 TRA 1.4137 [C3-5.0914 BAU 1.1836
     ROE .3378 RRA -.0067 RC3 -.0393 FAU .02275
                                                                                                                                                              LSA 2752.3 MSA 173.8 SSA 21.5
     FOE -.5556 FRA .7954 FC3-1.1327 BSP 17261
BOE 1.8877 BRA 1.4137 BC3 5.0915 FSP -503
                                                                                                                                                               EL1 2686.0 EL2 119.4 ALF 170.38
                                                                                                                                                                              ARRIVAL DATE JAN 18 1968
                                                                                                FLIGHT TIME 184.00
                                                                                               DISTANCE 538.192
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.591 GAL 3.46 A7L 92.73 MCA 268.33 SMA 121.65 ECC .25653 INC 2.7252 VI 29.304 RP 107.97 LAP 2.72 LOP 203.04 VP 36.977 GAP 13.42 A7P 89.92 TAL 169.85 TAP 78.19 RCA 90.44 APO 152.86 V2 35.097 RC 176.504 GL -16.38 GP 8.94 ZAL 67.46 ZAP 169.36 ETS 54.53 ZAE 129.29 ETE 172.69 ZAC 55.59 ETC 8.84 CLP-174.21
   PLANETOCENTRIC CONIC
    C3 18.551 VHL 4.307 DLA -32.92 RAL 220.45 RAD 6567.8 VEL 11.829 PTH 2.10 VHP 8.501 DPA -.48 RAP 211.17 ECC 1.3053 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.46 10 7 3 1303.99 23.13 356.40 89.14 114.10 10 28 47 704.0 26.19 348.68 107.54 14 35 51 5733.26 23.15 270.51 89.15 114.09 16 11 24 5133.3 26.20 262.79 110.00 13 40 55 614.30 17.13 302.40 85.88 120.04 13 51 9 14.3 21.00 295.40 110.00 16 1 9 5470.95 29.43 252.94 91.86 108.23 17 32 20 4870.9 31.63 244.42
                                                                                                                                                                           -.48 RAP 211.17 ECC 1.3053
     C3 18.551 VHL 4.307 DLA -32.92 RAL 220.45 RAD 6567.8 VEL 11.829 PTH
                                                                                                                                  2.10 VHP 8.501 DPA
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 5500.0 SGR 469.6 SG3 149.6

RRT -.4273 RRF -.4114 RTF .9240

SGB 5520.0 R23 .0158 R13 -.9240

SGI 5503.7 SG2 424.3 THA 177.90
                                                                                                                                                               ST 2572.4 SR 468.73 S5 585.9
CRT -.9534 CRS .8708 CST -.9778
     TOE-1.8341 TRA 1.6946 TC3-4.7985 BAU 1.1901
     ROE .3520 RRA -.0163 RC3 -.0303 FAU .02117
                                                                                                                                                              LSA 2672.9 MSA 185.8 SSA 20.6
     FOE -.5173 FRA .8470 FC3 -.9879 BSP 17409
BOE 1.8675 BRA 1.6946 BC3 4.7986 FSP -492
                                                                                                                                                             EL1 2610.9 EL2 139.1 ALF 170.13
                                                                                                                                                                             ARRIVAL CATE JAN 20 1968
                                                                                                FLIGHT TIME 186.00
LAUNCH DATE JUL 18 1967
                                                                                              DISTANCE 543.610
    RL 152.04 LAL -.00 LOL 294.71 VL 25.541 GAL 4.11 A7L 92.61 HCA 271.55 SMA 121.37 ECC .26203 INC 2.6070 V1 29.304 RP 108.01 LAP 2.61 LOP 206.26 VP 36.931 GAP 13.84 A7P 90.07 TAL 168.23 TAP 79.78 RCA 89.57 APO 153.17 V2 35.084 RC 178.389 GL -15.04 GP 8.66 ZAL 64.29 ZAP 170.01 ETS 57.50 ZAE 129.30 ETE 172.89 ZAC 53.31 ETC 8.89 CLP-175.02
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 19.953 VHL 4.467 DLA -32.57 RAL 224.36 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 8.739 DPA -1.64 RAP 213.27 ECC 1.3284
    C3 19.953 VHL 4.467 DLA -32.57 RAL 224.36 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 8.739 DPA -1.64 RAP 213.27 ELC 11.3284 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.20 10 27 26 1306.44 22.42 356.24 94.10 114.26 10 49 12 706.4 25.50 348.57 106.80 14 46 41 5765.25 22.43 272.62 94.11 114.25 16 22 47 5165.2 25.51 264.96 73.20 10 27 26 1306.44 22.42 356.24 94.10 114.26 10 49 12 706.4 25.50 348.57 106.80 14 46 41 5765.25 22.43 272.62 94.11 114.25 16 22 47 5165.2 25.51 264.96 110.00 13 47 21 660.44 15.54 305.03 90.31 120.84 13 58 21 60.4 19.51 298.16 110.00 16 25 57 5459.24 29.68 252.11 97.21 107.80 17 56 56 4859.2 31.82 243.56
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 5524.4 SGR 472.7 SG3 145.3

RRT -.4348 RRF -.4171 RTF ..9266

SGB 5544.6 R23 ..0130 R13 -.9267

SG1 5528.3 SG2 425.4 THA 177.86
                                                                                                                                                              ST 2485.4 SR 470.6 S5 558.5
CRT -.9389 CRS .8459 CST -.9771
LSA 2582.7 MSA 199.8 SSA 19.6
     TOE-1.8012 TRA 1.9897 TC3-4.4790 BAU 1.1948
     RDE .3668 RRA -.0274 RC3 -.0218 FAU .01965
FDE -.4795 FRA .8987 FC3 -.8525 BSP 17536
                                                                                                                                                              EL1 2524.6 EL2 159.5 ALF 169.88
     BOE 1.8381 BRA 1.9899 BC3 4.4790 FSP
                                                                        -481
                                                                                                                                                                              ARRIVAL DATE JAN 22 1968
                                                                                                FLIGHT TIME 188.00
LAUNCH DATE JUL 18 1967
                                                                                               DISTANCE 548.972
    HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.492 GAL 4.80 AZL 92.49 HCA 274.76 SMA 121.09 ECC .26801 INC 2.4886 V1 29.304
RP 108.05 LAP 2.48 LOP 209.48 VP 36.885 GAP 14.29 AZP 90.21 TAL 166.62 TAP 81.38 RCA 88.64 APO 153.55 V2 35.071
RC 180.257 GL -13.72 GP 8.42 ZAL 61.23 ZAP 170.61 ETS 60.94 ZAE 129.31 ETE 173.06 ZAC 51.02 ETC 8.99 CLP-175.82
    PLANETOCENTRIC CONIC
     C3 21.625 VHL 4.650 DLA -32.13 RAL 228.11 RAD 6567.9 VEL 11.958 PTH 2.13 VHP 8.993 CPA -2.76 RAP 215.38 ECC 1.3559
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.14 10 48 35 1306.40 21.60 355.84 99.00 114.38 11 10 21 706.4 24.71 348.23 105.86 14 55 25 5803.84 21.62 275.17 99.01 114.37 16 32 9 5203.8 24.72 267.57
                                                                                                                              114.38 11 10 21
114.37 16 32 9
                                                                                                                                                                                          24.71
                                                                                                                                                                                                            348.23
                                                                                                                                                                       706.4
                        10 48 35
                                          1306.40
                                                                    21.60
                                                                                      355.84
                                                                                                           99.00
          74.14
                                                                                                                                                                                                            267.57
                                                                                                                                                                                          24.72
                                                                                                                                                                     5203.8
                                           5803.84
                                                                    21.62
                                                                                      275.17
                                                                                                           99.01
                         14 55 25
         105.86
                                                                                                                              121.61 14 4 15
107.35 18 21 34
                                                                                                                                                                                                            301.13
                                                                                                                                                                      111.1
                                                                                                                                                                                          17.83
                                                                                      307.87
                                                711.12
                                                                    13.75
                                                                                                          94.63
                        13 52 24
         110.00
                                                                                                                                                                                          32.00
                         16 50 47
                                                                                                        102.52
                                                                   29.92
                                                                                      251.26
         110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 2387.5 SR 470.8 SS 531.6

CRT -.9207 CRS .8156 CST -.9761

LSA 2481.4 MSA 216.0 SSA 18.6

EL1 2426.7 EL2 180.8 ALF 169.65
                                                                                         SCT 5540.5 SGR 474.3 SG3 141.1
RRT -.4420 RRF -.4226 RTF .9288
SGB 5560.7 R23 .0108 R13 -.9288
      TOE-1.7549 TRA 2.3039 TC3-4.1343 BAU 1.1952
     RDE .3818 RRA -.0402 RC3 -.0146 FAU .01806
FDE -.4406 FRA .9527 FC3 -.7231 BSP 17554
BDE 1.7960 BRA 2.3042 BC3 4.1343 FSP -465
                                                                                        SG1 5544.5 SG2 425.1 THA 177.82
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FI IGHT TIME 182.00

ARRIVAL CATE JAN 24 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 18 1967
    RL 152.04 LAL -.00 LOL 294.71 VL 25.444 GAL 5.52 AZL 92.37 HCA 277.97 SMA 120.82 ECC .27453 INC 2.3692 VI 29.304 RP 108.09 LAP 2.35 LOP 212.69 VP 36.839 GAP 14.77 AZP 90.33 TAL 165.02 TAP 82.99 RCA 87.65 APO 153.99 V2 35.058 RC 182.108 GL -12.45 GP 8.19 ZAL 58.30 ZAP 171.15 ETS 64.89 ZAE 129.30 ETE 173.22 ZAC 48.73 ETC 9.14 CLP-176.63
                                                                                      DISTANCE 554.268
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 23.602 VHL 4.858 DLA -31.63 RAL 231.67 RAD 6568.0 VEL 12.041 PTH 2.15 VHP 9.267 OPA -3.85 RAP 217.52 ECC 1.3884
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                     23.82
                                                                                                                                                       703.6
                                                                                            103.83 114.48 11 32 12
                                                             20.70
                                                                            355.18
         75.27
                       11 10 29 1303.60
                                                                                                                                                                         23.83
                                                                                                                  114.47
                                                                                                                                16 39 25
                                                                                                                                                      5249.1
                      15 1 56 5849.14
11 10 29 1303.60
                                                              20.71
                                                                              278.17
                                                                                               103.83
        104.73
                                                                                                                                                                                          347.64
                                                                                                                  114.48 11 32 12
114.47 16 39 25
                                                                                                                                                       703.6
                                                                                                                                                                         23.82
                                                                                               103.83
                                                              20.70
                                                                              355.18
         75.27
                                                                                                                                                                                         270.63
                                                                                                                                                                         23.83
                                                                              278.17
                                                                                               103.83
                                                                                                                                                      5249.1
                                                              20.71
        104.73
                       15 1 56 5849.14
                                                                                                                  122.31 14 9 13
106.93 18 45 43
                                                                                                                                                                                         304.22
                                                                                                                                                      164.9
                                                                                                                                                                         15.99
                                                                                                 98.83
                                                                              310.83
                                                              11.81
        110.00
                       13 56 28
                                          764.89
                                                                                                                                                                         32.17
                                                                                                                                                                                         241.82
        110.00 17 15 7 5435.84
                                                                                                                                                      4835.8
                                                                              250.46
                                                                                               107.78
                                                              30.15
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 2291.7 SR 469.4 55 50R.2

CRT -.8996 CRS .7831 CST -.9755

LSA 2382.4 MSA 232.4 SSA 17.7

EL1 2330.5 EL2 201.6 ALF 169.48
                                                                                   SGT 5556.1 SGR 474.9 SG3 137.1
     TOE-1.7056 TRA 2.6289 TC3-3.7904 BAU 1.1960
                                                                                  RRT -.4504 RRF -.4299 RTF .9316
SGB 5576.3 R23 .0087 R13 -.9316
     ROE .3976 RRA -.0542 RC3 -.0078 FAU .01663
FDE -.4050 FRA 1.0051 FC3 -.6099 BSP 17665
BDE 1.7513 BRA 2.6294 BC3 3.7904 FSP -454
                                                                                  SG1 5560.2 SG2 423.7 THA 177.7H
                                                                                                                                                              ARRIVAL DATE JAN 26 1968
                                                                                        FLIGHT TIME 192,00
                                                                                        DISTANCE 559.490
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.397 GAL 6.28 AZL 92.25 HCA 281.18 SMA 120.56 ECC .28163 INC 2.2479 V1 29.304 RP 108.13 LAP 2.21 LOP 215.90 VP 36.794 GAP 15.28 AZP 90.44 TAL 163.43 TAP 84.61 RCA 86.60 APO 154.51 V2 35.045 RC 183.942 GL -11.21 GP 7.98 ZAL 55.51 ZAP 171.62 ETS 69.39 ZAE 129.28 ETE 173.37 ZAC 46.45 ETC 9.35 CLP-177.43
   PLANETOCENTRIC CONIC
                                                                                                                                                          -4.90 RAP 219.67 ECC 1.4267
    C3 25.928 VHL 5.092 DLA -31.08 RAL 235.03 RAD 6568.0 VEL 12.137 PTH 2.18 VHP 9.561 DPA -4.90 RAP 219.67 ECC 1.4267 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.61 11 33 15 1297.25 19.71 354.22 108.55 114.53 11 54 53 697.3 22.85 346.74 103.39 15 5 86 613.68 19.72 303.76 108.56 114.52 15 16 12 13.7 22.86 296.28 103.39 15 5 86 613.68 19.72 303.76 108.55 114.53 11 54 53 697.3 22.85 346.74 103.39 15 5 86 613.68 19.72 303.76 108.55 114.53 11 54 53 697.3 22.85 346.74 103.39 15 5 88 613.68 19.72 303.76 108.55 114.52 15 16 12 13.7 22.86 296.28 110.00 13 59 48 820.73 9.76 313.85 102.93 122.92 14 13 29 220.7 14.03 307.35 110.00 17 38 36 5426.24 30.34 249.77 112.94 106.56 19 9 2 4826.2 32.31 241.11 DIFFERENTIAL CORRECTIONS
     C3 25.928 VHL 5.092 DLA -31.08 RAL 235.03 RAD 6568.0 VEL 12.137 PTH
                                                                                                                        2.18 VHP 9.561 DPA
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 2196.4 SR 466.2 SS 487.7
CRT -.8745 CRS .7473 CST -.9752
                                                                                   SCT 5566.2 SCR 474.3 SC3 133.2
RRT -.4590 RRF -.4378 RTF .9346
SCB 5586.4 R23 .0071 R13 -.9346
      TDE-1.6487 TRA 2.9711 TC3-3.4442 BAU 1.1939
     RDE .4136 RRA -.0695 RC3 -.0023 FAU .01522
FDE -.3710 FRA 1.0585 FC3 -.5083 BSP 17754
                                                                                                                                                LSA 2284.1 MSA 249.3 SSA 16.8
                                                                                                                                                  ELI 2234,3 EL2 222.3 ALF 169.38
      BOE 1.6998 BRA 2.9719 BC3 3.4442 FSP -443
                                                                                   SG1 5570.5 SG2 421.1 THA 177.75
                                                                                                                                                              ARRIVAL DATE JAN 28 1968
                                                                                        FLIGHT TIME 194.00
LAUNCH DATE JUL 18 1967
                                                                                       DISTANCE 564.627
    HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 25.350 GAL 7.08 A7L 92.12 HCA 284.38 SMA 120.30 ECC .28939 INC 2.1241 V1 29.304 RP 108.18 LAP 2.06 LOP 219.10 VP 36.749 GAP 15.82 A7P 90.53 TAL 161.86 TAP 86.25 RCA 85.49 APO 155.11 V2 35.032
     RC 185.758 GL -10.03 GP 7.79 7AL 52.86 7AP 172.01 ETS 74.46 7AE 129.26 ETE 173.50 7AC 44.17 ETC 9.62 CLP-178.24
    PLANETOCENTRIC CONIC
     C3 28.655 VHL 5.353 CLA -30.49 RAL 238.19 RAC 6568.2 VEL 12.249 PTH 2.20 VHP 9.878 CPA -5.91 RAP 221.84 ECC 1.4716
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 114.56 12 18 42
114.55 15 18 24
114.56 12 18 42
114.55 15 18 24
                                                                                                                                                                    21.82
                                                                                             113.17
                       11 57 16 1286.00
                                                             18.66
                                                                             352.87
          7A.19
                                                                                                                                                                                          300.41
                                                                                                                                                         74.7
                                                                                                                                                                         21.83
                        15 7 9
                                                                               307.83
                                                                                                113.18
                                           674.67
                                                               18.67
         101.81
                                                                                                                                                                                          345.45
                                                                                                                                                        686.0
                                                                                                                                                                         21.82
                                                                               352.87
                                                                                               113.17
                       11 57 16 1286.00
                                                               18.66
          78.19
                                                                                                                                                                         21.83
                                                                                                                                                                                          300.41
                                                                                                                                                         74.7
                       15 7 9
14 2 34
                                                                               307.83
                                                                                                113.18
                                          674.67
                                                               18.67
         101.81
                                                                                                                   123.42 14 17 12
106.28 19 31 21
                                                                                                                                                        277.9
                                                                                                                                                                          11.98
                                                                                                                                                                                          310.51
                                           877.91
                                                                               316.91
                                                                                               106.91
                                                                7.63
         110.00
                                                                                                                                                                       32.41
                                                                                                                                                                                          240.55
                                                                                                                                                       4818.8
                                                                               249.24
                                                                                                118,00
                       18 1 2
                                        5418.80
                                                               30.48
         110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 2105.3 SR 461.2 SS 470.2
CRT -,8454 CRS .7084 CST -.9753
                                                                                   SCT 5571.6 SCR 472.4 SC3 129.4

RRT -.4678 RRF -.4461 RTF .9376

SCB 5591.6 R23 .0056 R13 -.9376

SCI 5576.0 SC2 417.2 THA 177.72
      TDE-1.5860 TRA 3.3314 TC3-3.1033 BAU 1.1889
     RDE .4299 RRA -.0862 RC3 .0021 FAU .01385
FDE -.3385 FRA 1.1132 FC3 -.4186 BSP 17832
                                                                                                                                                LSA 2189.8 MSA 265.9 SSA 16.0
                                                                                                                                                 EL1 2141.6 EL2 242.2 ALF 169.37
      BOE 1.6432 BRA 3.3325 BC3 3.1033 FSP -432
                                                                                                                                                               ARRIVAL DATE JAN 30 1968
                                                                                        FLIGHT TIME 196,00
 LAUNCH DATE JUL 18 1967
                                                                                        DISTANCE 569.666
    HELIOCENTRIC CONIC
     RE 152.04 LAL -.00 LOL 294.71 VE 25.304 GAL 7.94 AZE 92.00 HCA 287.59 SMA 120.05 ECC .29787 INC 1.9967 VI 29.304 RP 108.22 LAP 1.90 LOP 222.31 VP 36.705 GAP 16.41 AZP 90.60 TAL 160.32 TAP 87.91 RCA 84.29 APO 155.80 V2 35.019 RC 187.557 GL -8.90 GP 7.62 ZAL 50.36 ZAP 172.32 ETS 80.08 ZAE 129.21 ETE 173.63 ZAC 41.90 ETC 9.95 CLP-179.06
    PLANETOCENTRIC CONIC
      C3 31.847 VHL 5.643 DLA -29.87 RAL 241.14 RAD 6568.3 VEL 12.378 PTH 2.23 VHP 10.222 DPA -6.88 RAP 224.01 ECC 1.5241
     C3 31.847 VHL 5.643 DLA -29.87 RAL 241.14 RAD 6568.3 VEL 12.378 PTH 2.23 VHP 10.222 DPA -6.88 RAP 224.01 ECC 1.5241 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.08 12 23 12 1267.45 17.56 350.96 117.69 114.55 12 44 20 667.5 20.73 343.60 199.92 15 4 47 746.19 17.57 312.64 117.69 114.55 15 17 14 146.2 20.74 305.27 100.00 14 55 9 776.97 16.65 314.47 117.24 115.19 15 8 6 177.0 19.90 307.20 100.00 15 15 32 711.90 18.49 310.52 118.12 113.91 15 27 24 111.9 21.56 303.08 110.00 14 4 52 935.92 5.45 319.98 110.80 123.80 14 20 28 335.9 9.85 313.65 110.00 18 22 18 5413.76 30.58 248.88 122.95 106.08 19 52 32 4813.8 32.48 240.18
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5571.4 SGR 469.1 SG3 125.9

RRT -.4763 RRF -.4544 RTF .9407

SGB 5591.1 R23 .0043 R13 -.9407

SGI 5575.9 SG2 412.1 THA 177.69
                                                                                                                                                   ST 2018.4 SR 454.3 SS 455.6
      TDE-1.5138 TRA 3.7153 TC3-2.7675 BAU 1.1783
                                                                                                                                               CRT -.8112 CRS .6654 CST -.9758
LSA 2099.5 MSA 282.1 55A 15.2
      RDE .4460 RRA -.1043 RC3 .0050 FAU .01245
FDE -.3064 FRA 1.1710 FC3 -.3385 BSP 17803
                                                                                                                                           EL1 2052.3 EL2 261.3 ALF 169.48
      BOE 1.5781 BRA 3.7167 BC3 2.7676 FSP -418
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FLIGHT TIME 198.00
                                                                                                                                                        ARRIVAL DATE FEB 1 1968
 LAUNCH DATE JUL 18 1967
                                                                                    DISTANCE 574.590
    HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 25.259 GAL 8.85 AZL 91.86 MCA 290.79 SMA 119.80 ECC .30716 INC 1.8648 VI 29.304 RP 108.26 LAP 1.74 LOP 225.51 VP 36.661 GAP 17.04 AZP 90.66 TAL 158.80 TAP 89.59 RCA 83.00 APO 156.60 VZ 35.005 RC 189.337 GL -7.83 GP 7.46 ZAL 48.01 ZAP 172.54 ETS 86.21 ZAE 129.15 ETE 173.74 ZAC 39.64 ETC 10.37 CLP-179.89
    PLANETOCENTRIC CONIC
     C3 35.578 VHL 5.965 DLA -29.23 RAL 243.89 RAD 6568.4 VEL 12.528 PTH 2.27 VHP 10.596 DPA -7.81 RAP 226.20 ECC 1.5855 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           114.52 13 13 13
114.51 15 11 12
117.74 14 39 1
111.42 16 19 21
124.05 14 23 21
105.98 20 12 31
                                                                                        122.08
                                                                                                                                                              19.60
                                                                                                                                                                               340.80
         82.45
                      12 52 37 1236.31
                                                            16.42
                                                                           348.11
                                                                                                                                                  636.3
         97.55
                       14 57 19
                                        833.22
                                                            16.44
                                                                           318.54
                                                                                           122.08
                                                                                                                                                  233.2
                                                                                                                                                                   19.61
                                                                                                                                                                                  311.23
                     14 23 19
        100.00
                                        942.33
                                                            11.62
                                                                            324.17
                                                                                          119.65
                                                                                                                                                  342.3
                                                                                                                                                                  15.24
                                                                                                                                                                                  317.26
        100.00
                       16 9 19
                                         602.43
                                                           21.37
                                                                            303.66
                                                                                           124.29
                                                                                                                                                    2.4
                                                                                                                                                                   24.09
                                                                                                                                                                                  295.92
                      14 6 47
        110.00
                                        994.37
                                                             3.22
                                                                            323.04
                                                                                         114.59
                                                                                                                                                  394.4
                                                                                                                                                                    7.67
                                                                                                                                                                                  316.78
                      18 42 20 5411.19
        110,00
                                                            30.63
                                                                           248.69
                                                                                            127.77
                                                                                                                                               4811.2
                                                                                                                                                                  32.51
                                                                                                                                                                                  239.98
                                                                                HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SGT 5568.8 SGR 464.6 SG3 122.4

RRT -.4855 RRF -.4636 RTF ..9441

SGB 5588.1 R23 .0033 R13 -.9441

SGI 5573.4 SG2 405.8 THA 177.67
                                                                                                                                          ST 1943.3 SR 446.1 SS 444.8
CRT -.2743 CRS .6235 CST -.9770
     TOE-1.4431 TRA 4.1159 TC3-2.4535 BAU 1.1670
    RDE_ .4625 RRA -.1234 RC3 .0071 FAU .01116
FDE -.2779 FRA 1.2292 FC3 -.2716 BSP 17856
BDE 1.5154 BRA 4.1177 BC3 2.4535 FSP -408
                                                                                                                                          LSA 2021.2 MSA 296.1 SSA 14.5
                                                                                                                                           EL1 1974.4 EL2 277.9 ALF 169.72
                                                                                     FLIGHT TIME 200.00
                                                                                                                                                         ARRIVAL DATE FEB 3 1968
LAUNCH DATE JUL 18 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 579.379
    RL 152.04 LAL -.00 LOL 294.71 VL 25.215 GAL 9.82 AZL 91.73 MCA 293.98 SMA 119.56 ECC .31737 INC 1.7274 V1 29.304 RP 108.30 LAP 1.58 LOP 228.70 VP 36.618 GAP 17.72 AZP 90.70 TAL 157.32 TAP 91.31 RCA 81.61 APO 157.50 V2 34.992 RC 191.100 GL -6.81 GP 7.32 ZAL 45.81 ZAP 172.65 ETS 92.73 ZAE 129.07 ETE 173.85 ZAC 37.40 ETC 10.86 CLP 179.27
   PLANETOCENTRIC CONIC
    CAS 39.943 VHL 6.320 DLA -28.57 RAL 246.44 RAD 6568.5 VEL 12.701 PTH 2.31 VHP 11.003 DPA -8.71 RAP 228.38 ECC 1.6574
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
86.02 13 31 49 1171.95 15.26 342.83 126.35 114.45 13 51 21 572.0 18.44 335.57
93.98 14 38 28 956.05 15.28 327.03 126.36 114.44 14 54 24 356.0 18.45 319.77
100.00 14 11 59 1041.54 8.42 329.80 122.85 118.79 14 29 20 441.5 12.19 323.05
100.00 16 40 59 5849.73 22.36 278.95 129.44 110.38 18 18 29 5249.7 24.93 271.09
110.00 14 8 24 1052.96 .99 326.10 118.29 124.17 14 25 54 453.0 5.46 319.88
110.00 19 1 6 5411.08 30.63 248.69 132.47 105.98 20 31 18 4811.1 32.51 239.98
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SGT 5559.8 SGR 458.8 SG3 119.1
RRT -.4944 RRF -.4751 RTF .9478
SGB 5578.7 R23 .0024 R13 -.9478
SGI 5564.5 SG2 398.5 THA 177.65
                                                                                                                                          ST 1876.4 SR 436.3 SS 437.2
CRT -.7337 CRS .5812 CST -.9789
     TOE-1.3675 TRA 4.5405 TC3-2.1530 BAU 1.1497
    RDE .4788 RRA -.1436 RC3 .0082 FAU .00988 FOE -.2512 FRA 1.2901 FC5 -.2142 BSP 17910
                                                                                                                                          LSA 1951.2 MSA 307.9 SSA 13.9
    BOE 1.4489 BRA 4.5427 BC3 2.1531 FSP -398
                                                                                                                                           ELI 1904.2 EL2 292.2 ALF 170.08
                                                                                   FLIGHT TIME 202.00
                                                                                                                                                       ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUL 18 1967
                                                                                   DISTANCE 584.011
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.171 GAL 10.86 AZL 91.58 MCA 297.18 SMA 119.32 ECC .32860 INC 1.5830 V1 29.304 RP 108.34 LAP 1.41 LOP 231.90 VP 36.575 GAP 18.47 AZP 90.72 TAL 155.88 TAP 93.06 RCA 80.11 APO 158.53 V2 34.979 RC 192.846 GL -5.84 GP 7.18 ZAL 43.76 ZAP 172.64 ETS 99.48 ZAE 128.97 ETE 173.95 ZAC 35.19 ETC 11.46 CLP 178.40
   PLANETOCENTRIC CONIC
    C3 45.055 VHL 6.712 OLA -27.91 RAL 248.80 RAD 6568.7 VEL 12.900 PTH 2.35 VHP 11.448 OPA -9.56 RAP 230.57 ECC 1.7415
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           116.54 13 53 7 630.6

112.24 15 12 26 358.1

119.41 14 23 33 526.6

109.73 18 44 4 5225.4

124.16 14 28 8 511.4

106.06 20 48 52 4813.3
                                                                                        128.64
         90.00
                                                                                                                                                               13.75
                      13 32 37 1230.61
                                                           10.27
                                                                          344.67
                                      958.10
1126.60
         90.00
                  14 56 28
                                                           17.99
                                                                           328.40
                                                                                           132.25
                                                                                                                                                                  20.85
                                                                                                                                                                                  320.89
        100.00
                      14 4 47
                                                             5.60
                                                                          334.54
                                                                                          126.14
                                                                                                                                                                   9.48
                                                                                                                                                                                 327.90
       100.00
                     17 6 59
                                    5825.39
                                                          22.92
                                                                          277.36
                                                                                          134.27
                                                                                                                                                                  25.40
                                                                                                                                                                                269.44
                    14 9 37 1111.42
19 18 38 5413.33
       110.00
                                                           -1.25
                                                                           329.15
                                                                                          121.90
                                                                                                                                                                   3.24
                                                                                                                                                                                 322.95
       110.00
                                                           30.59
                                                                          248.85
                                                                                          137.04
                                                                                                                                                                  32.48
                                                                                                                                                                                 240.14
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               RRT -.5032 RRF -.4826 RTF ..9516
SGB 5565.3 R23 .0017 R13 -.9516
SGI 5551.7 SGZ 390.0 THA 177.64
                                                                                                                                          ST 1818.9 SR 425.2 SS 432.6
CRT -.6905 CRS .5394 CST -.9811
    TOE-1.2893 TRA 4.9905 TC3-1.8723 BAU 1.1278
    ROE .4950 RRA -.1647 RC3 .0084 FAU .00862
FOE -.2262 FRA 1.3541 FC3 -.1655 BSP 17937
                                                                                                                                          LSA 1890.9 HSA 317.1 SSA 13.3
EL1 1843.1 EL2 303.5 ALF 170.57
    BOE 1.3810 BRA 4.9932 BC3 1.8724 FSP
                                                               -388
LAUNCH DATE JUL 18 1967
                                                                                    FLIGHT TIME 204.00
                                                                                                                                                       ARRIVAL DATE FEB 7 1968
                                                                                   DISTANCE 588.455
   HELIOCENTRIC CONIC
    RL 152.04 LAL -.00 LOL 294.71 VL 25.129 GAL 11.98 AZL 91.43 HCA 300.37 SMA 119.09 ECC .34100 INC 1.4302 VI 29.304 RP 108.38 LAP 1.23 LOP 235.09 VP 36.534 GAP 19.28 AZP 90.72 TAL 154.49 TAP 94.86 RCA 78.48 APO 159.70 V2 34.966 RC 194.574 GL -4.93 GP 7.06 ZAL 41.87 ZAP 172.52 ETS 106.27 ZAE 128.83 ETE 174.05 ZAC 33.01 ETC 12.16 CLP 177.52
   PLANETOCENTRIC CONIC
    C3 51.055 VHL 7.145 DLA -27.26 RAL 250.96 RAD 6568.9 VEL 13.131 PTH 2.40 VHP 11.937 DPA -10.37 RAP 232.75°ECC 1.8402
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        131,44
                                                                                                                                                              10.29
                                                                                                          117.59 13 37 43
111.09 15 46 10
                                                                                                                                                                              344.55
                                                                                                                                                 747.2
         90.00 13 15 16 1347.24
                                                           6.65
                                                                          351.33
         90.00
                      15 31 6
                                       904.02
                                                           19.35
                                                                           325.01
                                                                                          137.32
                                                                                                                                                 304.0
                                                                                                                                                                  22.04
                                                                                                                                                                                  317.38
                                                                                                             119.76 14 19 34
109.31 19 6 23
124.03 14 30 4
106.24 21 5 15
                                                                                                                                                 604.3
       100.00
                    13 59 29 1204.35
                                                            2.98
                                                                           338.83
                                                                                         129.43
                                                                                                                                                                   6.92
                                                                                                                                                                                  332.26
                      17 29 33
                                      5810.19
                                                          23.27
                                                                          276.37
                                                                                           138.87
                                                                                                                                                5210.2
                                                                                                                                                                  25.69
                                                                                                                                                                                  268.40
       100.00
                                      1169.55
                                                                                                                                                                                  325.98
       110.00
                     14 10 34
                                                           -3.47
                                                                           332.19
                                                                                           125.42
                                                                                                                                                569.5
                                                                                                                                                                   1.02
       110.00
                                                                                                                                                4817.8
                      19 34 57
                                      5417.75
                                                           30.50
                                                                          249.17
                                                                                           141.47
                                                                                                                                                                  32.42
                                                                                                                                                                                 240.48
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 1769.8 SR 412.7 SS 450.5
CRT -.6443 CRS .4973 CST -.9835
                                                                               SGT 5531.2 SGR 443.0 SG3 112.8
RRT -.5115 RRF -.4919 RTF .9554
SGB 5548.9 R23 .0010 R13 -.9554
     TOE-1.2047 TRA 5.4741 TC3-1.6078 BAU 1.0974
    ROE .5108 RRA -.1869 RC3 .0078 FAU .00730
FOE -.2017 FRA 1.4232 FC3 -.1237 BSP 17854
BDE 1.3085 BRA 5.4772 BC3 1.6078 FSP -375
                                                                                                                                         LSA 1839.4 MSA 323.6 SSA 12.7
                                                                               SGI 5535.8 SG2 380.4 THA 177.64
                                                                                                                                         EL1 1790.3 EL2 312.0 ALF 171.19
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ARRIVAL DATE FEB 9 1968

LAUNCH DATE JUL 18 1967

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DISTANCE 592.674
    RL 152.04 LAL -.00 LOL 294.71 VL 25.088 GAL 13.19 A7L 91.27 MCA 303.56 SMA 118.87 ECC .35472 INC 1.2672 VI 29.304 RP 108.42 LAP 1.06 LOP 238.28 VP 36.493 GAP 20.18 A7P 90.70 TAL 153.16 TAP 96.73 RCA 76.71 APO 161.04 V2 34.953 RC 196.285 GL -4.06 GP 6.95 ZAL 40.13 ZAP 172.27 ETS 112.93 ZAE 128.67 ETE 174.15 ZAC 30.86 ETC 12.99 CLP 176.61
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 58.120 VHL 7.624 DLA -26.61 RAL 252.94 RAD 6569.1 VEL 13.397 PTH 2.45 VHP 12.476 DPA -11.13 RAP 234.92 ECC 1.9565
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 4 52 1440.03 3.70 356.55 134.44 118.09 13 28 52 840.0 7.43 349.86
         90.00 13 4 52 1440.03

90.00 15 57 17 875.22

100.00 13 55 15 1277.31

100.00 17 49 35 5801.21

110.00 14 11 14 1227.13

110.00 19 50 5 5424.15
                                                                                                                              118.09 13 28 52
110.43 16 11 52
                                                                                                                                                                                                                  315.48
                                                                                                                                                                                               22.65
                                                                                                            141.94
                                                                                                                                                                           275.2
                                                                      20.04
                                                                                        323.18
                                                                                                                                                                                                                  336.30
                                                                                                                                                                           677.3
                                                                                                                                                                                                 4.48
                                                                                        342.84
                                                                                                            132.68
                                                                                                                                 119.89 14 16 32
                                                                         . 51
        100.00
                                                                                                                                 25.85
                                                                      23.47
                                                                                        275.77
                                                                                                            143.26
                                                                                                                                                                          5201.2
        100.00
                                                                                                                                                                                                                  328.99
                                                                                                                                                                          627.1
                                                                                                                                                                                               -1.18
                                                                                         335.21
                                                                                                           128.85
                                                                      -5.65
        110.00
                                                                                                                                                                                               32.34
                                                                                                                                                                                                                  240.95
                                                                                                                                                                         4824.2
                                                                      30.38
                                                                                        249.62
                                                                                                           145.74
        110.00
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                   ST 1730.6 SR 399.3 SS 432.0

CRT -.5992 CRS .4599 CST -.9861

LSA 1798.5 MSA 326.3 SSA 12.1

ELI 1747.7 EL2 316.5 ALF 171.86
                                                                                             RRT - 5102 SGR 433.2 SG3 109.9

RRT - 5199 RRF - 5015 RTF .9595

SGB 5527.2 R23 .0004 R13 - .9595

SG1 5514.8 SG2 369.8 THA 177.65
     TOE-1.1241 TRA 5.9845 TC3-1.3669 BAU 1.0621
     ROE .5266 RRA -.2093 RC3 .0068 FAU .00603
FDE -.1805 FRA 1.4954 FC3 -.0898 BSP 17875
BDE 1.2413 BRA 5.9881 BC3 1.3669 FSP -366
                                                                                                   FLIGHT TIME 208,00
                                                                                                                                                                                   ARRIVAL DATE FEB 11 1968
LAUNCH DATE JUL 18 1967
                                                                                                   DISTANCE 596.621
   HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 25.047 GAL 14.50 AZL 91.09 MCA 306.75 SMA 118.66 ECC .36994 INC 1.0918 V1 29.304 RP 108.46 LAP .87 LOP 241.46 VP 36.453 GAP 21.17 AZP 90.65 TAL 151.91 TAP 98.66 RCA 74.76 APO 162.55 V2 34.941 RC 197.979 GL -3.25 GP 6.84 ZAL 38.54 ZAP 171.90 ETS 119.27 ZAE 128.46 ETE 174.25 ZAC 28.76 ETC 13.97 CLP 175.66
    PLANETOCENTRIC CONIC
                                                                                                                                      2.50 VHP 13.073 DPA -11.85 RAP 237.08 ECC 2.0940
     C3 66.472 VHL 8.153 DLA -25.97 RAL 254.74 RAD 6569.3 VEL 13.705 PTH
     LNCH AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 118.30 13 22 37
110.02 16 33 32
119.84 14 14 4
108.94 19 44 10
123.39 14 33 0
106.79 21 34 36
                                                                                                                                                                            922.2
                                                                                                                                                                                                 4.83
                                                                                                                                                                                                                   354.50
                         12 57 15 1522.24
16 19 14 857.98
                                                                       1.05
                                                                                           1.15
                                                                                                           137.47
          90.00
                                                                                                                                                                            258.0
                                                                                                                                                                                                 22.99
                                                                                                                                                                                                                   314.33
                                                                                         322.08
                                                                                                             146.27
                                                                      20.45
          90.00
                          13 51 37 1346.68
18 7 34 5796.82
                                                                                                                                                                                                                   340.12
                                                                                                                                                                            746.7
                                                                                                                                                                                                  2.14
                                                                       -1.64
                                                                                         346.64
                                                                                                             135.86
         100.00
                                                                                                                                                                                                25.93
                                                                                                                                                                                                                   267.49
                                                                                                                                                                          5196.8
                                                                      23.57
                                                                                         275.48
                                                                                                             147.46
         100.00
                                                                                                                                                                                                                   331.95
                                                                                                                                                                            684.0
                                                                                                                                                                                                -3.35
                                                                       -7.79
                                                                                         338.22
                                                                                                           132.19
         110.00
                           14 11 36 1283.98
20 4 4 5432.28
                                                                                                                                                                        4832.3
                                                                                                                                                                                               32.22
                                                                                                                                                                                                                   241.56
                                                                                                             149.86
         110.00
                                                                      30.22
                                                                                         250.20
                          20 4 4
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SCT 5485.0 SCR 422.1 SG3 107.0
RRT -.5277 RRF -.5107 RTF .9635
SGB 5501.2 R23 .0000 R13 -.9635
SGI 5489.5 SG2 358.2 THA 177.66
                                                                                                                                                                    ST 1698.4 SR 384.8 SS 435.7
CRT -.5543 CRS .4250 CST -.9886
      TOE-1.0417 TRA 6.5309 TC3-1.1452 BAU 1.0178
     RDE .5421 RRA -.2322 RC3 .0054 FAU .00473
FDE -.1606 FRA 1.5730 FC3 -.0616 BSP 17874
BDE 1.1743 BRA 6.5350 BC3 1.1453 FSP -357
                                                                                                                                                                    LSA 1765.3 MSA 325.9 SSA 11.5
                                                                                                                                                                     EL1 1712.2 EL2 317.7 ALF 172.58
                                                                                                                                                                                  ARRIVAL DATE FEB 13 1968
                                                                                                   FLIGHT TIME 210.00
LAUNCH DATE JUL 18 1967
                                                                                                  DISTANCE 600.237
     RL 152.04 LAL -.00 LOL 294.71 VL 25.008 GAL 15.93 AZL 90.90 MCA 309.93 SMA 118.45 ECC .38688 INC .9013 V1 29.304 RP 108.50 LAP .69 LOP 244.65 VP 36.415 GAP 22.27 AZP 90.58 TAL 150.74 TAP 100.67 RCA 72.62 APO 164.28 V2 34.929 RC 199.655 GL -2.48 GP 6.74 ZAL 37.10 ZAP 171.41 ETS 125.20 ZAE 128.21 ETE 174.35 ZAC 26.71 ETC 15.12 CLP 174.67
    PLANETOCENTRIC CONIC
     C3 76.391 VML 8.740 DLA -25.34 RAL 256.36 RAD 6569.5 VEL 14.062 PTH 2.56 VHP 13.737 DPA -12.53 RAP 239.20 ECC 2.2572
     C3 76.391 VHL 8.740 DLA -25.34 RAL 256.36 RAD 6569.5 VEL 14.062 PTH 2.56 VHP 13.737 OPA -12.53 RAP 239.20 ECC 2.2572

LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 51 5 1597.86 -1.39 5.36 140.46 118.29 13 17 43 997.9 2.40 356.73 90.00 16 38 19 847.85 20.68 321.43 150.35 109.78 16 52 26 247.9 23.19 313.66 100.00 13 48 19 1413.05 -4.08 350.29 138.97 119.64 14 11 52 813.0 -.11 343.76 100.00 18 23 45 5795.94 23.59 275.43 151.46 108.92 20 0 21 5195.9 25.95 267.42 110.00 14 11 39 1339.89 -9.88 341.21 135.42 122.69 14 33 58 739.9 -5.47 334.89 110.00 20 16 56 5441.86 30.03 250.88 153.81 107.15 21 47 37 4841.9 32.08 242.27
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                    ST 1672.3 SR 369.5 SS 442.1

CRT -.5108 CRS .3930 CST -.9910

LSA 1739.2 MSA 322.3 SSA 11.0
                                                                                              SGT 5455.8 SGR 409.5 SG3 104.3
RRT -.5349 RRF -.5194 RTF .9676
SGB 5471.1 R23 -.0003 R13 -.9676
      TOE -.9590 TRA 7.1179 TC3 -.9425 BAU .9626
     ROE .5573 RRA -.2550 RC3 .0036 FAU .00336
FDE -.1423 FRA 1.6571 FC3 -.0381 BSP 17857
                                                                                              SG1 5460.2 SG2 345.7 THA 177.69
                                                                                                                                                                    EL1 1683.3 EL2 315.6 ALF 173.33
      BOE 1.1092 BRA 7.1224 BC3 .9425 FSP -348
                                                                                                                                                                                    ARRIVAL DATE FEB 15 1968
LAUNCH DATE JUL 18 1967
                                                                                                    ELICHT TIME 212.00
                                                                                                   DISTANCE 603.448
     RL 152.04 LAL -.00 LOL 294.71 VL 24.971 GAL 17.50 AZL 90.69 MCA 313.12 SMA 118.25 ECC .40581 INC .6924 VI 29.304 RP 108.53 LAP .51 LOP 247.83 VP 36.378 GAP 23.50 AZP 90.47 TAL 149.68 TAP 102.79 RCA 70.27 APO 166.24 V2 34.917 RC 201.315 GL -1.76 GP 6.65 ZAL 35.82 ZAP 170.79 ETS 130.65 ZAE 127.90 ETE 174.45 ZAC 24.73 ETC 16.45 CLP 173.62
    HELLOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 88.236 VML 9.393 DLA -24.73 RAL 257.79 RAD 6569.7 VEL 14.477 PTH 2.63 VMP 14.480 DPA -13.16 RAP 241.29 ECC 2.4521
     C3 88.236 VHL 9.393 DLA -24.73 RAL 257.79 RAD 6569.7 VEL 14.477 PTH 2.63 VHP 14.480 DPA -15.16 RAP 241.29 ECC 2.4921 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 45 45 1668.63 -3.67 9.32 143.37 118.10 13 13 33 1068.6 .12 2.68 90.00 16 55 7 842.60 20.80 321.09 154.21 109.65 17 9 10 242.6 23.30 313.31 100.00 13 45 11 1476.73 -6.22 3553.82 141.97 119.30 14 9 48 876.7 -2.27 347.26 100.00 18 38 22 5797.77 23.55 275.55 155.25 108.97 20 14 59 5197.8 25.92 267.55 110.00 14 11 21 1394.67 -11.89 344.18 138.55 122.29 14 34 36 794.7 -7.54 337.79 110.00 20 28 41 5452.60 29.81 251.64 157.56 107.55 21 59 34 4652.6 31.92 243.07
                           18 38 22 5797.77
14 11 21 1394.67
20 28 41 5452.60
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 1651.0 SR 353.3 SS 451.1

CRT -.4680 CRS .3624 CST -.9930

LSA 1718.7 MSA 316.1 SSA 10.4

EL1 1659.6 EL2 310.6 ALF 174.07
                                                                                             SGT 5424.2 SGR 395.6 SG3 101.8
RRT -.5412 RRF -.5273 RTF .9716
      TOE -.8721 TRA 7.7550 TC3 -.7560 BAU .8918
      RDE .5719 RRA -.2778 RC3 .0016 FAU .00185
FDE -.1243 FRA 1.7498 FC3 -.0181 BSP 17718
BOE 1.0429 BRA 7.7600 BC3 .7560 FSP -337
                                                                                              SGB 5438.7 R23 -.0006 R13 -.9716
                                                                                             SG1 5428.5 SG2 332.4 THA 177.73
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FLIGHT TIME 206.00

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LAUNCH DATE JUL 18 1967
                                                                                           FLIGHT TIME 214.00
                                                                                                                                                                    ARRIVAL DATE FEB 17 1968
                                                                                           DISTANCE 606.155
    HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 24.935 GAL 19.24 AZL 90.46 MCA 316.30 SMA 118.07 ECC .42701 INC .4608 V1 29.304 RP 108.57 LAP .32 LOP 251.01 VP 36.342 GAP 24.88 AZP 90.33 TAL 148.74 TAP 105.04 RCA 67.65 APO 168.48 V2 34.905 RC 202.957 GL -1.07 GP 6.57 ZAL 34.71 ZAP 170.05 ETS 135.62 ZAE 127.52 ETE 174.56 ZAC 22.83 ETC 18.01 CLP 172.51
    PLANETOCENTRIC CONIC
      C3 102.473 VHL 10.123 DLA -24.14 RAL 259.05 RAD 6570.0 WEL 14.960 PTH 2.70 VMP 15.314 DPA -13.75 RAP 243.32 ECC 2.6864
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    117.77 13 9 47
109.61 17 24 1
118.84 14 7 41
109.08 20 28 11
121.58 14 34 49
107.98 22 10 26
                                                                                                                                                         1135.4
                                                                                                                                                                           -2.04
                                                                                                146.18
          90.00
                      12 40 51 1735.43
                                                                 -5.80
                                                                                  13.07
                                                                                                                                                                                                    6.41
           90.00
                        17 10 0
                                            840.82
                                                                 20.85
                                                                                  320.98
                                                                                                   157.82
                                                                                                                                                             240.8
                                                                                                                                                                                23.33
                                                                                                                                                                                                  313.19
                                                                                                                                                                                               350.62
                       13 42 3 1537.87
18 51 30 5801.65
         100.00
                                                                 -8.24
                                                                                  357.23
                                                                                                 144.85
                                                                                                                                                              937.9
                                                                                                                                                                                -4.33
         100.00
                                                                 23.46
                                                                                 275.80
                                                                                                   158.81
                                                                                                                                                            5201.6
                                                                                                                                                                                25.85
                                                                                                                                                                                                267.82
                       14 10 41 1448.10
20 39 22 5464.18
         110.00
                                                            -13.81
                                                                                  347.13
                                                                                                  141.55
                                                                                                                                                            848.1
                                                                                                                                                                                -9.53
                                                                                                                                                                                                  340.64
         110.00
                                                                                 252.46
                                                                                                                                                            4864.2.
                                                               29.57
                                                                                                   161.10
                                                                                                                                                                                 31.74
                                                                                                                                                                                                 243.92
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                      SGT 5386.7 SGR 380.4 SG3 99.3
RRT -.5466 RRF -.5344 RTF .9755
                                                                                                                                                       ST 1633.2 SR 336.7 SS 462.8
CRT -.4299 CRS .3372 CST -.9947
LSA 1703.1 MSA 307.2 SSA 9.9
     TDE -.7924 TRA 8.4380 TC3 -.5898 BAU .8080
     RDE .5866 RRA -.2994 RC3 -.0003 FAU .00026
     FOE -.1092 FRA 1.8501 FC3 -.0022 BSP 17702
BOE .9859 BRA 8.4433 BC3 .5898 FSP -329
                                                                                      SGB 5400.1 R23 -.0008 R13 -.9755
                                                                                      SGI 5390.7 SGZ 318.3 THA 177.78
                                                                                                                                                       EL1 1639.9 EL2 302.7 ALF 174.76
                                                                                           FLIGHT TIME 216.00
                                                                                                                                                                     ARRIVAL DATE FEB 19 1968
    HELIOCENTRIC CONIC
                                                                                           DISTANCE 608.234
     RL 152.04 LAL -.00 LOL 294.71 VL 24.902 GAL 21.16 AZL 90.20 MCA 319.47 SMA 117.89 ECC .45084 INC .2002 V1 29.304 RP 108.60 LAP .13 LOP 254.18 VP 36.308 GAP 26.44 AZP 90.15 TAL 147.97 TAP 107.AA RCA 64.74 APO 171.04 V2 34.894 RC 204.581 GL -.43 GP 6.49 ZAL 33.77 ZAP 169.19 ETS 140.11 ZAE 127.06 ETE 174.68 ZAC 21.02 ETC 19.82 CLP 171.33
    PLANETOCENTRIC CONIC
     C3 119.705 VHL 10.941 DLA -23.56 RAL 260.11 RAD 6570.2 VEL 15.525 PTH 2.77 VHP 16.257 DPA -14.28 RAP 245.29 ECC 2.9700
     C3 119.705 VML 10.941 DLA -23.56 RAL 260.11 RAD 6570.2 VEL 15.525 PTH 2.77 VMP 16.257 DPA -14.28 RAP 245.29 ECC 2.9700 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 36 9 1798.70 -7.79 16.65 148.84 117.31 13 6 8 1198.7 -4.07 9.55 90.00 17 23 11 841.54 20.85 321.03 161.17 109.65 17 37 13 241.5 23.32 313.24 100.00 13 38 48 1596.49 -10.15 .54 147.59 118.27 14 5 25 996.5 -6.29 353.87 100.00 19 3 14 5807.02 23.34 276.16 162.13 109.23 20 40 1 5207.0 25.75 268.19 110.00 14 9 35 1499.98 -15.64 350.03 144.40 120.79 14 34 35 900.0 -11.44 343.45 110.00 20.48 56 5476.30 29.31 253.31 164.40 108.43 22 20 13 4876.3 31.55 244.81
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     SGT 5345.1 SGR 363.9 SG3 96.9

RRT -.5505 RRF -.5400 RTF .9792

SGB 5357.5 R23 -.0010 R13 -.9792

SGI 5348.8 SG2 303.6 THA 177.85
     TOE -.7146 TRA 9.1797 TC3 -.4398 BAU .7039
                                                                                                                                                       ST 1617.5 SR 319.5 SS 477.3
CRT -.3947 CRS .3146 CST -.9961
     ROE .6010 RRA -.3196 RC3 -.0022 FAU-.00153
     FOE -.0955 FRA 1.9611 FC3 .0110 BSP 17654
BOE .9337 BRA 9.1853 BC3 .4398 FSP -322
                                                                                                                                                      LSA 1690.6 MSA 296.2 SSA 9.3
                                                                                                                                                       EL1 1622.5 EL2 292.6 ALF 175.39
                                                                                           FLIGHT TIME 218.00
                                                                                                                                                                    ARRIVAL DATE FEB 21 1968
LAUNCH DATE JUL 18 1967
                                                                                          DISTANCE 609.522
   HELTOCENTRIC CONTC.
    RL 152.04 LAL -.00 LOL 294.71 VL 24.870 GAL 23.31 AZL 89.90 HCA 322.65 SMA 117.73 ECC .47772 INC .0928 V1 29.304
RP 108.64 LAP -.06 LOP 257.36 VP 36.276 GAP 28.22 AZP 89.92 TAL 147.38 TAP 110.03 RCA 61.49 APO 173.97 V2 34.883
RC 206.187 GL .18 GP 6.41 ZAL 33.01 ZAP 168.18 ETS 144.16 ZAE 126.50 ETE 174.80 ZAC 19.33 ETC 21.89 CLP 170.05
    PLANETOCENTRIC CONIC
     C3 140.729 VHL 11.863 DLA -23.00 RAL 260.97 RAD 6570.5 VEL 16.188 PTH 2.84 VHP 17.329 DPA -14.77 RAP 247.17 ECC 3.3160
     C3 140,729 VHL 11,863 OLA -23.00 RAL 260.97 RAD 6570.5 VEL 16.188 PTH 2.84 VMP 17.329 DPA -14.77 RAP 247.17 ECC 3.3160 LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 31 27 1858.66 -9.65 20.08 151.34 116.75 13 2 25 1258.7 -5.98 13.32 90.00 17 34 47 843.97 20.77 321.18 164.25 109.69 17 48 50 244.0 23.27 313.40 100.00 13 35 18 1652.54 -11.94 3.74 150.15 117.61 14 2 51 1052.5 -8.15 357.00 100.00 19 13 36 5813.37 23.20 276.58 165.17 109.40 20 50 29 5213.4 25.63 268.62 110.00 14 7 59 1550.07 -17.36 352.89 147.07 119.92 14 33 49 950.1 -13.25 346.19 110.00 20 57 24 5488.61 29.05 254.17 167.43 108.87 22 28 53 4888.6 31.34 245.72
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                                                      ST 1602.5 SR 301.9 SS 495.0
CRT - 3627 CRS .2946 CST - 9972
LSA 1680.4 MSA 283.5 SSA 8.8
ELI 1606.3 EL2 280.6 ALF 175.97
                                                                                     SCT 5299.4 SCR 346.0 SC3 94.7

RRT -.5525 RRF -.5436 RTF .9827

SCB 5310.7 R23 -.0011 R13 -.9827

SCJ 5302.9 SC2 288.3 THA 177.93
     TOE -.6408 TRA 9.9878 TC3 -.3053 BAU .5744
     RDE .6153 RRA -.3375 RC3 -.0039 FAU-.00360
     FOE -.0834 FRA 2.0847 FC3 .0222 BSP 17586
BOE .8884 BRA 9.9935 BC3 .3053 FSP -314
                                                                                                                                                                    ARRIVAL DATE FEB 23 1968
LAUNCH DATE JUL 18 1967
                                                                                           FLIGHT TIME 220.00
                                                                                          DISTANCE 609.805
   HELIOCENTRIC CONIC
     RL 152.04 LAL -.00 LOL 294.71 VL 24.842 GAL 25.73 AZL 89.56 HCA 325.82 SMA 117.58 ECC .50810 INC .4362 VI 29.304 RP 108.67 LAP -.25 LOP 260.53 VP 36.246 GAP 30.26 AZP 89.64 TAL 147.03 TAP 112.86 RCA 57.84 APO 177.32 V2 34.872 RC 207.774 GL .76 GP 6.33 ZAL 32.46 ZAP 167.02 ETS 147.83 ZAE 125.82 ETE 174.94 ZAC 17.78 ETC 24.23 CLP 168.65
    PLANETOCENTRIC CONIC
     C3 166.598 VHL 12.907 OLA -22.46 RAL 261.62 RAD 6570.8 VEL 16.968 PTH 2.92 VHP 18.554 DPA -15.22 RAP 248.95 ECC 3.7418
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     116.11 12 58 28
109.77 17 58 57
                                                                                               153.63
                                                                                                                                                         1315.4
                                                                                                                                                                                -7.77
                                                                                                                                                                                                  16.53
          90.00 12 26 32 1915.40
                                                              -11.37
                                                                                 23.36
                                                                                                                                                                                23.20
                                                                                                                                                             247.5
          90.00
                        17 44 49
                                          847.49
                                                               20.69
                                                                                 321.41
                                                                                                   167.00
                                                                                                                      116.88 13 59 52
109.59 20 59 37
118.98 14 32 27
109.30 22 36 24
                                                            -13.60
                                                                                                                                                            1105.9
                                                                                                                                                                                -9.89
                                                                                                                                                                                                     .00
                      13 31 26 1705.92
                                                                                 6.83
277.03
                                                                                                  152.49
        100.00
                                                                                                                                                                               25.50
        100.00
                       19 22 36
                                          5820.24
                                                              23.04
                                                                                                  167.91
                                                                                                                                                            5220.2
                                                                                                                                                                                                 269.09
                                                                                                                                                             998.1
                                                                                                                                                                              -14.96
                                                                                                                                                                                                 348.87
                       14 5 49
                                          1598.14
                                                             -18.97
                                                                                 355.69
                                                                                                  149.52
        110.00
                                                                                                                                                                             31.13
                                                                                                                                                            4900.8
                                                                                                                                                                                                 246.60
                                                                                                   170.16
        110.00
                       21 4 43
                                           5500.79
                                                              28.78
                                                                                 255.01
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 1587.0 SR 284.0 SS 516.2

CRT -.3340 CRS .2768 CST -.9981

LSA 1671.2 MSA 269.5 SSA 8.2

EL1 1589.9 EL2 267.2 ALF 176.48
                                                                                    SGT 5249.3 SGR 326.9 SG3 92.6

RRT -.5517 RRF -.5444 RTF .9858

SGB 5259.5 R23 -.0012 R13 -.9858
     TOE -.9734 TRA10.8700 TC3 -.1854 BAU
                                                                    .4132
     RDE .6296 RRA -,3518 RC3 -.0054 FAU-.00608
FDE -.0732 FRA 2.2231 FC3 .0316 89P 17486
     BDE .8516 BRA10.8757 BC3. .1855 FSP -307
                                                                                     SG1 5252.4 SG2 272.5 THA 178.03
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ARRIVAL DATE SEP 27 1967

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LAUNCH DATE JUL 19 1967
                                                                      DISTANCE 191.088
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 27.350 GAL -11.61 AZL 92.82 MCA 84.88 SMA 132.99 ECC .24526 INC 2.8212 V1 29.306.
RP 108.46 LAP -2.81 LOP 20.54 VP 38.069 GAP -9.47 AZP 90.25 TAL 223.53 TAP 308.40 RCA 100.37 APO 165.61 V2 34.938
RC 56.885 GL -12.47 GP -12.14 ZAL 151.98 ZAP 26.00 ETS 25.50 ZAE 151.29 ETE 355.08 ZAC 91.14 ETC 13.66 CLP -23.17
   PLANETOCENTRIC CONIC
                                       2.67 RAL 139.39 RAO 6568.5 VEL 12.595 PTH 2.28 VHP 6.721 OPA
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 35 24 2451.20 -24.52 57.05 12.27 104.63 1 16 15 1851.2 -22.27 49.10
                                                                                                       14 35 9
                                                                                                                         4329.9
                                                                                                                                        18.42
                                                               215.00
                                                                              10.49
                                                                                              70.81
                                 4929.89
                                                  21.23
        90.00
                   13 12 59
                                                                                                        2 34 24
                                                                                                                         1584.8
                                                                                                                                        -23.37
                                                                                                                                                       29.11
                                                                                             105.69
                    1 57 59 2184.82
                                                 -25.78
                                                                37.08
                                                                              11.89
      100.00
                                                                                              69.74 15 50 57
                                                                                                                                                      187.98
                                                                                                                         4071.5
                                                                                                                                        19.50
                  14 33 5 4671.50
3 9 5 1962.30
15 38 29 4466.80
                                                  22.46
                                                              195.53
                                                                              10.02
      100.00
                                                                                                      3 41 47
16 52 55
                                                                                                                                                       10.97
                                                                                                                         1362.3
                                                                            10.71
                                                                                             108.68
                                                 -29.16
                                                                19.01
      110.00
                                                                                                                                       22.37
                                                                                                                                                     171.02
                                                                                                                         3866.8
                                                                               8.58
                                                                                             66.70
                                                  25.75
                                                               178.55
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 550.1 SGR 439.4 SG3 147.7
RRT -.2194 RRF .3630 RTF -.5110
SGB 704.0 R23 -.1023 R13 .5628
                                                                                                                     ST 215.7 SR 391.7 SS 129.7
CRT -.8490 CRS -.4013 CST -.1168
    TOE .2108 TRA -.3012 TC3 .3507 BAU .1773
    ROE -.4128 RRA -.2065 RC3 -.0598 FAU .05494
                                                                                                                     LSA 437.1 MSA 158.4 SSA 25.0
    FOE -.0626 FRA -.7462 FC3-1.2761 BSP 1350
BOF .4635 BRA .3652 BC3 .3558 FSP -384
                                                                                                                     EL1 435.2 EL2 102.6 ALF 116.65
                                                                   SG1 569.3 SG2 414.2 THA 157.96
    BOE .4635 BRA .3652 BC3 .3558 FSP
                                                                                                                                ARRIVAL DATE SEP 29 1967
                                                                       FLIGHT TIME 72.00
LAUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                       DISTANCE 197.871
    RL 152.03 LAL .00 LOL 295.66 VL 27.461 GAL -11.50 AZL 92.70 HCA 88.07 SMA 133.80 ECC .23998 INC 2.7011 V1 29.306
RP 108.43 LAP -2.70 LOP 23.73 VP 38.160 GAP -8.61 AZP 90.09 TAL 224.71 TAP 312.78 RCA 101.69 APO 165.91 V2 34.951
RC 58.673 GL -12.16 GP -12.98 ZAL 152.95 ZAP 29.42 ETS 23.48 ZAE 151.96 ETE 352.47 ZAC 91.61 ETC 13.59 CLP -26.64
   PLANETOCENTRIC CONIC
                                                                                                                            -7.62 RAP 173.32 ECC 1.5966
                                                                                                 2.28 VHP 6.301 OPA
    C3 36.254 VHL 6.021 DLA 3.25 RAL 138.60 RAD 6568.4 VEL 12.555 PTH 2.28 VHP 6.301 DPA -7.62 RAP 173.32 ECC 1.9966 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                        3.25 RAL 138.60 RAD 6568.4 VEL 12.555 PTH
                                                                                                                                       -22.30
                                                                                                                                                       49.84
                                                                                                                       1862.4
                                                                                                          1 8 55
                   0 27 53 2462.41
13 14 12 4904.66
                                                                            11.19
                                                                                             104.29
                                                  -24.71
                                                                 57.81
        90.00
                                                                                              70.19 14 35 57
                                                                                                                          4304.7
                                                                                                                                         17.77
                                                                                                                                                       205.89
                                                                                9.06
                                                   20.66
                                                                213.37
        90.00
                                                                                                          2 27 49
                                                                                                                                        -23.60
                   1 50 44 2195.14
14 34 1 4647.16
                                                                                                                          1595.1
                                                                               10.83
                                                                                             105.36
                                                  -25.96
                                                                 37.79
       100.00
                                                                                              69.10 15 51 29
                                                                                                                          4047.2
                                                                                                                                        18.84
                                                                               8.58
                                                   21.88
                                                                193.95
       100.00
                                                                                             108.38 3 35 19
66.04 16 52 51
                                1970.64
                                                                                                                          1370.6
                                                                                                                                       -26.55
                                                                                9.67
                    3 2 28
                                                  -29.34
                                                                 19.59
       110.00
                                                                                                                                          21.69
                                                                                                                          3844.4
                                                               177.10
                                                                                7.11
                   15 38 47
                                  4444.43
                                                   25.14
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 548.6 SGR 450.3 SG3 167.3
RRT -.2389 RRF .4136 RTF -.4977
SGB 709.7 R23 -.1259 R13 .5692
                                                                                                                     ST 212.1 SR 392.6 SS 139.2
CRT -.8404 CRS -.3331 CST -.2056
    TDE .2039 TRA -.2965 TC3 .3557 BAU .1769
    RDE - .4073 RRA - .2170 RC3 - .0820 FAU .06100
                                                                                                                    LSA 435.2 MSA 168.7 SSA 25.2
EL1 433.9 EL2 104.0 ALF 116.03
    FOE -.0489 FRA -.8600 FC3-1.4568 BSP 1384
BOE .4555 BRA .3674 BC3 .3650 FSP -446
                                                                   SG1 573.3 SG2 418.4 THA 154.88
                                                                                                                                ARRIVAL DATE OCT 1 1967
                                                                       FLIGHT TIME 74.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 204.628
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 35.354 VML 5.946 DLA 3.83 RAL 137.93 RAD 6568.4 VEL 12.519 PTH 2.27 VMP 5.915 DPA -8.27 RAP 172.52 ECC 1.5818
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            103.93 1 2 5
69.61 14 37 13
105.01 2 20 45
68.51 15 52 29
108.05 3 29 20
65.42 16 53 16
                                                                                                                                      -22.74
                                                                                                                       1874.2
                                                  -24.90
                                                                 58.62
                                                                             10.29
                    0 20 51 2474.22
13 15 53 4880.15
         90.00
                                                                                                                                         17.13
                                                                                                                          4280.2
                                                                211.60
                                                                                7.82
                                                   20.09
         90.00
                                                                                                                                                       30.51
                                                                                                                                       -23.84
                                                                                                                          1606.1
                    1 43 59 2206.06
14 35 26 4623.54
                                                                 38.54
                                                                                 9.93
                                                  -26.16
        100.00
                                                                                                                                                       185.02
                                                                                                                          4023.5
                                                                                                                                        18.19
                                                                192.44
                                                                                 7.32
                                                   21.29
        100.00
                                                                                                                                                        12.11
                                                                                 8.80
                                                                                                                          1170.6
                                                                                                                                       -26.7A
                                                                 20.22
                    2 56 21 1979.58
15 39 34 4422.78
                                                  -29.53
        110.00
                                                                                                                                         21.01
                                                                                                                          3822.8
                                                                175.71
                                                                                 5.83
                                                   24.53
        110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 207.3 SR 392.1 SS 149.2
                                                                   SGT 542.0 SGR 463.3 SG3 188.9
RRT - 2490 RRF .4667 RTF - .4705
SGB 713.0 R23 - .1564 R13 .5720
     TOE .1952 TRA -.2980 TC3 .3523 BAU .1741
                                                                                                                     CRT -.8240 CRS -.2629 CST -.3053
LSA 431.1 MSA 180.2 SSA 25.3
EL1 430.4 EL2 107.0 ALF 115.21
     ROE -.4010 RRA -.2292 RC3 -.1075 FAU .06762
FOE -.0295 FRA -.9821 FC3-1.6559 BSP 1375
BOE .4460 BRA .3760 BC3 .3684 FSP -512
                                                                    SG1 572.9 SG2 424.5 THA 151.16
                                                                                                                                 ARRIVAL DATE OCT 3 1967
                                                                        FLIGHT TIME 76.00
 LAUNCH DATE JUL 19 1967
                                                                        DISTANCE 211.358
    RL 152.03 LAL .00 LOL 295.66 VL 27.636 GAL -11.32 AZL 92.46 HCA 94.45 SHA 135.12 ECC .23152 INC 2.4613 VI 29.306 RP 108.35 LAP -2.45 LOP 30.12 VP 38.309 GAP -7.02 AZP 89.81 TAL 226.67 TAP 321.12 RCA 103.83 APO 166.40 V2 34.977 RC 62.420 GL -11.42 GP -14.89 ZAL 154.64 ZAP 36.91,ETS 20.16 ZAE 153.97 ETE 345.80 ZAC 93.15 ETC 13.32 CLP -34.17
    MELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                        4.41 RAL 137.38 RAD 6568.4 VEL 12.487 PTH 2.26 VHP 5.563 DPA -8.90 RAP 171.51 ECC 1.5686
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.10 59.47 9.54 103.55 0 55.44 1886 5 -29.00 81.42
     C3 34.548 VHL 5.878 DLA
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                            0 14 18 2486.48
         90.00
                                                                                                                           4256.2
                                                                                                                                          16.49
                                                                210.28
                                                                                 6.73
                                   4856.24
                    13 18 2 4856.24
1 37 43 2217.43
                                                   19.51
         90.00
                                                                                                                                         -24.09
                                                                                              104.64
                                                                                                          2 14 40
                                                                                                                           1617.4
                                                                 39.33
                                                                                 9.19
                                                   -26.36
        100.00
                                                                                                                           4000.5
                                                                                                                                          17.54
                                                                                               67.95
                                                                                                        15 53 58
                                                   20.71
                                                                 190.98
                                                                                  6.23
                    14 37 16
                                   4600.52
        100.00
                                                                                                                           1389.0
                                                                                                                                         -27.02
                                                                                                                                                         12.74
                   2 50 42 1988.98
15 40 48 4401.74
                                                                                                          3 23 51
                                                                                  8.09
                                                                                              107.70
                                                   -29.73
                                                                  20.88
        110.00
                                                                                               64.83 16 54 9
                                                                                                                           3801.7
                                                                                                                                         20.34
                                                   23.93
                                                                 174.37
                                                                                  4.71
        110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 202.9 SR 390.3 SS 160.0
     TOE .1864 TRA -.3050 TC3 .3411 BAU .1697
ROE -.3936 RRA -.2433 RC3 -.1369 FAU .07483
FOE -.0050 FRA-1.1124 FC3-1.8751 BSP 1355
BOE .4355 BRA .3901 BC3 .3675 FSP -585
                                                                     SGT 531.7 SGR 479.2 SG3 212.4
                                                                   RRT -.2485 RRF .5223 RTF -.4288
SGB 715.8 R23 -.1897 R13 .5762
                                                                                                                       CRT. - .8006 CRS - .1961 CST - .4071
                                                                                                                    CRT.-.8006 CR5 -.1901 CO.
LSA 425.8 MSA 192.9 SSA 25.4
                                                                                                                       EL1 425.5 EL2 111.5 ALF 114.38
                                                                    SG1 570.0 SG2 433.1 THA 146.37
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FLIGHT TIME 70.00

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LAUNCH DATE JUL 19 1967
                                                                        FLIGHT TIME 78.00
                                                                                                                                 ARRIVAL DATE OCT 5 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 218.058
    RL 152.03 LAL .00 LOL 295.66 VL 27.703 GAL -11.24 AZL 92.34 HCA 97.64 SMA 135.63 ECC .22814 INC 2.3401 V1 29.306 RP 108.31 LAP -2.32 LOP 33.31 VP 38.369 GAP -6.28 AZP 89.69 TAL 227.44 TAP 325.09 RCA 104.69 APO 166.57 V2 34.990 RC 64.367 GL -11.00 GP -15.96 ZAL 155.35 ZAP 40.99 ETS 18.70 ZAE 155.26 ETE 341.43 ZAC 94.25 ETC 13.07 CLP -38.27
    PLANETOCENTRIC CONIC
    C3 33.812 VHL 5.815 DLA
                                        4.99 RAL 136.94 RAD 6568.3 VEL 12.457 PTH 2.25 VHP 5.245 OPA -9.52 RAP 170.26 ECC 1.5565
    LNCH AZHTH LNCH TIME L-I TIME
                                               INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 8 12 2499.09
13 20 38 4832.76
1 31 54 2229.15
14 39 37 4577.94
        90.00
                                                  -25.30
                                                                                8.94
                                                                                                          0 49 51
                                                                 60.34
                                                                                             103.16
                                                                                                                          1899.1
                                                                                                                                       -23.24
                                                                                                                                                        52.27
                                                                                               58.54 14 41 10
        90.00
                                                  18.93
                                                                206.81
                                                                                 5.61
                                                                                                                          4232.8
                                                                                                                                         15.85
                                                                                                                                                       201.48
                                                  -26.56
       100.00
                                                                 40.14
                                                                                 8:60
                                                                                              104.25
                                                                                                          2 9 3
                                                                                                                          1629.2
                                                                                                                                        -24.33
                                                                                                                                                        32.05
                                                                                              67.42 15 55 55
       100.00
                                                 20.13
                                                                189.55
                                                                                 5.29
                                                                                                                          3977.9
                                                                                                                                         16.90
                                                                                                                                                       182.25
                    2 45 32 1998.71
15 42 29 4381.14
                                                                                             107.34 3 18 50
64.28 16 55 30
       110.00
                                                -29.93
                                                                 21.57
                                                                                7.52
                                                                                                                          119A 7
                                                                                                                                        -27.27
                                                                                                                                                        13.39
       110.00
                   15 42 29
                                                                173.07
                                                                                 3.75
                                                  23.33
                                                                                                                          3781.1
                                                                                                                                         19.68
                                                                                                                                                       165.84
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SCT 519.7 SCR 499.4 SC3 238.1
RRT -.2351 RRF .5801 RTF -.3706
SCB 720.8 R23 -.2180 R13 .5891
SCI 567.1 SC2 444.8 THA 139.81
    TOE .1792 TRA -.3171 TC3 .3223 BAU .1649
                                                                                                                     ST 200.4 SR 387.5 SS 171.9
CRT -.7711 CRS -.1421 CST -.4986
    RDE -.3853 RRA -.2594 RC3 -.1707 FAU .08269
    FOE .0218 FRA-1.2520 FC3-2.1172 BSP 1364
BOE .4250 BRA .4097 BC3 .3648 FSP -670
                                                                                                                      LSA 420.1 MSA 206.8 SSA 25.4
                                                                                                                       EL1 420.0 EL2 117.7 ALF 113.72
LAUNCH DATE JUL 19 1967
                                                                        FLIGHT TIME 80.00
                                                                                                                                 ARRIVAL DATE OCT 7 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 224.727
    RL 152.03 LAL .00 LOL 295.66 VL 27.757 GAL -11.16 AZL 92.22 MCA 100.84 SMA 136.05 ECC .22522 INC 2.2170 V1 29.306 RP 108.27 LAP -2.18 LOP 36.51 VP 38.421 GAP -5.57 AZP 89.58 TAL 228.07 TAP 328.92 RCA 105.41 APO 166.69 V2 35.003 RC 66.356 GL -10.55 GP -17.10 ZAL 155.97 ZAP 45.29 ETS 17.28 ZAE 156.65 ETE 336.09 ZAC 95.57 ETC 12.74 CLP -42.60
   PLANETOCENTRIC CONIC
    C3 33.128 VHL 5.756 DLA
                                        5.56 RAL 136.62 RAD 6568.3 VEL 12.430 PTH
                                                                                                 2.25 VHP 4.962 DPA -10.12 RAP 168.78 ECC 1.5452
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 2 33 2511.99 -25.50 61.23 8.47 102.75 0 44 25 1912.0 -23.49 53.14
                  13 23 41
                                                                                                        14 43 50
        90.00
                                4809.56
                                                  18.35
                                                                207.35
                                                                                 5.02
                                                                                               68.05
                                                                                                                          4209.6
                                                                                                                                         15.21
                                                                                                                                                        200.08
                  1 26 32 2241.14
14 42 24 4555.64
       100.00
                                                 -26.75
                                                                 40.98
                                                                                                          2 3 53
                                                                                8.14
                                                                                              103.86
                                                                                                                          1641.1
                                                                                                                                         -24.58
                                                                                                                                                         32.45
                                                                                              66.92 15 58 19
       100.00
                                                 19.54
                                                                188.16
                                                                                 4.50
                                                                                                                          3955.6
                                                                                                                                        16.25
                                                                                                                                                       180.41
                   2 40 46 2008.71
      110.00
                                                 -30.13
                                                                 22.28
                                                                                7.0A
                                                                                             106.97
                                                                                                          3 14 17
                                                                                                                          1408.7
                                                                                                                                        -27.51
                                                                                                                                                        14.06
                                                                                              63.75 16 57 18
                  15 44 37
      110.00
                                 4360.84
                                                 22.72
                                                                171.81
                                                                                2.93
                                                                                                                          3760.8
                                                                                                                                         19.01
                                                                                                                                                       164.64
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 505.8 SGR 523.4 SG3 265.0

RRT -.1924 RRF .6555 RTF -.2832

SGB 727.8 R23 -.2250 R13 .6166

SGI 562.7 SG2 461.7 THA 129.97
    TOE .1710 TRA -.3373 TC3 .2921 BAU .1590
                                                                                                                      ST 198.3 SR 382.8 SS 184.1
CRT -.7281 CRS -.0846 CST -.6009
    ROE -.3753 RRA -.2768 RC3 -.2086 FAU .09083
    FDE .0575 FRA-1.3918 FC3-2.3737 BSP 1348
BDE .4125 BRA .4363 BC3 .3589 FSP -755
                                                                                                                     LSA 412.3 MSA 221.6 SSA 25.4
ELI 412.2 EL2 126.2 ALF 112.94
                                                                       FLIGHT TIME 82.00
                                                                                                                                ARRIVAL DATE OCT 9 1967
LAUNCH DATE JUL 19 1967
                                                                      DISTANCE 231.365
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 27.800 GAL -11.08 A7L 92.09 MCA 104.04 SMA 136.38 ECC .22268 INC 2.0911 V1 29.306 RP 108.22 LAP -2.03 LOP 39.71 VP 38.464 GAP -4.89 A7P 89.49 TAL 228.56 TAP 332.60 RCA 106.01 APO 166.75 VZ 35.016 RC 68.382 GL -10.06 GP -18.31 ZAL 156.52 ZAP 49.80 ETS 15.87 ZAE 158.06 ETE 329.53 ZAC 97.11 ETC 12.31 CLP -47.17
  PLANETOCENTRIC CONIC
    C3 32.481 VHL 5.699 DLA 6.14 RAL 136.40 RAD 6568.3 VEL 12.404 PTH 2.24 VHP 4.712 DPA -10.70 RAP 167.07 ECC 1.5345
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 23 53 23 2525.16

90.00 13 27 12 4786.44

100.00 1 21 34 2253.40

100.00 14 45 38 4533.43

110.00 2 36 29 2018.96

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67.57 14 46 58
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  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
    TDE 11648 TRA -.3638 TC3 .2521 BAU .1545
                                                                  SCT 495.3 SCR 552.7 SC3 293.2
RRT .1200 RRF .6890 RTF -.1669
SCB 742.1 R23 -.1621 R13 .6750
                                                                                                                     ST 199.3 SR 376.9 SS 196.9
   RDE -.3640 RRA -.2959 RC3 -.2512 FAU .09932
                                                                                                                     CRT -.6765 CRS -.0386 CST -.6912
   FDE .0965 FRA-1.5332 FC3-2.6471 BSP 1375
                                                                                                                     LSA 404.4 MSA 237.5 SSA 25.3
                                                                                                                     EL1 403.7 EL2 137.0 ALF 112.40
                                                                   SG1 565.6 SG2 480.5 THA 113.78
   BDE .3996 BRA .4689 BC3 .3559 FSP
                                                     -851
LAUNCH DATE JUL 19 1967
                                                                       FLIGHT TIME 84.00
                                                                                                                                ARRIVAL DATE OCT 11 1967
                                                                      DISTANCE 237.970
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 27.833 GAL -11.00 AZL 91.96 MCA 107.24 SMA 136.64 ECC .22046 INC 1.9615 V1 29.306
RP 108.18 LAP -1.87 LOP 42.92 VP 38.500 GAP -4.24 AZP 89.42 TAL 228.91 TAP 336.16 RCA 106.52 APO 166.76 V2 35.029
RC 70.443 GL -9.54 GP -19.58 ZAL 156.98 ZAP 54.51 ETS 14.41 ZAE 159.35 ETE 321.50 ZAC 98.85 ETC 11.76 CLP -51.96
  PLANETOCENTRIC CONIC
   C3 31.857 VHL 5.644 DLA 6.72 RAL 136.29 RAD 6568.3 VEL 12.379 PTH 2.23 VHP 4.496 DPA -11.24 RAP 165.14 ECC 1.5243
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       90.00 23 48 29 2538.65
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MID-COURSE EXECUTION ACCURACY
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  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 202.4 SR 368.9 SS 209.9
CRT -.6100 CRS .0102 CST -.7819
                                                                  SGT 492.6 SGR 586.0 SG3 321.1
RRT -.0039 RRF .7370 RTF -.0120
SGB 765.6 R23 .0023 R13 .7370
                                                     .1524
    TOE .1587 TRA -.3992 TC3 .1985 BAU
   RDE -.3506 RRA -.3153 RC3 -.2977 FAU .10761
FDE .1450 FRA-1.6643 FC3-2.9243 BSP 1422
BDE .3848 BRA .5087 BC3 .3578 FSP -942
                                                                                                                     LSA 395.0 MSA 253.9 SSA 25.3
                                                                 SG1 586.1 SG2 492.6 THA 90.63
                                                                                                                     EL1 392.9 EL2 150.6 ALF 111.88
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LAUNCH DATE JUL 19 1967
                                                                                                 FLIGHT TIME 86.00
                                                                                                                                                                              ARRIVAL DATE OCT 13 1967
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 244.542
      RL 152.03 LAL ...ON LOL 295.66 VL 27.856 GAL -10.91 AZL 91.83 HCA 110.45 SMA 136.82 ECC .21851 INC 1.8273 V1 29.306
RP 108.14 LAP -1.71 LOP 46.12 VP 38.529 GAP -3.62 AZP 89.36 TAL 229.13 TAP 339.58 RCA 106.92 APO 166.72 V2 35.042
RC 72.534 GL -8.98 GP -20.89 ZAL 157.36 ZAP 59.39 ETS 12.88 ZAE 160.37 ETE 311.87 ZAC 100.77 ETC 11.08 CLP -56.97
    PLANETOCENTRIC CONIC
      C3 31.247 VHL 5.590 OLA 7.31 RAL 136.28 RAD 6568.2 VEL 12.354 PTH 2.23 VHP 4.314 OPA -11.76 RAP 163.02 ECC 1.5142
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
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                                                                                           SCT 505.6 SCR 623.7 SC3 348.1

RRT .1465 RRF .7793 RTF .1690

SCB 802.9 R23 .1292 R13 .7705

SCI 635.1 SC2 491.1 THA 72.64
                                                                                                                                                                ST 209.4 SR 359.0 SS 223.2
CRT -.5346 CRS .0545 CST -.8583
      TOE .1544 TRA -.4420 TC3 .1323 BAU .1555
     ROE -.3351 RRA -.3349 RC3 -.3478 FAU .11550
FOE .1997 FRA-1.7817 FC3-3.2000 BSP 1530
BOE .3690 BRA .5546 BC3 .3722 FSP -1030
                                                                                                                                                                LSA 385.9 MSA 270.2 SSA
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                                                                                                                                                                EL1 380.6 EL2 166.9 ALF 111.69
LAUNCH DATE JUL 19 1967
                                                                                                 FLIGHT TIME 88.00
                                                                                                                                                                               ARRIVAL DATE OCT 15 1967
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 251.081
     RL 152.03 LAL .00 LOL 295.66 VL 27.871 GAL -10.83 AZL 91.69 MCA 113.66 SMA 136.93 ECC .21679 INC 1.6872 V1 29.306 RP 108.10 LAP -1.55 LOP 49.33 VP 38.551 GAP -3.03 AZP 89.32 TAL 229.22 TAP 342.87 RCA 107.25 APO 166.62 V2 35.056 RC 74.652 GL -8.37 GP -22.22 ZAL 157.67 ZAP 64.39 ETS 11.25 ZAE 160.90 ETE 300.84 ZAC 102.83 ETC 10.28 CLP -62.17
    PLANETOCENTRIC CONIC
     C3 30.644 VHL 5.536 DLA
                                                      7.91 RAL 136.37 RAD 6568.2 VEL 12.330 PTH 2.22 VHP 4.166 DPA -12.24 RAP 160.75 ECC 1.5043
     SOURCE TO SEE THE STATE OF THE 
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14 58 18 4465.26
         100.00
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    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                           SGT 540.7 SGR 665.7 SG3 373.6

RRT .3090 RRF .8163 RTF .3519

SGB 657.7 R23 .1790 R13 .8033

SGI 708.6 SG2 483.1 THA 62.06
                                                                                                                                                                ST 221.2 SR 347.6 SS 236.5
CRT -.4573 CRS .0884 CST -.9135
LSA 379.0 MSA 285.2 SSA 25.2
     TOE .1534 TRA - .4914 TC3 .0539 BAU .1661
     RDE -.3180 RRA -.3542 RC3 -.4018 FAU .12281
FDE .2561 FRA-1.8821 FC3-3.4695 BSP 1726
      BOE .3530 BRA .6057 BC3 .4054 FSP -1121
                                                                                                                                                                EL1 367.6 EL2 186.0 ALF 112.19
LAUNCH DATE JUL 19 1967
                                                                                                FLIGHT TIME 90.00
                                                                                                                                                                             ARRIVAL DATE OCT 17 1967
                                                                                               DISTANCE 257.588
   MELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 27.877 GAL -10.74 AZL 91.54 MCA 116.86 SMA 136.98 ECC .21526 INC 1.5399 VI 29.306 RP 108.06 LAP -1.37 LOP 52.54 VP 38.567 GAP -2.46 AZP 89.30 TAL 229.19 TAP 346.05 RCA 107.50 APO 166.47 V2 35.069 RC 76.795 GL -7.72 GP -23.56 ZAL 157.90 ZAP 69.46 ETS 9.49 ZAE 160.80 ETE 289.00 ZAC 104.98 ETC 9.34 CLP -67.50
    PLANETOCENTRIC CONIC
     C3 30.041 VHL 5.481 OLA 8.54 RAL 136.56 RAD 6568.2 VEL 12.305 PTH 2.22 VHP 4.050 OPA -12.70 RAP 158.37 ECC 1.4944
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00
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65.79 15 4 37
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   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                                              ST 237.2 SR 333.4 SS 250.0

CRT -.3775 CRS .1256 CST -.9551

LSA 377.6 MSA 294.5 SSA 25.2

EL1 352.5 EL2 207.8 ALF 113.72
                                                                                         SGT 602.7 SGR 708.8 SG3 395.1*
RRT .4642 RRF .8466 RTF .5159
SG8 930.4 R23 .1978 R13 .8348
SG1 801.8 SG2 471.9 THA 54.67
     TDE .1546 TRA -.5478 TC3 -.0389 BAU .1843
     RDE -.2980 RRA -.3713 RC3 -.4573 FAU .12877
    FOE .3212 FRA-1.9512 FC3-3.7110 BSP 1985
BOE .3357 BRA .6617 BC3 .4590 FSP -1193
LAUNCH DATE JUL 19 1967
                                                                                                FLIGHT TIME 92.00
                                                                                                                                                                              ARRIVAL BATE OCT 19 1967
   HELTOCENTRIC CONTC.
                                                                                               DISTANCE 264.062
     RL 152.03 LAL .00 LOL 295.66 VL 27.876 GAL -10.64 AZL 91.38 MCA 120.08 SMA 136.98 ECC .21388 INC 1.3839 V1 29.306 RP 108.02 LAP -1.20 LOP 55.75 VP 38.579 GAP -1.91 AZP 89.31 TAL 229.04 TAP 349.12 RCA 107.68 APO 166.27 V2 35.082 RC 78.958 GL -7.01 GP -24.90 ZAL 158.05 ZAP 74.55 ETS 7.60 ZAE 159.98 ETE 277.28 ZAC 107.18 ETC 8.28 CLP -72.92
   PLANETOCENTRIC CONIC
     C3 29.434 VHL 5.425 DLA 9.20 RAL 136.84 RAD 6568.2 VEL 12.280 PTH 2.21 VHP 3.967 DPA -13.15 RAP 155.94 ECC 1.4844
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
     TDE .1602 TRA -.6088 TC3 -.1437 BAU .2103
RDE -.2765 RRA -.3863 RC3 -.5148 FAU .13347
                                                                                         SGT 690.7 SGR 753.8 SG3 413.0
RRT .5894 RRF .8720 RTF .6423
SGB 1022.4 R23 .2027 R13 .8629
SG1 912.6 SG2 460.9 TMA 49.22
                                                                                                                                                            ST 258.5 SR 317.7 SS 263.1

CRT -.3055 CRS .1514 CST -.9780

LSA 386.5 MSA 294.9 SSA 25.2

EL1 337.9 EL2 231.4 ALF 117.90
     FOE .3838 FRA-1.9920 FC3-3.9257 BSP 2325
BOE .3195 BRA .7210 BC3 .5345 FSP -1262
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ARRIVAL DATE OCT 21 1967
                                                                                                   FLIGHT TIME 94.00
LAUNCH DATE JUL 19 1967
                                                                                                   DISTANCE 270.504
   HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 27.868 GAL -10.54 AZL 91.22 HCA 123.29 SMA 136.92 ECC .21264 INC 1.2173 V1 29.306 RP 107.98 LAP -1.02 LOP 58.96 VP 38.585 GAP -1.39 AZP 89.33 TAL 228.78 TAP 352.07 RCA 107.80 APO 166.03 V2 35.094 RC 81.139 GL -6.22 GP -26.21 ZAL 158.13 ZAP 79.58 ETS 5.57 ZAE 158.48 ETE 266.59 ZAC 109.34 ETC 7.12 CLP -78.37
    PLANETOCENTRIC CONIC
      C3 28.821 VHL 5.369 DLA 9.90 RAL 137.23 RAD 6568.2 VEL 12.255 PTH 2.20 VHP 3.916 DPA -13.59 RAP 153.50 ECC 1.4743
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 27 14 2615.89 -26.86 68.53 8.34 99.33 24 10 50 2015.9 -25.29 60.21
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                         16 13 33 4210.11
                                                                                         162.77
                                                                      17.90
         110.00
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SCT 802.6 SGR 796.2 SG3 424.9

RRT .6844 RRF .8923 RTF .7332

SGB 1130.5 R23 .2041 R13 .8848

SG1 1037.5 SG2 449.1 THA 44.66
                                                                                                                                                                     ST 284.4 SR 298.8 SS 277.0

CRT -.2389 CRS .1797 CST -.9901

LSA 406.2 MSA 284.9 SSA 25.3
     TDE .1698 TRA - .6738 TC3 - .2611 BAU .2421
     RDE -.2519 RRA -.3972 RC3 -.5715 FAU .13618
     FOE .4530 FRA-1.9920 FC3-4.0907 BSP 2713
                                                                                                                                                                     EL1 325.3 EL2 253.6 ALF 129.17
     BDE .3038 BRA .7821 BC3 .6283 FSP -1303
                                                                                                                                                                                     ARRIVAL DATE OCT 23 1967
                                                                                                    FLIGHT TIME 96.00
LAUNCH DATE JUL 19 1967
                                                                                                   DISTANCE 276.915
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 27.854 GAL -10.43 A7L 91.04 MCA 126.50 SMA 136.81 ECC .21152 INC 1.0379 V1 29.306 RP 107.94 LAP -.83 LOP 62.17 VP 38.586 GAP -.88 A7P 89.38 TAL 228.43 TAP 354.93 RCA 107.87 APO 165.74 V2 35.107 RC 83.336 GL -5.36 GP -27.52 TAL 158.12 TAP 84.49 ETS 3.40 ZAE 156.42 ETE 257.40 ZAC 111.43 ETC 5.87 CLP -83.78
     PLANETOCENTRIC CONIC

C3 28.202 VHL 5.311 DLA 10.65 RAL 137.71 RAD 6568.1 VEL 12.230 PTH 2.20 VHP 3.894 DPA 14.06 RAP 131.13 ECC ...

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME FO CST TIME FOR THE FORM AZHTH LNCH TIME L-I TIME FOR THE FORM AZHTH LNCH TIME FOR THE FOR 
    PLANETOCENTRIC CONIC
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63.27 16 36 43
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                          15 24 3 4360.13
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         100.00
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                         2 13 54 2104.58
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                                                                                           29.23
         110.00
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         110.00
                          16 20 14 4184.16
                                                                     17.03
                                                                                         161.28
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SCT 932.6 SGR 837.7 SG3 431.7
RRT .7517 RRF .9092 RTF .7951
SGB 1253.6 R23 .2044 R13 .9020
                                                                                                                                                                     ST 315.4 SR 278.3 SS 290.5
CRT .1820 CRS .1958 CST -.9929
      TOE .1853 TRA - .7398 TC3 - .3884 BAU .2785
      ROE -. 2257 RRA -. 4045 RC3 -. 6282 FAU .13725
                                                                                                                                                                     LSA 433.3 MSA 269.9 SSA 25.3
      FOE .5167 FRA-1.9599 FC3-4.2133 BSP 3154
BDE .2920 BRA .8431 BC3 .7386 FSP -1336
                                                                                               SGI 1174.3 SG2 438.8 THA 40.93
                                                                                                                                                                      EL1 328.4 EL2 262.8 ALF 152.31
                                                                                                                                                                                    ARRIVAL DATE OCT 25 1967
                                                                                                   FLIGHT TIME 98.00
LAUNCH DATE JUL 19 1967
     RL 152.03 LAL .00 LOL 295.66 VL 27.835 GAL -10.32 AZL 90.84 MCA 129.72 SMA 136.66 ECC .21049 INC .8426 V1 29.306
RP 107.91 LAP -.65 LOP 65.39 VP 38.583 GAP -.40 AZP 89.46 TAL 227.97 TAP 357.69 RCA 107.89 APO 165.42 V2 35.119
RC 85.546 GL -4.40 GP -28.81 ZAL 158.03 ZAP 89.21 ETS 1.09 ZAE 153.95 ETE 249.81 ZAC 113.38 ETC 4.55 CLP -89.10
                                                                                                   DISTANCE 283.296
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 18 32 2657.27 -27.28 71.49 9.29 97.91 24 2 49 2057.3 -25.90 63 00
      C3 27.575 VHL 5.251 DLA 11.48 RAL 138.30 RAD 6568.1 VEL 12.205 PTH 2.19 VHP 3.901 DPA -14.58 RAP 148.86 ECC 1.4538
                                                                                                                               97.91 24 2 49
64.05 15 33 24
99.12 1 29 13
62.82 16 44 53
102.47 2 46 20
59.41 17 37 8
                                              4572.28
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           90.00
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                            0 49 36 2376.22
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16 27 52 4155.95
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                                                                     -32.09
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          110.00
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                    ST 351.5 SR 254.5 S5 305.5
CRT -.1279 CRS .2079 CST -.9905
                                                                                              SGT 1076.8 SGR 874.3 SG3 431.9
RRT .7997 RRF .9228 RTF .8370
SGB 1387.1 R23 .2060 R13 .9145
SGI 1319.2 SG2 428.4 THA 37.65
      TOE .2067 TRA -.8055 TC3 -.5253 BAU .3175
      RDE -.1963 RRA -.4064 RC3 -.6825 FAU .13621
FOE .5838 FRA-1.8876 FC3-4.2763 BSP 3620
BOE .2851 BRA .9022 BC3 .8612 FSP -1340
                                                                                                                                                                    LSA 467.2 MSA 250.5 SSA 25.5
                                                                                                                                                                     EL1 354.5 EL2 250.3 ALF 169.36
                                                                                                                                                                                     ARRIVAL DATE OCT 27 1967
                                                                                                     FLIGHT TIME 100.00
 LAUNCH DATE JUL 19 1967
                                                                                                    DISTANCE 289.646
    HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 27.811 GAL -10.19 AZL 90.63 HCA 132.94 SMA 136.47 ECC .20955 INC .6281 VI 29.306 RP 107.87 LAP -.46 LOP 68.61 VP 38.577 GAP .06 AZP 89.57 TAL 227.43 TAP .37 RCA 107.87 APO 165.06 V2 35.131 RC 87.767 GL -3.32 GP -30.12 TAL 157.84 ZAP 93.69 ETS 358.65 ZAE 151.22 ETE 243.69 ZAC 115.14 ETC 3.18 CLP -94.27
     PLANETOCENTRIC CONIC
      C3 26.945 VHL 5.191 DLA 12.40 RAL 139.00 RAD 6568.1 VEL 12.179 PTH 2.19 VHP 3.936 DPA -15.18 RAP 146.74 ECC 1.4434 ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                     64.86
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                           23 13 34 2682.55
14 27 45 4535.50
                                                                      -27.50
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            90.00
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            90.00
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15 42 43 4293.60
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16 36 36 4124.84
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          110.00
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          110.00
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                                                                      14.97
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                                                                                              MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                             SGT 1230.1 SGR 907.1 SG3 426.6
RRT .8335 RRF .9342 RTF .8654
SG8 1528.4 R23 .2093 R13 .9239
SG1 1469.7 SG2 419.4 THA 34.82
                                                                                                                                                                     ST 393.3 SR 228.7 SS 321.€
CRT -,0725 CRS .2037 CST -.9858
       TOE .2355 TRA -.8683 TC3 -.6691 BAU .3580
                                                                                                                                                                 CRT -,0725 CRS .2037 LS1 -,2021
LSA 507.3 MSA 228.9 SSA 25.7
ELI 393.8 EL2 227.8 ALF 176.37
       RDE -. 1648 RRA -. 4035 RC3 -. 7347 FAU .13338
       FOE .6471 FRA-1.7847 FC3-4.2856 BSP 4108
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BDE .2874 BRA .9575 BC3 .9938 FSP -1328

ARRIVAL CATE OCT 29 1967

LAUNCH DATE JUL 19 1967

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DISTANCE 295.969
  HELIOCENTRIC CONIC
   PL 152.03 LAL .00 LOL 295.66 VL 27.782 GAL -10.06 A7L 90.39 MCA 136.16 SMA 136.24 ECC .20869 INC .3896 VI 29.306 RP 107.83 LAP -.27 LOP 71.83 VP 38.566 GAP .51 A7P 89.72 TAL 226.80 TAP 2.96 RCA 107.81 APO 164.67 V2 35.143 RC 89.996 GL -2.08 GP -31.47 ZAL-157.53 ZAP 97.88 ETS 356.06 ZAE 148.32 ETE 238.81 ZAC 116.69 ETC 1.77 CLP -99.25
  PLANETOCENTRIC CONIC
   C3 26.316 VHL 5.130 DLA 13.45 RAL 139.82 RAD 6568.1 VEL 12.153 PTH 2.18 VHP 3.998 DPA -15.90 RAP 144.78 ECC 1.4331
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        95.97 23 53 5
63.16 15 54 54
       90.00
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                  23 7 53 2712.34
14 AO O 4493.99
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                                              -27.73
                                                            75.45
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                                               9.38
                                                           188.53
                                                                          4.02
                                                                                                   1 20 39
                                                                                                                                -27.78
                                                                                                                                               45.75
                                                                                                                  1827.3
                  0 40 11 2427.31
                                              -29.09
                                                            54.31
                                                                          10.63
                                                                                      97.22 1 20 39
61.88 17 5 12
100.67 2 40 19
58.39 17 54 54
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      100.00
                 15 54 18
                               4254.28
                                               10.59
                                                           170.27
                                                                           3.38
                                                                                                                  3654.3
                                                                                                                  1564.3
                 2 4 15 2164.27
16 46 44 4090.05
                                                                                                                                -30.85
                                                                                                                                               24.93
                                             -32.67
                                                            33.66
                                                                           9.98
                                                                                                                                 9.46
                                                                                                                  3490.0
                                              13.74
                                                           155.96
                                                                           1.53
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 441.8 SR 201.6 SS 339.0

CRT -.0048 CRS .1725 CST -.9809

LSA 554.6 MSA 206.2 SSA 26.0
                                                              SCT 1389.2 SCR 937.3 SG3 416.5
RRT .8576 RRF .9439 RTF .8849
SCB 1675.8 R23 .2145 R13 .9309
SG1 1624.3 SG2 412.3 THA 32.39
    TOE .2727 TRA -.9263 TC3 -.8188 BAU .3993
    RDE -.1311 RRA -.3961 RC3 -.7859 FAU .12911
   FOE .7047 FRA-1.6579 FC3-4.2475 BSP 4619
BDE .3025 BRA 1.0074 BC3 1.1349 FSP -1305
                                                                                                               EL1 441.8 EL2 201.6 ALF 179.84
                                                                                                                         ARRIVAL DATE OCT 31 1967
                                                                   FLIGHT TIME 104.00
                                                                  DISTANCE 302.263
  HELIOCENTRIC CONIC
                       .00 LOL 295.66 VL 27.749 GAL -9.93 AZL 90.12 MCA 139.38 SMA 135.99 ECC .20790 INC .1215 V1 29.306 -.08 LOP 75.05 VP 38.553 GAP .94 AZP 89.91 TAL 226.09 TAP 5.48 RCA 107.71 APO 164.26 V2 35.154
   RL 152.03 LAL
RP 107.80 LAP
                       -.66 GP -32.89 ZAL 157.10 ZAP 101.73 ETS 353.32 ZAE 145.34 ETE 234.96 ZAC 117.98 ETC .33 CLP-104.01
        92.232 GL
  PLANETOCENTRIC CONIC
   C3 25.696 VHL 5.069 DLA 14.64 RAL 140.78 RAD 6568.0 VEL 12.127 PTH
                                                                                          2.17 VHP 4.087 DPA -15.78 RAP 142.99 ECC 1.4229
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 2148.3
                                                                                                                               -27.01
                               2748.26
                                              -27.96
                                                            78.06
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                14 54 27
                                                7.90
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                             4446.27
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                0 34 13 2460.56
16 7 55 4209.20
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                             2192.01
4050.52
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                  16 58 35
                                                            153.78
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                                                                                                                   3450.5
                                                                                                                                   7.98
      110.00
                                               12.31
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               RRT .8748 RRF .9523 RTF .8985

9GB 1826.9 R23 .2216 R13 .9360

SGI 1780.9 SG2 407.0 THA 30.28
                                                                                                               ST 498.6 SR 173.6 SS 358.8
CRT .0952 CRS .0980 CST -.9768
   TDE .3194 TRA -.9776 TC3 -.9730 BAU .4406
    RDE - .0945 RRA - .3837 RC3 - .8355 FAU .12348
                                                                                                               LSA 611.1 MSA 182.6 SSA 26.3
EL1 498.9 EL2 172.7 ALF 2.16
   FOE .7590 FRA-1.5100 FC3-4.1603 BSP 5143
    BOE .3331 BRA 1.0502 BC3 1.2824 FSP -1269
                                                                                                                        ARRIVAL DATE NOV 2 1967
                                                                  FLIGHT TIME 106.00
LAUNCH DATE JUL 19 1967
  HELIOCENTRIC CONIC
                                                                 DISTANCE 308.531
                        .00 LOL 295.66 VL 27.712 GAL -9.78 AZL 89.82 MCA 142.61 SMA 135.70 ECC .20717 INC .1837 V1 29.306 .11 LOP 78.27 VP 38.536 GAP 1.36 AZP 90.15 TAL 225.32 TAP 7.92 RCA 107.59 APO 163.82 V2 35.165
   RL 152.03 LAL
RP 107.77 LAP
                        1.00 CP -34.44 ZAL 156.49 ZAP 105.20 ETS 350.40 ZAE 142.30 ETE 231.95 ZAC 119.02 ETC 358.86 CLP-108.54
   RC 94.474 GL
  PLANETOCENTRIC CONIC
   C3 25.098 VHL 5.010 DLA 16.04 RAL 141.90 RAD 6568.0 VEL 12.103 PTH 2.17 VHP 4.205 DPA -17.86 RAP 141.37 ECC 1.4131
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        93.08 23 39 10
62.30 16 24 59
                                                                                                                                               72.70
                                                                                                                2192.7 -27.44
                  22 52 37 2792.68
                                              -28.16
                                                            81.29
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       90.00
                                                                                                                                              175.96
                  15 11 49
                                                6.14
                                                           182.63
                                                                          5.66
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       90.00
                               4390.23
                  0 26 49 2501.57
16 24 14 4156.57
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      100.00
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                   1 54 52 2226.09
17 12 40 4004.82
                                              -33.35
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      110.00
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                                              10.65
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                         ST 566.8 SR 146.3 SS 383.8
CRT .2643 CRS -.0558 CST -.9735
                                                               SGT 1713.9 SGR 986.1 SG3 382.6
   TDE .3789 TRA-1.0193 TC3-1.1284 BAU .4804
   RDE -.0533 RRA -.3651 RC3 -.8813 FAU .11642
FDE .8168 FRA-1.3403 FC3-4.0158 BSP 5640
                                                               RRT .8870 RRF .9595 RTF .9077
SGB 1977.3 R23 .2306 R13 .9394
                                                                                                               LSA 681.3 MSA 158.6 SSA 26.5
EL1 568.3 EL2 140.8 ALF 4.16
   BOE .3826 BRA 1.0827 BC3 1.4318 FSP -1208
                                                               SG1 1935.8 SG2 403.1 THA 28.38
                                                                   FLIGHT TIME 108.00
                                                                                                                         ARRIVAL DATE NOV 4 1967
LAUNCH DATE JUL 19 1967
                                                                  DISTANCE 314.772
  HELIOCENTRIC CONIC
                        .00 LOL 295.66 VL 27.672 GAL -9.63 A7L 89.46 MCA 145.83 SMA 135.40 ECC .20651 INC .5391 V1 29.306 .30 LOP 81.50 VP 38.517 GAP 1.76 AZP 90.45 TAL 224.47 TAP 10.30 RCA 107.44 APO 163.36 V2 35.175 2.97 GP -36.18 ZAL 155.68 ZAP 108.24 ETS 347.28 ZAE 139.22 ETE 229.64 ZAC 119.79 ETC 357.34 CLP-112.82
   RL 152.03 LAL
   RP 107.73 LAP
   RC 96.719 GL
  PLANETOCENTRIC CONIC
   C3 24.544 VHL 4.954 OLA 17.69 RAL 143.21 RAD 6568.0 VEL 12.080 PTH 2.16 VHP 4.353 OPA -19.20 RAP 139.88 ECC 1.4039
   UNCH AZMTH LNCH TIME L-I TIME INJ LAT 90.00 22 41 38 2849.24 -28.30
                                                         INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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61.94 16 45 17
                                                                                                                  2249.2
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       90.00
                  15 33 14
                               4322.69
                                                3.99
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                              2553.54
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      100.00
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                               4093.62
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      110.00
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      110.00
                  17 29 46
                               3950.94
                                               8.65
                                                           148.40
                                                                           4.17
                                                                                                                                  4.22
                                                                                                                                              142.11
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                             ST 649.4 SR 128.0 SS 412.0
CRT .5227 CRS -.3271 CST -.9725
LSA 767.2 MSA 136.5 SSA 26.5
                                                               SCT 1876.3 SCR 1008.1 SC3 360.6
RRT .8955 RRF .9659 RTF .9144
SCB 2130.0 R23 .2405 R13 .9421
    TOE .4526 TRA-1.0503 TC3-1.2850 BAU .5199
   ROE -.0087 RRA -.3423 RC3 -.9270 FAU .10864
FDE .8679 FRA-1.1642 FC3-3.8319 BSP 6162
BDE .4526 BRA 1.1046 BC3 1.5844 FSP -1146
                                                               SG1 2091.6 SG2 402.5 THA 26.76
                                                                                                             EL1 652.9 EL2 108.6 ALF 6.05
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FLIGHT TIME 102.00

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FLIGHT TIME 110.00
                                                                                                                                ARRIVAL DATE NOV 6 1967
LAUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 320.988
                         .00 LOL 295.66 VL 27.629 GAL -9.47 AZL 89.04 MCA 149.06 SMA 135.07 ECC .20590 INC .9587 V1 29.306 .49 LOP 84.73 VP 38.495 GAP .2.15 AZP 90.82 TAL 223.56 TAP 12.62 RCA 107.26 APO 162.88 V2 35.185
    RL 152.03 LAL
    RP 107.70 LAP
                          5.33 GP -38.18 ZAL 154.58 ZAP 110.82 ETS 343.91 ZAE 136.08 ETE 227.92 ZAC 120.28 ETC 355.74 CLP-116.89
    RC 98.967 GL
   PLANETOCENTRIC CONIC
    C3 24.066 VHL 4.906 DLA 19.69 RAL 144.75 RAD 6568.0 VEL 12.060 PTH
                                                                                                2.16 VMP 4.537 DPA -20.85 RAP 138.50 ECC 1.3961
                                               INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.27 90.89 16.78 88.27 23 15 21 2323.9 -28.21 82.22
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                            88.27 23 15 21
                   22 26 37 2923.94
                   16 0 36
0 4 19
                                 4236.33
                                                               174.12
                                                                                8.74
                                                                                              61.71
                                                                                                       17 11 14
                                                                                                                          3638.3
        90.00
                                                   1.28
                                                                              16.82
                                                                                              89.72
                                                                                                        0 48 1
                                                                                                                          2021.6
                                                                                                                                        -29.61
                                 2621.56
                                                                 68.67
      100.00
                                                 -29.89
                  17 9 31
1 39 18
                                                                                7.95
                                                                                              60.22
                                                                                                       18 16 27
                                                                                                                          3415.9
                                                                                                                                         -1.29
                                 4015.94
                                                               156.98
      100.00
                                                   2.69
                                                                                                        2 18 3
                                                                45.97
                                                                                              93.52
                                                                                                                                        -33.16
                                                 -34.02
                                                                               16.68
                                2324.38
      110.00
                                                               144.94
                                                                                5,77
                                                                                              56.32
                                                                                                        18 55 47
                                                                                                                          3285.9
                                                                                                                                          1.74
                   17 51 1
                                 3885.88
                                                   6.21
      110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2036.3 SGR 1026.7 SG3 335.1

RRT .9008 RRF .9715 RTF .9190

SGB 2280.5 R23 .2515 R13 .9438

SG1 2244.3 SG2 404.4 THA 25.31
                                                                                                                     ST 753.0 SR 129.7 55 447.9
CRT .8122 CRS -.6696 CST -.9728
    TDE .5467 TRA-1.0666 TC3-1.4371 BAU .5574 RDE .0429 RRA -.3123 RC3 -.9677 FAU .09983
   FOE .9232 FRA -.9758 FC3-3.5914 BSP 6658
BDE .5484 BRA 1.1114 BC3 1.7326 FSP -1067
                                                                                                                     LSA 877.5 MSA 117.8 SSA 25.8
EL1 760.4 EL2 74.9 ALF 8.04
LAUNCH DATE TUIL 19 1967
                                                                       FLIGHT TIME 112,00
                                                                                                                                ARRIVAL DATE NOV 8 1967
                                                                       DISTANCE 327.179
  HELIOCENTRIC CONIC
                        .00 LOL 295.66 VL 27.584 GAL -9.30 AZL 88.53 HCA 152.28 SMA 134.72 ECC .20535 INC 1.4655 VI 29.306
.68 LOP 87.96 VP 38.471 GAP 2.32 AZP 91.30 TAL 222.59 TAP 14.88 RCA 107.06 APO 162.39 VZ 35.195
8.22 GP -40.52 ZAL 153.07 ZAP 112.87 ETS 340.27 ZAE 132.82 ETE 226.69 ZAC 120.50 ETC 354.03 CLP-120.75
   RL 152.03 LAL
RP 107.67 LAP
   RC 101.218 GL
  PLANETOCENTRIC CONIC
   C3 23.721 VHL 4.870 DLA 22.14 RAL 146.62 RAD 6568.D VEL 12.046 PTH 2.15 VHP 4.768 DPA -22.88 RAP 137.14 ECC 1.3904 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   22 4 29
                                 3028.24
                                                 -27.82
                                                                98.48
                                                                              19.26
                                                                                              84.49
                                                                                                        22 54 57
                                                                                                                          2428.2
                                                                                                                                        -28.29
                                                                                                                                                        89.85
       90.00
                   16 37 35
                                                                                               61.77
                                                                                                        17 46 22
                                                  -2.32
                                                               167.91
                                                                               11.33
                                                                                                                          3527.0
                                                                                                                                                       161.24
                                 4126.96
       90.00
                   23 41 41
                                 2714.79
                                                 -29.66
                                                                 75.59
                                                                               19,44
                                                                                              86.09 24 26 56
60.12 18 48 19
                                                                                                        24 26 56
                                                                                                                          2114.8
                                                                                                                                         -29.89
      100.00
                  17 43 4
                                 3915.65
                                                   -.70
                                                                               10.44
                                                                                                                                          -4.68
                                                                                                                                                       144.94
      100.00
                                                               151.48
                                                 -34.18
                    1 26 47
                                 2398.32
                                                                 51.73
                                                                                              90.11
                                                                                                          2 6 45
                                                                                                                          1798.3
                                                                                                                                        -33.79
                                                                                                                                                        42.51
      110.00
                                                                              19.61
                                                                                                      19 21 49
                  18 18 24
                                                               140.69
                                                                                8.04
                                                                                              55.94
                                                                                                                          3204.9
                                                                                                                                        -1.36
      110.00
                                 3804.88
                                                  3.14
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TDE .6667 TRA-1.0661 TC3-1.5809 BAU
                                                                   SGT 2195.4 SGR 1045.9 SG3 307.4
RRT .9035 RRF .9764 RTF .9225
SGB 2431.8 R23 .2622 R13 .9452
                                                     . 5939
                                                                                                                     ST 884.5 SR 161.6 SS 489.7
CRT .9620 CRS -.8897 CST -.9752
                                                                                                                            .9620 CRS -.8897 CST -.9752
    RDE .1013 RRA -.2762 RC3-1.0042 FAU .09049
   FDE .9744 FRA -.7872 FC3-3.3026 BSP 7168
                                                                                                                     LSA 1018.1 MSA 105.1 SSA 23.6
                                                                   SG1 2396.9 SG2 410.7 THA 24.04
   BOE .6744 BRA 1.1013 BC3 1.8728 FSP
                                                     -986
                                                                                                                      EL1 898.1 EL2 43.4 ALF
                                                                                                                                                          9.99
                                                                      FLIGHT TIME 114.00
                                                                                                                                ARRIVAL DATE NOV 10 1967
LAUNCH DATE JUL 19 1967
                                                                      DISTANCE 333.345
  HELIOCENTRIC CONIC
                       .00 LOL 295.66 VL 27.536 GAL -9.12 AZL 87.91 HCA 155.51 SMA 134.36 ECC .20485 INC 2.0946 V1 29.306
.87 LOP 91.19 VP 38.445 GAP 2.88 AZP 91.91 TAL 221.57 TAP 17.08 RCA 106.84 APO 161.89 V2 35.204
11.80 GP -43.32 ZAL 151.00 ZAP 114.32 ETS 336.27 ZAE 129.36 ETE 225.86 ZAC 120.45 ETC 352.14 CLP-124.47
   RL 152.03 LAL
RP 107.65 LAP
    RC 103.470 GL
   PLANETOCENTRIC CONIC
   C3 23.610 VHL 4.859 DLA 25.19 RAL 148.91 RAD 6568.0 VEL 12.041 PTH 2.15 VHP 5.061 DPA -25.38 RAP 135.71 ECC 1.3886 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             78.87 22 19 57
62.64 18 39 38
                                                                                                                                                     101.70
                                                                             22.14
                                                                                                                        2591.3
                                                                                                                                      -27.48
       90.00
                21 26 46 3191.32
17 33 37 3961.58
                                                 -26.21
                                                               110.13
                                                                              15.39
                                                                                                                         3361.6
                                                                                                                                        -11.19
                                                                                                                                                      151.78
                                                 -7.5A
                                                               158.60
       90.00
                                                                                              80.85 23 59 9
60.56 19 34 23
                                                                                                                         2253.3
                                                                                                                                       -29.55
                                                                                                                                                       77.07
                                                                85.75
                                                                              22.62
                                                 -28.58
      100.00
                  23 11 35
                                2853.34
                                                               143.73
                                                                              14.23
                                                                                                                         3174.8
                                                                                                                                        -9.34
                                                                                                                                                      137.09
      100.00
                  18 31 28
                                 3774.79
                                                 -5.46
                                                                                              85.36
                                                                                                        1 49 37
                                                                                                                         1901.7
                                                                                                                                       -34.16
                                                                                                                                                       50.56
                                                                59.79
                                                                              23.38
                                2501.68
      110.00
                   1 7 55
                                                 -33.90
                                                                                                      19 57 13
                                                                                              55.83
                                                                                                                         3099.2
                                                                                                                                        -5.38
                                                                                                                                                      128.95
                                                               135.17
                                                                              11.40
      110.00
                  18 55 33
                                 3699.22
                                                   - .90
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE .8252 TRA-1.0423 TC3-1.7040 BAU .6280
                                                                  SCT 2352.3 SCR 1061.5 SC3 276.8
RRT .9033 RRF .9803 RTF .9250
SCB 2580.7 R23 .2724 R13 .9462
                                                                                                                     ST 1056.1 SR 222.5 SS 541.0
                                                                                                                     CRT .9959 CRS -.9718 CST -.9784
   RDE .1708 RRA -.2296 RC3-1.0273 FAU .08033
FDE 1.0279 FRA -.5935 FC3-2.9457 BSP 7651
                                                   7651
                                                                                                                     LSA 1202.9 MSA 100.7 SSA 19.5
                                                                                                                     ELI 1079.1 EL2 19.8 ALF 11.85
                                                                   SG1 2546.2 SG2 420.7 THA 22.83
    BOE .8427 BRA 1.0673 BC3 1.9897 FSP
                                                    -890
                                                                                                                                ARRIVAL DATE NOV 12 1967
                                                                       FLIGHT TIME 116.00
LAUNCH DATE JUL 19 1967
                                                                      DISTANCE 339.487
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 27.486 GAL -8.93 AZL 87.10 HCA 158.73 SMA 133.99 ECC .20441 INC 2.9015 VI 29.306
RP 107.62 LAP ,1.03 LOP 94.42 VP 38.417 GAP 3.23 AZP 92.70 TAL 220.49 TAP 19.23 RCA 106.60 APO 161.38 V2 35.212
RC 105.723 GL 16.32 GP -46.70 ZAL 148.12 ZAP 115.05 ETS 331.88 ZAE 125.60 ETE 225.32 ZAC 120.12 ETC 349.99 CLP-128.12
  PLANETOCENTRIC CONIC
    C3 23.922 VHL 4.891 DLA 29.03 RAL 151.84 RAD 6568.0 VEL 12.054 PTH 2.15 VHP 5.447 DPA -28.45 RAP 134.07 ECC 1.3937
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-19.01 149.23 23.48 67.64 19.49 10 3144 2 22.40
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                            67.64 19 49 19
67.63 21 33 44
                                 3758.17
       83.33
                  18 46 40
                                                               123.05
                                                                               23.47
                                                                                                                          2801.2
                                                                                                                                        -21.87
                                                                                                                                                       115.50
                   20 37 3
                                 3401.15
                                                 -19.00
       96.67
                                                                               25.54
                                                                                              71.89
                                                                                                      22 55 32
                                                                                                                         2523.8
                                                                                                                                        -26.44
                                                                                                                                                        96.53
      100.00
                   22 3 28
                                 3123.78
                                                 -24.20
                                                               104.60
                                                                                              63.30 21 1 27
                                                                                                                          2910.8
                                                                                                                                        -17.44
                                                                                                                                                       121.68
                                                               128.75
                                                                               21.08
                   20 2 56
       100.00
                                 3510.77
                                                -13.97
                                                                                                         1 20 7
                                                                                              78.40
                                                                                                                         2059.1
                                                                                                                                        -33.64
                                                                                                                                                        62.80
                                2659.09
                                                                               28.00
      110.00
                    0 35 48
                                                 -32.38
                                                                71.81
                                                                                              56.39
                                                                                                        20 50 10
                                                                                                                         2948.2
                                                                                                                                        -11.02
                                                                                                                                                       120.89
                                                               127.26
                                                                               16.76
                   19 51 2
                                 3548.23
                                                  -6.64
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1282.2 SR 305.6 SS 599.5
    TOE 1.0397 TRA -.9885 TC3-1.7895 BAU .6601
                                                                   SGT 2510.3 SGR 1073.8 SG3 243.8
                                                                  RRT .9000 RRF .9831 RTF .9274
SGB 2730.4 R23 .2805 R13 .9473
SG1 2695.3 SG2 436.0 THA 21.65
                                                                                                                    CRT .9945 CRS -.9942 CST -.9824
LSA 1444.3 MSA 103.2 SSA 14.6
    RDE .2529 RRA -.1711 RC3-1.0288 FAU .06963
    FDE 1.0768 FRA -.4041 FC3-2.5201 BSP 8152
BDF 1.0700 BRA 1.0032 BC3 2.0642 FSP -792
                                                                                                                     EL1 1317.8 EL2 31.0 ALF 13.34
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BOE 1.0700 BRA 1.0032 BC3 2.0642 FSP

ARRIVAL DATE NOV 14 1967

JPL TM 33-99

LAUNCH DATE JUL 19 1967

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DISTANCE 345.603
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 27.434 GAL -8.73 AZL 86.02 MCA 161.95 SMA 133.61 ECC .20402 INC 3.9817 V1 29.306 RP 107.60 LAP 1.23 LOP 97.66 VP 38.387 GAP 3.57 AZP 93.79 TAL 219.37 TAP 21.32 RCA 106.35 APO 160.87 V2 35.220
    RC 107.975 GL 22.10 GP -50.84 ZAL 144.06 ZAP 114.92 ETS 326.98 ZAE 121.36 ETE 224.90 ZAC 119.51 ETC 347.42 CLP-131.86
   PLANETOCENTRIC CONIC
    C3 25.045 VHL 5.005 OLA 33.91 RAL 155.75 RAD 6568.0 VEL 12.101 PTH 2.17 VHP 5.979 DPA -32.19 RAP 131.99 ECC 1.4122
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         63.24 18 38 42
63.23 23 15 58
                     17 31 5
                                     4057.24
                                                       -21.65
                                                                      173.04
                                                                                       29.58
                                                                                                                                       3457.2
                                                                                                                                                      -25.06
                                                                                                                                                                      165.57
        70.51
                     22 23 54 3124.63
                                                       -21.64
                                                                      103.52
                                                                                        29.58
                                                                                                                                       2524.6
                                                                                                                                                        -25.05
                                                                                                                                                                         96.06
       109.49
                                                                                                         63.24 18 38 42
63.23 23 15 58
65.64 23 50 2
60.79 22 47 57
                                                                      173.04
                                                                                        29.58
                                                                                                                                        3457.2
                                                                                                                                                        -25.06
                                                                                                                                                                        165.57
         70.51
                     17 31 5
                                     4057.24
                                                      -21.65
                                                                                                                                       2524.6
                     22 23 54 3124.63
                                                                                        29.58
                                                                                                                                                        -25.05
                                                                                                                                                                         96.06
                                                                       103.52
       109.49
                                                      -21.64
                                                                        96.60
                    22 59 47
21 54 22
                                                      -24.75
                                                                                        31.20
                                                                                                                                       2415.1
                                                                                                                                                        -27.82
                                                                                                                                                                          88.78
       110.00
                                     3015.09
                                                                                                                                       2614.8
                                                                                                                                                        -22.35
       110.00
                                     3214.78
                                                      -18.60
                                                                      108.83
                                                                                        27.86
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                   ST 1583.6 SR 404.2 SS 664.6
CRT .9896 CRS -.9993 CST -.9865
    TDE 1.3445 TRA -.8899 TC3-1.8036 BAU .6885
                                                                           SGT 2671.2 SGR 1074.5 SG3 208.1
    RDE .3505 RRA -.0934 RC3 -.9875 FAU .05830
FDE 1.1198 FRA -.2188 FC3-2.0151 8SP 8655
BDE 1.3894 BRA .8948 BC3 2.0562 FSP -685
                                                                          RRT .8920 RRF .9840 RTF .9301
SGB 2879.2 R23 .2857 R13 .9487
SGI 2842.8 SG2 456.5 THA 20.28
                                                                                                                                   LSA 1760.8 MSA 110.7 SSA 10.1
                                                                                                                                   EL1 1633.4 EL2 56.3 ALF 14.19
                                                                                                                                               ARRIVAL DATE NOV 16 1967
LAUNCH DATE JUL 19 1967
                                                                               FLIGHT TIME 120.00
   HELIOCENTRIC CONIC
                                                                               DISTANCE 351.691
    RL 152.03 LAL .00 LOL 295.66 VL 27.381 GAL -8.53 AZL 84.49 MCA 165.17 SMA 133.22 ECC .20367 INC 5.5130 V1 29.306 RP 107.58 LAP 1.41 LOP 100.89 VP 38.356 GAP 3.89 AZP 95.33 TAL 218.19 TAP 23.36 RCA 106.08 APO 160.35 V2 35.227 RC 110.226 GL 29.52 GP -55.96 ZAL 138.37 ZAP 113.75 ETS 321.41 ZAE 116.41 ETE 224.28 ZAC 118.61 ETC 344.15 CLP-136.01
   PLANETOCENTRIC CONTC
                                                                                                           2.20 VHP 6.761 DPA -36.74 RAP 129.05 ECC 1.4586
    C3 27.868 VHL 5.279 DLA 40.04 RAL 161.34 RAD 6568.1 VEL 12.217 PTH
    LNOW AFMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.42 16 59 54 4241.46 -24.21 189.51 39.01 57.07 18 10 35 3641.5 -28.36 182.30
                                                                                                                                                        -28.35
       119.58
                    23 39 34
                                    2993.35
                                                                                        39.00
                                                                                                          57.06
                                                                                                                     24 29 31
                                                                                                                                        2393.4
                                                                                                                                                                         87.30
                                                       -24.19
                                                                        94.51
                   16 59 54
                                                                                                                     18 10 35
                                     4241.46
                                                      -24.21
                                                                       189.51
                                                                                        39.01
                                                                                                          57.07
                                                                                                                                        3641.5
                                                                                                                                                        -28.36
        60.42
                                                                                                                  24 29 31
18 10 35
24 29 31
       119.58
                    23 39 38
                                    2993.35
                                                      -24.19
                                                                        94.51
                                                                                        39.00
                                                                                                          57.06
                                                                                                                                        2393.4
                                                                                                                                                        -28.35
                                                                                                                                                                          87.30
                   16 59 54
                                                                                        39.01
                                                                                                          57.07
                                                                                                                                        3641.5
                                                                                                                                                        -26.36
        60.42
                                    4241.46
                                                      -24.21
                                                                       189.51
                                                                                                                                        2393.4
                                                                                                                                                        -28.35
       119.58
                    23 39 36
                                     2993.35
                                                                        94.51
                                                                                        39.00
                                                                                                         57.06
                                                      -24.19
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RIT 2038.4 SGR 1044.5 SG3 169.9

RRT .8744 RRF .9805 RTF .9339

SGB 3024.5 R23 .2875 R13 .9506

SGI 2985.9 SG2 481.8 THA 18.33
                                                                                                                                   ST 1981.8 SR 499.5 SS 731.2
CRT .9855 CRS -.9995 CST -.9900
    TDE 1.8035 TRA -.7177 TC3-1.6916 BAU .7085
    RDE .4595 RRA .0156 RC3 -.8689 FAU .04625
    FOE 1.1524 FRA -.0368 FC3-1.4367 89P 9120
80E 1.8611 8RA .7179 BC3 1.9017 FSP -565
                                                                                                                                   LSA 2167.2 MSA 122.1 SSA
                                                                                                                                                                             6.6
                                                                                                                                   EL1 2042.1 EL2 82.1 ALF 13.97
                                                                                                                                              ARRIVAL DATE NOV 18 1967
                                                                              FLIGHT TIME 122.00
LAUNCH DATE JUL 19 1967
                                                                              DISTANCE 357.744
   HELIOCENTRIC CONTC
   RL 152.03 LAL .00 LOL 295.66 VL 27.326 GAL -8.31 A7L 82.13 MCA 168.36 SMA 132.82 ECC .20336 INC 7.8660 VI 29.306 RP 107.36 LAP 1.58 LOP 104.13 VP 38.322 GAP 4.20 A7P 97.71 TAL 216.97 TAP 25.33 RCA 105.81 APO 159.83 V2 35.233 RC 112.475 GL 38.89 GP -62.31 7AL 130.57 7AP 111.32 ETS 314.60 7AE 110.38 ETE 222.66 7AC 117.46 ETC 339.45 CLP-141.50
   PLANETOCENTRIC CONIC
    C3 34.746 VML 5.895 DLA 47.35 RAL 169.95 RAD 6568.4 VEL 12.495 PTH 2.26 VMP 8.022 DPA -42.14 RAP 124.48 ECC 1.5718
   C3 34.746 VHL 5.895 OLA 47.35 RAL 169.95 RAD 6568.4 VEL 12.495 PTH 2.26 VHP 8.022 DPA -42.14 RAP 124.48 ECC 1.5718 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 50.31 16 53 50 4404.81 -25.50 205.24 53.91 48.64 18 7 15 3804.8 -30.62 198.69 129.69 0 58 19 2940.80 -25.48 90.88 53.89 48.65 1 47 20 2340.8 -30.60 84.33 50.31 16 53 50 4404.81 -25.50 205.24 53.91 48.64 18 7 15 3804.8 -30.62 198.69 129.69 0 58 19 2940.80 -25.48 90.88 53.89 48.65 1 47 20 2340.8 -30.60 84.33 50.31 16 53 50 4404.81 -25.50 205.24 53.91 48.64 18 7 15 3804.8 -30.60 84.33 129.69 0 58 19 2940.80 -25.48 90.88 53.89 48.63 1 47 20 2340.8 -30.60 84.33
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 3020.6 SGR 946.2 SG3 130.9
RRT .8277 RRF .9607 RTF .9407
SGB 3165.3 R23 .2830 R13 .9540
SGI 3123.4 SG2 513.5 THA 14.95
                                                                                                                                 ST 2474.5 SR 519.4 SS 781.9
CRT .9773 CRS -.9956 CST -.9927
    TOE 2.5388 TRA -.4096 TC3-1.3908 BAU .7115
    ROE .5285 RRA .1692 RC3 - .6418 FAU .03393
                                                                                                                                 LSA 2643.1 MSA 136.2 SSA 4.2
EL1 2526.2 EL2 107.8 ALF 11.61
    FOE 1.1588 FRA .1285 FC3 -.8454 BSP 9586
BDE 2.5933 BRA .4432 BC3 1.5318 FSP -443
                                                                                                                                               ARRIVAL DATE NOV 20 1967
LAUNCH DATE JUL 19 1967
                                                                               FLIGHT TIME 124,00
                                                                               DISTANCE 363.744
   HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 27.271 GAL -8.07 AZL 78.04 HCA 171.53 SMA 132.41 ECC .20304 INC11.9601 V1 29.306 RP 107.54 LAP 1.75 LOP 107.37 VP 38.288 GAP 4.50 AZP 101.83 TAL 215.69 TAP 27.22 RCA 105.53 APO 159.30 V2 35.239 RC 114.720 GL 49.92 GP -70.07 ZAL 120.54 ZAP 107.45 ETS 304.33 ZAE 102.69 ETE 217.45 ZAC 116.20 ETC 330.80 CLP-151.61
   PLANETOCENTRIC CONIC
    C3 53.471 VHL 7.312 OLA 54.70 RAL 184.10 RAD 6568.9 VEL 13.222 PTH 2.42 VHP 10.333 DPA -48.19 RAP 116.55 ECC 1.8800
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
41.03 17 21 6 4581.00 -22.87 220.50 76.74 38.85 18 37 27 3981.0 -29.00 215.19
                                                                                                                    3 13 40
                                                                                        76.72
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                                                                                                                                       2381.3
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       134 07
                      2 23 59 2981.25
                                                      -22.86
                                                                       92.06
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        41.03
                  17 21 6
                                    4581.00
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                                                      -22.86
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          SGT 3219.5 SGR 697.1 SG3 94.5
RRT .5965 RRF .8004 RTF .9548
SGB 3294.1 R23 .2659 R13 .9611
                                                                                                                                   ST 2940.2 SR 257.6 SS 793.6
    TDE 3.7504 TRA .2154 TC3 -.8768 BAU .6640
                                                                                                                                   CRT__.8367 CRS -.8893 CST -.9945
    RDE .2694 RRA .3615 RC3 -.3067 FAU .02163
                                                                                                                                  LSA 3052.0 MSA 160.5 SSA 2.4
EL1 2948.1 EL2 140.7 ALF 4.20
    FDE 1.1241 FRA .2925 FC3 -.3502 BSP 9954
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FLIGHT TIME 118.00

- 322

BDE 3.7601 BRA .4208 BC3 .9289 FSP

SG1 3247.0 SG2 554.8 THA

7.58

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ARRIVAL CATE NOV 22 1967
                                                                            FLIGHT TIME 126.00
LAUNCH DATE JUL 19 1967
                                                                            CISTANCE 369.632
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 27.214 GAL -7.81 AZL 69.23 HCA 174.61 SMA 132.01 ECC .20259 INC20.7727 V1 29.306 RP 107.52 LAP 1.91 LOP 110.62 VP 38.252 GAP 4.76 AZP 110.69 TAL 214.32 TAP 28.93 RCA 105.26 APO 158.75 V2 35.244
    RC 116.961 GL 60.35 GP -77.86 7AL 109.01 ZAP 102.09 ETS 277.14 ZAE 91.84 ETE 194.71 ZAC 115.56 ETC 304.10 CLP 175.02
   PLANETOCENTRIC CONIC
    C3 121.064 VHL 11.003 OLA 58.21 RAL 205.20 RAD 6570.3 VEL 15.569 PTH 2.77 VHP 15.545 DPA -53.50 RAP 100.94 ECC 2.9924 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     32.79
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                18 33 36 4790.00
3 59 48 3142.77
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                                                    -13.41
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18 33 36 4790.00
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                                                                       HID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2689.8 SR 1084.0 SS 769.8
CRT -.9825 CRS ..9655 CST -.9971
                                                                        SGT 3206.1 SGR 1084.4 SG3 66.1
RRT -.8314 RRF -.7329 RTF .9867
SGB 3384.6 R23 -.2070 R13 -.9775
    TOE 5.0686 TRA 1.7464 TC3 -.2623 BAU
                                                          .4248
    ROE-2.0816 RRA -.0239 RC3 -.0089 FAU .00911
FDE 1.0607 FRA .5155 FC3 -.0651 BSP 10268
                                                                                                                              LSA 2993.6 MSA 202.4 55A 1.2
                                                                                                                              EL1 2893.9 EL2 187.6 ALF 158.30
    BOE 5.4794 BRA 1.7465 BC3 .2625 FSP -222
                                                                        SG1 3334.6 SG2 579.3 THA 163.79
                                                                                                                                          ARRIVAL DATE NOV 24 1967
                                                                            FLIGHT TIME 128.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 375.066
   RL 152.03 LAL .00 LOL 295.66 VL 27.156 GAL -7.45 A7L 41.07 HCA 177.26 SMA 131.67 ECC .20129 INC48.9271 V1 29.306 RP 107.51 LAP 2.07 LOP 113.86 VP 38.215 GAP 4.89 A7P 138.89 TAL 212.67 TAP 29.92 RCA 105.11 APO 158.09 V2 35.248 RC 119.197 GL 39.19 GP -67.99 TAL 98.29 TAP 95.93 ETS 202.84 TAE 71.22 ETE 124.31 TAC 118.85 ETC 225.84 CLP 106.01
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 558.563 VML 23.634 DLA 49.03 RAL 219.58 RAD 6572.5 VEL 26.074 PTH 3.37 VMP 32.180 DPA -49.50 RAP 68.91 ECC1U.1925

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

-1.46 229.73 128.32 40.99 21 26 25 4320.6 -7.49 224.86
                   - 23 41 3420.28
20 4 24 4920 50
4 23 41
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20 4 24 4920.62
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                                                                       MID-COURSE EXECUTION ACCURACY
SGT 568.2 SGR 300.
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                                                      -1.45
                                                                    111.81
      131.86
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 269.8 SR 2206.9 SS 991.7
CRT .6056 CRS .9964 CST .5360
LSA 2423.6 MSA 229.7 SSA 1.2
                                                                        SGT 568.2 SGR 3201.4 SG3 50.5
RRT -.3378 RRF -.9924 RTF .4490
    TOE -.9157 TRA 1.3815 TC3 -.0238 BAU 1.2544
    ROE-8.6516 RRA-6.1863 RC3 -.1663 FAU-.01834
                                                                        SGB 3251.4 R23 -.1108 R13 -.9935
    FOE 1.3545 FRA 1.2551 FC3 .0284 BSP 9991
BOE 8.6999 BRA 6.3386 BC3 .1680 FSP -165
                                                                                                                              EL1 2213.0 EL2 214.1 ALF 85.73
                                                                        SG1 3207.3 SG2 533.8 THA 93.53
                                                                                                                                         ARRIVAL DATE NOV 26 1967
                                                                            FLIGHT TIME 130.00
LAUNCH DATE JUL 19 1967
                                                                            DISTANCE 383.307
   HELIOCENTRIC CONIC
    RL 152.03 LAL ... .00 LOL 295.66 VL 27.098 GAL -7.65 AZL 146.94 MCA 182.64 SMA 131.19 ECC .20619 INC56.9412 VI 29.306 RP 107.50 LAP 2.22 LOP 117.11 VP 38.177 GAP 5.81 AZP 33.09 TAL 212.57 TAP 35.21 RCA 104.14 APO 158.23 V2 35.25Z RC 121.426 GL -56.20 GP 66.09 ZAL 97.41 ZAP 96.67 ETS 171.27 ZAE 67.81 ETE 247.67 ZAC 93.97 ETC 136.72 CLP 106.65
   PLANETOCENTRIC CONIC
    C3 733.628 VHL 27.086 DLA -54.04 RAL 157.76 RAD 6572.7 VEL 29.239 PTH 3.44 VHP 33.758 DPA 68.74 RAP 342.00 ECC13.0737
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
41.84 3 40 10 2339.85 .55 66.27 67.34 144.04 4 19 9 1739.9 7.01 61.96
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                     12 34 44
                                     749.54
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                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 887.3 SGR 3182.3 SG3 52.8
RRT -.8246 RRF .9974 RTF -.7853
SGB 3303.7 R23 -.1008 R13 .9945
                                                                                                                               ST 442.3 SR 2745.6 SS 1597.8
     TOE 1.8194 TRA 2.0144 TC3 -. 0620 BAU 1.9837
                                                                                                                              CRT -.9309 CRS -.9998 CST .9228
LSA 3203.1 MSA 165.2 SSA 1.5
    RD-12.8499 RRA-3.5669 RC3 .1925 FAU-.02748
FDE-2.5712 FRA -.6039 FC3 .0324 BSP 9991
BDE12.9781 BRA 4.0964 BC3 .2023 FSP -165
                                                                                                                              EL1 2776.4 EL2 159.8 ALF 98.56
                                                                        SG1 3267.4 SG2 488.8 THA 103.25
                                                                                                                                          ARRIVAL DATE NOV 28 1967
                                                                             FLIGHT TIME 132.00
LAUNCH DATE JUL 19 1967
                                                                            DISTANCE 388.658
    RL 152.03 LAL .00 LOL 295.66 VL 27.039 GAL -7.26 AZL 116.73 HCA 185.25 SHA 130.77 ECC .20488 INC26.7312 V1 29.306 RP 107.49 LAP 2.36 LOP 120.35 VP 38.138 GAP 5.91 AZP 63.37 TAL 210.85 TAP 36.09 RCA 103.98 APO 157.57 V2 35.255 RC 123.648 GL -62.47 GP 75.48 ZAL 104.06 ZAP 104.32 ETS 112.22 ZAE 89.65 ETE 190.80 ZAC 88.91 ETC 77.75 CLP 170.69
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43.65 2 31 16 2182.42 8.40 59.51 42.65 142.11 3 7 38 1582.4 14.67 54.86
                                                                                                                11 25 27
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       136.35
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                               ST 2110.3 SR 1482.7 SS 919.9
CRT .9854 CRS -.9825 CST -.9999
                                                                        SCT 2723.9 SGR 2458.8 SG3 72.4
RRT .9620 RRF .9493 RTF .9986
SGB 3669.5 R23 -.1646 R13 .9858
     TOE-4.8451 TRA-2.5902 TC3 -.0673 BAU .1667
     RDE-3.2015 RRA-2.9666 RC3 -.0021 FAU .00716
                                                                                                                               LSA 2729.7 MSA 216.4 SSA 1.1
     FOE-1.5284 FRA -.7639 FC3 -.0335 BSP 11162
BOE 5.8073 BRA 3.9382 BC3 .0674 FSP -228
                                                                         SG1 3634.9 SG2 502.8 THA 41.96
                                                                                                                               EL1 2570.8 EL2 207.2 ALF 34.96
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ARRIVAL DATE NOV 30 1967
                                                                       FLIGHT TIME 134.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 394.474
  HELIOCENTRIC CONTC
   RL 152.03 LAL :00 LOL 295.66 VL 26.980 GAL -6.96 AZL 107.50 HCA 188.32 SMA 130.36 ECC .20472 INC17.4958 V1 29.306 RP 107.48 LAP 2.49 LOP 123.60 VP 38.098 GAP 6.15 AZP 72.68 TAL 209.36 TAP 37.67 RCA 103.67 APO 157.05 V2 35.257 RC 125.861 GL -58.61 GP 66.25 ZAL 109.56 ZAP 112.53 ETS 74.57 ZAE 100.99 ETE 156.02 ZAC 89.57 ETC 40.40 CLP-162.08
   PLANETOCENTRIC CONIC
    C3 88.954 VHL 9.432 DLA -47.05 RAL 137.78 RAD 6569.7 VEL 14.502 PTH 2.63 VHP 10.723 OPA 72.29 RAP 210.47 ECC 2.4640
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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                                 5816.70
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                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3754.0 SGR 551.9 SG3 103.1
RRT .4790 RRF .2710 RTF .9729
SGB 3794.3 R23 -.2312 R13 .9708
SGI 3763.4 SG2 483.2 THA 4.10
                                                                                                                       ST 2392.1 SR 257.5 SS 828.0
CRT -.5328 CRS .6353 CST -.9920
    TOE-3.6691 TRA-3.2455 TC3 -.4598 BAU
    ROE .3406 RRA -.5730 RC3 .0150 FAU .02122
                                                                                                                      LSA 2533.4 MSA 237.2 SSA 1.9
    FOE-1.4271 FRA -.8100 FC3 -.2065 BSP 11641
BDE 3.6849 BRA 3.2957 BC3 .4601 FSP -329
                                                                                                                       EL1 2396.1 EL2 217.5 ALF 176.69
                                                                                                                                  ARRIVAL DATE DEC 2 1967
                                                                        FLIGHT TIME 136.00
                                                                       DISTANCE 400.376
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 26.920 GAL -6.68 AZL 103.27 HCA 191.48 SHA 129.95 ECC .20488 INC13.2673 V1 29.306 RP 107.48 LAP 2.62 LOP 126.85 VP 38.057 GAP 6.40 AZP 76.99 TAL 207.90 TAP 39.38 RCA 103.33 APO 156.58 V2 35.258 RC 128.065 GL -54.01 GP 56.79 ZAL 113.43 ZAP 120.06 ETS 63.96 ZAE 108.75 ETE 149.48 ZAC 90.90 ETC 30.04 CLP-156.13
   PERRETOCENTRIC CONIC
                                                                                                 2.44 VHP 8.509 DPA 63.72 RAP 194.41 ECC 1.9465
    C3 57.512 VHL 7.584 DLA -42.40 RAL 139.58 RAD 6569.0 VEL 13.374 PTM
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1220.6
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 3654.2 SGR 500.3 SG3 135.6
RRT - .4564 RRF - .6872 RTF .9550
SGB 3686.5 R23 .2758 R13 -.9570
                                                                                                                       ST 2254.6 SR 465.7 SS 828.5
CRT -.8923 CRS .9574 CST -.9846
    TOE-2.7432 TRA-2.8894 1C3 -.8897 BAU .6886
    RDE .6151 RRA -.0972 RC3 .1031 FAU .03203
                                                                                                                       LSA 2434.9 MSA 240.8 SSA
    FDE-1.4525 FRA -.8321 FC3 -.4822 BSP 11968
                                                                                                                       EL1 2292.9 EL2 206.8 ALF 169.47
                                                                    SG1 3861.1 SG2 444.3 THA 176.56
    BOE 2.8113 BRA 2.8910 BC3 .8956 FSP -436
                                                                                                                                 ARRIVAL DATE DEC 4 1967
                                                                        FLIGHT TIME 138.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 406.299
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 26.861 GAL -6.39 AZL 100.86 MCA 194.69 SMA 129.55 ECC .20521 INC10.8562 V1 29.306 RP 107.48 LAP 2.74 LOP 130.10 VP 38.016 GAP 6.67 AZP 79.49 TAL 206.44 TAP 41.12 RCA 102.96 APO 156.13 V2 35.259 RC 130.261 GL -50.00 GP 48.81 7AL 115.96 ZAP 126.56 ETS 58.96 ZAE 114.35 ETE 149.24 ZAC 91.91 ETC 25.35 CLP-154.74
   PLANETOCENTRIC CONIC
    C3 43.077 VHL 6.563 DLA -38.82 RAL 141.99 RAD 6568.6 VEL 12.824 PTH 2.33 VHP 7.417 DPA 56.00 RAP 187.45 ECC 1.7089 LNCH AZMTH LNCH TIME L-I TIME. INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                         1063.0
                                                                                            124.28 4 21 13
124.27 11 52 6
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                     3 53 10 1682.96
10 15 55 5771.21
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        62.25
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                                  5771.21
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       117.75
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS -
                                                                   SCT 3939.5 SCR 532.2 SC3 163.5
RRT -.6427 RRF -.8439 RTF .9432
SCB 3975.3 R23 .3018 R13 -.9460
SCI 3954.5 SC2 406.2 THA 174.98
                                                                                                                       ST 2173.7 SR 489.8 SS 834.7
CRT -.9156 CRS .9784 CST -.9789
    TOE-2.2760 TRA-2,6182 TC3-1.3119 BAU .7610
    ROE -5611 RRA .0049 RC3 .1365 FAU .04032
FOE-1.4584 FRA -.8122 FC3 -.8103 BSP 12283
                                                                                                                       LSA 2367,1 MSA 241.8 SSA 3.6
                                                                                                                       EL1 2219.8 EL2 192.8 ALF 168.25
    BOE 2.3441 BRA 2.6182 BC3 1.3214 FSP -529
                                                                                                                                  ARRIVAL DATE DEC 6 1967
                                                                        FLIGHT TIME 140.00
LAUNCH DATE ILE 19 1967
                                                                        DISTANCE 412.225
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 26.801 GAL -6.09 AZL 99.30 MCA 197.91 SMA 129.14 ECC .20568 INC 9.2950 V1 29.306 RP 107.48 LAP 2.85 LOP 133.35 VP 37.973 GAP 6.93 AZP 81.15 TAL 204.96 TAP 42.87 RCA 102.58 APO 155.70 V2 35.259 RC 132.447 GL -46.67 GP 42.26 ZAL 117.47 ZAP 132.03 ETS 55.63 ZAE 118.39 ETE 150.87 ZAC 92.39 ETC 22.39 CLP-154.77
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 66.57 4 25 19 1565.96 20.11 15.23 24.39 120.67 4 51 25 966.0 24.09
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                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2122.2 SR 465.1 SS 831.7
CRT -.9197 CRS ..9845 CST -.9742
                                                                    SGT 4025.5 SGR 511.6 SG3 183.8
RRT -.6835 RRF -.8739 RTF .9345
SGB 4057.9 R23 .3147 R13 -.9371
     TOE-1,9995 TRA-2,4099 TC3-1,7130 BAU .8062
     ROE .4802 RRA .0227 RC3 .1788 FAU .04589
FOE-1.4273 FRA -.7523 FC3-1.1347 BSP 12499
BDE 2.0564 BRA 2.4100 BC3 1.7223 FSP -592
                                                                                                                       LSA 2313.7 MSA 241.9 SSA 4.6
                                                                                                                        EL1 2165.2 EL2 179.0 ALF 168.52
                                                                    SG1 4040.8 SG2 372.0 THA 174.99
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FLIGHT TIME 142.00
                                                                                                                                ARRIVAL DATE DEC 8 1967
 -AUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 418.144
    RL 152.03 LAL .00 LOL 295.66 VL 26.741 GAL -5.79 AZL 98.20 HCA 201.13 SMA 128.74 ECC .20627 INC 8.1973 V1 29.306 RP 107.48 LAP 2.95 LOP 136.60 VP 37.930 GAP 7.20 AZP 82.35 TAL 203.48 TAP 44.61 RCA 102.18 APO 155.30 V2 35.258 RC 134.624 GL -43.93 GP 36.93 ZAL 118.18 ZAP 136.60 ETS 53.04 ZAE 121.29 ETE 153.08 ZAC 92.37 ETC 20.20 CLP-155.36
   PLANETOCENTRIC CONIC
    C3 29.891 VHL 5.467 DLA -34.12 RAL 147.03 RAD 6568.2 VEL 12.299 PTH 2.22 VHP 6.510 DPA 43.80 RAP 182.38 ECC 1.4919
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          117.97 5 20 9
117.96 11 30 19
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116.88 11 46 13
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                                                               277.38
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      110.00
                                                 21.96
                                                                               24.65
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 4128.0 SGR 477.2 SG3 198.5

RRT -.6898 RRF -.8729 RTF .9284

SGB 4155.5 R23 .3148 R13 -.9305

SGI 4141.2 SG2 344.4 THA 175.41
                                                                                                                     ST 2098.6 SR 435.2 SS 826.3
CRT -.9211 CRS .9876 CST -.9706
LSA 2284.3 MSA 241.2 SSA 5.6
    TOE-1.8287 TRA-2.2446 TC3-2.1044 BAU .8439
   ROE .4151 RRA .0218 RC3 .1776 FAU .04952
FDE-1.3795 FRA -.6746 FC3-1.4344 BSP 12871
BDE 1.8752 BRA 2.2447 BC3 2.1119 FSP -645
                                                                                                                     EL1 2136.7 EL2 166.4 ALF 169.12
                                                                       FLIGHT TIME 144.00
LAUNCH DATE JUL 19 1967
                                                                                                                                 ARRIVAL DATE DEC 10 1967
                                                                      DISTANCE 424.055
  HELIOCENTRIC CONIC
   RL 152.03 LAL
RP 107 40 11
        152.03 LAL .00 LOL 295.66 VL 26.681 GAL -5.47 AZL 97.38 HCA 204.37 SMA 128.34 ECC .20699 INC 7.3792 V1 29.306
107.48 LAP 3.04 LOP 139.85 VP 37.887 GAP 7.46 AZP 83.27 TAL 201.97 TAP 46.34 RCA 101.78 APO 154.91 V2 35.256
   RC 136.791 CL -41.65 GP 32.58 7AL 118.27 7AP 140.44 ETS 50.89 7AE 123.38 ETE 155.38 7AC 91.92 ETC 18.45 CLP-156.21
   PLANETOCENTRIC CONIC
    C3 26.343 VHL 5.133 OLA -32.65 RAL 149.56 RAD 6568.1 VEL 12.154 PTH
                                                                                                 2.18 VHP 6.337 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          115.97
                    5 24 2
                                 1377.45
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110.42 12 53 53
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                                                                                                                                         30.54
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      110.00
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SCT 4240.9 SCR 444.0 SC3 208.8

RRT -.6818 RRF -.8565 RTF .9243

SCB 4264.1 R23 .3042 R13 -.9260

SCI 4251.8 SC2 324.0 THA 175.89
                                                                                                                      ST 2096.6 SR 410.4 SS 821.2
CRT -.9235 CRS .9900 CST -.9680
    TDE-1.7208 TRA-2.1028 TC3-2.4880 BAU .8781
    RDE .3676 RRA .0180 RC3 .1637 FAU .05166
    FOE-1.3263 FRA -.5890 FC3-1.6978 BSP 13343
                                                                                                                     LSA 2276.1 MSA 239.6 SSA
                                                                                                                                                           6.7
                                                                                                                     EL1 2130.7 EL2 154.9 ALF 169.70
    BOE 1.7596 BRA 2.1029 BC3 2.4934 FSP -690
                                                                      FLIGHT TIME 146.00
                                                                                                                               ARRIVAL DATE DEC 12 1967
LAUNCH DATE JUL 19 1967
                                                                     DISTANCE 429.958
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 26.622 GAL -5.15 AZL 96.74 HCA 207.60 SHA 127.95 ECC .20782 INC 6.7428 V1 29.306 RP 107.49 LAP 3.12 LOP 143.10 VP 37.843 GAP 7.73 AZP 84.02 TAL 200.45 TAP 48.05 RCA 101.36 APO 154.54 V2 35.254 RC 138.949 GL -39.73 GP 29.02 TAL 117.86 ZAP 143.70 ETS 49.07 ZAE 124.88 ETE 157.56 ZAC 91.12 ETC 17.00 CLP-157.17
   PLANETOCENTRIC CONIC
    C3. 23.722 VHL 4.871 DLA -31.60 RAL 152.13 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.253 OPA 34.98 RAP 181.77 ECC 1.3904
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TLM INJ 2 LAT INJ 2 LONG
                                                                                         114.48 6 11 31
114.47 11 17 45
114.48 6 11 31
114.47 11 17 45
122.35 6 47 27
106.90 13 25 6
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                 11 54 31 5435.11
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                                                  30.17
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                    ST 2066.5 SR 382.9 SS 791.1

CRT - .9239 CRS .9920 CST - .9643

LSA 2233.1 MSA 237.1 SSA 7.8

EL1 2096.7 EL2 144.4 ALF 170.24
                                                                  SCT 4270.2 SCR 403.1 SC3 207.6
RRT -.6375 RRF -.8142 RTF .9158
SCB 4289.2 R23 .2950 R13 -.9171
SCI 4278.0 SC2 310.0 THA 176.54
    TOE-1.6174 TRA-1.9361 TC3-2.8046 BAU .8904
    ROE .3255 RRA .0069 RC3 .1290 FAU .05082
FOE-1.2332 FRA -.4604 FC3-1.8548 BSP 12963
    BOE 1.6498 BRA 1.9361 BC3 2.8076 FSP
                                                    -644
                                                                                                                                ARRIVAL DATE DEC 14 1967
LAUNCH DATE JUL 19 1967
                                                                       FLIGHT TIME 148.00
                                                                      DISTANCE 435.845
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 26.562 GAL -4.82 ATL 96.23 HCA 210.84 SMA 127.56 ECC .20878 INC 6.2306 VI 29.306 RP 107.50 LAP 3.19 LOP 146.35 VP 37.798 GAP 7.99 ATP 84.64 TAL 198.92 TAP 49.76 RCA 100.93 APO 154.19 V2 35.251 RC 141.095 GL -38.07 GP 26.06 TAL 117.05 ZAP 146.50 ETS 47.53 TAE 125.96 ETE 159.53 TAC 90.06 ETC 15.78 CLP-158.18
   PLANETOCENTRIC CONIC
    C3 21,700 VHL 4.658 DLA -30,89 RAL 154,75 RAD 6567.9 VEL 11.962 PTH 2.13 VHP 6.228 DPA 31.44 RAP 182.23 ECC 1.3571 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          6 33 19
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       110.00
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                                 5372.00
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                                                               245.86
                                                                               29.34
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2093.3 SR 371.7 SS 788.1
CRT -.9305 CRS .9943 CST -.9634
LSA 2255.3 MSA 233.6 SSA 9.0
                                                                   SGT 4385.8 SGR 384.5 SG3 211.6
RRT -.6142 RRF -.7769 RTF .9137
SGB 4402.6 R23 .2699 R13 -.9147
    TOE-1.5782 TRA-1.8106 TC3-3.1718 BAU
                                                      9207
    ROE .3022 RRA .0067 RC3 .1051 FAU .05100
    FOE-1.1827 FRA -.3728 FC3-2.0348 8SP 13491
                                                                                                                     EL1 2121.8 EL2 134.4 ALF 170.58
                                                                   SG1 4392.2 SG2 302.9 THA 176.90
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BDE 1.6069 BRA 1.8106 BC3 3.1736 FSP -672

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ARRIVAL DATE DEC 16 1967
                                                                      FLIGHT TIME 150.00
LAUNCH DATE JUL 19 1967
                                                                      DISTANCE 441.720
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 26.503 GAL -4.48 AZL 95.81 MCA 214.08 SMA 127.18 ECC .20987 INC 5.8072 V1 29.306 RP 107.51 LAP 3.25 LOP 149.60 VP 37.753 GAP 8.26 AZP 85.18 TAL 197.37 TAP 51.45 RCA 100.49 APO 153.87 V2 35.247 RC 143.222 GL -36.62 GP 23.60 TAL 115.87 ZAP 148.95 ETS 46.24 ZAE 126.76 ETE 161.29 TAC 88.77 ETC 14.74 CLP-159.21
   PLANETOCENTRIC CONIC
    C3 20.087 VML 4.482 DLA -30.45 RAL 157.45 RAD 6567.8 VEL 11.894 PTH 2.11 VMP 6.242 DPA 28.33 RAP 183.00 ECC 1.3306
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                               242.76
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                  12 35 39
                                                  32.00
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4483.2 SGR 370.8 SG3 212.1
RRT -.5820 RRF -.7306 RTF .9112
SGB 4498.5 R23 .2433 R13 -.9120
SGI 4488.4 SG2 301.1 THA 177.23
                                                                                                                     ST 2123.8 SR 364.1 55 782.2
CRT -.9382 CRS ..9964 CST -.9629
   TOE-1.5534 TRA-1.6787 TC3-3.5204 BAU .9456
    RDE .2848 RRA .0067 RC3 .0777 FAU .05024
                                                                                                                     LSA 2280.9 MSA 229.0 SSA 10.2
    FOE-1.1295 FRA -. 2802 FC3-2.1655 BSP 13852
                                                                                                                     EL1 2151.2 EL2 124.4 ALF 170.83
    BDE 1.5793 BRA 1.6787 BC3 3.5212 FSP -678
                                                                                                                                 ARRIVAL DATE DEC 18 1967
                                                                       FLIGHT TIME 152.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 447.581
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 26.444 GAL -4.13 AZL 95.45 MCA 217.31 SMA 126.80 ECC .21110 INC 5.4493 V1 29.306 RP 107.53 LAP 3.30 LOP 152.85 VP 37.707 GAP 8.52 AZP 85.66 TAL 195.81 TAP 53.13 RCA 100.03 APO 153.56 V2 35.243 RC 145.356 GL -35.32 GP 21.52 ZAL 114.39 ZAP 151.10 ETS 45.18 ZAE 127.34 ETE 162.84 ZAC 87.32 ETC 13.83 CLP-160.23
  PLANETOCENTRIC CONIC
    C3 18.772 VHL 4.333 OLA -30.23 RAL 160.25 RAD 6567.8 VEL 11.839 PTH
                                                                                                2.10 VHP 6.284 DPA 25.56 RAP 184.02 ECC 1.3089
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.94 6 47 57 1165.61 21.27 345.07 28.32 112.01 7 7 23 565.6 24.07 337.37
                                                                                                                                                       272.84
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                                                                280.55
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                                                                                             111.99
                                                                                                        11 24 48
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      101.06
                   9 46 51
                                 5877.21
                                                   21.29
                                                                                             112.01 7 7 25
111.99 11 24 48
122.58 8 56 54
101.57 14 18 36
                     6 47 57 1165.61
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                                                   21.27
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        78.94
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      110.00
                                 788.19
                                                   10.96
                  12 50 13 5302.63
                                                  32.39
                                                                240.73
                                                                               32.07
                                                                                                                          4702.6
                                                                                                                                          33.65
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ST 2160.9 SR 360.1 SS 776.3
CRT -.9470 CRS .9980 CST -.9629
LSA 2313.4 MSA 223.4 SSA 11.4
                                                                   SGT 4570.4 SGR 362.9 SG3 210.7
RRT -.5470 RRF -.6802 RTF .9086
    TOE-1.5421 TRA-1.5414 TC3-3.8559 BAU .9678
    RDE .2723 RRA .0077 RC3 .0501 FAU .04896
    FOE-1.0783 FRA -.1883 FC3-2.2578 BSP 14136
BOE 1.5659 BRA 1.5414 BC3 3.8562 FSP -674
                                                                   SG8 4584.8 R23 .2163 R13 -.9093
                                                                                                                      EL1 2187.7 EL2 114.2 ALF 171.01
                                                                   SG1 4574.8 SG2 303.5 THA 177150
                                                                                                                                ARRIVAL DATE DEC 20 1967
                                                                       FLIGHT TIME 154.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 453.428
   HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 26.386 GAL -3.77 A7L 95.14 HCA 220.55 SHA 126.42 ECC .21247 INC 5.1409 VI 29.306 RP 107.54 LAP 3.34 LOP 156.10 VP 37.661 GAP 8.79 A7P 86.09 TAL 194.24 TAP 54.79 RCA 99.56 APO 153.29 V2 35.237 RC 147.469 GL -34.12 GP 19.76 TAL 112.63 TAP 153.02 ETS 44.34 TAE 127.77 ETE 164.20 TAC 85.72 ETC 13.04 CLP-161.25
   PLANETOCENTRIC CONIC
    C3 17.588 VHL 4.206 DLA -30.20 RAL 163.18 RAD 6567.7 VEL 11.793 PTH 2.09 VMP 6.346 DPA 23.05 RAP 185.21 ECC 1.2911
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.63 7 19 38
111.62 11 35 25
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        79.05
                    7 0 29 1148.92
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                                 5866.07
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        79.05
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100.90 14 30 35
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                                   776.26
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       110,00
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                                                                239.53
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                                 5286.73
                                                   32.60
       110.00
                  13 2 29
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2208.8 SR 359.7 SS 772.6
CRT -.9566 CRS .9990 CST -.9636
LSA 2357.5 MSA 216.7 SSA 12.6
                                                                   SGT 4657.0 SGR 360.6 SG3 208.5
RRT -.5144 RRF -.6310 RTF .9068
SGB 4671.0 R23 .1895 R13 -.9073
    TOE-1.5447 TRA-1.4009 TC3-4.1836 BAU .9893
    ROE .2640 RRA .0098 RC3 .0246 FAU .04745
FOE-1.0328 FRA -.1016 FC3-2.3224 BSP 14430
BOE 1.5671 BRA 1.4010 BC3 4.1837 FSP -667
                                                                                                                      EL1 2235.5 EL2 103.5 ALF 171.13
                                                                   SG1 4660.7 SG2 309.0 THA 177.71
                                                                                                                                 ARRIVAL DATE DEC 22 1967
                                                                       FLIGHT TIME 156.00
LAUNCH DATE JUL 19 1967
                                                                       DISTANCE 459.260
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 26.327 GAL -3.39 AZL 94.87 MCA 223.79 SMA 126.06 ECC .21399 INC 4.8708 VI 29.306 RP 107.55 LAP 3.37 LOP 159.35 VP 37.615 GAP 9.06 AZP 86.48 TAL 192.65 TAP 56.45 RCA 99.08 APO 153.03 V2 35.231 RC 149.570 GL -33.00 GP 18.24 ZAL 110.62 ZAP 154.76 ETS 43.69 ZAE 128.10 ETE 165.38 ZAC 84.00 ETC 12.36 CLP-162.25
   PLANETOCENTRIC CONIC
    C3 16.789 VHL 4.097 DLA -30.30 RAL 166.24 RAD 6567.7 VEL 11.755 PTH 2.07 VHP 6.425 DPA 20.77 RAP 186.56 ECC 1.2763
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       336.01
                                                   21.97
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       110.00
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                   13 13 4
                                                   32.69
                                                                239.04
                                                                               36.01
       110.00
                                  5280.09
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2260.6 SR 361.5 SS 767.9

CRT -.9661 CRS ..9991 CST -.9646

LSA 2405.6 MSA 209.1 SSA 13.8

EL1 2287.5 EL2 92.2 ALF 171.20
                                                                   SGT 4732.2 SGR 362.0 SG3 205.0
RRT -.4832 RRF -.5834 RTF .9048
SGB 4746.0 R23 .1648 R13 -.9052
    TOE-1.5550 TRA-1.2522 TC3-4.4922 BAU 1.0083
    RDE .2585 RRA .0121 RC3 .0006 FAU .04564
FDE -.9885 FRA -.0166 FC3-2.3534 BSP 14652
                                                                   SG1 4735.4 SG2 316.7 THA 177.87
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BOE 1.5763 BRA 1.2523 BC3 4.4922 FSP -654

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LAUNCH DATE JUL 19 1967
                                                                                            FLIGHT TIME 158.00
                                                                                                                                                                      ARRIVAL DATE DEC 24 1967
    HELIOCENTRIC CONIC
                                                                                            DISTANCE 465.075
      RL 152.03 LAL .00 LOL 295.66 VL 26.270 GAL -3.00 A7L 94.63 MCA 227.03 SMA 125.69 ECC .21567 INC 4.6309 VI 29.306 RP 107.58 LAP 3.39 LOP 162.60 VP 37.568 GAP 9.33 A7P 86.84 TAL 191.06 TAP 58.09 RCA 98.38 APO 152.80 V2 35.225 RC 151.657 GL -31.92 GP 16.94 7AL 108.37 7AP 156.34 ETS 43.23 7AE 128.35 ETE 166.42 7AC 82.19 ETC 11.75 CLP-163.24
    PLANETOCENTRIC CONIC
      C3 16.049 VHL 4.006 DLA -30.52 RAL 169.45 RAD 6567.6 VEL 11.723 PTH
                                                                                                                            2.07 VHP 6.516 DPA 18.66 RAP 188.01 ECC 1.2641
      LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        7 18 30 1148.82
10 29 40 5821.48
          78.11
                                                                 22.38
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                       7 18 30 1148.82
10 29 40 5821.48
                                                                  22.38
                                                                                  344.29
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100.66 14 50 26
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                        13 22 25 5281.22
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                                                                                  239.12
                                                                                                      38.44
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                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                     SGT 4812.8 SGR 367.1 SG3 201.8
RRT -.4590 RRF -.5428 RTF .9039
SGB 4826.8 R23 .1418 R13 -.9043
SGI 4815.7 SG2 325.9 THA 177.99
                                                                                                                                                        ST 2323.9 SR 366.0 SS 766.4
CRT -.9751 CRS .9981 CST -,9662
      TOE-1.5771 TRA-1.0998 TC3-4.7919 BAU 1.0282
     ROE .2558 RRA .0151 RC3 -.0195 FAU .04388
FOE -.9508 FRA .0616 FC3-2.3667 BSP 14929
                                                                                                                                                       LSA 2466.1 MSA 200.8 SSA 15.1
                                                                                                                                                       EL1 2351.2 EL2 80.2 ALF 171.26
      BOE 1.5977 BRA 1.0999 BC3 4.7920 FSP -645
LAUNCH DATE JUL 19 1967
                                                                                            FLIGHT TIME 160.00
                                                                                                                                                                      ARRIVAL DATE DEC 26 1967
                                                                                            DISTANCE 470-874
   HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 26.212 GAL -2.60 AZL 94.42 MCA 230.27 SMA 125.34 ECC .21752 INC 4.4152 V1 29.306 RP 107.60 LAP 3.39 LOP 165.85 VP 37.521 GAP 9.61 AZP 87.17 TAL 189.46 TAP 59.72 RCA 98.07 APO 152.60 V2 35.217 RC 153.730 GL -30.85 GP 15.80 ZAL 105.90 ZAP 157.79 ETS 42.96 ZAE 128.54 ETE 167.32 ZAC 80.30 ETC 11.22 CLP-164.20
    PLANETOCENTRIC CONIC
     C3 15.450 VHL 3.931 DLA -30.83 RAL 172.82 RAD 6567.6 VEL 11.698 PTH
                                                                                                                            2.06 VHP 6.618 DPA 16.69 RAP 189.57 ECC 1.2543
     C3 15.450 VHL 3.931 DLA -30.83 RAL 172.82 RAD 6567.6 VEL 11.698 PTM 2.06 VHP 6.618 DPA 16.69 RAP 189.57 ECC 1.2543 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.27 7 25 54 1159.36 22.81 345.26 37.99 111.32 7 45 13 559.4 25.50 337.42 102.73 10 49 9 5793.70 22.82 274.95 38.00 111.31 12 25 43 5193.7 25.51 267.11 102.073 10 49 9 5793.70 22.82 274.95 38.00 111.31 12 25 43 5193.7 25.51 267.11 110.00 9 43 22 712.02 13.72 307.92 33.24 121.62 9 55 14 112.0 17.80 301.18 110.00 13 30 52 5289.04 32.57 239.71 41.18 101.00 14 59 1 4689.0 33.74 230.67
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                 SGT 4890.3 SGR 374.4 SG3 198.3

RRT -.4395 RRF -.5082 RTF .9035

SGB 4904.6 R23 .1216 R13 -.9037

SGI 4893.1 SG2 336.1 THA 178.06
                                                                                                                                                      ST 2393.0 SR 372.2 SS 765.4
CRT -.9830 CRS .9961 CST -.9681
LSA 2532.5 MSA 192.0 SSA 16.4
      TOE-1.6064 TRA -.9402 TC3-5.0699 BAU 1.0472
     RDE .2553 RRA .0178 RC3 -.0366 FAU .04203
FDE -.9163 FRA .1361 FC3-2.3554 BSP 15211
      BOE 1.6265 BRA .9404 BC3 5.0701 FSP -635
                                                                                                                                                     EL1 2420.8 EL2 67.6 ALF 171.30
                                                                                                                                                                     ARRIVAL DATE DEC 28 1967
                                                                                           FLIGHT TIME 162.00
LAUNCH DATE JUL 19 1967
                                                                                          DISTANCE 476.655
     RL 152.03 LAL .00 LOL 295.66 VL 26.155 GAL -2.19 AZL 94.22 MCA 233.50 SMA 124.98 ECC .21955 INC 4.2189 VI 29.306 RP 107.63 LAP 3.39 LOP 169.09 VP 37.474 GAP 9.89 AZP 87.49 TAL 187.84 TAP 61.34 RCA 97.54 APO 152.43 VZ 35.210 RC 155.789 GL -29.79 GP 14.81 ZAL 103.24 ZAP 159.14 ETS 42.87 ZAE 128.69 ETE 168.12 ZAC 78.34 ETC 10.75 CLP-165.14
   PLANETOCENTRIC CONIC
     C3 14.979 VHL 3.870 DLA -31.19 RAL 176.36 RAD 6567.6 VEL 11.678 PTH 2.05 VMP 6.730 DPA 14.85 RAP 191.21 ECC 1.2465
    C3 14.979 VHL 3.870 DLA -31.19 RAL 176.36 RAD 6567.6 VEL 11.678 PTH 2.05 VHP 6.730 DPA 14.85 RAP 191.21 ECC 1.2465 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.34 7 33 20 1173.47 23.24 346.51 41.16 111.41 7 52 54 573.5 25.94 338.64 103.66 11 9 56 5765.71 23.25 273.03 41.17 111.40 12 46 2 5165.7 25.95 265.16 103.66 11 9 56 5765.71 23.25 273.03 41.17 111.40 12 46 2 5165.7 25.95 265.16 103.66 11 9 56 5765.71 23.25 273.03 41.17 111.40 12 46 2 5165.7 25.95 265.16 110.00 10 3 45 684.53 14.69 306.38 36.70 121.22 10 15 10 84.5 18.72 299.58
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        110.00
                                                               32.39
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SCT 4963.3 SGR 383.2 SG3 194.4

RRT -.4247 RRF -.4794 RTF .9036

SGB 4978.1 R23 .1036 R13 -.9038

SGI 4966.0 SG2 346.7 THA 178.11
                                                                                                                                                      ST 2464.1 SR 379.7 SS 763.3
CRT -.9894 CRS .9930 CST -.9700
LSA 2600.9 MSA 183.0 SSA 17.7
     TOE-1.6402 TRA -.7728 TC3-5.3188 BAU 1.0652
     ROE .2554 RRA .0203 RC3 -.0305 FAU .04016
FOE -.8830 FRA .2067 FC3-2.3209 BSP 15466
BOE 1.6601 BRA .7731 BC3 5.3191 FSP -623
                                                                                                                                                       EL1 2492.6 EL2 54.6 ALF 171.33
                                                                                                                                                                      ARRIVAL DATE DEC 30 1967
                                                                                            FLIGHT TIME 164.00
LAUNCH DATE JUL 19 1967
                                                                                          DISTANCE 482.416
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 26.099 GAL -1.77 AZL 94.04 MCA 236.74 SMA 124.64 ECC .22177 INC 4.0384 VI 29.306 RP 107.65 LAP 3.38 LOF 172.34 VP 37.427 GAP 10.17 AZP 87.78 TAL 186.22 TAP 62.96 RCA 97.00 APO 152.28 V2 35.201 RC 157.834 GL -28.70 GP 13.94 ZAL 100.39 ZAP 160.39 ETS 42.96 ZAE 128.81 ETE 168.81 ZAC 76.32 ETC 10.34 CLP-166.07
   PLANETOCENTRIC CONIC
     C3 14.632 VHL 3.825 DLA -31.59 RAL 180.06 RAD 6567.6 VEL 11.663 PTH
                                                                                                                           2.05 WHP 6.851 DPA 13.10 RAP 192.91 ECC 1.2408
     LNCH A7MTH LNCH TIME L-| TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.37 7 41 21 1189.46 23.65 347.90 44.63 111.58 8 1 11 589.5 26.37 340.01 104.63 11 31 27 5739.26 23.67 271.21 44.63 111.56 13 7 6 5139.3 26.38 263.32
                                                                                                                       111.58 8 1 11
111.56 13 7 6
120.76 10 36 46
102.35 15 14 49
                       7 41 21 1189.46
11 31 27 5739.26
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        110.00
                                         5321.18
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                        13 46 8
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        110.00
                                                                32.13
                                                                                 242.11
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                    SGT 5034.5 SGR 392.8 SG3 190.5

RRT -.4144 RRF -.4565 RTF .9042

SGB 5049.8 R23 .0878 R13 -.9044

SGI 5037.2 SG2 357.3 THA 178.14
                                                                                                                                                     ST 2535.3 SR 388.3 SS 760.1
CRT -.9941 CRS .9888 CST -.9719
     TOE-1.6774 TRA -.5974 TC3-5.5349 BAU 1.0828
     RDE .2591 RRA .0222 RC3 -.0607 FAU .03831
FDE -.8511 FRA .2738 FC3-2.2664 BSP 15724
                                                                                                                                                     LSA 2669.4 MSA 174.3 SSA 19.0
     BDE 1.6973 BRA .5978 BC3 5.5352 FSP -613
                                                                                                                                                      EL1 2564.6 EL2 41.7 ALF 171.34
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ARRIVAL DATE JAN 1 1968

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FLIGHT TIME 166.00
LAUNCH DATE JUL 19 1967
                                                                        DISTANCE 488.158
   RL 152.03 LAL .00 LOL 295.66 VL 26.043 GAL -1.32 A7L 93.87 MCA 239.97 SMA 124.30 ECC .22420 INC 3.8709 V1 29.306 RP .107.68 LAP 3.35 LOP 175.58 VP 37.380 GAP 10.46 A7P 88.06 TAL 184.59 TAP 64.56 RCA 96.43 APO 152.17 V2 35.192 RC 159.863 GL -27.59 GP 13.17 TAL 97.38 ZAP 161.56 ETS 43.24 ZAE 128.91 ETE 169.42 ZAC 74.25 ETC 9.98 CLP-166.97
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 14.406 VHL 3.796 DLA -32.00 RAL 183.92 RAD 6567.6 VEL 11.653 PTH 2.05 VMP 6.981 DPA 11.45 RAP 194.68 ECC 1.2371
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              111.79 8 10 28
                                                                                                                              606.0
                     7 50 22 1206.01
11 53 15 5715.79
                                                                                48.38
                                                    24.03
                                                                349.32
       74.44
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                                                                                                                                             26.78
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        74.44
                                                                                               111.78 13 28 31
120.25 10 59 48
103.29 15 22 29
                                                                                                                             5115.8
                                                                                                                                             26.78
                                                                                                                                                           261.69
                  11 53 15 5715.79
                                                                                 48.38
                                                    24.04
                                                                 269.59
      105.56
                                                                                                                                             20.63
                                                                                                                                                           296.11
                                                                                                                                26.0
                                                    16.73
                                                                 303.07
                                                                                 44.58
      110.00
                   10 49 22
                                                                                                                             4743.8.
                                                                                                                                              33.29
                                                                                                                                                           234.88
                                                                 243.79
                                                                                 51.15
                  13 53 26
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    NID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5089.8 SGR 402.4 SG3 185.9

RRT -.4053 RRF -.4368 RTF .9042

SGB 5105.7 R23 .0749 R13 -.9044

.SGI 5092.5 SG2 367.7 THA 178.15
                                                                                                                         ST 2596.9 SR 397.1 SS 752.3
CRT -.9971 CRS .9833 CST -.9734
    TOE-1.7121 TRA -.4090 TC3-5.6962 BAU 1.0971
    ROE .2630 RRA .0230 RC3 -.0687 FAU .03628
                                                                                                                         LSA 2727.6 MSA 166.4 SSA 20.2
    FOE -.8168 FRA .3412 FC3-2.1803 BSP 15870
BOE 1.7321 BRA .4096 BC3 5.6966 FSP -595
                                                                                                                         EL1 2627.0 EL2 29.7 ALF 171.33
                                                                                                                                     ARRIVAL DATE JAN 3 1968
                                                                         FLIGHT TIME 168.00
LAUNCH DATE JUL 19 1967
                                                                         DISTANCE 493.877
   HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 25.988 GAL -.87 AZL 93.71 HCA 243.20 SMA 123.97 ECC .22684 INC 3.7141 VI 29.306
RP 107.71 LAP 3.31 LOP 178.82 VP 37.332 GAP 10.76 AZP 88.32 TAL 182.96 TAP 66.16 RCA 95.85 APO 152.09 V2 35.183
RC 161.876 GL -26.43 GP 12.49 TAL 94.23 TAP 162.65 ETS 43.70 TAE 129.00 ETE 169.96 TAC 72.14 ETC 9.67 CLP-167.86
   PLANETOCENTRIC CONIC
                                                                                                                                 9.86 RAP 196.50 ECC 1.2354
    C3 14.302 VHL 3.782 DLA -32.39 RAL 187.93 RAD 6567.6 VEL 11.648 PTH 2.04 VHP 7.119 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.58 8 0 39 1222.21 24.35 350.69 52.40 112.05 8 21 1 622.2 27.12 342.78
                                                                                                 112.03 13 49 54
                                                                                                                              5096.4
                                                                  268.25
                                                                                  52.40
                    12 14 58
                                   5696.38
                                                    24.36
       106.42
                                                                                                622.2
                                                                                                                                              27.12
                                                                                                                                                            342.78
                                                                  350.69
                                                                                  52.40
                     8 0 39
                                   1222.21
                                                    24.35
        73.58
                                                                                                                              5096.4
                                                                                                                                                            260.34
                                                    24.36
                                                                  268.25
                                                                                  52,40
       106.42
                    12 14 58
                                  5696.38
                                                                                                119.72 12 52 0
104.33 15 30 22
                                                                                                                                                            272.27
                                                                                                                              5285.2
                                                    17.71
                                                                  279.32
                                                                                 48.95
       110.00
                    11 13 55
                                   5885.17
                                                                                                                              4769.5
                                                                                                                                              33.02
                                                                                                                                                            236.83
                   14 0 53
                                   5369.45
                                                    31.37
                                                                  245.67
                                                                                  55.00
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     RRT -.4015 RRF -.4236 RTF ..9057
SGB 5169.1 R23 ..0634 R13 -.9058
SGI 5155.3 SG2 377.7 THA 178.15
                                                                                                                          ST 2656.3 SR 407.1 SS 744.5
    TDE-1.7494 TRA -.2153 TC3-5.8197 BAU 1.1128
                                                                                                                          CRT -.9985 CRS .9769 CST -.9750
    RDE .2685 RRA .0233 RC3 -.0724 FAU .03443
                                                                                                                          LSA 2783.9 MSA 159.4 SSA 21.4
    FDE -.7854 FRA .4026 FC3-2.0841 BSP 16115
BDE 1.7699 BRA .2166 BC3 5.8201 FSP -584
                                                                                                                          EL1 2687.2 EL2 22.2 ALF 171.30
                                                                                                                                     ARRIVAL DATE JAN 5 1968
                                                                         FLIGHT TIME 170.00
LAUNCH DATE JUL 19 1967
                                                                        DISTANCE 499.574
    RL 152.03 LAL .00 LOL 295.66 VL 25.933 GAL -.39 A7L 93.57 HCA 246.43 SMA 123.64 ECC .22971 INC 3.5661 V1 29.306 RP 107.74 LAP 3.27 LOP 182.06 VP 37.285 GAP 11.07 A7P 88.57 TAL 181.32 TAP 67.75 RCA 95.24 APO 152.04 V2 35.172 RC 163.875 GL -25.23 GP 11.88 7AL 90.96 ZAP 163.68 ETS 44.37 ZAE 129.07 ETE 170.44 ZAC 70.00 ETC 9.40 CLP-168.74
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                8.35 RAP 198.36 ECC 1.2357
     C3 14.323 VML 3.785 DLA -32.74 RAL 192.07 RAD 6567.6 VEL 11.649 PTH 2.05 VHP 7.265 DPA
     LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           27.40
                                                                              56.67
                                                                                             112.33 8 32 57
112.31 14 11 1
                   8 12 19 1237.56
12 36 19 5681.68
8 12 19 1237.56
                                                                 351.98
                                                    24.59
        72.84
                                                                                                                                              27.41
                                                                                                                                                            259.31
                                                                                                                              5081.7
                                                                  267.23
                                                                                  56.68
                                                     24.60
       107.16
                                                                                                112.33 8 32 57
112.31 14 11 1
                                                                                                                                              27.40
                                                                                                                                                            344.06
                                                                                                                               637.6
                                                                  351.98
                                                                                  56.67
                                                    24.59
        72.84
                                                                                                                                              27.41
                                                                                                                                                            259.31
                                                                                  56.68
                                                                                                                              5081.7
                                                                  267.23
                   12 36 19
11 38 57
                                   5681.68
                                                    24.60
       107.16
                                                                                                119.21 13 16 36
105.42 15 38 48
                                                                                                                                              22.35
                                                                                                                                                            270.64
                                                                                                                              5258.5
       110.00
                                                                  277.77
                                                                                  53.57
                                                    18.61
                                   5454.54
                                                                                                                                              32.70
                     14 8 52 5396.74
                                                                                                                              4796.7
                                                                  247.65
                                                                                  59.10
       110.00
                                                    30.89
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2702.6 SR 417.3 SS 733.5
CRT -.9982 CRS .9695 CST -.9765
                                                                     SCT 5210.7 SCR 422.7 SC3 177.6
RRT -.4009 RRF -.4146 RTF .9081
SCB 5227.8 R23 .0529 R13 -.9083
SCI 5213.5 SCZ 387.0 THA 178.13
    TOE-1.7830 TRA -.0118 TC3-5.8884 BAU 1.1276
RDE .2755 RRA .0227 RC3 -.0723 FAU .03269
                                                                                                                          LSA 2827.1 MSA 153.6 SSA 22.4
    FOE -.7535 FRA .4607 FC3-1.9757 BSP 16324
BDE 1.8041 BRA .0256 BC3 5.8886 FSP -574
                                                                                                                          EL1 2734.5 EL2 24.7 ALF 171.24
                                                                                                                                     ARRIVAL DATE JAN 7 1968
                                                                          FLIGHT TIME 172.00
 LAUNCH DATE JUL 19 1967
                                                                         DISTANCE 505.244
    HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.879 GAL .10 AZL 93.43 MCA 249.66 SMA 123.31 ECC .23283 INC 3.4252 VI 29.306 RP 107.78 LAP 3.21 LOP 185.29 VP 37.237 GAP 11.38 AZP 88.81 TAL 179.68 TAP 69.34 RCA 94.60 APO 152.03 VZ 35.162 RC 165.860 GL -23.98 GP 11.34 ZAL 87.61 ZAP 164.66 ETS 45.24 ZAE 129.13 ETE 170.86 ZAC 67.82 ETC 9.18 CLP-169.60
    PLANETOCENTRIC CONIC
                                                                                                                                  6.89 RAP 200.27 ECC 1.2382
     C3 14.475 VHL 3.805 DLA -33.03 RAL 196.31 RAD 6567.6 VEL 11.656 PTH 2.05 VHP 7.421 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               112.62 8 46 18
112.61 14 31 34
112.62 8 46 18
                                                                                                                                                            345.21
                                                                                                                                651.6
                    8 25 27
12 57 2
                                                     24.74
                                                                  353.12
                                                                                  61.17
                                   1251.63
         72.24
                                                                                                                                                             258.66
                                                                                                                               5072.3
                                                                                                                                               27.59
                                                                                   61.17
                                                     24.75
                                                                  266.58
                                  5672.29
        107.76
                                                                                                                                                             345.21
                                                                                                                                651.6
                                                                  353.12
                                                                                   61.17
                                   1251.63
                                                     24.74
                      8 25 27
         72.24
                                                                                                112.61 14 31 34
118.75 13 41 1
106.47 15 48 17
                                                                                                                               5072.3
                                                                                                                                               27.59
                                                                                                                                                             258.66
                                                                                   61.17
                                                     24.75
                                                                  266.58
       107.76
                    12 57 2
                                    5672.29
                                                                                                                                               23.03
                                                                                                                                                             269.25
                    12 3 45
14 17 54
                                                                                                                              5236.1
                                                                                   58.37
                                                     19.35
                                                                  276.45
                                    5836.13
        110.00
                                                                                                                                               32.34
                                                                                                                                                             240.93
                                                                                                                              4823.8
                                                                                   63.43
                                    5423.83
                                                     30.39
                                                                  249.60
        110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2718.0 SR 425.0 SS 707.0

CRT -.9963 CRS ..9586 CST -.9762

LSA 2836.2 MSA 152.4 SSA 23.1

EL1 2750.8 EL2 35.9 ALF 171.14
                                                                     SGT 5240.9 SGR 430.0 SG3 171.6
RRT -.3946 RRF -.3999 RTF .9060
     TDE-1.8010 TRA .2109 TC3-5.8724 BAU 1.1365
RDE .2822 RRA .0198 RC3 -.0734 FAU .03040
FDE -.7069 FRA .5268 FC3-1.8181 BSP 16247
                                                                     SCB 5258.5 R23 .0439 R13 -.9061
SG1 5243.6 SG2 394.9 THA 178.13
     BDE 1.8230 BRA .2118 BC3 5.8728 FSP -535
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FLIGHT TIME 174.00
                                                                                                                                                        ARRIVAL DATE JAN 9 1968
LAUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 510.887
    RL 152.03 LAL .00 LOL 295.66 VL 25.825 GAL .61 A7L 93.29 MCA 252.89 SMA 123.00 ECC .23623 INC 3.2902 V1 29.306
RP 107.81 LAP 3.14 LOP 188.52 VP 37.189 GAP 11.71 A7P 89.03 TAL 178.03 TAP 70.92 RCA 93.94 APO 152.05 V2 35.151
RC 167.829 GL -22.69 GP 10.85 ZAL 84.19 ZAP 165.58 ETS 46.35 ZAE 129.19 ETE 171.23 ZAC 65.61 ETC 8.99 CLP-170.44
   PLANETOCENTRIC CONIC
     C3 14.766 VHL 3.843 OLA -33.24 RAL 200.62 RAD 6567.6 VEL 11.668 PTH 2.05 VHP 7.586 OPA
                                                                                                                                                    5.48 RAP 202.21 FCC 1.2430
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 39 57 1264.37
13 16 55 5668.41
8 39 57 1264.37
13 16 55 5668.41
12 27 21 5820.60
14 28 42 5448.21
        71.82
                                                           24.77
                                                                           354.12
                                                                                            65.85
                                                                                                             112.91
                                                                                                                             9 1 1
                                                                                                                                                 664.4
                                                                                                                                                                 27.65
                                                                                                                                                                                  346.22
                                                                                                             112.90 14 51 24
        108.18
                                                            24.78
                                                                           266.29
                                                                                             65.86
                                                                                                                                                5068.4
                                                                                                                                                                   27.66
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         71.82
                                                           24.77
                                                                           354.12
                                                                                             65.85
                                                                                                              112.91
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                                                                                                                                                 664.4
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                                                                                                             112.90 14 51 24
118.42 14 4 21
107.39 15 59 30
        108.18
                                                           24.78
                                                                           266.29
                                                                                             65.86
                                                                                                                                                5068.4
                                                                                                                                                                  27.66
                                                                                                                                                                                  254.39
       110.00
                                                           19.85
                                                                           275.53
                                                                                             63.30
                                                                                                                                                5220.6
                                                                                                                                                                  23.49
                                                                                                                                                                                  268.28
       110.00
                                                           29.90
                                                                           251.34
                                                                                             67.97
                                                                                                                                               4848.2
                                                                                                                                                                  31.99
                                                                                                                                                                                  242 74
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              SGT 5310.4 SGR 440.4 SG3 168.5

RRT -.4022 RRF -.4028 RTF .9108

SGB 5328.6 R23 .0375 R13 -.9109

SGI 5313.4 SG2 403.0 THA 178.08
    TDE-1.8332 TRA .4296 TC3-5.8397 BAU 1.1529
RDE .2927 RRA .0171 RC3 -.0663 FAU .02899
                                                                                                                                           ST 2746.3-SR 436.5 SS 697.4
CRT -.9931 CRS .9497 CST -.9777
                                                                                                                                          LSA 2862.9 MSA 150.5 SSA 23.5
EL1 2780.4 EL2 50.4 ALF 171.03
    FOE -.6824 FRA .5782 FC3-1.6999 BSP 16682
BDE 1.8564 BRA .4300 BC3 5.8400 FSP -545
                                                                                    FLIGHT TIME 176.00
                                                                                                                                                        ARRIVAL DATE JAN 11 1968
LAUNCH DATE JUL 19 1967
                                                                                    DISTANCE 516.499
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.772 GAL 1.14 A7L 93.16 MCA 256.11 SMA 122.69 ECC .23991 INC 3.1599 V1 29.306 RP 107.84 LAP 3.07 LOP 191.76 VP 37.142 GAP 12.05 AZP 89.24 TAL 176.39 TAP 72.50 RCA 93.25 APO 152.12 V2 35.139 RC 169.783 GL -21.36 GP 10.41 ZAL 80.75 ZAP 166.45 ETS 47.70 ZAE 129.23 ETE 171.57 ZAC 63.39 ETC 8.85 CLP-171.28
   PLANETOCENTRIC CONIC
    C3 15.207 VHL 3.900 DLA -33.36 RAL 204.96 RAD 6567.6 VEL 11.687 PTH 2.06 VHP 7.761 DPA
                                                                                                                                                    4.12 RAP 204.19 ECC 1.2503
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 55 47 1275,49
13 35 43 5670,44
8 55 47 1275,49
13 35 43 5670,44
        71.58
                                                           24.68
                                                                           354.94
                                                                                             70.69
                                                                                                           113.19
                                                                                                                           9 17 3
                                                                                                                                                675.5
                                                                                                                                                                  27.60
                                                                                                                                                                                  347.06
                                                                                                             113.18 15 10 13
113.19 9 17 3
113.18 15 10 13
118.30 14 25 30
108.09 16 13 13
       106.42
                                                            24.69
                                                                           266.41
                                                                                             70.69
                                                                                                                                                5070.4
                                                                                                                                                                   27.61
                                                                                                                                                                                  258.52
        71.58
                                                           24.68
                                                                           354.94
                                                                                             70.69
                                                                                                                                                 675.5
                                                                                                                                                                   27.60
                                                                                                                                                                                  347 06
       108.42
                                                           24.69
                                                                           266.41
                                                                                             70.69
                                                                                                                                                5070.4
                                                                                                                                                                   27.61
                                                                                                                                                                                  258.52
                     12 48 35 5815.00
14 42 6 5466.98
       110.00
                                                           20.03
                                                                           275.19
                                                                                             68.27
                                                                                                                                                5215.0
                                                                                                                                                                   23.65
                                                                                                                                                                                  267.92
       110.00
                                                          29.51
                                                                           252.66
                                                                                             72.73
                                                                                                                                                4867.0
                                                                                                                                                                   31.70
                                                                                                                                                                                  244.13
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    TDE-1.8464 TRA .6656 TC3-5.7257 BAU 1.1641
                                                                              SGT 5354.6 SGR 448.4 SG3 164.0
RRT -.4053 RRF -.4012 RTF .9128
SGB 5373.4 R23 .0318 R13 -.9129
                                                                                                                                          ST 2738.8 SR 445.5 SS 675.1

CRT -.9884 CRS .9375 CST -.9781

LSA 2851.5 MSA 152.6 SSA 23.5
    ROE .3031 RRA .0126 RC3 -.0601 FAU .02723
FOE -.6460 FRA .6330 FC3-1.5500 BSP 16838
BOE 1.8711 BRA .6657 BC3 5.7260 FSP -531
                                                                             SG1 5357.7 SG2 409.7 THA 178.04
                                                                                                                                         EL1 2773.9 EL2 66.9 ALF 170.86
                                                                                                                                                       ARRIVAL DATE JAN 13 1968
LAUNCH DATE JUL 19 1967
                                                                                   FLIGHT TIME 178.00
                                                                                  DISTANCE 522.078
    RL 152.03 LAL .00 LOL 295.66 VL 25.720 GAL 1.69 AZL 93.03 MCA 259.33 SMA 122.38 ECC .24391 INC 3.0333 V1 29.306 RP 107.88 LAP 2.98 LOP 194.98 VP 37.094 GAP 12.40 AZP 89.44 TAL 174.74 TAP 74.07 RCA 92.53 APO 152.23 V2 35.128 RC 171.722 GL -20.01 GP 10.01 ZAL 77.30 ZAP 167.27 ETS 49.33 ZAE 129.28 ETE 171.86 ZAC 61.14 ETC 8.75 CLP-172.10
   PLANETOCENTRIC CONIC
    C3 15.810 VHL 3.976 OLA -53.38 RAL 209.30 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 7.947 OPA 2.81 RAP 206.20 ECC 1.2602
    C3 15.810 VHL 5.976 DLA -33.38 RAL 209.30 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 7.947 DPA 2.81 RAP 206.20 ECC 1.2602 LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.55 9 12 51 1284.97 24.45 355.56 75.63 113.46 9 34 16 685.0 27.41 347.71 108.45 13 53 14 5678.52 24.47 266.93 75.64 113.44 15 27 52 5078.5 27.42 259.07 108.45 13 53 14 5678.52 24.47 266.93 75.64 113.46 9 34 16 685.0 27.41 347.71 108.45 13 53 14 5678.52 24.47 266.93 75.64 113.46 15 27 52 5078.5 27.42 259.07 110.00 13 6 28 5821.90 19.81 275.60 73.19 118.44 14 43 30 5221.9 23.45 268.36
                                                                                                          113.46 9 34 16

113.44 15 27 52

113.46 9 34 16

113.44 15 27 52

113.44 15 27 52

118.44 14 43 30

108.47 16 30 4
                                     5477.62
                     14 58 47
                                                                          253.40
                                                                                            77.70
                                                                                                                                               4877.6
                                                                                                                                                                  31.53
                                                                                                                                                                                 244.91
       110.00
                                                          29.29
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 5396.0 SGR 455.5 SG3 159.5
RRT -.4099 RRF -.4016 RTF ..9153
SGB 5415.2 R23 ..0265 R13 -.9153
SGI 5399.3 SG2 415.2 THA 178.01
                                                                                                                                         ST 2711.1 SR 453.5 SS 650.1
CRT -.9820 CRS .9232 CST -.9781
LSA 2820.1 MSA 157.5 SSA 23.1
    TDE-1.8504 TRA .9125 TC3-5.5569 BAU 1.1746
    RDE .3147 RRA .0067 RC3 -.0521 FAU .02555
    FDE -.6086 FRA .6865 FC3-1.3990 BSP 17008
BDE 1.8770 BRA .9125 BC3 5.5572 FSP -519
                                                                                                                                          EL1 2747.5 EL2 84.6 ALF 170.66
                                                                                                                                                        ARRIVAL DATE JAN 15 1968
                                                                                    FLIGHT TIME 180.00
LAUNCH DATE JUL 19 1967
                                                                                   DISTANCE 527.621
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.668 GAL 2.27 AZL 92.91 MCA 262.56 SMA 122.08 ECC .24826 INC 2.9094 VI 29.306
RP 107.92 LAP 2.88 LOP 198.21 VP 37.047 GAP 12.77 AZP 89.62 TAL 173.09 TAP 75.65 RCA 91.77 APO 152.39 V2 35.116
RC 173.647 GL -18.64 GP 9.65 ZAL 73.88 ZAP 168.05 ETS 51.27 ZAE 129.31 ETE 172.13 ZAC 58.88 ETC 8.69 CLP-172.91
   PLANETOCENTRIC CONIC
    C3 16.591 VHL 4.073 DLA -33.29 RAL 213.58 RAD 6567.7 VEL 11.746 PTH
                                                                                                                 2.07 VHP 8.144 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TÎME PO CST TIM INJ 2 LAT INJ 2 LONG
                     9 31 2 1292.56
14 9 13 5692.90
                                                                                                                             9 52 35
                                                                                                                                                 692.6
                                                                                                                                                                  27.09
                                                          24.09
                                                                          355.98
                                                                                            80.64
                                                                                                            113.70
        71.72
                                                                                                             113.69 15 44 6
                                                                          267.87
                                                                                             80.64
                                                                                                                                                5092.9
                                                                                                                                                                  27.09
                                                                                                                                                                                 260.05
                                                           24.10
       108.28
                       9 31 2 1292.56
14 9 13 5692.90
                                                                                                             113.70
                                                                                                                             9 52 35
                                                                                                                                                 692.6
                                                                                                                                                                  27.09
                                                                                                                                                                                  348.17
                                                           24.09
                                                                          355.98
                                                                                             80.64
         71.72
                                                                                                             113.69 15 44 6
118.87 14 58 0
108.54 16 50 7
                     14 9 13
                                                                                                                                                                                 260.05
                                                          24.10
                                                                          267.87
                                                                                             80.64
                                                                                                                                                5092.9
                                                                                                                                                                  27.09
       108.28
                                                                                                                                               5242.0
                                                                                                                                                                                 269.61
                     13 20 38
                                      5841.99
                                                           19.15
                                                                          276.79
                                                                                             78.01
                                                                                                                                                                  22.85
       110.00
                     15 18 48
       110.00
                                                                                                                                               4879.5
                                                                                                                                                                 31.49
                                                          29.25
                                                                          253.53
                                                                                            82.86
                                                                                                                                                                                 245.05
   DIFFERENTIAL CORRECTIONS
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             SGT 5426.5 SGR 461.3 SG3 155.1
RRT -.4146 RRF -.4026 RTF ..9172
SGB 5446.1 R23 .0220 R13 -.9173
SGI 5429.9 SG2 419.5 THA 177.97
                                                                                                                                         ST 2659.2 SR 459.9 SS 621.6
CRT -.9736 CRS .9056 CST -.9775
    TOE-1.8404 TRA 1.1754 TC3-5.3271 BAU 1.1816
    ROE .3270 RRA -.0007 RC3 -.0440 FAU .02382
FOE -.5688 FRA .7411 FC3-1.2431 89P 17075
                                                                                                                                         LSA 2764.3 MSA 165.9 SSA 22.5
    BOE 1.8693 BRA 1.1754 BC3 5.3273 FSP -503
                                                                                                                                          EL1 2696.7 EL2 103.5 ALF 170.43
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ARRIVAL DATE JAN 17 1968

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FLIGHT TIME 182.00
LAUNCH DATE JUL 19 1967
                                                                              DISTANCE 533.121
  HELIOCENTRIC CONIC
   RL 152.03 LAL .00 LOL 295.66 VL 25.617 GAL 2.87 AZL 92.79 MCA 265.77 SMA 121.79 ECC .25297 INC 2.7874 VI 29.306 RP 107.96 LAP 2.78 LOP 201.43 VP 37.000 GAP 13.15 AZP 89.79 TAL 171.45 TAP 77.22 RCA 90.98 APO 152.60 V2 35.103 RC 175.555 GL -17.27 GP 9.33 ZAL 70.52 ZAP 168.77 ETS 53.54 ZAE 129.34 ETE 172.36 ZAC 56.60 ETC 8.67 CLP-173.72
   PLANETOCENTRIC CONIC
                                                                                                                                              .31 RAP 210.30 ECC 1.2891
    C3 17.569 VHL 4.192 OLA -33.10 RAL 217.78 RAD 6567.7 VEL 11.788 PTH
                                                                                                           2.08 VHP 8.354 DPA
   C3 17.569 VHL 4.192 OLA -33.10 RAL 217.78 RAD 6567.7 VEL 11.788 PTH 2.08 VHP 8.354 DPA .31 RAP 210.30 ECC 1.2891 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.90 14 23 34 5713.46 23.61 269.22 85.68 113.89 15 58 47 5113.5 26.64 261.45 107.90 14 23 34 5713.46 23.61 269.22 85.68 113.89 15 58 47 5113.5 26.64 261.45 107.90 14 23 34 5713.46 23.61 269.22 85.68 113.89 15 58 47 5113.5 26.64 261.45 110.00 13 31 26 5873.71 18.10 278.65 82.71 119.51 15 9 19 5273.7 21.89 271.57 110.00 15 41 29 5474.18 29.36 253.16 88.15 108.35 17 12 43 4874.2 31.58 244.66
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2596.2 SR 465.4 SS 594.9
CRT -.9634 CRS .8862 CST -.9771
                                                                          SGT 5460.9 SGR 466.5 SG3 150.8
RRT -.4212 RRF -.4067 RTF .9200
    TDE-1.8250 TRA 1.4460 TC3-5.0653 BAU 1.1898
    RDE .3404 RRA -.0094 RC3 -.0348 FAU .02225
                                                                          SGB 5480.8 R23 .0186 R13 -.9200
SG1 5464.4 SG2 422.8 THA 177.93
                                                                                                                                   LSA 2698.1 MSA 176.2 SSA 21.6
    FOE -.5316 FRA .7927 FC3-1.0965 BSP 17241
BDE 1.8564 BRA 1.4460 BC3 5.0654 FSP -493
                                                                                                                                   EL1 2634.8 EL2 122.9 ALF 170.18
                                                                                                                                                ARRIVAL DATE JAN 19 1968
                                                                               FLIGHT TIME 184.00
  HELIOCENTRIC CONIC
                                                                               DISTANCE 538.576
    RL 152.03 LAL .00 LOL 295.66 VL 25.567 GAL 3.50 AZL 92.67 HCA 268.99 SMA 121.50 ECC .25810 INC 2.6665 VI 29.306 RP 107.99 LAP 2.67 LOP 204.65 VP 36.953 GAP 13.56 AZP 89.95 TAL 169.81 TAP 78.80 RCA 90.14 APO 152.86 V2 35.091 RC 177.448 GL -15.91 GP 9.03 ZAL 67.24 ZAP 169.45 ETS 56.19 ZAE 129.37 ETE 172.58 ZAC 54.32 ETC 8.69 CLP-174.52
   PLANETOCENTRIC CONIC
                                                                                                                                             -.88 RAP 212.38 ECC 1.3088
                                                                                                            2.10 VHP 8.578 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.69 10 10 10 1302.20 22.99 356.19 90.69 114.09 10 31 52 702.2 26.04 348.47
    C3 18.765 VHL 4.332 DLA -32.81 RAL 221.85 RAD 6567.8 VEL 11.838 PTH
                                                                                                        114.07 16 11 44
114.09 10 31 52
114.07 16 11 44
120.26 13 50 3
107.99 17 36 51
                                                                                                                                                                         263.28
                                                                                        90.70
                                                                                                                                        5140.4
                                                                                                                                                          26.05
                    14 36 4 5740.44
                                                         23.00
                                                                       270.99
                                                                                                                                          702.2
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                                                                                        90.69
                     10 10 10
                                    1302.20
                                                         22.99
                                                                       356.19
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                    14 36 4 5740.44
13 39 37 626.31
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                                                                                        90.70
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                                                        23.00
                                                                       270.99
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                                                                                        87.28
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                                                        16,72
                                                                       303.09
       110.00
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                                    5464.33
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                                                                       252.47
                     16 5 47
                                                        29.57
                                                                                        93.51
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5488.9 SGR 470.4 SG3 146.5
RRT - .4282 RRF - .4113 RTF .9226
SGB 5509.1 R23 .0153 R13 - .9226
SGI 5492.7 SG2 424.8 THA 177.89
                                                                                                                                   ST 2517.6 SR 469.0 SS 567.1
CRT -.9507 CRS .8630 CST -.9764
     TOE-1.7981 TRA 1.7303 TC3-4.7672 BAU 1.1960
     ROE .3545 RRA -.0195 RC3 -.0260 FAU .02071
                                                                                                                                    LSA 2616.1 MSA 189.0 SSA 20.6
    FOE -.4934 FRA .8443 FC3 -.9553 BSP 17384
BOE 1.8327 BRA 1.7304 BC3 4.7672 FSP -482
                                                                                                                                    EL1 2556.9 EL2 143.2 ALF 169.92
                                                                                                                                               ARRIVAL DATE JAN 21 1968
                                                                               FLIGHT TIME 186.00
LAUNCH DATE JUL 19 1967
                                                                              DISTANCE 543.980
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.517 GAL 4.16 A7L 92.55 MCA 272.20 SMA 121.22 ECC .26367 INC 2.5459 VI 29.306 RP 108.03 LAP 2.54 LOP 207.87 VP 36.906 GAP 13.98 A7P 90.10 TAL 168.18 TAP 80.39 RCA 89.26 APO 153.18 V2 35.078 RC 179.325 GL -14.57 GP 8.76 TAL 64.06 ZAP 170.08 ETS 59.27 ZAE 129.38 ETE 172.77 ZAC 52.03 ETC 8.76 CLP-175.32
    PLANETOCENTRIC CONIC
    C3 20.207 VHL 4.495 DLA -32.44 RAL 225.77 RAD 6567.8 VEL 11.899 PTH 2.11 VHP 8.818 DPA -2.03 RAP 214.49 ECC 1.3326
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     114.23 10 52 40

114.22 16 22 48

114.22 16 22 48

121.04 13 57 9

107.55 18 1 37
                                                                                                                                          703.8 25.33 348.30
         73.48
                                                                                     95.67
                     10 30 56 1303.81
14 46 34 5773.89
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                                                        22.25
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                     14 46 34
10 30 56
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                                                                       273.20
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        106.52
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                                    1303.81
5773.89
                                                                       355.95
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         73.48
                                                         22.25
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       106.52
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                     13 45 56
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                                   5452.43
       110.00
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                                                                       251.63
                                                                                        98.88
                     16 30 44
                                                    29.82
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RET -.4356 RRF -.4169 RTF ..9253
SGB 5532.0 R23 .0126 R13 -.9253
SGB 5515.6 SG2 425.6 THA 177.85
                                                                                                                                    ST 2428.7 SR 470.8 SS 540.3
     TDE-1.7612 TRA 2.0289 TC3-4.4424 BAU 1.2001
                                                                                                                                   CRT -.9351 CRS .8361 CST -.9755
LSA 2523.9 MSA 203.7 SSA 19.6
     RDE .3692 RRA -.0310 RC3 -.0178 FAU .01920
     FDE -.4559 FRA .8961 FC3 -.8225 BSP 17500
                                                                                                                                    EL1 2468.4 EL2 164.1 ALF 169.68
     BOE 1.7994 BRA 2.0292 BC3 4.4425 FSP -470
                                                                                                                                                ARRIVAL DATE JAN 23 1968
LAUNCH DATE JUL 19 1967
                                                                                FLIGHT TIME 188.00
                                                                                DISTANCE 549.325
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.468 GAL 4.86 AZL 92.42 HCA 275.41 SMA 120.94 ECC .26973 INC 2.4249 VI 29.306 RP 108.07 LAP 2.41 LOP 211.08 VP 36.860 GAP 14.43 AZP 90.23 TAL 166.56 TAP 81.98 RCA 88.32 APO 153.56 V2 35.065 RC 181.185 GL -13.26 GP 8.51 ZAL 60.99 ZAP 170.65 ETS 62.81 ZAE 129.39 ETE 172.94 ZAC 49.73 ETC 8.88 CLP-176.12
    PLANETOCENTRIC CONIC
     C3 Z1.925 VHL 4.682 DLA -31.98 RAL 229.52 RAD 6567.9 VEL 11.971 PTH 2.13 VHP 9.075 DPA -3.15 RAP 216.62 ECC 1.3608
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     100.59
                                                                                                      114.34 11 14 13
114.33 16 31 47
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                     10 52 30 1302.79
14 54 53 5814.12
         74.47 10 52 30
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                                                                       355.47
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        105.53
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                                    1302.79
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                    10 52 30
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                                                         21.43
                                                                        275.86
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107.10 18 26 18
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                                                                                        96.05
                     13 50 56
                                       724.56
                                                         13.27
                                                                        308.61
                                                                                                                                       4840.3
                                                                                                                                                         32.10
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                                                         30.06
                                                                                       104.21
                      16 55 38
                                       5440.34
                                                                       250.78
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCOUNT.

SGT -527.2 SGR 474.5 SG3 138.4

RRT -.4429 RRF -.4225 RTF .9277

SGB 5547.5 R23 .0103 R13 -.9277

SGI 5531.2 SG2 425.2 THA 177.81
                                                                                                                                    ST 2330.2 SR 470.5 SS 514.5
CRT -.9157 CRS .8037 CST -.9744
      TOE-1.7114 TRA 2.3463 TC3-4.0951 BAU 1.2004
     ROE .3842 RRA -.0442 RC3 -.0109 FAU .01765
FDE -.4177 FRA .9499 FC3 -.6971 BSP 17520
                                                                                                                                   LSA 2422.2 MSA 220.6 SSA 18.6
                                                                                                                                    EL1 2370.0 EL2 186.0 ALF 169.46
     BOE 1.7540 BRA 2.3467 BC3 4.0951 FSP -456
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FLIGHT TIME 190.00
                                                                                                                                                            ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUL 19 1967
                                                                                      DISTANCE 554.603
   HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 25.419 GAL 5.59 AZL 92.30 MCA 278.62 SMA 120.67 ECC .27633 INC 2.3027 V1 29.306
RP 108.11 LAP 2.28 LOP 214.29 VP 36.814 GAP 14.92 AZP 90.35 TAL 164.96 TAP 83.58 RCA 87.33 APO 154.02 V2 35.052
RC 183.028 GL -11.99 GP 8.29 ZAL 58.06 ZAP 171.16 ETS 66.86 ZAE 129.39 ETE 173.10 ZAC 47.44 ETC 9.05 CLP-176.92
    PLANETOCENTRIC CONIC
     C3 23.958 VHL 4.895 DLA -31.47 RAL 233.07 RAD 6568.0 VEL 12.056 PTH 2.15 VHP 9.351 DPA -4.22 RAP 218.77 ECC 1.3943
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 14.71 105.42 114.42 11 36 30 19.00 105.43 114.41 16 38 34 14.71 105.42 114.42 11 36 30 19.00 105.43 114.41 16 38 34 15.58 100.26 122.48 14 7 56 19.99 109.48 106.68 18 50 26 MID-COURSE EXECUTION ACCURACY SCT 5541.5 568 474 0 563 134 5
                                                                                                                                                                  23.61
                                                                                                                                                     698.7
                      11 14 51 1298.74
15 0 53 5861.33
         75.67
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        104.33
                       15 0 53
                                         5861.33
                                                             20.50
                                                                             279.00
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                                       1298.74
5861.33
         75.67
                      11 14 51
                                                             20.49
                                                                             354.71
                                                                                                                                                      698.7
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        104.33
                       15 0 53
                                                             20.50
                                                                             279.00
                                                                                                                                                    5261.3
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        110.00
                      13 54 58
                                         778.81
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                                                                             311.58
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                                       5429.26
                       17 19 57
                                                             30.28
                                                                             249.99
                                                                                                                                                    4829.3
                                                                                                                                                                       32.26
                                                                                                                                                                                       241.33
        110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5541.5 SGR 474.9 SG3 134.5

RRT -.4512 RRF -.4299 RTF .9306

SGB 5561.8 R23 .0084 R13 -.9307

SGI 5545.7 SG2 423.5 THA 177.77
                                                                                                                                               ST 2234.6 SR 468.7 SS 492.4
CRT -.8929 CRS .7692 CST -.9739
     TOE-1.6585 TRA 2.6748 TC3-3.7483 BAU 1.2006
    ROE .3998 RRA -.0586 RC3 -.0045 FAU .01624
FOE -.3829 FRA 1.0023 FC3 -.5869 BSP 17632
BDE 1.7060 BRA 2.6754 BC3 3.7483 FSP -446
                                                                                                                                               LSA 2323.6 MSA 237.6 SSA 17.6
                                                                                                                                                EL1 2273.8 EL2 207.3 ALF 169.30
LAUNCH DATE JUL 19 1967
                                                                                       FLIGHT TIME 192.00
                                                                                                                                                             ARRIVAL DATE JAN 27 1968
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 559.806
    RL 152.03 LAL .00 LOL 295.66 VL 25.372 GAL 6.36 AZL 92.18 MCA 281.83 SMA 120.41 ECC .28353 INC 2.1785 V1 29.306 RP 108.16 LAP 2.13 LOP 217.50 VP 36.769 GAP 15.43 AZP 90.45 TAL 163.36 TAP 85.19 RCA 86.27 APO 154.54 V2 35.039 RC 184.853 GL -10.76 GP 8.09 ZAL 55.26 ZAP 171.60 ETS 71.44 ZAE 129.37 ETE 173.25 ZAC 45.15 ETC 9.28 CLP-177.72
   PLANETOCENTRIC CONIC
     C3 26.350 VHL 5.133 0LA -30.90 RAL 236.42 RAD 6568.1 VEL 12.154 PTH
                                                                                                                      2.18 VHP 9.648 OPA
                                                                                                                                                       -5.26 RAP. 220.93 ECC 1.4337
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             110.15
        77.09
                       11 38 15
                                       1290.64
                                                             19.49
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                                                                                                              114.47 11 59 45
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         77.09
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                                                                                              110.15
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835.03
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        102.91
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                       13 58 17
       110.00
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                      17 43 23 5419.94
       110.00
                                                                             249.32
                                                             30.46
                                                                                              114.65
                                                                                                                                                   4819.9
                                                                                                                                                                        32.39
                                                                                                                                                                                        240.54
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RIT - 4597 RRF - 4374.0 SG3 130.7
RRT - 4597 RRF - 4377 RTF . 9337
SGB 5570.8 R23 .0067 R13 - .9338
SG1 5554.9 SG2 420.6 THA 177.74
                                                                                                                                               ST 2140.1 SR 464.9 SS 472.9
CRT -.8659 CRS .7308 CST -.9736
     TDE-1.5975 TRA 3.0208 TC3-3.4007 BAU 1.1980
    RDE .4157 RRA -.0743 RC3 .0006 FAU .01487
FDE -.3491 FRA 1.0560 FC3 -.4885 BSP 17717
BDE 1.6507 BRA 3.0218 BC3 3.4007 FSP -435
                                                                                                                                               LSA 2225.9 MSA 255.0 SSA 16.7
ELI 2178.1 EL2 228.5 ALF 169.23
                                                                                      FLIGHT TIME 194.00
                                                                                                                                                            ARRIVAL DATE JAN 29 1968
LAUNCH DATE JUL 19 1967
                                                                                     DISTANCE 564.921
   HELIOCENTRIC CONTC
    RL 152.03 LAL .00 LOL 295.66 VL 25.325 GAL 7.18 AZL 92.05 MCA 285.03 SMA 120.15 ECC .29140 INC 2.0514 V1 29.306
RP 108.20 LAP 1.98 LOP 220.71 VP 36.723 GAP 15.98 AZP 90.53 TAL 161.79 TAP 86.82 RCA 85.13 APO 155.16 V2 35.025
RC 186.660 GL -9.59 GP 7.90 TAL 52.62 ZAP 171.97 ETS 76.56 ZAE 129.35 ETE 173.38 ZAC 42.87 ETC 9.58 CLP-178.53
    RC 186.660 GL
   PLANETOCENTRIC CONIC
     C3 29.156 VHL 5.400 DLA -30.29 RAL 239.57 RAD 6568.2 VEL 12.269 PTH 2.21 VHP 9.969 DPA -6.26 RAP 223.11 ECC 1.4798
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               52.08 114.78 114.48 12 24 21 09.04 114.79 114.47 15 16 3 52.08 114.78 114.47 15 16 3 17.69 108.35 123.53 14 15 54 48.81 19.71 106.05 19 35 56 MID-COURSE EXECUTION ACCURACY SGT 5554.8 SGR 471.8 SGR 127
                                                                                                                                                  676.9
                                                                                                                                                                   21.57
                    12 3 4 1276.93
                                                            18.42
                                                                            352.08
         78.76
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        101.24
                     15 4 31
                                         692.40
                                                             18.44
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                      12 3 4
                                       1276.93
                                                             18.42
                                                                             352.08
         78.76
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                                       692.40
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        101.24
                     15 4 31
                                                           18.44
                                                                             309.04
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        110.00
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                                          892.52
                                                              7.08
                                                                             317.69
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                       18 5 43 5412.85
                                                            30.60
                                                                             248.81
                                                                                                                                                   4812.8
                                                                                                                                                                       32.49
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                               SGT 5554.8 SGR 471.8 SG3 127.1
RRT -.4684 RRF -.4460 RTF .9369
SG8 5574.8 R23 .0053 R13 -.9369
SG1 5559.2 SG2 416.5 THA 177.71
                                                                                                                                              ST 2051:0 SR 459.4 SS 456.8
CRT -.8346 CRS .6896 CST -.9739
LSA 2133.5 MSA 271.9 SSA 15.9
EL1 2087.0 EL2 248.7 ALF 169.26
     TOE-1.5311 TRA 3.3849 TC3-3.0590 BAU 1.1924
    ROE .4318 RRA -.0914 RC3 .0044 FAU .01352
FOE -.3171 FRA 1.1111 FC3 -.4014 BSP 17790
     BOE 1.5908 BRA 3.3861 BC3 3.0590 FSP -424
                                                                                                                                                            ARRIVAL DATE JAN 31 1968
LAUNCH DATE JUL 19 1967
                                                                                      FLIGHT TIME 196.00
                                                                                     DISTANCE 569.936
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.279 GAL 8.04 AZL 91.92 MCA 288.23 SMA 119.89 ECC .30001 INC 1.9206 V1 29.306
RP 108.24 LAP 1.82 LOP 223.91 VP 36.679 GAP 16.57 AZP 90.60 TAL 160.24 TAP 88.48 RCA 83.92 APO 155.86 V2 35.012
RC 188.449 GL -8.47 GP 7.73 ZAL 50.12 ZAP 172.24 ETS 82.20 ZAE 129.30 ETE 173.50 ZAC 40.60 ETC 9.95 CLP-179.34
   PLANETOCENTRIC CONIC
   C3 32.440 VHL 5.696 DLA -29.66 RAL-242.51 RAD 6568.3 VEL 12.402 PTH 2.24 VHP 10.317 OPA -7.22 RAP 225.29 ECC 1.5559 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.80 12 30 12 1254.58 17.51 349.88 119.29 114.46 12 51 6 654.6 20.47 342.53 199.20 15 0 49 768.35 17.53 314.16 119.30 114.45 15 13 38 168.4 20.48 306.81 100.00 14 35 21 849.82 14.49 318.80 117.90 116.44 14 49 31 249.8 17.92 311.70 100.00 15 38 22 648.35 20.20 306.57 120.62 112.52 15 49 10 48.3 23.07 298.96 110.00 14 3 20 950.78 4.88 320.76 112.25 123.87 14 19 11 350.8 9.30 314.45 110.00 18 26 52 5408.19 30.68 248.48 124.65 105.87 19 57 0 4808.2 32.55 239.76
    C3 32.440 VHL 5.696 DLA -29.66 RAL-242.51 RAD 6568.3 VEL 12.402 PTH 2.24 VHP 10.317 DPA -7.22 RAP 225.29 ECC 1.5339
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 5553.8 SGR 468.1 SG3 123.7

RRT - .4767 RRF - .4541 RTF .9402

SGB 5573.5 R23 .0040 R13 - .9402

SGI 5558.3 SG2 411.1 THA 177.69
                                                                                                                                             ST 1966.8 SR 452.0 SS 443.5
CRT -.7978 CRS .6442 CST -.9745
LSA 2046.0 MSA 288.3 SSA 15.2
     TDE-1.4551 TRA 3.7731 TC3-2.7234 BAU 1.1811
    ROE .4477 RRA -.1099 RC3 .0069 FAU .01214
FOE -.2855 FRA 1.1691 FC3 -.3240 BSP 17743
BOE 1.5224 BRA 3.7747 BC3 2.7234 FSP -411
                                                                                                                                               EL1 2000.2 EL2 268.0 ALF 169.42
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ARRIVAL DATE FEB 2 1968
                                                                                         FLIGHT TIME 198.00
LAUNCH DATE JUL 19 1967
                                                                                        DISTANCE 574.833
   HELIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.233 GAL 8.97 AZL 91.78 HCA 291.43 SHA 119.64 ECC .30946 INC 1.7849 V1 29.306 RP 108.28 LAP 1.66 LOP 227.11 VP 36.655 GAP 17.21 AZP 90.65 TAL 158.72 TAP 90.16 RCA 82.62 APO 156.67 V2 34.999 RC 190.221 GL -7.41 GP 7.57 ZAL 47.78 ZAP 172.43 ETS 88.29 ZAE 129.24 ETE 173.62 ZAC 38.34 ETC 10.40 CLP 179.83
   PLANETOCENTRIC CONIC
     C3 36.281 VHL 6.023 OLA -29.00 RAL 245.24 RAD 6568.4 VEL 12.556 PTH 2.28 VHP 10.696 OPA -8.14 RAP 227.48 ECC 1.5971
    C3 36.281 VML 6.023 DLA -29.00 RAL 245.24 RAD 656R.4 VEL 12.556 PTM 2.28 VMP 10.996 DPA -8.14 RAP 227.48 ECC 1.3971 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.45 13 2 1 1215.63 16.17 346.46 123.69 114.41 13 22 17 615.6 19.33 339.16 19.55 14 50 48 865.78 16.18 320.67 123.70 114.40 15 5 12 263.8 19.34 313.37 100.00 14 16 37 973.67 10.62 325.96 120.88 118.11 14 32 50 373.7 14.30 319.10 100.00 16 18 54 5869.02 21.89 280.19 126.21 110.88 17 56 43 5269.0 24.54 272.39 110.00 14 5 15 1009.43 2.65 323.83 116.04 124.09 14 22 4 409.4 7.11 317.58 110.00 18 46 45 5406.02 30.72 248.32 129.47 105.78 20 16 51 4806.0 32.58 239.60
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    SCT 5548.0 SCR 463.3 SC3 120.4

RRT - .4855 RRF - .4633 RTF .9438

SCB 5567.4 R23 .0030 R13 - .9438

SCI 5552.6 SC2 404.7 THA 177.67
                                                                                                                                                    ST 1894.2 SR 443.3 SS 434.0
CRT -.7582 CRS .6003 CST -.9761
LSA 1970.1 MSA 302.3 SSA 14.4
     TDE-1.3797 TRA 4.1775 TC3-2.4080 BAU 1.1680
     RDE .4639 RRA -.1292 RC3 .0086 FAU .01087
FDE -.2575 FRA 1.2279 FC3 -.2593 BSP 17845
                                                                                                                                                    EL1 1924.4 EL2 284.5 ALF 169.71
     BDE 1.4556 BRA 4.1794 BC3 2.4080 FSP
                                                                  -401
                                                                                                                                                                  ARRIVAL DATE FEB 4 1968
                                                                                          FLIGHT TIME 200.00
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 579.591
    RL 152.03 LAL .00 LOL 295.66 VL 25.189 GAL 9.95 AZL 91.64 MCA 294.63 SMA 119.40 ECC .31983 INC 1.6433 V1 29.306
RP 108.32 LAP 1.49 LOP 230.30 VP 36.592 GAP 17.90 AZP 90.68 TAL 157.24 TAP 91.87 RCA 81.21 APO 157.59 VZ 34.986
RC 191.975 GL -6.40 GP 7.42 ZAL 45.59 ZAP 172.51 ETS 94.71 ZAE 129.16 ETE 173.73 ZAC 36.10 ETC 10.94 CLP 178.99
   PLANETOCENTRIC CONIC
    C3 40.777 VHL 6.386 DLA -28.34 RAL 247.77 RAD 6568.6 VEL 12.734 PTH 2.31 VHP 11.108 DPA -9.02 RAP 229.68 ECC 1.6711 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   57.67 127.96 114.33 14 14 25 32.70 127.97 114.32 14 34 15 151.23 124.16 119.00 14 24 56 17.96 131.28 109.98 18 25 48 16.90 119.75 124.18 14 24 37 18.34 134.17 105.79 20 35 29 HID-COURSE EXECUTION ACCURACY SGT 5540.6 SGR 447.1 $C.$\text{X}$ 117.2
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         88.76 13 56 2 1103.20
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        110.00
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   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5540.6 SGR 457.1 SG3 117.2

RRT -.4941 RRF -.4725 RTF .9476

SGB 5559.4 R23 .0022 R13 -.9476

SGI 5545.2 SG2 397.1 THA 177.65
                                                                                                                                                    ST 1831.4 SR 433.1 SS 427.7

CRT -.7149 CRS .5561 CST -.9782

LSA 1904.2 MSA 313.8 SSA 13.8
     TOE-1.3006 TRA 4.6077 TC3-2.1114 BAU 1.1510
     RDE .4800 RRA -.1496 RC3 .0094 FAU .00961
FDE -.2310 FRA 1.2895 FC3 -.2040 BSP 17865
BDE 1.3864 BRA 4.6101 BC3 2.1114 FSP -391
                                                                                                                                                    ELI 1858.1 ELZ 298.5 ALF 170.15
                                                                                                                                                                 ARRIVAL DATE FEB 6 1968
                                                                                         FLIGHT TIME 202.00
LAUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 584.186
    RL 152.03 LAL .00 LOL 295.66 VL 25.145 GAL 11.01 AZL 91.49 HCA 297.82 SMA 119.17 ECC .33126 INC 1.4943 V1 29.306 RP 108.36 LAP 1.32 LOP 233.49 VP 36.550 GAP 18.66 AZP 90.70 TAL 155.80 TAP 93.62 RCA 79.69 APO 158.64 VZ 34.973 RC 193.712 GL -5.44 GP 7.29 ZAL 43.56 ZAP 172.47 ETS 101.31 ZAE 129.06 ETE 173.83 ZAC 33.89 ETC 11.58 CLP 178.13
   PLANETOCENTRIC CONIC
     C3 46.047 VHL 6.786 DLA -27.68 RAL 250.10 RAD 6568.7 VEL 12.939 PTH 2.36 VMP 11.561 DPA -9.85 RAP 231.87 ECC 1.7578
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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119.54 14 19 57
109.40 18 50 25
124.14 14 26 51
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   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ST 1778.3 SR 421.7 SS 424.3
CRT -.6693 CRS .5130 CST -.9806
LSA 1848.2 MSA 322.4 SSA 13.2
                                                                                    SGT 5526.9 SGR 449.6 SG3 114.1
RRT -.5026 RRF -.4818 RTF .9515
SGB 5545.1 R23 .0015 R13 -.9515
     TOE-1.2190 TRA 5.0630 TC3-1.8323 BAU 1.1280
    RDE .4960 RRA -.1709 RC3 .0093 FAU .00836
FDE -.2063 FRA 1.3544 FC3 -.1571 BSP 17880
                                                                                    SG1 5531.5 SG2 388.3 THA 177.65
                                                                                                                                                    EL1 1801.2 EL2 309.3 ALF 170.71
     BDE 1.3161 BRA 5.0659 BC3 1.8323 FSP -382
                                                                                                                                                                  ARRIVAL DATE FEB 8 1968
                                                                                         FLIGHT TIME 204.00
LAUNCH DATE JUL 19 1967
                                                                                        DISTANCE 588.588
   HERIOCENTRIC CONIC
    RL 152.03 LAL .00 LOL 295.66 VL 25.103 GAL 12.15 AZL 91.34 HCA 301.01 SMA 118.94 ECC .34388 INC 1.3364 VI 29.306
RP 108.40 LAP 1.15 LOP 236.68 VP 36.508 GAP 19.49 AZP 90.69 TAL 154.41 TAP 95.42 RCA 78.04 APO 159.84 V2 34.960
RC 195.431 GL -4.54 GP 7.17 ZAL 41.68 ZAP 172.32 ETS 107.91 ZAE 128.92 ETE 173.93 ZAC 31.71 ETC 12.35 CLP 177.24
   PLANETOCENTRIC CONIC
     C3 52.237 VHL 7.228 OLA -27.02 RAL 252.25 RAD 6568.9 VEL 13.176 PTH 2.41 VHP 12.058 OPA -10.65 RAP 234.06 ECC 1.8597
    LNCH AZMTH LNCH TIME L-1 TIME IN LAT INJ LONG IN RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 9 7 1377.24 5.70 353.03 132.71 117.78 13 32 4 777.2 9.38 346.28
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110.67 15 54 23
119.81 14 16 26
109.03 19 12 6
123.97 14 28 47
106.08 21 9 7
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        110.00
                                                                                248.88
                                                                                                  143.14
   DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                                   ST 1733.3 SR 408.8 SS 423.7

CRT -.6208 CRS .4699 CST -.9833

LSA 1800.9 MSA 328.2 SSA 12.6

EL1 1752.4 EL2 317.0 ALF 171.39
     TOE-1.1306 TRA 5.5517 TC3-1.5696 BAU 1.0962
                                                                                    SGT 5509.7 SGR 440.6 SG3 111.2
     RDE .5116 RRA -.1930 RC3 .0084 FAU .00705
FDE -.1821 FRA 1.4244 FC3 -.1168 BSP 17798
                                                                                   RRT -.5106 RRF -.4908 RTF .9555
SGB 5527.3 R23 .0008 R13 -.9555
SG1 5514.3 SG2 378.5 THA 177.65
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BOE 1.2410 BRA 5.5551 BC3 1.5697 FSP

ARRIVAL CATE FEB 10 1968

LAUNCH DATE JUL 19 1967

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DISTANCE 592.756
    HELIOCENTRIC CONIC
      RL 152.03 LAL .00 LOL 295.66 VL 25.061 GAL 13.38 AZL 91.17 HCA 304.20 SMA 118.72 ECC .35786 INC 1.1678 VI 29.306 RP 108.44 LAP .97 LOP 239.87 VP 36.467 GAP 20.40 AZP 90.66 TAL 153.09 TAP 97.29 RCA 76.23 APO 161.20 V2 34.947 RC 197.134 GL -3.69 GP 7.06 TAL 39.95 ZAP 172.05 ETS 114.34 TAE 128.75 ETE 174.03 TAC 29.57 ETC 13.25 CLP 176.33
     PLANETOCENTRIC CONIC
      C1 59.533 VHL 7.716 DLA -26.36 RAL 254.20 RAD 6569.1 VEL 13.450 PTH 2.46 VHP 12.606 DPA -11.39 RAP 236.24 ECC 1.9798
      UNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 -13 0 0 1465.88 2.87 358.00 135.76 118.18 13 24 26 865.9 6.61 351.32
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143.73
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110.10 16 18 42
            90.00 16 4 21
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13 52 5 1297.69
17 54 57 5792.56
14 9 41 1242.44
19 53 50 5420.58
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108.82 19 31 30
123.68 14 30 23
106.34 21 24 11
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144.98
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         110.00
                                                                                                    MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                    SCT 5487.8 SCR 430.4 SC3 108.3
RRT -.5184 RRF -.5000 RTF ..9596
SCB 5504.6 R23 .0003 R13 -.9596
SCI 5492.3 SC2 367.7 THA 177.66
                                                                                                                                                                                ST 1697.9 SR 395.1 SS 425.9
      TOE-1.0457 TRA 6.0681 TC3-1.3314 BAU 1.0597
     ROE .5272 RRA -.2154 RC3 .0071 FAU .00580
FOE -.1609 FRA 1.4976 FC3 -.0843 BSP 17827
                                                                                                                                                                                CRT -.5736 CRS .4318 CST -.9861
                                                                                                                                                                               LSA 1763.9 MSA 330.1 SSA 12.0
                                                                                                                                                                                EL1 1713.6 EL2 320.7 ALF 172.12
     BOE 1.1711 BRA 6.0719 BC3 1.3314 FSP -361
                                                                                                                                                                                                 ARRIVAL DATE FEB 12 1968
                                                                                                           FLIGHT TIME 208.00
LAUNCH DATE JUL 19 1967
                                                                                                         DISTANCE 596.642
    HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 25.021 GAL 14.72 A7L 90.99 MCA 307.39 SMA 118.50 ECC .37338 INC .9859 V1 29.306
RP 108.48 LAP .78 LOP 243.06 VP 36.428 GAP 21.41 A7P 90.60 TAL 151.84 TAP 99.22 RCA 74.26 APO 162.75 V2 34.935
RC 198.819 GL -2.89 GP 6.95 ZAL 38.38 ZAP 171.66 ETS 120.47 ZAE 128.54 ETE 174.13 ZAC 27.48 ETC 14.32 CLP 175.38
    PLANETOCENTRIC CONIC
      C3 68.166 VHL 8.256 DLA -25.72 RAL 255.98 RAD 6569.3 VEL 13.767 PTH 2.52 VHP 13.214 DPA -12.10 RAP 238.39 ECC 2.1218
     UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 53 5 1545.74 .29 2.46 138.82 118.32 13 18 51 945.7 4.07 355.82 90.00 16 25 25 846.47 20.72 321 34 148 01 100 75 15 30 75
           90.00
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18 12 30 5789.26
14 10 2 1299.21
20 7 38 5429.05
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108.73 19 48 59
123.27 14 31 41
106.67 21 38 7
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         110.00
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    DIFFERENTIAL CORRECTIONS
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                    SCT 5461.7 SCR 418.8 SG3 105.6
RRT -.5257 RRF -.5088 RTF ..9638
SGB 5477.8 R23 .0000 R13 -.9638
SGI 5466.2 SG2 356.0 THA 177.68
                                                                                                                                                                                ST 1669.5 SR 380.4 SS 430.7
CRT -.5269 CRS .3964 CST -.9888
LSA 1734.7 MSA 328.7 SSA 11.4
      TOE -.9588 TRA 6.6217 TC3-1.1120 BAU 1.0134
      RDE .5424 RRA -.2381 RC3 .0055 FAU .00450
      FOE -.1411 FRA 1.5766 FC3 -.0571 BSP 17816
BDE 1.1016 BRA 6.6259 BC3 1.1120 FSP -352
                                                                                                                                                                                 ELI 1682.0 ELZ 320.9 ALF 172.89
                                                                                                                                                                                                ARRIVAL CATE FEB 14 1968
                                                                                                          FLIGHT TIME 210.00
LAUNCH DATE JUL 19 1967
    HELIOCENTRIC CONIC
                                                                                                         DISTANCE 500.184
     RL 152.03 LAL .00 LOL 295.66 VL 24.982 GAL 16.18 AZL 90.79 MCA 310.57 SMA 118.30 ECC .39067 INC .7880 VI 29.306 RP 108.51 LAP .60 LOP 246.24 VP 36.389 GAP 22.53 AZP 90.51 TAL 150.68 TAP 101.25 RCA 72.08 APO 164.51 VZ 34.923 RC 200.487 GL -2.14 GP 6.86 ZAL 36.97 ZAP 171.14 ETS 126.18 ZAE 128.28 ETE 174.24 ZAC 25.44 ETC 15.57 CLP 174.38
    PLANETOCENTRIC CONIC
      C3 78.431 VHL 8.856 DLA -25.09 RAL 257.57 RAD 6569.5 VEL 14.134 PTH 2.58 VHP 13.892 DPA -12.76 RAP 240.52 ECC 2.2908
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 47 22 1619.77 -2.10 6.59 141.82 118.25 13 14 22 1019.8 1.70 359.96
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119.55 14 9 25
108.73 20 4 49
122.74 14 32 39
107.04 21 50 57
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          100.00
                                                                                                                136.89
                                                                                               342.03
                                                                                                                                                                                       755.0
                                                                                                                                                                                                             -6.04
                                                                                                                                                                                                                                 335.68
                                                                         -10.43
          110.00
                                                                                             250.68
                                                                                                                    155.42
                                                                                                                                                                                     4838.9
                                                                                                                                                                                                             32.12
                                                                                                                                                                                                                                 242.06
                                                                          30.09
          110.00
                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                ST 1646.9 SR 364.9 SS 438.1

CRT - .4821 CRS .3642 CST - .9912

LSA 1712.4 MSA 324.2 SSA 10.9
                                                                                                    SGT 5431.8 SGR 405.9 SG3 103.0
RRT -.5323 RRF -.5171 RTF .9679
SGB 5446.9 R23 -.0003 R13 -.9679
      TOE -.8716 TRA 7.2165 TC3 -.9117 BAU .9559
      ROE .5574 RRA -.2606 RC3 .0036 FAU .00313
FDE -.1226 FRA 1.6622 FC3 -.0345 BSP 17797
                                                                                                                                                                                EL1 1656.7 EL2 317.8 ALF 173.67
      BOE 1.0346 BRA 7.2212 BC3 .9117 FSP -343
                                                                                                    5G1 5436.1 SG2 343.3 THA 177.71
                                                                                                                                                                                                 ARRIVAL DATE FEB $6 1968
                                                                                                           FLIGHT TIME 212.00
LAUNCH DATE JUL 19 1967
                                                                                                         DISTANCE 603.305
    HELIOCENTRIC CONIC
     RL 152.03 LAL .00 LOL 295.66 VL 24.945 GAL 17.78 AZL 90.57 HCA 313.75 SMA 118.10 ECC .40999 INC .5704 V1 29.306
RP 108.55 LAP .41 LOP 249.42 VP 36.352 GAP 23.78 AZP 90.39 TAL 149.63 TAP 103.38 RCA 69.68 APO 166.52 VZ 34.911
RC 202.138 GL -1.42 GP 6.77 ZAL 35.71 ZAP 170.51 ETS 131.45 ZAE 127.96 ETE 174.34 ZAC 23.47 ETC 17.04 CLP 173.33
    PLANETOCENTRIC CONIC
      C3 90.705 VHL 9.524 DLA -24.48 RAL 258.98 RAD 6569.8 VEL 14.562 PTH 2.64 VHP 14.651 DPA -13.37 RAP 242.60 ECC 2.4928
     CS 90.705 VML 9.524 DLA -24.48 RAL 258.59 RAU 6585.8 VEL 14.502 PART 1.002 PA
                            13 42 32 1494.93
18 42 36 5791.81
                                                                                                                  143.38
156.87
                                                                                                                                           108.80 20 19 7
122.10 14 33 15
107.46 22 2 42
                                                                         23.68
                                                                                                                                                                                                             26.02
                                                                                                                                                                                                                                 267.14
                                                                                               275.15
                                                                                                                                                                                       5191.8
          100.00
                                                                                                                140.02
159.14
                           14 9 46 1409.55
20 31 52 5449.95
                                                                          -12.43
                                                                                                345.00
                                                                                                                                                                                       809.5
                                                                                                                                                                                                             -8.10
                                                                                                                                                                                                                                  338.58
          110.00
                                                                                                                                                                                                        31.96
                                                                                               251.46
                                                                                                                                                                                       4849.9
                                                                                                                                                                                                                                  242.87
          110,00
     DIFFERENTIAL CORRECTIONS
                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                                                              ST 1628.8 SR 348.6 SS 448.1

CRT - .4383 CRS .3335 CST -.9933

LSA 1695.5 MSA 317.0 SSA 10.3

EL1 1636.2 EL2 311.9 ALF 174.44
                                                                                                    SGT 5399.5 SGR 391.6 SG3 100.5
RRT -.5379 RRF -.5243 RTF .9720
SGB 5413.6 R23 -.0006 R13 -.9720
      TOE -. 7799 TRA 7.8624 TC3 -. 7277 BAU .8824
      RDE .5719 RRA -.2829 RC3 .0015 FAU .00161
FDE -.1044 FRA 1.7567 FC3 -.0153 BSP 17653
BDE .9671 BRA 7.8675 BC3 .7277 FSP -333
                                                                                                     SG1 5403.6 SG2 329.9 THA 177.76
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FLIGHT TIME 206.00

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FLIGHT TIME 214.00
                                                                                                                                           ARRIVAL DATE FEB 18 1968
LAUNCH DATE JUL 19 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 605.901
                           .00 LOL 295.66 VL 24.909 GAL 19.55 AZL 90.33 MCA 316.93 SMA 117.92 ECC .43166 INC .3285 VI 29.306 .22 LOP 252.60 VP 36.317 GAP 25.19 AZP 90.24 TAL 148.71 TAP 105.65 RCA 67.02 APO 168.82 VZ 34.899
    RL 152.03 LAL
RP 108.59 LAP
                                          6.68 ZAL 34.62 ZAP 169.75 ETS 136.25 ZAE 127.58 ETE 174.46 ZAC 21.59 ETC 18.75 CLP 172.21
                            -.75 GP
    RC 203.771 GL
   PLANETOCENTRIC CONIC
    C3 105.478 VHL 10.270 DLA -23.89 RAL 260.20 RAD 6570.0 VEL 15.060 PTH 2.71 VHP 15.504 DPA -13.94 RAP 244.63 ECC 2.7359
    LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 37 39 1755.05 -6.42 14.18 147.55 117.64 13 6 54 1155.0 -2.67 7.50
90.00 17 14 33 833.39 21.01 320.50 159.44 109.43 17 28 27 233.4 23.47 312.69
                   13 39 30 1555.42
18 55 24 5796.29
                                                                                                     118.68 14 5 25
108.93 20 32 0
121.37 14 33 27
107.89 22 13 21
                                                                                                                                      955.4
                                                                                                                                                      -4.92
                                                                                                                                                                    351.59
                                                       -8.81
                                                                     358.22
                                                                                    146.26
       100.00
                                                                                                                                                                    267.45
                                                                                                                                                    25.94
                                                      23,58
                                                                                    160.40
                                                                                                                                    5196.3
                                                                     275.45
       100.00
                    14 9 4 1462.70
20 42 19 5461.77
                                                                                    143.00
                                                                                                                                     862.7
                                                                                                                                                   -10.07
31.78
                                                                                                                                                                    341.43
                                                     -14.33
                                                                     347.94
       110.00
                                                                                                                                     4861.8
                                                                                                                                                                    243.75
       110.00
                                                      29.62
                                                                     252.29
                                                                                    162.65
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5361.0 SGR 376.0 SG3 98.1
RRT -.5424 RRF -.5306 RTF .9759
SGB 5374.1 R23 -.0007 R13 -.9759
                                                                                                                                ST 1613.7 SR 331.8 SS 460.7
CRT -.3995 CRS .3082 CST -.9950
    TDE -.6951 TRA 8.5550 TC3 -.5639 BAU .7952
    ROE .5864 RRA -.3038 RC3 -.0005 FAU .00000
FOE -.0890 FRA 1.8591 FC3 -.0000 BSP 17632
                                                                                                                                LSA 1682.8 MSA 307.2 SSA
                                                                         SG1 5364.9 SG2 315.6 THA 177.81
                                                                                                                                EL1 1619.3 EL2 303.1 ALF 175.13
    BOE .9094 BRA 8.5604 BC3 .5639 FSP -325
                                                                                                                                            ARRIVAL DATE FEB 20 1968
LAUNCH DATE JUL 19 1967
                                                                             FLIGHT TIME 216.00
  HELIOCENTRIC CONIC
                                                                             DISTANCE 607.842
   RL 152.03 LAL
RP 108.62 LAP
                           .00 LOL 295.66 VL 24.875 GAL 21.52 AZL 90.06 HCA 320.11 SMA 117.74 ECC .45603 INC .0546 V1 29.306 .04 LOP 255.77 VP 36.283 GAP 26.79 AZP 90.04 TAL 147.96 TAP 108.07 RCA 64.05 APO 171.44 V2 34.888 -.12 GP 6.60 ZAL 33.71 ZAP 168.87 ETS 140.61 ZAE 127.10 ETE 174.58 ZAC 19.81 ETC 20.75 CLP 171.02
    RC 205.386 GL
   PLANETOCENTRIC CONIC
    C3 123.389 VHL 11.108 OLA -23.32 RAL 261.23 RAD 6570.3 VEL 15.644 PTH 2.78 VHP 16.470 DPA -14.45 RAP 246.59 ECC 3.0307
    C3 123.389 VHL 11,108 OLA -23.32 RAL 261.23 RAO 6570.3 VEL 15.644 PTH 2.78 VMP 16.470 DPA -14.45 RAP 246.59 ECC 3.0307 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 33 7 1817.35 -8.37 17.71 150.21 117.15 13 3 24 1217.3 -4.67 10.99 90.00 17 27 19 834.91 20.98 320.60 162.74 109.47 17 41"14 234.9 23.44 312.79 100.00 13 36 19 1613.38 -10.69 1.50 148.98 118.08 14 3 12 1013.4 -6.85 354.81 100.00 19 6 49 5802.16 23.45 275.84 163.67 109.09 20 43 31 5202.2 25.84 267.85 110.00 14 7 56 1514.22 -16.13 350.84 145.84 120.55 14 33 10 914.2 -11.96 344.22 110.00 20 51 41 5474.08 29.36 253.16 165.91 108.34 22 22 55 4874.1 31.58 244.65
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1600.1 SR 314.6 SS 476.2
CRT -.3639 CRS .2856 CST -.9964
                                                                         SGT 5318.7 SGR 359.0 SG3 95.8
RRT -.5453 RRF -.5352 RTF .9797
SGB 5330.8 R23 -.0009 R13 -.9797
    TDE -.6121 TRA 9.3080 TC3 -.4164 BAU .6869
    RDE .6006 RRA -.3230 RC3 -.0024 FAU-.00183
                                                                                                                               LSA 1672.9 MSA 295.5 SSA
    FDE -.0749 FRA 1.9725 FC3 .0128 BSP 17588
BDE .8576 BRA 9.3136 BC3 .4164 FSP -318
                                                                                                                                                                          9.2
                                                                                                                                EL1 1604.4 EL2 292.2 ALF 175.77
                                                                         SG1 5322.3 SG2 300.8 THA 177.89
                                                                                                                                           ARRIVAL DATE FEB 22 1968
                                                                             FLIGHT TIME 218.00
LAUNCH DATE JUL 19 1967
                                                                            DISTANCE 608.954
   HELIOCENTRIC CONIC
                         .00 LOL 295.66 VL 24.844 GAL 23.72 AZL 89.75 MCA 323.28 SMA 117.58 ECC .48354 INC .2532 V1 29.306 -.15 LOP 258.94 VP 36.252 GAP 28.62 AZP 89.80 TAL 147.41 TAP 110.69 RCA 60.73 APO 174.43 V2 34.878 .48 GP 6.52 ZAL 32.98 ZAP 167.84 ETS 144.56 ZAE 126.53 ETE 174.71 ZAC 18.16 ETC 23.04 CLP 169.72
    RL 152.03 LAL
    RC 206.983 GL
   PLANETOCENTRIC CONIC
    C3 145.276 VHL 12.053 DLA -22.76 RAL 262.06 RAD 6570.6 VEL 16.328 PTH 2.86 VMP 17.568 DPA -14.93 RAP 248.46 ECC 3.3909
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    12 28 31 1876.37
17 38 31 838.01
                                                     -10.19
                                                                     21.10
                                                                                   152.69
                                                                                                    116.56 12 59 48
                                                                                                                                  1276.4
                                                                                                                                                    -6.54
                                                                                                                                                                     14.32
                                                     20.91
                                                                     320.80
                                                                                    165.76
                                                                                                     109.54 17 52 29
                                                                                                                                     238.0
                                                                                                                                                     23.38
                                                                                                                                                                    313.00
                                                                                    151.52
                                                                                                     117.40
                                                                                                                 14 0 40
                                                                                                                                     1058.7
                                                                                                                                                      -8.68
                                                                                                                                                                    357.91
       100.00
                    13 32 51
                                    1668.72
                                                      -12.44
                                                                       4.67
                                                                                                     109.28 20 53 41
119.66 14 32 22
108.79 22 31 21
                                                                                                                                     5208.9
                                                                                                                                                    25.71
                                                                                                                                                                   26A.32
       100.00
                    19 16 52
                                    5808.93
                                                     23.30
                                                                     276.28
                                                                                    166.67
                                                                                                                                     963.9
                                                                                                                                                    -13.75
                                                                                                                                                                    346.96
                    14 6 18
                                    1563.86
                                                     -17.83
                                                                     353.69
                                                                                    148.48
       110.00
                                 5486.55
                                                                                                                                                    31.38
                                                                                                                                                                    245.57
                   20 59 55
                                                                                                                                    4886.6
                                                                     254.03
                                                                                    168.89
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1586.9 SR 297.0 SS 494.8
CRT -.3316 CRS .2655 CST -.9974
                                                                         SGT 5272.2 SGR 340.8 SG3 93.7
RRT -.5460 RRF -.5375 RTF .9831
SGB 5283.2 R23 -.0010 R13 -.9831
    TOE -.5329 TRAID.1284 TC3 -.2843 BAU .5522
    ROE .6148 RRA -.3394 RC3 -.0041 FAU-.00396
                                                                                                                                LSA 1664.8 MSA 282.2 SSA
    FOE -.0623 FRA 2.0990 FC3 .02$6 BSP 17512
                                                                                                                                                                         8.7
    BOE .8137 BRAID.1341 BC3 .2843 FSP -311
                                                                         SG1 5275.5 SG2 285.3 THA 177.97
                                                                                                                                EL1 1590.0 EL2 279.6 ALF 176.34
                                                                                                                                            ARRIVAL DATE FEB 24 1968
LAUNCH DATE JUL 19 1967
                                                                             FLIGHT TIME 220.00
    RL 152.03 LAL .00 LOL 295.66 VL 24.816 GAL 26.21 AZL 89.39 HCA 326.45 SMA 117.43 ECC .51464 INC .6137 VI 29.306 RP 108.69 LAP -.34 LOP 262.12 VP 36.223 GAP 30.71 AZP 89.49 TAL 147.10 TAP 113.56 RCA 57.00 APO 177.87 V2 34.867 RC 208.560 GL 1.04 GP 6.44 ZAL 32.47 ZAP 166.66 ETS 148.16 ZAE 125.82 ETE 174.85 ZAC 16.65 ETC 28.68 CLP 168.30
                                                                             DISTANCE 609.014
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 172.257 VHL 13.125 OLA -22.23 RAL 262.66 RAO 6570.9 VEL 17.134 PTH 2.93 VHP 18.825 OPA -15.35 RAP 250.22 ECC 3.8349
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    115.90 12 55 53
109.64 18 2 12
116.65 13 57 41
109.48 21 2 28
118.71 14 30 56
109.23 22 38 36
                     12 23 41 1932.14
                                                                                                                                    1332.1
                                                                                                                                                    -8.29
                                                                                                                                                                     17.49
                                                     -11.87
                                                                      24.34
                                                                                   154.95
                     17 48 10
                                      842.08
                                                                     321.06
                                                                                    168.46
                                                                                                                                      242.1
                                                                                                                                                     23.31
                                                                                                                                                                     313.27
                                                       20.82
                                                                                    153.83
                    13 29 0 1721.33
                                                                                                                                     1121.3
                                                                                                                                                    -10.38
                                                                                                                                                                         .88
                                                      -14.07
                                                                       7.73
                                                                     276.76
                                                                                    169.35
                                                                                                                                     5216.2
                                                                                                                                                    25.58
                                                                                                                                                                    268.81
                     19 25 32
                                    5816.15
                                                      23.13
                                                                                                                                                   -15.43
                    14 4 4 1611.39
21 6 57 5498.85
                                                                                    150.91
                                                      -19.41
                                                                     356.47
                                                                                                                                     1011.4
                                                                                                                                                                     349.62
                                                                     254.88
                                                                                                                                                                     246.46
       110.00
                                                      28.82
                                                                                    171.57
                                                                                                                                     4898.9
                                                                                                                                                     31.17
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5222.8 SGR 321.2 SG3 91.7
RRT -.5436 RRF -.5366 RTF .9863
                                                                                                                                ST 1573.0 SR 279.1 SS 517.1 CRT -.3015 CRS .2464 CST -.9982 LSA 1657.6 MSA 267.7 SSA 8.1
    TOE -.4558 TRA11.0282 TC3 -.1658 BAU .3819
    RDE .6290 RRA -.3521 RC3 -.0056 FAU-.00655
FDE -.0506 FRA 2.2416 FC3 .0329 BSP 17306
                                                                         SGB 5232.7 R23 -.0011 R13 -.9863
                                                                                                                                EL1 1575.3 EL2 265.7 ALF 176.85
    BOE .7768 BRA11.0338 BC3 .1659 FSP -302
                                                                         SG1 5225.8 SG2 269.5 THA 178.08
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ARRIVAL DATE SEP 28 1967

LAUNCH DATE JUL 20 1967

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DISTANCE 192.204
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 27.487 GAL -11.94 AZL 92.76 HCA 85.52 SHA 133.98 ECC .24520 INC 2.7643 V1 29.308 RP 108.45 LAP -2.76 LOP 22.13 VP 38.171 GAP -9.04 AZP 90.22 TAL 225.58 TAP 311.10 RCA 101.13 APO 166.84 V2 34.945 RC 57.772 GL -12.05 GP -12.76 ZAL 153.54 ZAP 28.12 ETS 24.45 ZAE 151.95 ETE 353.29 ZAC 91.77 ETC 13.56 CLP -25.27
    PLANETOCENTRIC CONIC
     C3 38.615 VHL 6.214 DLA 3.25 RAL 138.96 RAD 6568.5 VEL 12.648 PTH 2.30 VHP 6.546 DPA -7.33 RAP 173.21 ECC 1.6355
     C3 38.615 VHL 6.214 DLA 3.25 RAL 138.96 RAD 6568.5 VEL 12.648 PTH 2.30 VHP 6.546 DPA -7.33 RAP 173.21 ECC 1.6355 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 25 20 2478.44 -24.97 58.91 12.71 103.80 1 6 39 1878.4 -22.83 50.90 90.00 13 11 42 4920.52 21.02 214.39 10.51 70.58 14 33 43 4320.5 18.18 206.87 100.00 1 48 12 2211.17 -26.25 38.90 12.35 104.84 2 25 3 1611.2 -23.95 30.85 100.00 14 31 32 4663.02 22.26 194.98 10.03 69.51 15 49 15 4063.0 19.27 187.46 110.00 2 59 56 1986.65 -29.68 20.71 11.21 107.79 3 33 3 1386.7 -26.96 12.58 110.00 15 36 17 4460.30 25.58 178.13 8.56 66.51 16 50 37 3860.3 22.18 170.62 110.00 15 36 17 4460.30 25.58 178.13 8.56 66.51 16 50 37 3860.3 22.18 170.62
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 208.2 SR 390.0 SS 131.0
CRT -.8372 CRS -.2967 CST -.2479
                                                                                           SGT 535.0 SGR 442.9 SG3 152.9
RRT -.2185 RRF .3844 RTF -.4820
SGB 694.6 R23 -.1157 R13 .5484
     TOE .2057 TRA -.3070 TC3 .3317 BAU .1749
     ROE -.4179 RRA -.2172 RC3 -.0694 FAU .05760
     FOE -.0371 FRA -.8080 FC3-1.2913 BSP 1302
BOE .4658 BRA .3761 BC3 .3389 FSP -402
                                                                                                                                                                154 430.6 MSA 162.9 SSA 24.6
                                                                                                                                                               EL1 429.8 EL2 103.3 ALF 115.67
                                                                                         SG1 556.6 SG2 415.4 THA 155.52
                                                                                                                                                                               ARRIVAL DATE SEP 30 1967
                                                                                                 FLIGHT TIME 72.00
LAUNCH DATE JUL 20 1967
                                                                                                 DISTANCE 198.981
    HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.588 GAL -11.83 A7L 92.64 HCA 88.71 SMA 134.74 ECC .24033 INC 2.6419 V1 29.308 RP 108.41 LAP -2.64 LOP 25.32 VP 38.256 GAP -8.20 A7P 90.06 TAL 226.70 TAP 315.41 RCA 102.36 APO 167.12 V2 34.957 RC 59.590 GL -11.71 GP -13.64 7AL 154.45 7AP 31.67 ETS 22.56 7AE 152.75 ETE 350.40 7AC 92.36 ETC 13.47 CLP -28.86
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 37.601 VHL 6.132 DLA 3.83 RAL 138.25 RAD 6568.5 VEL 12.608 PTH 2.29 VHP 6.141 DPA -7.97 RAP 172.48 ECC 1.6188
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 18 12 2489.74 -25.15 59.69 11.75 103.45 0 59 42 1889.7 -23.06 51.65
90.00 13 13 13 4895.77 20.45 212.80 9.20 69.98 14 34 49 4295.8 17.54 205.34
100.00 1 41 20 2221.58 -26.43 39.62 11.40 104.50 2 18 22 1621.6 -24.17 31.54
100.00 14 32 46 4639.16 21.68 193.44 8.70 68.90 15 50 5 4039.2 18.62 185.98
110.00 2 53 42 1995.11 -29.86 21.31 10.28 107.48 3 26 57 1395.1 -27.18 13.15
110.00 15 36 54 4438.40 24.97 176.71 7.21 65.86 16 50 52 3838.4 21.50 169.28
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 530.7 SGR 454.8 SG3 172.9
RRT -.2295 RRF .4352 RTF -.4583
SGB 698.9 R23 -.1441 R13 .5516
                                                                                                                                                        ST 204.1 SR 390.2 SS 141.1

CRT -.8229 CRS -.2253 CST -.3434

LSA 427.8 MSA 173.7 SSA 24.8

ELI 427.4 EL2 105.9 ALF 114.91
     TOE .1975 TRA -.3070 TC3 .3312 BAU .1728
      ROE -.4119 RRA -.2287 RC3 -.0922 FAU .06387
     FOE -.0181 FRA -.9247 FC3-1.4705 BSP 1297
BDE .4568 BRA .3828 BC3 .3438 FSP -462
                                                                                          SG1 557.8 SG2 421.2 THA 152.03
                                                                                                                                                                               ARRIVAL DATE OCT 2 1967
                                                                                                FLIGHT TIME 74.00
LAUNCH DATE JUL 20 1967
                                                                                               DISTANCE 205.730
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 27.675 GAL -11.73 A7L 92.52 MCA 91.90 SMA 135.40 ECC .23613 INC 2.5197 VI 29.308 RP 108.37 LAP -2.52 LOP 28.52 VP 38.330 GAP -7.39 A7P 89.92 TAL 227.68 TAP 319.58 RCA 103.43 APO 167.37 V2 34.970 RC 61.464 GL -11.34 GP -14.60 7AL 155.27 ZAP 35.44 ETS 20.89 7AE 153.78 ETE 347.00 7AC 93.17 ETC 13.32 CLP -32.66
    PLANETOCENTRIC CONIC
     C3 36.700 VHL 6.058 DLA . 4.41 RAL 137.67 RAD 6568.4 VEL 12.573 PTH 2.28 VHP 5.771 DPA -8.60 RAP 171.54 ECC 1.6040
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        0 11 33 2501.50
13 15 11 4871.70
1 34 57 2232.50
14 34 27 4615.97
2 47 57 2004.07
15 37 57 4417.17
                                                                                                                                                                                     -23.29
                                                                                                       10.94
                                                                                                                                                                   1901.5
                                                                   -25.34
                                                                                        60.51
                                                                                                                             103.08 0 53 14
           90.00
                                                                                                                                                                                                           203.86
                                                                  19.88
                                                                                      211.27
                                                                                                            8.05
                                                                                                                               69.41 14 36 23
                                                                                                                                                                      4271.7
                                                                                                                                                                                          16.91
           90.00
                                                                                                                                                                                                              32.27
                                                                                                           10.60
                                                                                                                               104.14
                                                                                                                                              2 12 10
                                                                                                                                                                      1632.5
                                                                                                                                                                                         -24.40
                                                                  -26.61
                                                                                        40.38
                                                                                                                                                                                    17.98
         100.00
                                                                                                                               68.33 15 51 23
107.14 3 21 21
65.26 16 51 35
                                                                                                                                                                      4016.0
                                                                                                                                                                                                            184.56
                                                                                                           7.55
                                                                  21.11
                                                                                      191.96
         100.00
                                                                                                                                                                                     -27.40
                                                                                                                                                                                                              13.75
                                                                                                             9.51
                                                                                                                                                                      1404.1
                                                                  -30.04
                                                                                        21.95
         110.00
                                                                                                                                                                                           20.83
                                                                                                                                                                      3817.2
                                                                                                             6.03
                                                                                      175.35
         110.00
                                                                  24.38
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 523.9 SGR 469.4 SG3 195.0
RRT -.2352 RRF .4902 RTF -.4243
SGB 703.4 R23 -.1746 R13 .5575
                                                                                                                                                              ST 201.0 SR 389.4 SS 152.4
CRT -.8044 CRS -.1645 CST -.4301
      TOE .1904 TRA -.3111 TC3 .3249 BAU .1697
     LSA 424.4 MSA 185.8 SSA
                                                                                                                                                                EL1 424.3 EL2 109.6 ALF 114.27
      BDE .4477 BRA .3943 BC3 .3459 FSP
                                                                                           SG1 557.9 SG2 428.4 THA 147.53
                                                                                                                                                                               ARRIVAL DATE OCT 4 1967
                                                                                                 FLIGHT TIME 76.00
LAUNCH DATE JUL 20 1967
                                                                                                 DISTANCE 212.449
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 27.747 GAL -11.63 AZL 92.40 HCA 95.09 SMA 135.95 ECC .23250 INC 2.3970 V1 29.30A

RP 108.33 LAP -2.39 LOP 31.72 VP 38.394 GAP -6.63 AZP 89.79 TAL 228.51 TAP 323.61 RCA 104.34 APO 167.56 V2 34.983

RC 63.388 GL -10.94 GP -15.63 ZAL 156.00 ZAP 39.44 ETS 19.36 ZAE 154.99 ETE 342.91 ZAC 94.18 ETC 13.10 CLP -36.68
    PLANETOCENTRIC CONIC
     UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 5 22 2513.71 -25.52 61.35 10.29 102.70 0 47 15 1913.7 -23.52 53.25 90.00 13 17 35 4848.17 19.31 209.78 7.07 68.88 14 38 23 4248.2 16.27 202.42 100.00 12 29 3 2243.78 -26.80 41.16 9.95 103.77 2 6 27 1643.8 -24.64 33.03
                                                     4.98 RAL 137.19 RAD 6568.4 VEL 12.540 PTH 2.27 VHP 5.435 DPA -9.21 RAP 170.38 ECC 1.5905
                                                                                                                               68.88 14 38 23
103.77 2 6 27
67.78 15 53 9
106.79 3 16 13
64.69 16 52 44
                       14 36 35 4593.33
2 42 40 2013.39
4396.49
                                                                                                              6.55
                                                                   20.53
                                                                                       190.52
         100.00
                                                                                                                                                                                          -27.63
                                                                                                                                                                       1413.4
                                                                                                              8.89
                                                                  -30.22
                                                                                        22.61
         110.00
                                                                                                                                                                       3796.5
                                                                                                                                                                                            20.17
         110.00
                         15 39 28
                                                                                       174.04
                                                                                                              5.01
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE .1822 TRA -.3224 TC3 .3093 BAU .1647
ROE -.3971 RRA -.2574 RC3 -.1489 FAU .07823
                                                                                                                                                             ST 197.8 SR 387.0 SS 164.1
CRT -.7755 CRS -.1022 CST -.5266
LSA 419.0 MSA 199.0 SSA 25.0
                                                                                      SGT 513.3 SGR 487.0 SG3 218.7

RRT -.2230 RRF .5456 RTF -.3696

SGB 707.5 R23 -.2063 R13 .5655

SG1 554.6 SG2 439.4 THA 141.64
      FOE .0326 FRA-1.1851 FC3-1.8874 BSP 1292
                                                                                                                                                             ELI 419.0 EL2 115.3 ALF 113.50
      BDE .4369 BRA .4126 BC3 .3432 FSP
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FLIGHT TIME TO.OR

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FLIGHT TIME 78.00
                                                                                                                                               ARRIVAL DATE OCT 6 1967
LAUNCH DATE JUL 20 1967
                                                                               DISTANCE 219.138
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.806 GAL -11.54 A7L 92.27 MCA 98.29 SMA 136.41 ECC .22937 INC 2.2730 V1 29.30A RP 108.29 LAP -2.25 LOP 34.91 VP 38.448 GAP -5.90 A7P 89.67 TAL 229.20 TAP 327.49 RCA 105.12 APO 167.70 V2 34.996 RC 65.357 GL -10.50 GP -16.73 7AL 156.65 7AP 43.65 ETS 17.91 7AE 156.34 ETE 337.93 7AC 95.42 ETC 12.79 CLP -40.93
   PLANETOCENTRIC CONIC
    C3 35.131 VHL 5.927 OLA 5.54 RAL 136.83 RAD 6568.4 VEL 12.510 PTH 2.27 VHP 5.134 CPA -9.81 RAP 168.99 ECC 1.5782
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      102.30 24 37 48
68.38 14 40 51
                                                                                                                                     1926.2
                                                                                    9.77
        90.00 23 55 42 2526.16
90.00 13 20 26 4825.02
100.00 1 23 35 2255.35
                                                       -25.71
                                                                       62.21
                                                                                                                                        4225.0
                                                                      208.32
                                                                                         6.23
                                                        18.74
                                                                                                       103.38 2 1 11
67.27 15 55 21
106.42 3 11 33
64.15 16 54 21
                                                                                                                                                        -24.87
                                                                                                                                                                          33.81
                                                                                                                                        1655.3
                                                        -26.98
                                                                       41.97
                                                                                          9.44
       100.00
                                                                                                                                                       16.70
                                                                                                                                        3971.1
                    14 39 10
                                     4571.07
                                                        19.95
                                                                      189.12
                                                                                          5.70
       100.00
                                                                                                                                                                          15.03
                                                                                                                                       1423.0
                                                                                                                                                       -27.86
                                                                                          8.40
       110.00
                      2 37 50 2022.99
                                                       -30.41
                                                                        23.29
                                                                                                                                        3776.2
                                                                                                                                                         19.51
                                                                       172.76
                                                                                         4.14
       110.00
                    15 41 24
                                     4376.19
                                                        23.18
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 502.1 SCR 508.9 SG3 244.4
RRT -.1935 RRF .6023 RTF -.2950
SGB 714.9 R23 -.2220 R13 .5888
                                                                                                                                   ST 196.6 SR 383.5 SS 176.7
    TOE .1755 TRA -.3391 TC3 .2858 BAU .1595
RDE -.3880 RRA -.2746 RC3 -.1833 FAU .08623
                                                                                                                                   CRT -.7399 CRS -.0527 CST -.6122
                                                                                                                                  LSA 413.3 MSA 213.3 SSA 25.0
    FOE .0644 FRA-1.3251 FC3-2.1248 BSP 1303
BOE .4258 BRA .4363 BC3 .3396 FSP -693
                                                                                                                                  EL1 413.1 EL2 122.8 ALF 112.91
                                                                           SG1 552.3 SG2 453.8 THA 133.00
                                                                                                                                                ARRIVAL DATE OCT 8 1967
                                                                                FLIGHT TIME 80.00
LAUNCH DATE JUL 20 1967
                                                                               DISTANCE 225.794
   HELTOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.853 GAL -11.46 A7L 92.15 MCA 101.49 SMA 136.78 ECC .22665 INC 2.1468 V1 29.308 RP 108.25 LAP -2.10 LOP 38.11 VP 38.494 GAP -5.20 A7P 89.57 TAL 229.75 TAP 331.23 RCA 105.78 APO 167.78 V2 35.009 RC 67.365 GL -10.04 GP -17.90 ZAL 157.22 ZAP 48.09 ETS 16.47 ZAE 157.74 ETE 331.82 ZAC 96.88 ETC 12.39 CLP -45.41
   PLANETOCENTRIC CONIC
                                             6.11 RAL 136.58 RAD 6568.4 VEL 12.482 PTH 2.26 VHP 4.867 DPA -10.38 RAP 167.37 ECC 1.5665
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 50 23 2538.85 -25.89 63.10 9.37 101.89 24 32 42 1938.9 -23.99 54.95
                                                                                                       101.89 24 32 42
67.89 14 43 46
102.98 1 56 21
66.77 15 58 0
106.04 3 7 19
63.63 16 56 24
                                                                                                                                                          15.00
                                                                                                                                                                         199.63
                                                                       206.89
                                                                                          5.53
                                                                                                                                         4202.1
                    13 23 44 4802.07
                                                        18.16
         90.00
                     1 18 33 2267.14
14 42 11 4549.01
                                                                                                                                                         -25.11
                                                                                                                                                                           34.61
                                                                        42.80
                                                                                          9.06
                                                                                                                                        1667.1
                                                        -27.16
       100.00
                                                                                                                                        3949.0
                                                                                                                                                          16.05
                                                                                                                                                                         180.52
                                                                       187.75
                                                                                          4.99
                                                        19.36
       100.00
                                                                                                                                                        -28.09
                                                                                                                                                                          15.69
                       2 33 26 2032.80
15 43 48 4356.12
                                                                                                                                        1432.8
                                                                        24.00
                                                                                          8.05
                                                        -30.60
       110.00
                                                                                                                                        3756.1
                                                                                                                                                          18.86
                                                                                          3.40
                     15 43 48
                                                        22.58
                                                                       171.52
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 196.5 SR 378.1 SS 189.5
CRT -.6903 CRS -.0001 CST -.7046
                                                                           SGT 491.7 SGR 534.5 SG3 270.9
RRT -.1298 RRF .6558 RTF -.1874
    TOE .1682 TRA -.3644 TC3 .2509 BAU .1540
     RDE -. 3769 RRA -. 2927 RC3 -. 2215 FAU . 09438
                                                                                                                                    LSA 405.9 MSA 228.3 SSA 24.9
EL1 404.9 EL2 132.7 ALF 112.25
                                                                           SGB 726.2 R23 -.1839 R13 .6379
SG1 551.6 SG2 472.4 THA 118.60
    FOE .1052 FRA-1.4625 FC3-2.3734 BSP 1301
BDE .4128 BRA .4674 BC3 .3347 FSP -777
                                                                                                                                               ARRIVAL DATE OCT 10 1967
                                                                               FLIGHT TIME 82.00
LAUNCH DATE JUL 20 1967
                                                                               DISTANCE 232.418
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.889 GAL -11.37 AZL 92.02 HCA 104.69 SMA 137.06 ECC .22427 INC 2.0177 VI 29.308 RP 108.20 LAP -1.95 LOP 41.32 VP 38.533 GAP -4.53 AZP 89.49 TAL 230.15 TAP 334.84 RCA 106.32 APO 167.80 V2 35.023 RC 69.409 GL -9.54 GP -19.13 ZAL 157.71 ZAP 52.72 ETS 15.01 ZAE 159.08 ETE 324.34 ZAC 98.54 ETC 11.89 CLP -50.13
   PLANETOCENTRIC CONIC
     C3 33.750 VHL 5.809 DLA 6.67 RAL 136.43 RAD 6568.3 VEL 12.455 PTH 2.25 VHP 4.634 DPA -10.92 RAP 165.53 ECC 1.5554
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      101.47 24 27 59
67.43 14 47 9
102.57 1 51 53
66.30 16 1 6
105.65 3 3 28
63.13 16 58 53
                                                                                       9.10
                                                                                                                                     1951.8
                                                                                                                                                      -24.22
                   23 45 27 2551.81
                                                       -26.07
                                                                        64.01
         90.00
                                                                                                                                                                         198.26
                                                                       205.46
                                                                                                                                        4179.1
                                                                                                                                                         14.35
                                                                                          4.95
         90.00
                     13 27 30
                                     4779.12
                                                        17.56
                                                                                                                                                                          35.43
                                                                                                                                        1679.2
                                                                                                                                                       -25.34
                     1 13 54 2279.19
14 45 39 4526.98
                                                                        43.65
                                                                                         8.79
                                                       -27:35
        100.00
                                                                                                                                                                        179.21
                                                        14.77
                                                                       186.38
                                                                                          4.41
                                                                                                                                        3927.0
                                                                                                                                                        15.40
        100.00
                                                                                                                                                       -28.33
                                                       -30.78
                                                                                          7.81
                                                                                                                                        1442.8
                                                                                                                                                                          16.38
        110.00
                                                                        24.72
                     2 29 26 2042.84
15 46 37 4336.09
                                                                                                                                                        18.19
                                                                                                                                       3736.1
                                                                                                                                                                        163.19
                                                                                          2.79
                                                                       170.28
        110.00
                                                        21.97
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 199.1 9R 371.0 55 202.9

CRT - 6299 CRS .0477 CST - .7889

LSA 397.8 MSA 244.1 SSA 24.9

EL1 395.2 EL2 145.2 ALF 111.76
    TDE .1622 TRA -.3971 TC3 .2049 BAU .1507

RDE -.3641 RRA -.3118 RC3 -.2637 FAU .10258

FDE .1523 FRA-1.5954 FC3-2.6512 BSP 1332

BDE .3986 BRA .5049 BC3 .3339 FSP -863
                                                                           SGT 487.6 SGR 564.5 SG3 297.8

RRT -.0301 RRF .7058 RTF -.0471

SGB 745.9 R23 -.0357 R13 .7053
                                                                           SG1 565.2 SG2 486.7 THA 95.79
                                                                                FLIGHT TIME 84.00
                                                                                                                                                ARRIVAL DATE OCT 12 1967
LAUNCH DATE JUL 20 1967
                                                                                DISTANCE 239.008
   HELIOLENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.915 GAL -11.28 AZL 91.88 MCA 107.89 SMA 137.27 ECC .22218 INC 1.8846 V1 29.308 RP 108.16 LAP -1.79 LOP 44.52 VP 38.564 GAP -3.89 AZP 89.42 TAL 230.42 TAP 338.31 RCA 106.77 APO 167.77 V2 35.036 RC 71.485 GL -9.00 GP -20.40 ZAL 158.11 ZAP 57.53 ETS 13.50 ZAE 160.21 ETE 315.28 ZAC 100.39 ETC 11.26 CLP -55.06
   PLANETOCENTRIC CONIC
     C3 33.096 VHL 5.753 DLA 7.25 RAL 136.38 RAD 6568.3 VEL 12.429 PTH 2.25 VHP 4.436 DPA -11.42 RAP 163.50 ECC 1.5447
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 40 51 2565.10 -26.24 64.94 8.93 101.04 24 23 36 1965.1 -24.46 56.73
                                                                                      8.93
                                                                                                      101.04 24 23 36
66.97 14 51 0
         90.00 23 40 51 2565.10
                                                                                                                                                          13.69
                                                                                                                                                                          196.88
                                                        16.95
                                                                       204.04
                                                                                           4.49
                                                                                                                                         4156.0
                    13 31 44
                                      4755.97
         90.00
                                                                                                                                                                           36.27
                                                                                                                       1 47 47
                                                                                                                                         1691.5
                                                                                                                                                         -25.57
                                                                         44.53
                                                                                          8.64
                                                                                                        102.14
                                                        -27.53
        100.00
                       1 9 35 2291.54
                                                                                                         65.83 16 4 41
105.25 2 59 59
62.64 17 1 51
                                                                                                                                                                         177.89
                                                                                                                                         3904.8
                                                                                                                                                          14.74
                                                                       185.02
                                                                                           3.94
                     14 49 36
                                      4504.76
                                                        18.15
        100.00
                                                                                                                                                        -28.57
                                                                                                                                                                          17.09
                                                                                                                                         1453.1
                       2 25 46 2053.14
                                                        -30.97
                                                                         25.46
                                                                                           7.68
        110.00
                                                                                                                                                          17.51
                                                                                                                                                                         162.02
                                                                       169.05
                                                                                          2.30
                                                                                                                                        3715.9
                                                        21.34
        110.00
                     15 49 55
                                     4315.93
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 205.7 SR 362.5 SS 216.5
CRT -.5633 CRS .0837 CST -.8555
LSA 390.3 MSA 260.2 SSA 24.9
     TOE .1588 TRA -.4365 TC3 .1481 BAU .1520

RDE -.3498 RRA -.3316 RC3 -.3100 FAU .11069

FOE .2017 FRA-1.7211 FC3-2.8955 BSP 1435

BDE .3841 BRA .5482 BC3 .3435 FSP -957
                                                                          SCT 496.1 SCR 599.5 SC3 324.7
RRT .1010 RRF .7516 RTF .1187
SCB 778.2 R23 .1057 R13 .7454
                                                                                                                                     EL1 384.9 EL2 160.1 ALF 111.66
                                                                            561
                                                                                   605.7 SG2 488.5 THA 76.03
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ARRIVAL DATE OCT 14 1967

LAUNCH DATE JUL 20 1967

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HELIOCENTRIC CONIC
                                                                              DISTANCE 245.564
     RL 152.01 LAL .00 LOL 296.62 VL 27.932 GAL -11.19 AZL 91.75 HCA 111.10 SMA 137.40 ECC .22033 INC 1.7465 V1 29.308 RP 108.12 LAP -1.63 LOP 47.72 VP 38.588 GAP -3.28 AZP 89.37 TAL 230.55 TAP 341.65 RCA 107.13 APO 167.68 V2 35.049 RC 73.590 GL -8.43 GP -21.69 ZAL 158.45 ZAP 62.48 ETS 11.89 ZAE 160.93 ETE 304.71 ZAC 102.39 ETC 10.50 CLP -60.18
    PLANETOCENTRIC CONIC
     C3 32.453 VHL 5.697 DLA 7.83 RAL 136.44 RAD 6568.3 VEL 12.403 PTH 2.24 VHP 4.272 DPA -11.90 RAP 161.30 ECC 1.5341
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00 23 36 31 2578.80
90.00 13 36 29 4732.37
                                                                                   8.87
                                                                                                     100.58 24 19 30
66.53 14 55 21
                                                                                                                                  1978.8
                                                                                                                                                   -24.69
                                                                                                                                                                       57.66
                                                                      65.91
                                                      -26.42
                                                                                         4,14
                                                                                                                                      4132.4
                                                                                                                                                       13.01
                                                                                                                                                                      195.49
                                                        16.32
                                                                      202.60
                      1 5 34 2304.28
14 54 3 4482.13
                                                                                                                                                                       37.14
                                                      -27.70
                                                                        45.43
                                                                                         8.59
                                                                                                       101.70
                                                                                                                    1 43 58
                                                                                                                                      1704.3
                                                                                                                                                      -25.81
                                                                                                       65.38 16 8 45
104.83 2 56 49
62.17 17 5 16
                     14 54 3
                                                       17.52
                                                                      183.64
                                                                                         3.58
                                                                                                                                       3882.1
                                                                                                                                                       14.05
                                                                                                                                                                      176.56
                      2 22 25 2063.75
                                                                                         7.65
                                                      -31.16
                                                                       26.23
                                                                                                                                      1463.8
                                                                                                                                                      -28.81
                                                                                                                                                                       17.82
                                                                                                                                      3695.4
       110.00
                     15 53 41
                                     4295.42
                                                       20.70
                                                                      167.81
                                                                                         1.92
                                                                                                                                                       16.81
                                                                                                                                                                      160.84
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 523.8 SGR 637.3 SG3 349.7

RRT .2576 RRF .7909 RTF .2991

SGB 824.9 R23 .1716 R13 .7783

SG1 669.7 SG2 481.6 THA 63.72
                                                                                                                                 ST 215.8 SR 351.7 SS 230.3
CRT -.4878 CRS .1225 CST -.9131
     TDE .1566 TRA -.4843 TC3 .0779 BAU .1594
    RDE -.3330 RRA -.3506 RC3 -.3590 FAU .11806
FDE .2600 FRA-1.8258 FC3-3.1495 BSP 1590
                                                                                                                                  LSA 383.4 MSA 275.1 SSA 24.8
    BDE .3679 BRA .5979 BC3 .3673 FSP -1040
                                                                                                                                  EL1 372.3 EL2 178.0 ALF 111.91
LAUNCH DATE JUL 20 1967
                                                                               FLIGHT TIME 88.00
                                                                                                                                              ARRIVAL DATE OCT 16 1967
                                                                              DISTANCE 252.087
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.941 GAL -11.10 AZL 91.60 HCA 114.31 SMA 137.47 ECC .21868 INC 1.6021 V1 29.308 RP 108.08 LAP -1.46 LOP 50.93 VP 38.606 GAP -2.70 AZP 89.34 TAL 230.56 TAP 344.87 RCA 107.41 APO 167.53 V2 35.062 RC 75.721 GL -7.81 GP -23.00 ZAL 158.70 ZAP 67.52 ETS 10.18 ZAE 161.08 ETE 293.06 ZAC 104.50 ETC 9.61 CLP -65.46
   PLANETOCENTRIC CONIC
    20 31.014 VIL 2.080 ULA 8.83 KAL 136.59 KAD 6568.3 VEL 12.377 PTH 2.23 VHP 4.141 OPA -12.34 KAP 158.97 ECC 1.5236 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 32 24 2593.10 -26.59 66.92 8.91 100.10 24 15 37 1993.1 -24.93 58.64 $0.00 13 41 47 4708.06 15.65 201.12 3.89 66.10 15 0 15 4108.1 12.29 194.06
     C3 31.814 VHL 5.640 OLA
                                            8.43 RAL 136.59 RAD 6568.3 VEL 12.377 PTH
                                                                                                           2.23 VHP 4.141 OPA -12.34 RAP 158.97 ECC 1.5236
                    1 1 46 2317.56
14 59 2 4458.83
                                                                                         8.64
                                                                                                       101.23
                                                                                                                     1 40 24
                                                                                                                                       1717.6
                                                                        46.38
                                                                                                                                                       -26.05
                                                                                                                                                                        38.06
                                                                                                         64.94 16 13 21
                                                                      182.23
                                                                                         3.33
                                                                                                                                       3858.8
                                                                                                                                                                       175.20
                                                                                                                                                       13.33
                                                                                                        104.39 2 53 55
61.70 17 9 12
                      2 19 20 2074.82
                                                      -31.35
                                                                       27.04
                                                                                         7.73
                                                                                                       104.39
                                                                                                                                       1474.8
                                                                                                                                                      -29.05
                                                                                                                                                                        18.59
                    15 57 58
                                   4274.34
                                                                                                                                       3674.3
                                                                                                                                                      16.09
                                                                      166.55
                                                                                         1.65
   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 575.4 SGR 678.4 SG3 372.5
RRT .4100 RRF .8248 RTF .4647
SGB 889.6 R23 .1934 R13 .8137
SG1 753.9 SG2 472.3 THA 55.99
                                                                                                                                  ST 230.7 SR 339.4 SS 243.7
CRT -.4141 CRS .1509 CST -.9510
     TOE .1579 TRA -.5381 TC3 -.0040 BAU .1748
     ROE -.3145 RRA -.3687 RC3 -.4109 FAU .12464
     FOE .3183 FRA-1.9100 FC3-3.3918 BSP 1829
                                                                                                                                  LSA 380.6 MSA 287.0 SSA 24.8
     BOE .3520 BRA .6523 BC3 .4109 FSP -1123
                                                                                                                                  EL1 359.2 EL2 198.4 ALF 113.15
                                                                                                                                             ARRIVAL DATE OCT 18 1967
                                                                              FLIGHT TIME 90.00
LAUNCH DATE JUL 20 1967
                                                                              DISTANCE 258.577
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.941 GAL -11.00 AZL 91.45 MCA 117.52 SMA 137.48 ECC .21719 INC 1.4502 V1 29.30A
RP 108.04 LAP -1.29 LOP 54.14 VP 38.618 GAP -2.14 AZP 89.33 TAL 230.45 TAP 347.97 RCA 107.62 APO 167.34 V2 35.075
RC 77.874 GL -7.14 GP -24.30 ZAL 158.88 ZAP 72.59 ETS 8.33 ZAE 160.53 ETE 281.19 ZAC 106.67 ETC 8.61 CLP -70.84
   PLANETOCENTRIC CONIC
    C3 31.173 VHL 5.583 DLA 9.06 RAL 136.83 RAD 6568.2 VEL 12.351 PTH 2.23 VHP 4.044 DPA -12.76 RAP 156.58 ECC 1.5130
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 28 26 2608.21 -26.77 67.99 9.05 99.60 24 11 54 2008.2 -25.17 59.68 90.00 13 47 43 4682.72 14.95 199.60 3.75 65.67 15 5 46 4082.7 11.54 192.58 100.00 0 58 8 2331.59 -28.07 47.38 8.79 100.73 1 36 59 1731.6 -26.30 39.02
                      0 58 8 2351.59
15 4 38 4434.57
                                                                                                                                                      12.58
                     15 4 38
                                                      16.14
                                                                     180.77
                                                                                        3.17
                                                                                                       64.50 16 18 32
                                                                                                                                      3834.6
                                                                                                                                                                     173.80
       100.00
                                                                                                       103.92 2 51 13
61.23 17 13 41
                      2 16 27 2086.51
16 2 48 4252.39
                                                                       27.90
                                                                                        7.91
                                                                                                      103.92
                                                                                                                                      1486.5
                                                                                                                                                     -29.31
                                                                                                                                                                       19.40
       110.00
                                                      -31.54
                    16 2 48
                                                                      165.25
                                                                                                                                      3652.4
                                                                                                                                                     15.32
       110.00
                                                      19.31
                                                                                        1.47
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 653.0 SGR 719.5 SG3 391.0
RRT .5436 RRF .8525 RTF .6015
SGB 971.6 R23 .2008 R13 .8447
                                                                                                                                 ST 249.9 SR 324.3 SS 257.5
CRT -.3413 CRS .1822 CST -.9767
     TOE .1620 TRA -.5983 TC3 -.0992 BAU .1975
    RDE -.2933 RRA -.3840 RC3 -.4635 FAU .12970
FDE .3840 FRA-1.9605 FC3-3.6020 BSP 2129
                                                                                                                                 LSA 385.4 MSA 291.1 SSA 24.8
ELI 344.6 EL2 221.0 ALF 116.16
    BDE .3351 BRA .7109 BC3 .4740 FSP -1186
                                                                          SG1 855.3 SG2 461.1 THA 50.06
LAUNCH DATE JUL 20 1967
                                                                              FLIGHT TIME 92.00
                                                                                                                                             ARRIVAL DATE OCT 20 1967
                                                                              DISTANCE 265.034
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.935 GAL -10.90 AZL 91.29 MCA 120.73 SMA 137.43 ECC .21585 INC 1.2890 V1 29.308 RP 108.00 LAP -1.11 LOP 57.35 VP 38.626 GAP -1.60 AZP 89.34 TAL 230.23 TAP 350.96 RCA 107.76 APO 167.09 V2 35.088 RC 80.046 GL -6.41 GP -25.59 ZAL 158.99 ZAP 77.64 ETS 6.36 ZAE 159.29 ETE 270.02 ZAC 108.83 ETC 7.50 CLP -76.27
   PLANETOCENTRIC CONIC
    C3 30.529 VHL 5.525 DLA
                                            9.72 RAL 137.17 RAD 6568.2 VEL 12.325 PTH 2.22 VHP 3.977 OPA -13.18 RAP 154.17 ECC 1.5024
    UNCH AZHTH LNCH TIME L-1 TIME
90.00 23 24 31 2624.44
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     99.04 24 8 15
65.24 15 11 57
                                                                                                                                                   -25.42
                                                                                     9.29
                                                      -26.95
                                                                       69.14
                                                                                                                                      2024.4
                                                                                                                                                                       60.81
                     13 54 21
                                    4655.99
                                                       14.19
                                                                      198.00
                                                                                        3.70
                                                                                                                                      4056.0
                                                                                                                                                       10.74
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        90.00
                                  2346.66
                                                                                                                    1 33 41
                                                                                                                                      1746.7
                                                                                                                                                      -26.56
                                                                                                                                                                       40.07
                     0 54 34
                                                                       48.46
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                                                                                                       100.19
                                                      -28.25
       100.00
                                                                                                                  16 24 23
                                                                                                                                      3809.0
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                                    4409.01
                                                      15.39
                                                                      179.25
                                                                                        3.11
                                                                                                        64.05
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                     15 10 54
       100.00
                                                                                                        103.40 2 48 41
60.76 17 18 45
                                                                                                                                      1499.1
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                                                                                                       103.40
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                       2 13 42
                                  2099.05
                                                      -31.74
                                                                                        8.20
       110.00
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                     16 8 16
                                     4229.38
                                                       18.55
                                                                      163.90
                                                                                         1.39
                                                                                                                                      3629.4
                                                                                                                                                      14.51
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1708 TRA -.6621 TC3 -.2052 BAU .2271
                                                                         SGT 753.7 SGR 761.4 SG3 405.6
RRT .6460 RRF .8758 RTF .7016
SGB 1071.3 R23 .2017 R13 .8707
                                                                                                                                 ST 274.0 SR 307.7 SS 270.7

CRT -.2776 CRS .2027 CST -.9887

LSA 400.0 MSA 287.1 SSA 24.8
    FOE .4456 FRA-1.9821 FC3-5.173 FAU .13339
FDE .4456 FRA-1.9821 FC3-3.7827 BSP 2498
BDE .3200 BRA .7719 BC3 .5565 FSP -1244
                                                                          SG1 971.9 SG2 450.7 THA 45.45
                                                                                                                                 EL1 332.1 EL2 244.0 ALF 123.65
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FLIGHT TIME 86.00

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ARRIVAL DATE OCT 22 1967
                                                                                                           FLIGHT TIME 94.00
LAUNCH DATE JUL 20 1967
                                                                                                           DISTANCE 271.459
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 27.923 GAL -10.79 A7L 91.12 MCA 123.94 SMA 137.33 ECC .21463 INC 1.1166 V1 29.30A RP 107.96 LAP -.93 LOP 60.56 VP 38.628 GAP -1.09 A7P 89.38 TAL 229.90 TAP 353.85 RCA 107.85 APO 166.80 V2 35.101 RC 82.236 GL -5.61 GP -26.85 ZAL 159.01 ZAP 82.59 ETS 4.26 ZAE 157.44 ETE 260.25 ZAC 110.94 ETC 6.29 CLP -81.69
    PLANETOCENTRIC CONIC
                                                                                                                                                  2.22 VHP 3.942 CPA -13.60 RAP 151.79 ECC 1.4917
      C3 29.877 VHL 5.466 DLA 10.42 RAL 137.61 RAD 6568.2 VEL 12.298 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                               98.43 24 4 35
64.81 15 18 55
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           90.00 23 20 33 2642.17
90.00 14 1 48 4627.44
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                                                                                                 70.41
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                                                                            13.37
                                                                                                196.30
                                                                                                                         3.75
                            0 51 0 2363.11
15 17 57 4381.73
                                                                                                                                                                 1 30 23
                                                                                                                                                                                         1763.1
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                                                                                                                         9.40
          100.00
                                                                           -28.45
                                                                                                  49.65
                                                                                                                                               63.61 16 30 59
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          100.00
                                                                             14.57
                                                                                                177.64
                                                                                                                          3.16
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                                                                                                                                             102.84 2 46 13
60.28 17 24 31
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                            2 11 1 2112.75
16 14 26 4204.86
                                                                          -31.96
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                                                                                                                         8.59
          110.00
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                                                                                                                                                                                         3604.9
                                                                            17.73
                                                                                                162.47
                                                                                                                         1.40
          110.00
                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SGT 874.4 SGR 799.8 SG3 414.0
RRT .7220 RRF .8944 RTF .7720
SGB 1185.0 R23 .2022 R13 .8902
SGI 1100.4 SG2 439.7 THA 41.47
                                                                                                                                                                                   ST 302.8 SR 288.0 55 284.7
CRT -.2199 CRS .2255 CST -.9928
      TDE .1842 TRA - .7287 TC3 - .3222 BAU .2614
      RDE -. 2447 RRA -. 4048 RC3 -. 5695 FAU .13505
                                                                                                                                                                                   LSA 423.6 MSA 274.9 SSA 24.9
      FDE .5127 FRA-1.9620 FC3-3.9133 BSP 2904
BDE .3063 BRA .8336 BC3 .6544 FSP -1274
                                                                                                                                                                                   EL1 327.1 EL2 260.1 ALF 141.44
                                                                                                                                                                                                    ARRIVAL DATE OCT 24 1967
                                                                                                            FLIGHT TIME 96.00
LAUNCH DATE JUL 20 1967
                                                                                                            DISTANCE 277.852
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 27.904 GAL -10.67 AZL 90.93 MCA 127.16 SMA 137.18 ECC .21350 INC .9304 V1 29.308 RP 107.92 LAP -.74 LOP 63.78 VP 38.626 GAP -.59 AZP 89.44 TAL 229.48 TAP 356.64 RCA 107.89 APO 166.47 V2 35.113 RC 84.440 GL -4.73 GP -28.10 ZAL 158.95 ZAP 87.39 ETS 2.02 ZAE 155.14 ETE 252.07 ZAC 112.93 ETC 5.02 CLP -87.04
    PLANETOCENTRIC CONIC
                                                                                                                                                   2.21 VHP 3.935 DPA -14.06 RAP 149.51 ECC 1.4809
      C3 29-219 VHL 5.405 DLA 11.19 RAL 138.14 RAD 6568.2 VEL 12.272 PTH
     C3 29.219 VHL 5.405 DLA 11.19 RAL 138.14 RAD 6568.2 VEL 12.272 PTH 2.21 VHP 3.935 DPA -14.06 RAP 149.51 ECC 1.2869 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 16 24 2661.93 -27.32 71.82 10.09 97.75 24 0 46 2061.9 -25.97 63.42 90.00 14 10 12 4596.52 12.47 194.48 3.91 64.37 15 26 49 3996.5 8.92 187.60 100.00 0 47 18 2381.45 -28.65 50.97 9.87 98.93 1 27 0 1781.4 -27.12 42.50 100.00 15 25 55 4352.24 13.67 175.91 3.30 63.16 16 38 28 3752.2 9.96 169.09 110.00 2 8 18 2128.02 -32.18 30.96 9.11 102.20 2 43 46 1528.0 -30.17 22.33 110.00 16 21 26 4178.43 16.83 160.95 1.52 59.80 17 31 4 3578.4 12.69 154.28
                           23 16 24 2661.93
14 10 12 4596.52
0 47 18 2381.45
15 25 55 4352.24
2 8 18 2128.02
16 21 26 4178.43
                                                                                                 160.95
                                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                   ST 336.5 SR 266.9 SS 298.1

CRT -.1699 CRS .2351 CST -.9915
                                                                                                       SGT 1009.9 SGR 836.9 SG3 417.7
RRT .7760 RRF .9102 RTF .8200
       TOE .2035 TRA -.7955 TC3 -.4480 BAU .2993
       RDE -.2177 RRA -.4093 RC3 -.6216 FAU .13513
                                                                                                                                                                                    LSA 453.3 MSA 259.3 SSA 25.0
                                                                                                       SGB 1311.6 R23 .2031 R13 .9054
SG1 1239.0 SG2 430.3 THA 38.16
      FOE .5720 FRA-1.9128 FC3-4.0039 BSP 3359
BDE .2980 BRA .8946 BC3 .7662 FSP -1298
                                                                                                                                                                                    EL1 343.8 EL2 257.5 ALF 161.99
                                                                                                                                                                                                   ARRIVAL DATE OCT 26 1967
                                                                                                            FLIGHT TIME 98.00
LAUNCH DATE JUL 20 1967
                                                                                                            DISTANCE 284.215
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 28.556 VHL 5.344 CLA 12.03 RAL 138.78 RAD 6568.1 VEL 12.245 PTH 2.20 VHP 3.956 QPA -14.58 RAP 147.37 ECC 1.4700
      C3 28.556 VHL 5.344 CLA 12.03 RAL 138.78 RAD 6568.1 VEL 12.245 PTH 2.20 VHP 3.956 QPA -14.58 RAP 147.37 ECC 1.4700 LNCH AYMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYMTH INJ TIME PO CST TIM ÎNJ 2 LAT INJ 2 LONG 90.00 23 11 56 2684.40 -27.52 73.44 10.68 96.96 23 56 40 2084.4 -26.27 64.99 90.00 14 19 47 4562.57 11.46 192.50 4.19 63.93 15 35 50 3962.6 7.86 185.66 100.00 0 43 20 2402.28 -28.86 52.48 10.48 98.16 1 23 22 1802.3 -27.43 43.97 100.00 15 35 0 4319.93 12.67 174.04 3.57 62.70 16 47 0 3719.9 8.91 167.26 110.00 2 5 26 2145.38 -32.42 32.26 9.76 101.47 2 41 11 1545.4 -30.50 23.57 110.00 16 29 23 4149.59 15.83 159.30 1.76 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17 38 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17.88 33 3549.6 11.65 152.70 110.00 16 29 23 4149.59 15.83 159.30 17.66 59.30 17.88 33 3549.6 11.65 152.70 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 110.00 
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                       MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                   ST 375.3 SR 243.0 55 312.9

CRT -.1211 CRS .2386 CST -.9873

LSA 489.4 MSA 240.1 SSA 25.2

EL1 377.2 EL2 239.9 ALF 172.44
                                                                                                      RRT .8147 RRF .9230 RTF .8527
SGB 1446.5 R23 .2058 R13 .9164
SGI 1383.8 SG2 421.0 THA 35.22
       TOE .2292 TRA -.8606 TC3 -.5816 BAU .3390
       RDE -.1878 RRA -.4084 RC3 -.6710 FAU .13326
FDE .6327 FRA-1.8271 FC3-4.0400 BSP 3829
BDE .2963 BRA .9526 BC3 .8880 FSP -1295
                                                                                                                                                                                                     ARRIVAL DATE OCT 28 1967
                                                                                                             FLIGHT TIME 100.00
 LAUNCH DATE JUL 20 1967
                                                                                                             DISTANCE 290.548
     HELIOCENTRIC CONIC
       RL 152.01 LAL .00 LOL 296.62 VL 27.852 GAL -10.42 AZL 90.50 MCA 133.60 SMA 136.77 ECC .21151 INC .5039 VI 29.30A RP 107.85 LAP -.37 LOP 70.22 VP 38.610 GAP .34 AZP 89.65 TAL 228.36 TAP 1.96 RCA 107.84 APO 165.70 V2 35.137 RC 88.880 GL -2.62 GP -30.61 ZAL 158.55 ZAP 96.27 ETS 357.16 ZAE 149.72 ETE 240.08 ZAC 116.37 ETC 2.35 CLP -97.29
     PLANETOCENTRIC CONIC
       C3 27.891 VHL 5.281 DLA 12.97 RAL 139.53 RAD 6568.1 VEL 12.217 PTH 2.20 VHP 4.005 DPA -15.20 RAP 145.38 ECC 1.4590
       UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 6 54 2710.50 -27.72 75.32 11.41 96.04 23 52 5 2110.5 -26.59 66.83
                                                                                                                                             96.04 23 52 5
63.48 15 46 13
                           23 6 54 2710.50
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             90.00
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            100.00
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100.61 2 38 23
58.79 17 47 9
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            100,00
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                                                    4283.98
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           110.00
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16 38 31 4117.68
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                                                                                                  157.51
                                                                                                                           2.11
           110.00
                                                                            14.72
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                        MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                             ST 419.9 SR 217.4 SS 328.4

CRT -.0677 CRS .2237 CST -.9825

LSA 531.8 MSA 219.2 SSA 25.4

EL1 420.3 EL2 216.7 ALF 177.27
                                                                                                       SGT 1309.6 SGR 898.2 SG3 408.3
RRT .8425 RRF .9340 RTF .8752
SGB 1588.0 R23 .2105 R13 .9246
        TOE .2623 TRA -.9221 TC3 -.7212 BAU .3797
       RDE -.1560 RRA -.4030 RC3 -.7190 FAU .12984
FDE .6875 FRA-1.7159 FC3-4.0303 BSP 4324
BDE .3052 BRA 1.0063 BC3 1.0184 FSP -1281
                                                                                                        SG1 1533.3 SG2 413.3 THA 32.69
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LAUNCH DATE JUL 20 1967
                                                                           FLIGHT TIME 102.00
                                                                                                                                      ARRIVAL DATE OCT 30 1967
                                                                          DISTANCE 296.853
   HELIOCENTRIC CONIC
                        .00 LOL 296.62 VL 27.819 GAL -10.28 A7L 90.26 MCA 136.82 SMA 136.51 ECC .21063 INC .2548 V1 29.308 -.17 LOP 73.44 VP 38.597 GAP .78 A7P 89.81 TAL 227.67 TAP 4.49 RCA 107.76 APO 165.26 V2 35.149 -1.34 GP -31.92 TAL 158.18 TAP 100.27 ETS 354.53 TAE 146.81 ETE 235.85 TAC 117.76 ETC .96 CLP-102.12
    RL 152.01 LAL
RP 107.82 LAP
    RC 91.113 GL
   PLANETOCENTRIC CONTC
    C3 27.250 VHL 5.218 OLA 14.04 RAL 140.41 RAD 6568.1 VEL 12.190 PTH 2.19 VHP 4.079 OPA -15.95 RAP 143.57 ECC 1.4481 LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 1 3 2741.49 -27.92 77.57 12.32 94.93 23 46 44 2141.5 -26.94 69.03 90.00 14 43 38 4481.79 9.00 187.83 5.17 63.04 15 58 20 3881.8 5.32 181.10
                   23 1 3 2741,49
14 43 38 4481,79
0 33 46 2455,15
15 57 32 4243,35
                                                                                                                               1855.2
       100.00
                                                    -29.31
                                                                   56.35
                                                                                                  96.17
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                                                                                  12.16
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                                                                                                   61.76 17 8 16
       100.00
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                                                                  169.65
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                                 2189.42
       110.00
                    1 58 41
                                                  -32.97
                                                                   35.58
                                                                                  11.57
                                                                                                  99.56
                                                                                                             2 35 11
                                                                                                                               1589.4
                                                                                                                                              -31.30
                                                                                                                                                              26.75
                                                                                                           17 57 8
      110.00
                   16 49 6
                                   4081.85
                                                    13.44
                                                                  155.51
                                                                                   2.62
                                                                                                  58.27
                                                                                                                               3481.9
                                                                                                                                                 9.15
                                                                                                                                                             149.04
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACGURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SCT 1466.6 SCR 921.8 SC3 395.9
RRT .8625 RRF .9432 RTF .8907
SCB 1732.2 R23 .2173 R13 .9304
SCI 1683.9 SC2 406.3 THA 30.42
                                                                                                                          ST 471.9 SR 189.3 SS 347.1
CRT .0057 CRS .1829 CST -.9775
LSA 582.9 MSA 196.3 SSA 25.6
    TOE .3045 TRA -.9775 TC3 -.8650 BAU .4201
    ROE -.1207 RRA -.3919 RC3 -.7639 FAU .12477
    FDE .7443 FRA-1.5767 FC3-3.9671 BSP 4810
    BDE .3275 BRA 1.0532 BC3 1.1540 FSP -1242
                                                                                                                                                                   .16
                                                                                                                           EL1 471.9 EL2 189.3 ALF
LAUNCH DATE JUL 20 1967
                                                                          FLIGHT TIME 104.00
                                                                                                                                       ARRIVAL DATE NOV 1 1967
  HELIOCENTRIC CONIC
                                                                          DISTANCE 303.130
                           .00 LOL 296.62 VL 27.782 GAL -10.14 A7L 89.97 HCA 140.04 SMA 136.23 ECC .20981 INC .0210 V1 29.308 .02 LOP 76.66 VP 38.580 GAP 1.20 A7P 90.02 TAL 226.91 TAP 6.96 RCA 107.64 APO 164.81 V2 35.160 .13 GP -33.34 ZAL 157.66 ZAP 103.91 ETS 351.74 ZAE 143.85 ETE 232.52 ZAC 118.89 ETC 359.56 CLP-106.72
    RL 152.01 LAL
    RP 107.78 LAP
    RC 93.352 GL
  PLANETOCENTRIC CONIC
    C3 26.583 VHL 5.156 DLA 15.27 RAL 141.42 RAD 6568.1 VEL 12.164 PTH
                                                                                                     2.18 VMP 4.179 OPA -16.88 RAP 141.93 ECC 1.4375
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                13.43
                   22 53 57 2779.15
                                                                                                  93.57 23 40 16
                                                                                                                              2179.2
        90.00
                                                   -28.11
                                                                  80.30
                                                                                                                                             -27.32
                                                                                                                                                               71.73
                   14 58 50 4432.19
0 27 33 2489.96
                                                                                                             16 12 42
        90.00
                                                      7.46
                                                                  185.01
                                                                                    5.94
                                                                                                   62.60
                                                                                                                               3632.2
                                                                                                                                                3.75
                                                                                                                                                              178.31
       100.00
                                                   -29.53
                                                                                                   94.84
                                                                                                               1 9 3
                                                                                                                               1890.0
                                                                   58.91
                                                                                  13.31
                                                                                                                                               -28.55
                                                                                                                                                                50.25
      100.00
                   16 11 50 4196.61
                                                    8.72
                                                                  167.01
                                                                                   5.26
                                                                                                   61.30
                                                                                                           17 21 47
                                                                                                                               3596.6
                                                                                                                                                4.82
                                                                                                                                                             160.39
                    1 54 21 2218.35
                                                   -33.28
                                                                                                  98.31
                                                                                                             2 31 20
      110.00
                                                                   37.78
                                                                                  12.81
                                                                                                                               1618.3
                                                                                                                                              -31.77
                                                                                                                                                               28.88
                                                                                                           18 8 52
      110.00
                   17 1 31
                                                                  153.26
                                                                                                   57.74
                                                                                                                               3441.0
                                  4040.99
                                                   11.97
                                                                                    3.32
                                                                                                                                                 7.63
                                                                                                                                                              146.86
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     RIT 1625.7 SGR 944.8 SG3 380.4

RRT .8770 RRF .9515 RTF .9017

SGB 1880.3 R23 .2258 R13 .9348

SG1 1836.9 SG2 401.9 THA 28.49
    TOE .3564 TRA-1.0256 TC3-1.0126 BAU .4606
                                                                                                                           ST 532.5 SR 162.0 SS 367.0
CRT .1178 CRS .0890 CST -.9744
    ROE -.0836 RRA -.3770 RC3 -.8087 FAU .11879
    FDE .7925 FRA-1.4255 FC3-3.8685 BSP 5325
BDE .3661 BRA 1.0927 BC3 1.2959 FSP -1203
                                                                                                                           LSA 643.1 MSA 173.7 SSA 25.9
ELI 532.8 EL2 160.7 ALF 2.26
LAUNCH DATE JUL 20 1967
                                                                          FLIGHT TIME 106.00
                                                                                                                                     ARRIVAL DATE NOV 3 1967
                                                                         DISTANCE 309.380
  HELIOCENTRIC CONIC
                         .00 LOL 296.62 VL 27.742 GAL -9.99 AZL 89.65 MCA 143.27 SMA 135.91 ECC .20905 INC .3467 V1 29.308
.21 LOP 79.88 VP 38.561 GAP 1.61 AZP 90.28 TAL 226.09 TAP 9.35 RCA 107.50 APO 164.33 V2 35.170
1.86 GP -34.90 ZAL 156.97 ZAP 107.16 ETS 348.77 ZAE 140.86 ETE 229.93 ZAC 119.76 ETC 358.12 CLP-111.08
    RL 152.01 LAL
    RP 107.75 LAP
    RC 95.596 GL
   PLANETOCENTRIC CONIC
    C3 25.966 VHL 5.096 DLA 16.72 RAL 142.60 RAD 6568.0 VEL 12.138 PTH 2.18 VHP 4.308 DPA -18.03 RAP 140.45 ECC 1.4273
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 22 44 59 2826.12

90.00 15 17 11 4373.58

100.00 0 19 45 2533.21

100.00 16 29 3 4141.72

110.00 1 48 56 2254.14

110.00 17 16 20 3993.55
                                                                              14.81
                                                                                                91.86 23 32 5
62.20 16 30 5
                                                                                                                             2226.1
                                                                                                                                           -27.70
                                                   -28.26
                                                                 83.73
                                                                                                                                                               75.11
                                                                                                                               3773.6
                                                                                                                                                1.85
                                                                                                                                                            175.03
                                                     5.61
                                                                 181.69
                                                                                   6.98
                                                                                                  93.17
                                                                                                                               1933.2
      100.00
                                                   -29.74
                                                                   62.11
                                                                                 14.74
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                                                                                                  60.85 17 38 4
96.72 2 26 30
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      100.00
                                                    6.91
                                                                 163.94
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                                                                                                                              1654.1
      110.00
                                                   -33.60
                                                                   40.53
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      110.00
                                                                  150.69
                                                                                   4.26
                                                                                                  57.21
                                                                                                                               3393.6
                                                                                                                                                5.84
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 605.3 SR 136.4 SS 392.2

CRT .3104 CRS -.0963 CST -.9720

LSA 717.9 MSA 150.9 SSA 26.1

EL1 606.9 EL2 129.3 ALF 4.19
                                                                     SGT 1783.9 SGR 963.1 SG3 360.8
RRT .8872 RRF .9586 RTF .9092
    TDE .4218 TRA-1.0633 TC3-1.1606 BAU .4994
    ROE -. 0417 RRA -. 3559 RC3 -. 8502 FAU .11153
   FOE .8444 FRA-1.2554 FC3-3.7187 BSP 5811
BOE .4238 BRA 1.1213 BC3 1.4387 FSP -1142
                                                                     SGB 2027.3 R23 .2361 R13 .9377
SG1 1987.7 SG2 398.8 THA 26.76
                                                                                                                                      ARRIVAL DATE NOV 5 1967
LAUNCH DATE JUL 20 1967
                                                                          FLIGHT TIME 108.00
                                                                          DISTANCE 315.604
   HELIOCENTRIC CONIC
   RL 152.01 LAL
                         .00 LOL 296.62 VL 27.699 GAL -9.83 AZL 89.28 HCA 146.49 SHA 135.58 ECC .20834 INC .7207 V1 29.308
.40 LOP 83.11 VP 38.539 GAP 2.01 AZP 90.60 TAL 225.19 TAP 11.68 RCA 107.33 APO 163.83 V2 35.180
3.91 GP -36.67 ZAL 156.04 ZAP 109.97 ETS 345.59 ZAE 137.83 ETE 227.97 ZAC 120.36 ETC 356.64 CLP-115.20
        107.72 LAP
   RC 97.843 GL
  PLANETOCENTRIC CONIC
    C3 25.403 VHL 5.040 DLA 18.43 RAL 143.98 RAD 6568.0 VEL 12.115 PTH 2.17 VHP 4.468 DPA -19.44 RAP 139.10 ECC 1.4181
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              16.52
                                                                                                 89.64 23 21 17
61.86 16 51 42
                                                                  88.15
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                 22 33 10 2886.50
15 40 0 4502 37
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       90.00
                                                   -28.31
                                                                 177.70
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       90.00
                   15 40 0
                                  4502.37
                                                    3.34
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                                                                                                              0 52 39
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                                                                                                                               1988.5
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                                                                                                                                                              57.44
      100.00
                    0 9 31 2588.50
16 50 16 4075.60
                                                   -29.88
                                                                   66.22
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      100.00
                   16 50 16
                                                    4.71
                                                                 160.27
                                                                                   7.65
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                   1 41 53 2299.51
17 34 24 3937.35
                                                  -33.90
                                                                                 16.27
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      110.00
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                                                   8.15
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                                                                                                  56.69
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      110.00
                                                                 147.67
                                                                                   5.53
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 693.7 SR 122.0 SS 420.6
CRT .5915 CRS -.4015 CST -.9719
LSA 809.7 MSA 130.3 SSA 25.9
                                                                     SGT 1941.7 SGR 981.8 SG3 338.9
RRT .8941 RRF .9651 RTF .9147
SGB 2175.8 R23 .2472 R13 .9400
    TOE .5025 TRA-1.0895 TC3-1.3084 BAU, .5376
    RDE .0037 RRA -.3307 RC3 -.8911 FAU .10366
FDE .8908 FRA-1.0811 FC3-3.5328 BSP 6318
    BOE .5025 BRA 1.1386 BC3 1.5830 FSP -1080
                                                                      SG1 2138.9 SG2 399.2 THA 25.27
                                                                                                                          EL1 697.5 EL2 97.8 ALF 6.06
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FLIGHT TIME 110.00
                                                                                                                              ARRIVAL DATE NOV 7 1967
LAUNCH DATE JUL 20 1967
                                                                     DISTANCE 321.803
  HELIOCENTRIC CONTC
   RL 152.01 LAL .00 LOL 296.62 VL 27.653 GAL -9.66 A7L 88.83 HCA 149.72 SMA 135.23 ECC .20770 INC 1.1650 V1 29.308 RP 107.69 LAP .59 LOP 86.34 VP 38.515 GAP 2.39 A7P 91.01 TAL 224.24 TAP 13.96 RCA 107.14 APO 163.31 V2 35.190 RC 100.092 GL 6.37 GP -38.72 7AL 154.80 7AP 112.31 ETS 342.16 7AE 134.73 ETE 226.54 7AC 120.70 ETC 355.07 CLP-119.12
  PLANETOCENTRIC CONIC
   C3 24.933 VHL 4.993 OLA 20.51 RAL 145.61 RAD 6568.0 VEL 12.096 PTH 2.17 VHP 4.666 OPA -21.19 RAP 137.82 ECC 1.4103
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          18.63
                                                                                            86.69 23 6 10
61.69 17 19 41
                                                                                                                      2367.3
                                                                                                                                      -28.30
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       90,00 22 16 42 2967.29
                                                -28.14
                                                               94.05
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                   16 9 29
                                4212.36
                                                  ,44
                                                              172.67
                                                                              10.40
       90.00
                                                                                                                                      -29.78
                                                                                                                                                      62.85
                                                                                             88.15 24 35 51
                                                                                                                        2061.7
                                                                              18.72
      100,00
                  23 51 29 2661.65
                                                -29.84
                                                               71.65
                                                                                             60.16 18 23 56
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                                                                                                                                                    149.22
                                                                                                                        3393.2
      100.00
                  17 17 23
                                 3993.24
                                                  1.93
                                                              155.74
                                                                              9.57
                                                                                                     2 11 36
19 1 29
                                                                                                                                      -33.49
                                                                                                                                                     39.45
                                 2358.57
                                                -34.13
                                                               48.63
                                                                              18.71
                                                                                             91.95
                                                                                                                        1758.6
                   1 32 18
                                                                                                                        3269.1
                                                                                                                                        1.10
                  17 57 D
                                                   5.58
                                                              144.06
                                                                              7.30
                                                                                             56.22
      110,00
                                 3869.09
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 804.7 SR 130.3 SS 457.0
CRT .8622 CRS -.7357 CST -.9730
LSA 927.3 MSA 113.6 SSA 24.8
                                                                  SGT 2097.1 SGR 997.6 SG3 314.0
RRT .8982 RRF .9707 RTF .9184
SGB 2322.3 R23 .2591 R13 .9414
    TOE .6051 TRA-1.1002 TC3-1.4506 BAU .5739
   ROE .0563 RRA -.2984 RC3 -.9271 FAU .09491
   FDE .9411 FRA -.8972 FC3-3.2954 BSP 6795
                                                                  SG1 2287.2 SG2 402.1 THA 23.92
                                                                                                                    FL1 812.6 EL2 65.3 ALF 8.00
   BOE .6078 BRA 1.1400 BC3 1.7216 FSP -1001
                                                                                                                               ARRIVAL DATE NOV 9 1967
                                                                      FLIGHT TIME 112.00
                                                                      DISTANCE 327.977
  HELIOCENTRIC CONIC
                         .00 LOL 296.62 VL 27.604 GAL -9.48 AZL 88.30 HCA 152-94 SMA 134.86 ECC .20711 INC 1.7042 V1 29.308
.78 LOP 89.57 VP 36.488 GAP 2.75 AZP 91.52 TAL 223.23 TAP 16.17 RCA 106.93 APO 162.79 V2 35.199
9.39 GP -41.14 ZAL 153.11 ZAP 114.11 ETS 338.43 ZAE 131.51 ETE 225.54 ZAC 120.78 ETC 353.37 CLP-122.85
   RL 152.01 LAL
RP 107.66 LAP
   RC 102.344 GL
  PLANETOCENTRIC CONIC
   C3 24.624 VHL 4.962 DLA 23.07 RAL 147.58 RAD 6568.0 VEL 12.083 PTH
                                                                                               2.16 VHP 4.913 DPA -23.34 RAP 136.54 ECC 1.4052
   C3 24.624 VHL 4.962 DLA 23.07 RAL 147.38 RAU 0308.0 VEL 12.003 FIN 13.0 VIII 14.00 PO CST TIM INJ 2 LAT INJ 2 LONG 190.00 21 51 41 3082.67 -27.40 102.41 21.20 82.57 22 43 4 2482.7 -28.15 93.82
                                                                                             61.88 17 58 23
84.21 24 16 42
60.15 18 58 41
88.27 1 59 14
                                                                                                                        3490 A
                                                                                                                                       -7.21
                                                                                                                                                     159.20
                  16 50 12
                                 4090.85
                                                 -3.48
                                                               165.89
                                                                              13.31
       90.00
                                                                                                                        2163.6
                                                                                                                                       -29.87
                                                                                                                                                      70.42
                                 2763.61
                                                 -29.38
                                                                79.19
                                                                              21.46
                   23 30 39
                                                                                                                        3285.1
                                                                                                                                       -5.70
                                                                                                                                                     143.26
                  17 53 56
                                                 -1.74
                                                              149.81
                                                                              12.35
      100.00
                                 3885.14
                   1 18 36
                                                                                                                        1838.2
                                                                                                                                      -34.01
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                                 2438.18
                                                -34.14
                                                                54.85
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      110.00
                                                                                             55.89 19 29 27
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                                                               139.56
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      110.00
                  18 26 24 3783.34
                                                  2.31
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 2252.0 SGR 1014.1 SG3 287.1
RRT .8996 RRF .9756 RTF .9214
SGB 2469.8 R23 .2704 R13 .9427
SGI 2435.6 SG2 409.5 THA 22.73
   TOE .7358 TRA-1.0931 TC3-1.5829 BAU .6091
                                                                                                                   ST 945.2 SR 167.9 SS 498.8
CRT .9766 CRS -.9177 CST -.9758
    RDE .1156 RRA - .2397 RC3 - .9582 FAU .08569
                                                                                                                    LSA 1076.7 MSA 103.2 SSA 22.3
ELI 959.4 ELZ 35.6 ALF 9.86
   FOE .9875 FRA -.7141 FC3-3.0128 BSP 7296
BDE .7449 BRA 1.1235 BC3 1.8503 FSP -923
                                                                      FLIGHT TIME 114.00
                                                                                                                              ARRIVAL DATE NOV 11 1967
LAUNCH DATE JUL 20 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 334.127
   RL 152.01 LAL .00 LOL 296.62 VL 27.553 GAL -9.30 AZL 87.62 MCA 156.17 SMA 134.48 ECC .20657 INC 2.3775 VI 29.308 RP 107.65 LAP .96 LOP 92.80 VP 38.460 GAP 3.11 AZP 92.18 TAL 222.16 TAP 18.33 RCA 106.70 APO 162.26 V2 35.208 RC 104.596 GL 13.15 GP -44.04 ZAL 150.81 ZAP 115.28 ETS 334.35 ZAE 128.06 ETE 224.89 ZAC 120.59 ETC 351.48 CLP-126.45.
  PLANETOCENTRIC CONIC
   C3 24.594 VHL 4.959 DLA 26.25 RAL 150.02 RAD 6568.0 VEL 12.082 PTH 2.16 VHP 5.229 DPA -25.97 RAP 135.16 ECC 1.4048
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            76.20 22 0 2
63.22 19 0 51
                                                                                                                      2675.3
                                                                                                                                                 107.70
                                                                                                                                     -26.63
                                                                            23.98
                  21 5 27
17 55 53
                                                -24.97
                                                              115.97
       90.00
                                 3275.31
                                                                                                                                                    148.04
                                                                                                                                      -13.08
                                 3897.62
                                                  -9.56
                                                                              18.03
                                                                                                                        3297.6
       90.00
                                                                                                                                                     82.05
                                                                                                                                      -29.07
                                                                             24.68
                                                                                             78.43
                                                                                                      23 44 2
                                                                                                                        2321.0
      100.00
                  22 55 21
                                 2921.00
                                                -27.75
                                                               90.60
                                                                                                                                                    134.39
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                  18 48 40
                                 3727.17
                                                -7.04
                                                              141.08
                                                                              16.68
                                                                                             60.87
                                                                                                      19 50 47
                                                                                                                        3127.2
      100.00
                   0 57 28
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                                                -33.57
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      110.00
                                 2551.22
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      110.00
                  19 6 59
                                3669.71
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1129.0 SR 232.0 SS 550.1
CRT .9967 CRS -.9800 CST -.9792
LSA 1273.0 MSA 100.7 SSA 18.0
ELI 1152.4 EL2 18.5 ALF 11.58
   TOE .9095 TRA-1.0604 TC3-1.6908 BAU .6416
                                                                  SGT 2404.7 SGR 1026.4 SG3 257.5
                                                                  RRT .8981 RRF .9794 RTF .9235
SGB 2614.6 R23 .2809 R13 .9436
SGI 2580.5 SG2 420.7 THA 21.58
   RDE .1864 RRA - .2100 RC3 - .9744 FAU .07570
   FOE 1.0368 FRA -.5270 FC3-2.6646 BSP 7759
BDE .9284 BRA 1.0810 BC3 1.9514 FSP -830
                                                                                                                               ARRIVAL DATE NOV 13 1967
LAUNCH DATE JUL 20 1967
                                                                      FLIGHT TIME 116.00
                                                                      DISTANCE 340.252
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.501 GAL -9.10 AZL 86.75 MCA 159.39 SMA 134.08 ECC .20608 INC 3.2483 V1 29.308 RP 107.61 LAP 1.14 LOP 96.04 VP 38.430 GAP 3.45 AZP 93.04 TAL 221.05 TAP 20.44 RCA 106.45 APO 161.72 V2 35.216 RC 106.849 GL 17.89 GP -47.57 ZAL 147.62 ZAP 115.72 ETS 329.85 ZAE 124.27 ETE 224.48 ZAC 120.13 ETC 349.30 CLP-130.03
  PLANETOCENTRIC CONIC
   C3 25.075 VHL 5.008 DLA 30.27 RAL 153.15 RAD 6568.0 VEL 12.102 PTH 2.17 VHP 5.647 DPA -29.19 RAP 133.51 ECC 1.4127
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            66.35 19 17 48
66.34 22 8 14
                                                                           25.90
                                                                                                                                                    151.06
                                                                                                                                      -22.50
                                                                                                                        3281.4
       78.83 18 13 6 3881.39
                                                -19.46
                                                              158.57
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                   21 13 13
                                 3301.08
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66.34 22 8 14
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                                                -31.29
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      110.00
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                                 2730.22
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      110.00
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                                 3500.24
                                                               124.71
                                                                                             56.75
                                                                                                       21 8 24
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1369.2 SR 314.8 SS 607.6
CRT .9930 CRS -.9963 CST -.9832
    TOE 1.1446 TRA -.9958 TC3-1.7575 BAU
                                                                   SGT 2560.1 SGR 1034.8 SG3 225.7
                                                     .6724
                                                                  RRT .8930 RRF .9819 RTF .9259
SGB 2761.3 R23 _.2888 R13 .9448
    RDE .2691 RRA -.1476 RC3 -.9669 FAU .06525
                                                                                                                   LSA 1527.1 MSA 104.4 SSA 13.3
   FDE 1.0802 FRA -.3454 FC3-2.2527 BSP 8261
BDE 1.1759 BRA 1.0067 BC3 2.0059 FSP -736
                                                                                                                   ELI 1404.5 EL2 36.1 ALF 12.87
                                                                   SG1 2726.4 SG2 437.3 THA 20.40
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ARRIVAL DATE NOV 15 1967

EL1 2993.0 EL2 148.8 ALF

.05

LAUNCH DATE JUL 20 1967

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DISTANCE 346.351
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 27.446 GAL -8.90 A7L 85.57 MCA 162.61 SMA 133.68 ECC .20565 INC 4.4257 V1 29.308 RP 107.59 LAP 1.32 LOP 99.28 VP 38.398 GAP 3.78 AZP 94.22 TAL 219.89 TAP 22.50 RCA 106.19 APO 161.17 V2 35.223 RC 109.101 GL 23.96 GP -51.90 ZAL 143.16 ZAP 115.26 ETS 324.82 ZAE 119.95 ETE 224.10 ZAC 119.41 ETC 346.65 CLP-133.77
   PLANETOCENTRIC CONIC
    C3 26.545 VHL 5.152 DLA 35.36 RAL 157.39 RAD 6568.1 VEL 12.162 PTH 2.18 VHP 6.230 DPA -33.11 RAP 131.32 ECC 1.4369 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.88 17 18 15 4118.32 -22.04 178.05 32.62 61.62 18 26 53 3518.3 -25.65 170.66 112.12 22 41 53 3092.51 -22.02 101.20 32.61 61.61 23 33 25 2492.3 -25.63 93.81
                                                                                                          61.62 18 26 53
61.61 23 33 25
61.62 18 26 53
61.61 23 33 25
                                                                                                                                                                          170.66
                    17 18 15 4118.32
22 41 53 3092.31
                                                                                                                                          3518.3
                                                                                                                                                         -25.65
        67.88
                                                       -22.04
                                                                       178.05
                                                                                         32.62
       112.12
                                                       -22.02
                                                                       101.20
                                                                                         32.61
                                                                                                                                         2492.3
                                                                                                                                                         -25.63
                                                                                                                                                                            93.81
                    17 18 15 4118.32
22 41 53 3092.31
                                                                                                                                          3518.3
                                                                                                                                                                          170.66
        67.88
                                                       -22.04
                                                                       178.05
                                                                                         32.62
                                                                                                                                                         -25.65
                                                                                                                                         2492.3
                                                                                                                                                          -25.63
                                                                                                                                                                            93.81
                                                       -22.02
                                                                       101.20
                                                                                         32.61
       112.12
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 2718.2 SCR 1028.0 SC3 191.4
RRT .8819 RRF .9818 RTF .9288
SCB 2906.1 R23 .2935 R13 .9464
SCI 2869.6 SC2 459.0 THA 18.95
                                                                                                                                     ST 1688.4 SR 408.5 SS 670.8
    TOE 1.4825 TRA -.8806 TC3-1.7439 BAU
                                                            .6985
                                                                                                                                     CRT .9880 CRS -.9996 CST -.9872
    ROE .3657 RRA -.0639 RC3 -.9123 FAU .05414
FDE 1.1180 FRA -.1677 FC3-1.7658 BSP 8749
BDE 1.5269 BRA .8829 BC3 1.9681 FSP -633
                                                                                                                                    LSA 1858.7 MSA 112.6 SSA 9.1
                                                                                                                                     EL1 1736.0 EL2 61.4 ALF 13.46
                                                                                FLIGHT TIME 120.00
                                                                                                                                                 ARRIVAL DATE NOV 17 1967
LAUNCH DATE JUL 20 1967
                                                                                DISTANCE 352.420
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.391 GAL -8.68 AZL 83.88 MCA 165.82 SMA 133.27 ECC .20526 INC 6.1183 V1 29.308 RP 107.57 LAP 1.50 LOP 102.51 VP 38.364 GAP 4.10 AZP 95.93 TAL 218.68 TAP 24.50 RCA 105.92 APO 160.63 V2 35.230 RC 111.351 GL 31.72 GP -57.26 ZAL 136.99 ZAP 113.73 ETS 319.04 ZAE 114.85 ETE 223.39 ZAC 118.43 ETC 343.18 CLP-138.07
   PLANETOCENTRIC CONIC
    C3 30.125 VHL 5.489 DLA 41.68 RAL 163.51 RAD 6568.2 VEL 12.308 PTH
                                                                                                            2.22 VHP 7.102 DPA -37.84 RAP 128.15 ECC 1.4958
    LNCH AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.03 16 54 5 4290.32 -24.32 193.79 43.02 55.04 18 5 35 3690.3 -28.72 186.74
                                                                                                           55.03 24 44 38

55.03 24 44 38

55.03 24 44 38

55.04 18 5 35

55.03 24 44 38
                                                                                                                                          2383.4
                                                                                                                                                           -28.71
                                                                                                                                                                            86.69
       121.97
                     23 54 55 2983.43
                                                       -24.31
                                                                         93.75
                                                                                         43.01
                                                                                                                                          3690.3
                                                                                                                                                           -28.72
                                                                                                                                                                           186.74
        58.03
                     16 54 5
                                      4290.32
                                                       -24.32
                                                                       193.79
                                                                                         43.02
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                    23 54 55 2983.43
16 54 5 4290.32
                                                                         93.75
                                                                                         43.01
                                                                                                                                          2363.4
                                                                                                                                                          -28.71
       121.97
                                                      -24.31
                                                                        193.79
                                                                                                                                          3690.3
                                                                                                                                                          -28.72
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                                                  -24.32
-24.31
        58.03
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                    23 54 55 2983.43
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       121.97
                                                                         93.75
                                                                                         43.01
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                           RIT - 2883.7 SGR 984.3 SG3 154.9
RRT - 8575 RRF - 9751 RTF - 9333
SGB 3047.0 R23 - 22941 R13 - 9487
SG1 3008.1 SG2 485.5 THA 16.76
                                                                                                                                     ST 2105.1 SR 486.8 SS 733.4
CRT .9831 CRS -.9988 CST -.9905
    TDE 1.9973 TRA -.6805 TC3-1.5944 BAU .7143
    RDE .4651 RRA .0536 RC3 -.7769 FAU .04239
                                                                                                                                    LSA 2278.4 MSA 124.4 SSA 5.9
EL1 2158.9 EL2 87.0 ALF 12.83
    FOE 1.1444 FRA .0042 FC3-1.2182 BSP 9193
BOE 2.0508 BRA .6826 BC3 1.7736 FSP -517
                                                                                                                                                 ARRIVAL DATE NOV 19 1967
                                                                                FLIGHT TIME 122.00
LAUNCH DATE JUL 20 1967
                                                                               DISTANCE 358.452
   HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.334 GAL -8.46 AZL 81.23 MCA 169.01 SMA 132.86 ECC .20489 INC 8.7737 V1 29.308 RP 107.55 LAP 1.67 LOP 105.75 VP 38.329 GAP 4.41 AZP 98.62 TAL 217.42 TAP 26.43 RCA 105.64 APO 160.08 V2 35.236 RC 113.598 GL 41.40 GP -63.88 ZAL 128.68 ZAP 110.90 ETS 311.75 ZAE 108.58 ETE 221.31 ZAC 117.23 ETC 337.95 CLP-144.13
   PLANETOCENTRIC CONIC
     C3 38.894 VHL 6.237 DLA 49.03 RAL 173.08 RAD 6568.5 VEL 12.659 PTH 2.30 VHP 8.539 DPA -43.40 RAP 123.05 ECC 1.6401
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       46.29 18 9 11
46.28 2 3 26
46.29 18 9 11
                                                                                                                                         3851.5
                                                                                       59.33
                   16 54 59 4451.46
                                                       -24.89
                                                                       209.20
        48.14
                     1 14 15 2951.14
16 54 59 4451.46
                                                                                                                                         2351.1
                                                                                                                                                         -30.25
                                                                                         59.32
        131.86
                                                       -24.88
                                                                         91.28
                                                                          18 9 11
46.28 2 3 26
19.33 46.29 18 9 11
1.28 59.32 46.28 2 3 26
MID-COURSE EXECUTION ACCURACY
SCT 3064.7 SGR 859.6 SC3
RRT .7860 RRF
                                                                                                                                                         -30.27
                                                                                                                                          3851.5
                                                       -24.89
                                                                       209.20
         48.14
                                                                                                                                         2351.1
                                                                                                                                                         -30.25
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                     1 14 15 2951.14
16 54 59 4451.46
1 14 15 2951.14
       131.86
                                                      -24,88
                                                                         91.28
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         48.14
                                                       -24.89
                                                                       209.20
                                                                                                                                         2351.1
                                                                                                                                                         -30.25
                                                                                                                                                                            85.01
                                                                        91.28
                                                       -24.88
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 3064.7 SGR 859.6 SG3 118.2

RRT .7860 RRF .9395 RTF .9417

SGB 3183.0 R23 .2869 R13 .9531

SGI 3140.5 SG2 .518.6 TMA 12.79
                                                                                                                                    ST 2601.4 SR 456.7 SS 776.8
CRT .9679 CRS -.9906 CST -.9931
     TOE 2.8273 TRA -.3189 TC3-1.2539 BAU .7090
    ROE .4866 RRA .2169 RC3 -.5358 FAU .03046
FDE 1.1432 FRĀ .1642 FC3 -.6781 BSP 9648
BDE 2.8689 BRA .3857 BC3 1.3636 FSP -402
                                                                                                                                    LSA 2749.5 MSA 139.6 SSA
EL1 2638.7 EL2 113.1 ALF
                                                                                                                                                                               3.7
                                                                                                                                                                             9.66
                                                                                                                                                 ARRIVAL DATE NOV 21 1967
LAUNCH DATE JUL 20 1967
                                                                                FLIGHT TIME 124.00
                                                                                DISTANCE 364.423
   HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.276 GAL -8.21 A7L 76.45 HCA 172.16 SMA 132.44 ECC .20450 INC13.5499 V1 29.308 RP 107.53 LAP 1.83 LOP 109.00 VP 38.293 GAP 4.69 A7P 103.43 TAL 216.10 TAP 28.27 RCA 105.35 APO 159.52 V2 35.241 RC 115.842 GL 52.46 GP -71.85 7AL 118.24 7AP 106.62 ETS 299.73 7AE 100.44 ETE 214.25 7AC 116.07 ETC 327.41 CLP-156.64
   PLANETOCENTRIC CONIC
    C3 63.632 VHL 7.977 DLA 55.82 RAL 188.72 RAD 6569.2 VEL 13.601 PTH 2.49 VHP 11.264 DPA -49.42 RAP 113.97 ECC 2.0472
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                     83.71
                                                                                                           36.96 18 48 54
36.96 3 32 37
                                                                                                                                          4031.7
                                                                                                                                                         -27.21
        39.65 17 31 43 4631.66
140.35 2 42 22 3015.64
                                                        -20.90
                                                                       223.62
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        140.35
                                                       -20.89
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                                     3015.64
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        140.35
                       2 42 22
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                                                                                                           36.96
                     17 31 43
                                     4631.66
                                                       -20.90
                                                                       223.62
                                                                                         83.71
        39.65
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         -27.19
                                                                                                                                          2415.6
                                                                         93.30
        140.35
                      2 42 22
                                     3015.64
                                                        -20.89
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 3250.0 SGR 596.3 SG3 85.0
RRT .3318 RRF .5759 RTF .9595
SGB 3304.2 R23 .2626 R13 .9624
                                                                                                                                     ST 2993.0 SR 148.8 SS 780.6
     TOE 4.1600 TRA .4412 TC3 -.7191 BAU .6370
                                                                                                                                     CRT .0167 CRS -.1179 CST -.9949
     RDE -.0084 RRA .3868 RC3 -.2087 FAU .01860
                                                                                                                                    LSA 3092.1 MSA 167.4 SSA .0
     FOE 1.1027 FRA .3291 FC3 -.2531 BSP 9991
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FILIGHT TIME 118.00

-290

BOE 4.1600 BRA .5868 BC3 .7488 FSP

SG1 3256.2 SG2 561.5 THA 3.59

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ARRIVAL DATE NOV 23 1967
                                                                  FLIGHT TIME 126.00
LAUNCH DATE JUL 20 1967
                                                                  DISTANCE 370.250
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.217 GAL -7.94 AZL 65.53 HCA 175.19 SMA 132.01 ECC .20390 INC24.4675 V1 29.308 RP 107.52 LAP 1.99 LOP 112.24 VP 38.255 GAP 4.93 AZP 114.39 TAL 214.68 TAP 29.87 RCA 105.10 APO 158.93 V2 35.246 RC 118.080 GL 61.75 GP -78.24 ZAL 106.67 ZAP 100.92 ETS 262.78 ZAE 88.50 ETE 181.56 ZAC 115.93 ETC 290.50 CLP 158.44
  PLANETOCENTRIC CONIC
    C3 160.638 VHL 12.674 OLA 57.47 RAL 210.13 RAD 6570.7 VEL 16.792 PTH 2.90 VHP 17.760 OPA -53.84 RAP 95.72 ECC_ 3.6437
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 4238.1
                                                                                                                              -16.96
                                                                       113.50
      37.65
                 18 51 43
                               4838.14
                                              -10.29
                                                          232.49
                                                                                       33.13 20 12 21
                                                                                                                                              95.40
                                                                                                                 2600.2
                                                                                                                               -16.94
      142.35
                  4 13 11
                               3200.20
                                              -10.28
                                                            99.54
                                                                        113.48
                                                                                        33.13
                                                                                                  5 6 31
       37.65
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                 18 51 43
                               4838.14
                                              -10.29
                                                           232.49
                                                                        113.50
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                                                                                                                 2600.2
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                  4 13 11
                               3200.20
                                              -10.28
                                                            99.54
                                                                        113.48
                                                                                        33.13
                                                                                                   5 6 31
      142.35
                                                                                        33.13 20 12 21
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       37.65
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                                                                                                                              -16.96
                 18 51 43
                               4838.14
                                              -10.29
                                                           232.49
                                                                        113.50
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                               -16.94
                                                                                                                                              95.40
                                                                                                                 2600.2
                   4 13 11
                              3200.20
                                                           99.54
      142.35
                                              -10.28
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SCT 2921.9 SGR 1699.5 SG3 60.6

RRT -.9263 RRF -.8862 RTF ..9949

SCB 3380.2 R23 -.1870 R13 -.9817

SCI 3333.3 SG2 561.2 THA 150.78
                                                                                                             ST 2287.2 SR 1615.8 SS 779.1
CRT -.9894 CRS .9804 CST -.9986
LSA 2899.4 MSA 206.2 SSA 1.1
    TOE 4.9046 TRA 2.2270 TC3 -.1349 BAU .2897
   ROE-3.5555 RRA -.6565 RC3 .0034 FAU .00557
   FOE 1.0727 FRA .5967 FC3 -.0300 BSP 10047
   BOE 6.0578 BRA 2.3218 BC3 .1349 FSP
                                                                                                              EL1 2793.8 EL2 191.8 ALF 144.86
                                                  -199
                                                                                                                        ARRIVAL DATE NOV 25 1967
                                                                  FLIGHT TIME 128.00
LAUNCH DATE JUL 20 1967
                                                                  DISTANCE 375.393
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.158 GAL -7.51 AZL 27.88 MCA 177.58 SMA 131.59 ECC .20195 INC62.1225 V1 29.308 RP 107.50 LAP 2.14 LOP 115.48 VP 38.216 GAP 4.98 AZP 152.10 TAL 212.85 TAP 30.42 RCA 105.02 PO 158.17 V2 35.250 RC 120.312 GL 54.36 GP -60.73 ZAL 96.72 ZAP 94.91 ETS 194.46 ZAE 63.57 ETE 117.50 ZAC 121.36 ETC 215.55 CLP 100.09
  PLANETOCENTRIC CONIC
   C3 857.693 VHL 29.286 DLA 43.27 RAL 219.38 RAD 6572.8 VEL 31.289 PTH
                                                                                          3.47 VHP 39.471 DPA -44.27 RAP 61.04 ECC15.1155
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       55.80 20 27 39 4876.08
124.20 3 50 58 3518.78
                                                                                                                  4276.1
                                                -.07
                                                           224.10
                                                                       129.32
                                                                                      46.73 21 48 56
                                                                                                                                -5.54
                                                                                                                                             218.67
                                                -.06
                                                           119.61
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                                                                                        46.73
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3 50 58
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46.73 4 49 37
46.73 21 48 56
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       55.80
                 3 50 50
20 27 39 4876,06
74 48 3518,78
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      124.20
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                                                                                                                                             114.18
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 631.0 SGR 3030.5 SG3 49.0
RRT .5153 RRF -.9963 RTF -.4410
                                                                                                              ST 542.3 SR 1920.2 SS 1119.0 CRT .9108 CRS .9979 CST .8819 LSA 2275.6 MSA 235.1 SSA 1.0
    TOE-2.7626 TRA .5428 TC3 -.0497 BAU 2.2535
   RDE-9.2360 RRA-8.0502 RC3 -.1901 FAU-.03411
FDE 1.5378 FRA 1.6226 FC3 .0344 BSP 8903
BDE 9.6403 BRA 8.0684 BC3 .1965 FSP -150
                                                               SG8 3095.5 R23 -.1038 R13 -.9944
                                                                                                              EL1 1983.5 EL2 216.7 ALF 75.40
                                                               SG1 3048.5 SG2 537.6 THA 83.68
                                                                                                                       ARRIVAL DATE NOV 27 1967
                                                                  FLIGHT TIME 130.00
LAUNCH DATE JUL 20 1967
                                                                  DISTANCE 383.774
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.098 GAL -7.74 AZL 137.31 MCA 183.11 SMA 131.17 ECC .20721 INC47.3062 V1 29.308 RP 107.49 LAP 2.29 LOP 118.73 VP 38.177 GAP 5.94 AZP 42.74 TAL 212.79 TAP 35.90 RCA 103.99 APO 158.35 V2 35.253 RC 122.538 GL -59.45 GP 71.00 ZAL 98.85 ZAP 98.14 ETS 164.50 ZAE 73.92 ETE 241.09 ZAC 92.21 ETC 128.86 CLP 115.77
  PLANETOCENTRIC CONIC
   C3 525.135 VHL 22.916 DLA -55.26 RAL 151.75 RAD 6572.4 VEL 25.425 PTH 3.35 VHP 28.276 DPA 73.67 RAP 329.80 ECC 9.8424
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             8.40
                                                                                    1725.9
                                                                                                                                              62.33
                   3 8 0 2325.92
                                               1.84
                                                            66.52
                                                                         60.46
       40.34
                                                                                                                                  8.42
                 12 11 6
                                                1.86
                                                           297.11
                                                                          60.48
                                                                                                                  117.5
                                                                                                                                             292.93
      139.66
                                 717.46
                                                                                       145.24 3 46 46
145.24 12 23 3
                               2325.92
                                                           66.52
                                                                          60.46
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                                                                                                                                              62.33
       40.34
                  3 8 0
                                                1.84
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       40.34
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                                                           297.11
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      139.66
                  12 11 6
                                 717.46
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 604.0 SGR 3357.8 SG3 54.9
                                                                                                              ST 173.7 SR 2770.4 SS 1357.0
    TOE .0497 TRA 1.3153 TC3 -.0388 BAU 1.2344
                                                                                                              CRT -.2659 CRS -.9994 CST .2320
LSA 3084.9 MSA 173.0 SSA 1.3
                                                              RRT -.6007 RRF .9951 RTF -.5225
SGB 3411.7 R23 -.1098 R13 .9935
   RO-10.8649 RRA-4.1264 RC3 .1715 FAU-.01570
FDE-2.1924 FRA -.6821 FC3 .0259 BSP 9840
BOE10.8650 BRA 4.3310 BC3 .1758 FSP -164
                                                               SG1 3377.8 SG2 480.0 THA 96.29
                                                                                                              EL1 2770.8 EL2 167.4 ALF 90.96
                                                                                                                        ARRIVAL DATE NOV 29 1967
                                                                   FLIGHT TIME 132.00
LAUNCH DATE JUL 20 1967
                                                                  DISTANCE 389.284
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 27.037 GAL -7.38 AZL 114.40 HCA 185.88 SMA 130.74 ECC .20623 INC24.4001 V1 29.308 RP 107.49 LAP 2.43 LOP 121.98 VP 38.136 GAP 6.09 AZP 65.71 TAL 211.14 TAP 37.02 RCA 103.78 APO 157.71 V2 35.256
   RC 124.755 GL -61.85 GP 73.91 ZAL 105.47 ZAP 106.09 ETS 101.18 ZAE 92.19 ETE 179.86 ZAC 88.99 ETC 65.75 CLP 178.96
  PLANETOCENTRIC CONIC
   C3 157.823 VHL 12.563 DLA -51.58 RAL 138.78 RAD 6570.7 VEL 16.708 PTH
                                                                                          2.90 VHP 14.728 OPA 78.44 RAP 244.26 ECC 3.5974
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
44.91 2 29 40 2146.83 9.71 57.38 40.96 140.91 3 5 27 1546.8 15.87 52.57
                 11 5 55
                                                                                                                                             267.54
                                                           272.36
                                                                          40.98
                                                                                       140.91 12 44 0
                                                                                                                  5285.3
                                                                                                                                15.88
      135.09
                               5885.32
                                                9.72
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                                                            57.38
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                                                                                       140.91
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                   2 29 40
                               2146.83
                                                9.71
       44.91
                                                                                       140.91 12 44 0
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                 11 5 55
                               5885.32
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                                                                          40.98
      135.09
                   2 29 40 2146.83
11 5 55 5885.32
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       44.91
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                 11 5 55
                                                           272.36
                                                                         40.98
                                                                                                                  5285.3
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      135.09
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                              ST 2301.1 SR 990.8 SS 872.6
CRT .9720 CRS -.9596 CST -.9989
    TOE-4.8231 TRA-3.0690 TC3 -.1261 BAU .2696
                                                               SGT 3164.1 SGR 1888.8 SG3 76.4
    ROE-1.8684 RRA-2,2959 RC3 -.0206 FAU .01025
                                                               RRT .9513 RRF .9145 RTF .9941
    FOE-1.4567 FRA -.7714 FC3 -.0562 BSP 11211
                                                              SGB 3685.0 R23 -.1808 R13 .9827
                                                                                                              LSA 2643.4 MSA 225,6 SSA
                                                                                                                                                 1.3
                                                               SG1 3650.3 SG2 504.5 THA 30.23
                                                                                                              ELI 2496.2 EL2 214.8 ALF 22.89
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BOE 5.1723 BRA 3.8327 BC3 .1278 FSP -241

ARRIVAL DATE DEC 1 1967

LAUNCH DATE JUL 20 1967

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DISTANCE 395.114
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 26.976 GAL -7.08 A7L 106.61 MCA 188.98 SMA 130.32 ECC .20610 INC16.6124 VI 29.308 RP 107.48 LAP 2.56 LOP 125.22 VP 38.095 GAP 6.32 A7P 73.58 TAL 209.65 TAP 38.62 RCA 103.46 APO 157.18 VZ 35.258 RC 126.964 GL -57.59 GP 64.32 7AL 110.69 7AP 114.19 ETS 72.45 7AE 102.55 ETE 154.22 7AC 89.76 ETC 37.28 CLP-161.03
   PLANETOCENTRIC CONIC
     C3 82.188 VHL 9.066 CLA -46.12 RAL 138.43 RAD 6569.6 VEL 14.267 PTH 2.60 VHP 10.296 DPA 70.54 RAP 206.13 ECC 2.3526
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 51.94 2 51 52 1957.24 15.28 44.84 33.19 134.06 3 24 29 1357.2 20.75 39.12 128.06 10 41 0 5610.08 15.29 271.15 33.20 134.06 12 17 50 5210.1 20.76 265.43
                      2 51 52 1957.24
10 41 0 5810.08
2 51 52 1957.24
10 41 0 5810.08
                                                                                                                               3 24 29
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                                                                                                                 134.06
         51.94
                                                             15.28
                                                                              44.84
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                                                                                               33.20
                                                           15.29
        128.06
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134.06 12 17 50
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                                                            15.28
                                                                              44.84
                                                                                               33.19
                                                                                                                                                   5210.1
                                                                                                                                                                      20.76
                                                                                               33.20
                                                       15.29
                                                                            271.15
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 3763.9 SGR 500.4 SG3 106.5
RRT .3170 RRF .0798 RTF .9684
SGB 3797.0 R23 -.2448 R13 .9671
SGI 3767.3 SG2 474.1 THA 2.45
                                                                                                                                              ST 2331.4 SR 297.5 SS 809.6

CRT -.6805 CRS .7766 CST -.9901

LSA 2474.3 MSA 239.6 SSA 2.1
     TDE-3.4164 TRA-3.2134 TC3 -.5292 BAU .5823
     ROE .4267 RRA -.4591 RC3 .0270 FAU .02312
    FDE-1.3966 FRA -.8094 FC3 -.2436 BSP 11598
BDE 3.4429 BRA 3.2460 BC3 .5299 FSP -339
                                                                                                                                               EL1 2340.2 EL2 217.2 ALF 174.99
                                                                                                                                                            ARRIVAL DATE DEC 3 1967
                                                                                      FLIGHT TIME 136.00
LAUNCH DATE JUL 20 1967
                                                                                     DISTANCE 401.012
  HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 26.915 GAL -6.79 AZL 102.83 MCA 192.15 SMA 129.90 ECC .20625 INC12.8302 V1 29.308 RP 107.48 LAP 2.68 LOP 128.47 VP 38.053 GAP 6.58 AZP 77.45 TAL 208.17 TAP 40.32 RCA 103.11 APO 156.69 V2 35.259 RC 129.165 GL -53.07 GP 55.21 ZAL 114.33 ZAP 121.51 ETS 63.52 ZAE 109.79 ETE 149.47 ZAC 90.93 ETC 28.60 CLP-156.35
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 55.128 VHL 7.425 DLA -41.67 RAL 140.41 RAD 6569.0 VEL 13.285 PTH 2.43 VMP 8.362 DPA 62.07 RAP 193.02 ECC 1.9073
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
58.05 3 23 52 1798.16 18.13 35.10 28.81 128.18 3 53 50 1198.2 22.95 26.69
121.95 10 24 45 5779.16 18.15 270.96 28.82 128.18 12 1 4 5179.2 22.96 264.56
121.95 10 24 45 5779.16 18.15 270.96 28.82 128.18 12 1 4 5179.2 22.96 264.56
121.95 10 24 45 5779.16 18.15 270.96 28.82 128.18 12 1 4 5179.2 22.96 264.56
121.95 10 24 45 5779.16 18.15 33.10 28.81 128.18 3 53 50 1198.2 22.95 26.69
121.95 10 24 45 5779.16 18.13 33.10 28.81 128.18 3 53 50 1198.2 22.95 26.69
121.95 10 24 45 5779.16 18.13 33.10 28.81 128.18 5 53 50 1198.2 22.95 26.69
121.95 10 24 45 5779.16 18.13 33.10 28.81 128.18 5 53 50 1198.2 22.95 26.69
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 NICT 2863.9 SGR 490.9 SG3 137.1
RRT - 4587 RRF - .6960 RTF .9514
SGB 3895.0 R23 .2858 R13 - .9533
SG1 3870.6 SG2 435.5 THA 176.62
                                                                                                                                              ST 2210.1 SR 456.2 SS 811.2
CRT -.8887 CRS .9583 CST -.9827
LSA 2385.8 MSA 242.7 SSA 2.9
     TOE-2.6201 TRA-2.8767 TC3 -.9549 BAU .7081
     RDE .5900 RRA -.0896 RC3 .1067 FAU .03326
     FOE-1.4168 FRA -.8217 FC3 -.5223 BSP 12028
BOE 2.6857 BRA 2.8781 BC3 .9608 FSP -442
                                                                                                                                              EL1 2247.3 EL2 205.7 ALF 169.52
                                                                                                                                                           ARRIVAL DATE DEC 5 1967
                                                                                     FLIGHT TIME 138.00
LAUNCH DATE JUL 20 1967
                                                                                     DISTANCE 406.926
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 26.854 GAL -6.49 AZL 100.60 HCA 195.36 SHA 129.49 ECC .20656 INC10.6025 V1 29.308 RP 107.48 LAP 2.79 LOP 131.72 VP 38.010 GAP 6.84 AZP 79.77 TAL 206.69 TAP 42.05 RCA 102.74 APO 156.23 V2 35.259
     RC 131.355 GL -49.18 GP 47.57 7AL 116.69 7AP 127.79 ETS 58.95 7AE 115.03 ETE 149.66 7AC 91.74 ETC 24.35 CLP-155.26
   PLANETOCENTRIC CONIC
     C3 42.084 VHL 6.487 DLA -38.26 RAL 142.85 RAD 6568.6 VEL 12.785 PTH 2.33 VHP 7.383 DPA 54.57 RAP 187.11 ECC 1.6926
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                      3 56 53 1664.89
10 11 10 5777.51
3 56 53 1664.89
10 11 10 5777.51
                                                                                                                                                  1064.9
                                                                                                                                                                      23.71
                                                                                               26.25
                                                                                                               123.63
                                                                                                                               4 24 38
                                                           19.43
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123.63 4 24 38 1064.9
123.62 11 47 28 5177.5
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        116.88
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                                      1664.89
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                        3 56 53
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                      10 11 10
                                       5777.51
                                                            19.45
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                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RRT - 6211 RRF - .8323 RTF . .9398
SGB 3981.3 R23 .3095 R13 - .9424
SGI 3961.3 SGZ 398.4 THA 175.37
                                                                                                                                              ST 2134.4 SR 469.5 SS 813.6
CRT -.9089 CR5 .9771 CST -.9768
     TOE-2.1990 TRA-2.6184 TC3-1.3668 BAU
                                                                . 773A
     ROE .5316 RRA -.0043 RC3 .1535 FAU .04080
FOE-1.4117 FRA -.7918 FC3 -.8393 BSP 12290
                                                                                                                                              LSA 2319.2 MSA 243.7 SSA 3.8
                                                                                                                                              EL1 2177.0 EL2 192.0 ALF 168.60
     BOE 2.2623 BRA 2.6184 BC3 1.3754 FSP -525
                                                                                                                                                            ARRIVAL DATE DEC 7 1967
                                                                                      FLIGHT TIME 140,00
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 412.841
    RL 152.01 LAL .00 LOL 296.62 VL 26.793 GAL -6.19 AZL 99.13 HCA 198.58 SHA 129.07 ECC .20701 INC 9.1308 V1 29.308 RP 107.48 LAP 2.90 LOP 134.97 VP 37.966 GAP 7.10 AZP 81.34 TAL 205.20 TAP 43.78 RCA 102.35 APO 155.79 V2 35.259 RC 133.557 GL -45.97 GP 41.31 ZAL 118.07 ZAP 133.07 ETS 55.79 ZAE 118.83 ETE 151.39 ZAC 92.04 ETC 21.57 CLP-155.38
   PLANETOCENTRIC CONIC
     C3 34.571 VHL 5.880 DLA -35.69 RAL 145.36 RAD 6568.4 VEL 12.488 PTH 2.26 VHP 6.850 DPA 48.18 RAP 184.18 ECC 1.5689
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                4 54 41
                                                                                                                                                     950.7
                                                                                                                                                                    23.85
                      4 28 50 1550.71
9 59 17 5792.34
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                      4 28 50 1550.71
9 59 17 5792.34
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120.19 11 35 49
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                                                                             273.39
                                                             20.01
        112.69
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                       4 28 50 1550.71
9 59 17 5792.34
                                                                                                                                                     950.7
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                                                                              13.94
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                                                             20.00
         67.31
                                                                                                                                                    5192.3
                                                                                                                                                                       23.87
                                                                                                                                                                                       266.25
                                                                             273.39
                                                                                                24.92
                                                             20.01
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 4036.3 SGR 488.0 SG3 180.7
RRT -.6591 RRF -.8596 RTF .9312
                                                                                                                                              ST 2086.5 SR 445.7 SS 808.2
CRT -.9128 CRS .9832 CST -.9720
LSA 2268.5 MSA 243.7 SSA 4.8
     TOE-1.9450 TRA-2.4177 TC3-1.7602 BAU .8172
                                                                                                                                      CRT -.9128 CRS .9832 LS1 -.9120
LSA 2268.5 MSA 243.7 S5A 4.8
EL1 2126.1 EL2 178.6 ALF 168.89
     ROE .4573 RRA .0124 RC3 .1686 FAU .04581
FOE-1.3748 FRA -.7272 FC3-1.1471 BSP 12521
                                                                               SGB 4065.7 R23 ..3201 R13 -.9336
SG1 4049.2 SG2 365.8 THA 175.41
     BOE 1.9980 BRA 2.4178 BC3 1.7682 FSP -582
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FLIGHT TIME 134.00

ARRIVAL DATE DEC 9 1967

ELI 2088.6 EL2 135.5 ALF 170.65

LAUNCH DATE JUL 20 1967

HELIOCENTRIC CONIC DISTANCE 418.751 RL 152.01 LAL .00 LOL 296.62 VL 26.732 GAL -5.88 AZL 98.08 MCA 201.80 SMA 128.66 ECC .20758 INC 8.0817 V1 29.308 RP 107.48 LAP 2.99 LOP 138.22 VP 37.922 GAP 7.36 AZP 8Z.49 TAL 203.70 TAP 45.50 RCA 101.96 APO 155.37 V2 35.257 RC 135.709 CL -43.31 CP 36.20 7AL 118.69 7AP 137.49 ETS 53.30 7AE 121.56 ETE 153.58 7AC 91.86 ETC 19.49 CLP-155.99 PLANETOCENTRIC CONIC C3 29.703 VHL 5.450 OLA -33.78 RAL 147.88 RAD 6568.2 VEL 12.291 PTH 2.21 VHP 6.554 OPA 42.77 RAP 182.81 ECC 1.4888 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 59 4 1451.51 9 49 11 5815.18 6.29 24.41 5 23 15 851.5 70.76 20.24 117.64 117.63 11 26 6 23.79 24.42 5215.2 109.24 20.26 275.33 4 59 4 1451.51 9 49 11 5815.18 5 23 15 23.78 35A.96 117.64 851.5 6.29 24.41 70.76 20.24 117.63 11 26 6 23.79 268.01 5215.2 109.24 20.26 275.33 24.42 120.40 9 24 38 114.96 12 8 2 34.5 20.35 296.62 110.00 9 14 4 634.4A 16.44 303.55 22.19 10 33 22 5080.2 27.31 259.16 110.00 5680.20 24.15 266.90 26.50 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 413.6 SCR 456.0 SC3 193.8 RRT -.6642 RRF -.8567 RTF .9250 SCB 4161.6 R23 .3185 R13 -.9270 SCI 4147.7 SC2 340.0 THA 175.78 ST 2063.8 SR 418.9 SS 801.2 CRT -.9146 CRS .9866 CST -.9682 TDE-1.7853 TRA-2.2545 TC3-2.1431 BAU .8535 ROE .3984 RRA .0131 RC3 .1647 FAU .04898 FOE-1.3245 FRA -.6470 FC3-1.4276 BSP 12874 BDE 1.8292 BRA 2.2545 BC3 2.1494 FSP -628 LSA 2240.0 MSA 243.0 SSA 5.9 EL1 2099.3 EL2 166.5 ALF 169.41 LAUNCH DATE JUL 20 1967 FLIGHT TIME 144,00 ARRIVAL DATE DEC 11 1967 HELIOCENTRIC CONIC DISTANCE 424.649 RL 152.01 LAL .00 LOL 296.62 VL 26.671 GAL -5.56 A7L 97.29 MCA 205.04 SMA 128.26 ECC .20828 INC 7.2920 V1 29.308 RP 107.49 LAP 3.08 LOP 141.48 VP 37.877 GAP 7.63 AZP 83.39 TAL 202.18 TAP 47.21 RCA 101.55 APO 154.97 V2 35.255 RC 137.871 GL -41.09 GP 32.03 ZAL 118.72 ZAP 141.20 ETS 51.23 ZAE 123.53 ETE 155.81 ZAC 91.29 ETC 17.82 CLP-156.83 PLANETOCENTRIC CONIC C3 26.281 VHL 5.126 DLA -32.38 RAL 150.42 RAD 6568.1 VEL 12.151 PTH 2.18 VHP 6.395 DPA 38.16 RAP 182.35 ECC 1.4325 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.59 5 27 10 1365.49 20.38 359.73 24.54 115.73 5 49 55 765.5 23.67 352.28 106.41 9 41 19 5840.17 20.39 277.33 24.55 115.72 11 18 39 5240.2 23.68 269.88 5 49 55 765.5 73.59 5 27 10 1365.49 20.38 359.73 24.54 115.73 23.67 352.28 9 41 19 115.72 11 18 39 122.01 8 52 35 109.72 12 59 18 5840.17 20.39 277.33 24.55 5240.2 23.68 269.88 106.41 8 40 14 741.03 110.00 12.68 309.52 141.0 16.82 302.86 20.12 11 27 25 110.00 5512.63 28.51 255.83 28.28 4912.6 30.92 247.46 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4275.3 SGR 431.1 SG3 205.4 RRT -.6642 RRF -.8429 RTF .9226 SGB 4297.0 R23 .3033 R13 -.9241 SG1 4284.9 SG2 321.6 THA 176.15 ST 2076.4 SR 400.7 SS 803.3 CRT -.9190 CRS .9895 CST -.9661 TDE-1.6961 TRA-2.1251 TC3-2.5385 BAU .8936 RDE .3584 RRA .0142 RC3 .1543 FAU .05140 FDE-1.2839 FRA -.5740 FC3-1.6932 BSP 13628 BDE 1.7335 BRA 2.1251 BC3 2.5432 FSP -694 LSA 2249.2 HSA 241.5 SSA 7.0 EL1 2108.9 EL2 155.6 ALF 169.89 FLIGHT TIME 146.00 ARRIVAL DATE DEC 13 1967 LAUNCH DATE JUL 20 1967 DISTANCE 430.543 HELLOCENTRIC CONTC RL 152.01 LAL .00 LOL 296.62 VL 26.610 GAL -5.23 AZL 96.67 HCA 208.27 SHA 127.86 ECC .20909 INC 6.6729 V1 29.308 RP 107.50 LAP 3.16 LOP 144.73 VP 37.832 GAP 7.89 AZP 84.12 TAL 200.64 TAP 48.91 RCA 101.12 APO 154.59 V2 35.253 RC 140.023 GL -39.21 GP 28.60 7AL 118.25 ZAP 144.36 ETS 49.47 ZAE 124.96 ETE 157.91 ZAC 90.39 ETC 16.43 CLP-157.77 PLANETOCENTRIC CONIC C3 23.723 VHL 4.871 DLA -31.40 RAL 152.99 RAD 6568.0 VEL 12.046 PTH 2.15 VMP 6.319 DPA 34.19 RAP 182.49 ECC 1.3904 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.31 6 14 10 114.30 11 14 6 23.62 25.16 75.83 5 52 37 1292.78 20.51 354.27 6 14 10 692.8 346.74 271.55 104,17 5862.46 9 36 23 20.53 279.09 25.17 5262.5 23.64 346.74 75.83 5 52 37 1292.78 20.51 354.27 25.16 114.31 6 14 10 692.8 23.62 114.30 11 14 6 271.55 104.17 9 36 23 5862.46 20.53 279.09 25.17 5262.5 23.64 110.00 8 30 21 780.44 11.25 311.67 19.96 122.49 8 43 22 FAC. 4 15.45 305.10 106.43 13 28 13 11 57 50 5422.80 110.00 30.41 249.53 29.22 4822.8 32.35 240.85 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2032.3 SR 373.2 SS 765.1 CRT -.9188 CRS ..9916 CST -.9615 LSA 2190.4 MSA 238.7 SSA 8.1 EL1 2061.2 EL2 145.3 ALF 170.38 SCT 4275.2 SCR 389.9 SC3 201.3 RRT -.6095 RRF -.7931 RTF .9121 SCB 4292.9 R23 .2955 R13 -.9133 SCI 4281.8 SC2 308.7 THA 176.80 TOE-1.5850 TRA-1.9456 TC3-2.8320 BAU .8989 RDE .3172 RRA .0023 RC3 .1160 FAU .04983 FDE-1.1806 FRA -.4348 FC3-1.8184 BSP 12952 -622 BOE 1.6164 BRA 1.9456 BC3 2.8344 FSP ARRIVAL DATE DEC 15 1967 LAUNCH DATE JUL 20 1967 FLIGHT TIME 148.00 DISTANCE 436.420 RL 152.01 LAL .00 LOL 296.62 VL 26.550 GAL -4.90 AZL 96.17 MCA 211.51 SMA 127.46 ECC .21004 INC 6.1716 V1 29.30A RP 107.51 LAP 3.22 LOP 147.98 VP 37.786 GAP 8.15 AZP 84.73 TAL 199.09 TAP 50.60 RCA 100.69 APO 154.24 V2 35.249 RC 142.165 GL -37.59 GP 25.75 ZAL 117.39 ZAP 147.09 ETS 47.99 ZAE 126.00 ETE 159.82 ZAC 89.24 ETC 15.26 CLP-158.76 PLANETOCENTRIC CONIC C3 21.734 VHL 4.662 DLA -30.73 RAL 155.62 RAD 6567.9 VEL 11.963 PTH 2.13 VHP 6.298 DPA 30.74 RAP 183.03 ECC 1.3577 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.25 6 35 43 113.24 11 12 50 26.18 6 35 43 633.5 23.65 342.29 6 15 9 1233.54 9 34 51 5879.14 77.52 20.68 349.89 20.70 5279.1 23.66 272.82 102.48 280.43 26.19 6 35 43 633.5 342.29 77.52 6 15 9 1233.54 20.68 349.89 26.18 113.25 23.65 272.82 102.48 9 34 51 5879.14 20.70 280.43 25.19 113.24 11 12 50 5279.1 23.66 122.68 8 42 34 104.11 13 49 17 796.90 196.9 14.66 306.02 110.00 8 29 17 10.64 312.57 20.66 4763.8 33.08 236.40 110.00 12 19 53 5363.78 31.46 245.25 30.23 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4391.8 SGR 374.9 SG3 205.1 RRT - .5878 RRF - .7554 RTF .9102 SG8 4407.8 R23 .2692 R13 - .9111 SG1 4397.3 SG2 303.0 THA 177.11 ST 2060.9 SR 364.7 SS 763.3 CRT -.9264 CRS .9942 CST -.9607 LSA 2215.3 MSA 235.1 SSA 9.3 TOE-1.5503 TRA-1.8200 TC3-3.1971 BAU .9294 ROE .2967 RRA .0037 RC3 .0934 FAU .04995 FDE-1.1338 FRA -.3503 FC3-1.9895 BSP 13495 BDE 1.5784 BRA 1.8200 BC3 3.1984 FSP -650

FLIGHT TIME 142.00

ARRIVAL DATE DEC 17 1967

LAUNCH DATE JUL 20 1967

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DISTANCE 442.284
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 26.490 GAL -4.55 AZL 95.76 HCA 214.75 SHA 127.07 ECC .21112 INC 5.7552 V1 29.308 RP 107.52 LAP 3.28 LOP 151.23 VP 37.740 GAP 8.41 AZP 85.27 TAL 197.52 TAP 52.27 RCA 100.25 APO 153.90 V2 35.245
   RC 144.295 GL -36.16 GP 23.37 ZAL 116.17 ZAP 149.47 ETS 46.76 ZAE 126.77 ETE 161.52 ZAC 87.89 ETC 14.26 CLP-159.77
  PLANETOCENTRIC CONIC
   C3 20.138 VHL 4.488 DLA -30.33 RAL 158.34 RAD 6567.8 VEL 11.896 PTH 2.11 VHP 6.314 DPA 27.69 RAP 183.87 ECC 1.3314
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                 32.08
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  NIGT 4489.6 SGR 364.3 SG3 205.7
RRT -.5575 RRF -.7092 RTF ..9078
SGB 4504.4 R23 .2419 R13 -.9085
SG1 4494.2 SG2 302.1 THA 177.40
                                                                                                                    ST 2092.5 SR 359.1 SS 758.4
CRT -.9351 CRS .9964 CST -.9603
   TDE-1.5286 TRA-1.6869 TC3-3.5447 BAU .9545
    RDE .2813 RRA .0049 RC3 .0676 FAU .04918
   FOE-1.0841 FRA -.2608 FC3-2.1144 BSP 13870
BOE 1.5542 BRA 1.6869 BC3 3.5453 FSP -657
                                                                                                                    LSA 2242.6 MSA 230.3 SSA 10.5
                                                                                                                    EL1 2119.3 EL2 125.7 ALF 170.85
                                                                                                                                ARRIVAL DATE DEC 19 1967
                                                                      FLIGHT TIME 152.00
                                                                     DISTANCE 448.136
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 26.430 GAL -4.19 A7L 95.40 MCA 217.98 SMA 126.69 ECC .21234 INC 5.4016 V1 29.308 RP 107.53 LAP 3.32 LOP 154.48 VP 37.693 GAP 8.67 A7P 85.74 TAL 195.95 TAP 53.93 RCA 99.79 APO 153.59 V2 35.240 RC 146.414 GL -34.88 GP 21.35 7AL 114.65 7AP 151.57 ETS 45.75 7AE 127.34 ETE 163.01 7AC 86.38 ETC 13.39 CLP-160.77
  PLANETOCENTRIC CONIC
   C3 18.831 VHL 4.339 DLA -30.14 RAL 161.16 RAD 6567.8 VEL 11.841 PTH 2.10 VHP 6.357 DPA 24.96 RAP 184.93 ECC 1.3099 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      110.00
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                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 4577.2 SGR 358.8 SG3 204.4
RRT -.5250 RRF -.6599 RTF .9054
                                                                                                                     ST 2130.6 SR 356.9 SS 753.4
CRT -.9448 CRS ..9981 CST -.9605
    TDE-1.5197 TRA-1.5484 TC3-3.8792 BAU .9767
    RDE .2703 RRA .0068 RC3 .0417 FAU .04791
   FDE-1.0362 FRA -.1723 FC3-2.2028 BSP 14158
BDE 1.5436 BRA 1.5485 BC3 3.8794 FSP -653
                                                                 9GB 4591.2 R23 .2143 R13 -.9060
SGI 4581.0 SG2 305.1 THA 177.63
                                                                                                                    LSA 2276.8 MSA 224.4 SSA 11.7
                                                                                                                    EL1 2157.2 EL2 115.5 ALF 170.98
                                                                                                                              ARRIVAL DATE DEC 21 1967
                                                                      FLIGHT TIME 154.00
LAUNCH DATE JUL 20 1967
                                                                     DISTANCE 453.972
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 26.370 GAL -3.82 AZL 95.10 MCA 221.22 SMA 126.31 ECC .21371 INC 5.0959 V1 29.308 RP 107.55 LAP 3.36 LOP 157.73 VP 37.646 GAP 8.94 AZP 86.16 TAL 194.36 TAP 55.58 RCA 99.32 APO 153.31 V2 35.234 RC 148.521 GL -33.69 GP 19.64 ZAL 112.85 ZAP 153.45 ETS 44.96 ZAE 127.77 ETE 164.32 ZAC 84.73 ETC 12.63 CLP-161.77
  PLANETOCENTRIC CONIC
    C3 17.749 VHL 4.213 DLA -30.13 RAL 164.11 RAD 6567.7 VEL 11.795 PTH 2.09 VHP 6.420 DPA 22.49 RAP 186.17 ECC 1.2921
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 4661.8 SGR 358.3 SG3 202.3

RRT - 4947 RRF - .6120 RTF .9035

SGB 4675.6 R23 .1876 R13 - .9040

SG1 4665.2 SG2 311.1 THA 177.81
                                                                                                                    ST 2178.0 SR 357.7 SS 750.1

CRT - .9551 CRS .9990 CST - .9614

LSA 2320.9 MSA 217.5 SSA 12.9
    TOE-1.5235 TRA-1.4053 TC3-4.2056 BAU .9979
    ROE .2630 RRA .0094 RC3 .0176 FAU .04641
    FDE -.9929 FRA -.0874 FC3-2.2638 BSP 14447
                                                                                                                    EL1 2204.7 EL2 104.7 ALF 171.07
    BOE 1.5460 BRA 1.4053 BC3 4.2056 FSP
                                                   -647
                                                                                                                               ARRIVAL DATE DEC 23 1967
                                                                      FLIGHT TIME 156.00
LAUNCH DATE JUL 20 1967
                                                                      DISTANCE 459.794
   RL 152.01 LAL .00 LOL 296.62 VL 26.311 GAL -3.44 A7L 94.83 HCA 224.46 SMA 125.94 ECC .21523 INC 4.8274 V1 29.308 RP 107.57 LAP 3.38 LOP 160.98 VP 37.599 GAP 9.21 A7P 86.55 TAL 192.76 TAP 57.22 RCA 98.83 APO 153.04 V2 35.228 RC 150.615 GL -32.58 GP 18.16 7AL 110.80 7AP 155.15 ETS 44.36 7AE 128.09 ETE 165.46 7AC 82.98 ETC 11.97 CLP-162.75
   PLANETOCENTRIC CONIC
    C3 16.851 VHL 4.105 OLA -30.25 RAL 167.20 RAD 6567.7 VEL 11.757 PTH
                                                                                               2.08 VHP 6.499 DPA 20.23 RAP 187.55 ECC 1.2773
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2234.2 SR 361.0 SS 748.1
CRT -.9652 CRS .9990 CST -.9628
                                                                 SGT 4744.1 SGR 361.5 SG3 199.6
RRT -.4686 RRF -.5682 RTF .9022
SGB 4757.9 R23 .1625 R13 -.9026
    TDE-1.5380 TRA-1.2572 TC3-4.5202 BAU 1.0183
    ROE .2586 RRA .0125 RC3 -.0040 FAU .04476
FDE -.9537 FRA -.0073 FC3-2.2997 BSP 14730
BDE 1.5596 BRA 1.2573 BC3 4.5202 FSP -640
                                                                                                                   LSA 2374.4 M5A 209.6 SSA 14.2
                                                                                                                    EL1 2261.3 EL2 93.3 ALF 171.12
                                                                 SG1 4747.2 SG2 319.1 THA 177.95
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FLIGHT TIME 150.00

ARRIVAL DATE DEC 25 1967

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FLIGHT TIME 158.00
LAUNCH DATE JUL 20 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 465.600
   RL 152.01 LAL .00 LOL 296.62 VL 26.253 GAL -3.05 AZL 94.59 HCA 227.70 SMA 125.57 ECC .21691 INC 4.5882 VI 29.308 RP 107.59 LAP 3.39 LOP 164.22 VP 37.551 GAP 9.48 AZP 86.91 TAL 191.15 TAP 58.85 RCA 98.33 APO 152.81 V2 35.221 RC 152.696 GL -31.50 GP 16.89 ZAL 108.52 ZAP 156.70 ETS 43.95 ZAE 128.34 ETE 166.46 ZAC 81.13 ETC 11.39 CLP-163.71
   PLANETOCENTRIC CONIC
    C3 16.110 VHL 4.014 DLA -30.49 RAL 170.44 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 6.590 DPA 18.14 RAP 189.03 ECC 1.2651
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
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                                                                277.05
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                                                                                                                           5224.3
                                                                                                                                           25.04
                                                                                                                                                        269.24
                   10 29 3 5824.31
      101.81
                                                                                                                           139.5
                                                                                                                                           16.87
                                                                                                                                                        302.77
                    9 24 28
                                   739.52
                                                   12.73
                                                                309.44
                                                                               31.12
      110.00
                                                                                                                                                        230.01
                                                                                                                           4680.5
                                                                                                                                           33.60
      110.00
                  13 22 55 5280.50
                                              32.68
                                                                239.07
                                                                               39.50
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 4814.2 SGR 367.1 SG3 196.0
RRT -.4448 RRF -.5282 RTF .9007
SGB 4828.1 R23 .1403 R13 -.9011
SG1 4817.0 SG2 328.6 THA 178.05
                                                                                                                       ST 2292.9 SR 365.8 SS 744.9
CRT -.9745 CRS .9979 CST -.9643
    TOE-1.5579 TRA-1.0993 TC3-4.8108 BAU 1.0362
   ROE .2562 RRA .0153 RC3 -.0236 FAU .04289
FOE -.9154 FRA .0714 FC3-2.3046 BSP 14927
BOE 1.5788 BRA 1.0994 BC3 4.8109 FSP -625
                                                                                                                       LSA 2430.1 MSA 201.0 SSA 15.5
                                                                                                                       EL1 2320.5 EL2 81.0 ALF 171.15
                                                                                                                                  ARRIVAL DATE DEC 27 1967
                                                                        FLIGHT TIME 160.00
LAUNCH DATE JUL 20 1967
                                                                        DISTANCE 471.388
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 26.195 GAL -2.65 A7L 94.37 HCA 230.93 SMA 125.21 ECC .21876 INC 4.3725 V1 29.308 RP 107.62 LAP 3.39 LOP 167.47 VP 37.504 GAP 9.75 A7P 87.24 TAL 189.54 TAP 60.47 RCA 97.82 APO 152.60 V2 35.214 RC 154.762 GL -30.43 GP 15.78 ZAL 106.02 ZAP 158.13 ETS 43.73 ZAE 128.54 ETE 167.34 ZAC 79.21 ETC 10.88 CLP-164.66
  PLANETOCENTRIC CONIC
    C3 15.510 VHL 3.938 DLA -30.81 RAL 173.84 RAD 6567.6 VEL 11.700 PTH
                                                                                                  2.06 VMP 6.692 DPA 16.19 RAP 190.61 ECC 1.2553
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.33
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                                 5795.62
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100.99 14 59 28
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       102.68
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                                   713.85
                                                   13.65
                                                                308.02
                                                                                                                          4689.0
                   13 31 19
                                5288.96
                                                                                42.28
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                                                                239.70
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4891.3 SGR 375.1 SG3 192.7

RRT -.4283 RRF -.4961 RTF .9006

SGB 4905.7 R23 .1200 R13 -.9008

SG1 4894.0 SG2 338.8 THA 178.11
                                                                                                                       ST 2361.9 SR 372.7 SS 744.2
CRT -.9827 CRS .9957 CST -.9664
    TOE-1.5880 TRA -.9374 TC3-5.0889 BAU 1.0552
    RDE .2561 RRA .0182 RC3 -.0392 FAU .04111
    FOE -.8826 FRA .1437 FC3-2.2947 BSP 15203
                                                                                                                       LSA 2496.9 MSA 191.9 SSA 16.8
                                                                                                                        EL1 2390.2 EL2 68.2 ALF 171.18
    BDE 1.6085 BRA .9376 BC3 5.0891 FSP -616
                                                                                                                                  ARRIVAL DATE DEC 29 1967
                                                                        FLIGHT TIME 162.00
LAUNCH DATE JUE-20 1967
                                                                        DISTANCE 477.159
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 26.137 GAL -2.23 AZL 94.18 MCA 234.17 SMA 124.86 ECC .22080 INC 4.1758 VI 29.308 RP 107.64 LAP 3.38 LOP 170.71 VP 37.456 GAP 10.03 AZP 87.55 TAL 187.91 TAP 62.08 RCA 97.29 APO 152.42 V2 35.205 RC 156.813 GL -29.37 GP 14.81 ZAL 103.32 ZAP 159.44 ETS 43.69 ZAE 128.70 ETE 168.11 ZAC 77.22 ETC 10.43 CLP-165.58
   PLANETOCENTRIC CONIC
    C3 15.040 VHL 3.878 DLA -31.19 RAL 177.42 RAD 5567.6 VEL 11.680 PTH 2.05 VHP 6.803 CPA 14.36 RAP 192.27 ECC 1.2475
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.43 7 53 19
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                                                   23.21
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       103.64
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        76.36
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121.24 10 15 20
101.59 15 7 31
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13 39 8
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                                                                 306.46
                                   685.90
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       110.00
                                 5303.07
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                                                                240.76
                                                                                45.35
                                                   32.38
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 4963.2 SGR 384.3 SG3 189.1
RRT -.4156 RRF -.4692 RTF 9007
SGB 4978.0 R23 .1023 R13 -.9009
SG1 4965.7 SG2 349.3 THA 178.15
                                                                                                                       ST 2432.3 SR 380.6 SS 742.2
CRT -.9893 CRS .9923 CST -.9685
    TDE-1.6220 TRA -.7676 TC3-5.3367 BAU 1.0731
    RDE .2575 RRA .0207 RC3 -.0518 FAU .03927
FOE -.8506 FRA .2126 FC3-2.2606 BSP 15466
                                                                                                                       LSA 2564.8 MSA 182.7 SSA
                                                                                                                                                            18.1
                                                                                                                        EL1 2461.3 EL2 55.0 ALF 171.20
    BDE 1.6423 BRA .7679 BC3 5.3369 FSP -606
                                                                        FLIGHT TIME 164.00
                                                                                                                                  ARRIVAL DATE DEC 31 1967
LAUNCH DATE JUL 20 1967
                                                                        DISTANCE 482.911
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 26.080 GAL -1.79 AZL 93.99 MCA 237.40 SMA 124.51 ECC .22303 INC 3.9947 VI 29.30A RP 107.67 LAP 3.36 LOP 173.96 VP 37.408 GAP 10.31 AZP 87.85 TAL 186.28 TAP 63.68 RCA 96.74 APO 152.28 VZ 35.197 RC 158.850 GL -28.28 GP 13.96 ZAL 100.43 ZAP 160.67 ETS 43.84 ZAE 128.83 ETE 168.78 ZAC 75.18 ETC 10.04 CLP-166.49
   PLANETOCENTRIC CONIC
    C3 14.694 VHL 3.833 DLA -31.59 RAL 181.16 RAD 6567.6 VEL 11.665 PTH 2.05 VHP 6.924 DPA 12.62 RAP 194.00 ECC 1.2418
    LNCH AZMTH LNCH TIME L-I TIME MAJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.38 7 41 50 1190.33 23.63 347.95 45.79 111.60 8 1 40 590.3 26.35 340.07
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                                  5740.25
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        75.38
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102.39 15 15 20
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       104.62
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                    10 26 16
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       110.00
                                   656.59
                                                    15.67
                                                                 304.81
                                 5321.99
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       110.00
                    13 46 38
                                                   32.12
                                                                 242.17
                                                                                48.72
                                                                                                                            4722.0
                                                                                                                                            33.49
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5030.2 SGR 394.1 SG3 185.2
RRT -.4066 RRF -.4477 RTF .9011
SGB 5045.6 R23 .0870 R13 -.9013
                                                                                                                        ST 2501.6 SR 389.5 SS 738.E
CRT -.9941 CRS .9878 CST -.9704
     TOE-1.6586 TRA -.5881 TC3-5.5481 BAU 1.0899
    ROE .2605 RRA .0223 RC3 -.0612 FAU .03741
FOE -.8194 FRA .2796 FC3-2.2042 BSP 15696
BDE 1.6789 BRA .5885 BC3 5.5484 FSP -594
                                                                                                                       LSA 2631.5 MSA 173.9 55A 19.4
                                                                     5G1 5032.7 SG2 359.9 THA 178.17
                                                                                                                        EL1 2531.4 EL2 41.8 ALF 171.20
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ARRIVAL DATE JAN 2 1968

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LAUNCH DATE JUL 20 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 488.642
    RL 152.01 LAL .00 LOL 296.62 VL 26.024 GAL -1.35 A7L 93.83 MCA 240.64 SMA 124.17 ECC .22546 INC 3.8263 VI 29.308
RP 107.70 LAP 3.33 LOP 177.20 VP 37.360 GAP 10.60 A7P 88.12 TAL 184.64 TAP 65.27 RCA 96.17 APO 152.16 V2 35.187
RC 160.871 GL -27.15 GP 13.20 ZAL 97.39 ZAP 161.82 ETS 44.17 ZAE 128.94 ETE 169.38 ZAC 73.09 ETC 9.70 CLP-167.38
   PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T4.44 7 51 1 1206.92 24.01 349.38 49.59 111.82 8 11 8 606.9 26.75 341.47 105.56 11 53 51 5716.85 24.02 269.66 49.59 111.81 13 29 8 5116.9 26.76 261.76 10.00 10 50 0 626.95 16.70 303.12 45.78 120.27 11 0 27 27 0 20 50 20.57
                                                                                                   111.82 8 11 8
111.81 13 29 8
120.27 11 0 27
103.33 15 23 8
                   10 50 0
                   13 54 3
                                                      31.77
                                                                                                                                    4744.8
                                                                                                                                                     33.28
                                                                                                                                                                    234.96
                                  5344.82
                                                                     243.86
                                                                                     52.37
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        RET -.3998 REF -.4301 RTF ..9014
SGB 5102.5 R23 .0740 R13 -.9016
SGI 5089.0 SGZ 370.1 THA 178.17
                                                                                                                               ST 2562.9 SR 398.8 SS 731.5

CRT -.9971 CRS .9820 CST -.9721

LSA 2689.7 MSA 166.0 SSA 20.7
    TOE-1.6935 TRA -.3976 TC3-5.7092 BAU 1.1046
    RDE .2646 RRA .0230 RC3 -.0678 FAU .03548
FOE -.7868 FRA .3452 FC3-2.1226 BSP 15852
BOE 1.7141 BRA .3983 BC3 5.7097 FSP -578
                                                                                                                                EL1 2593.6 EL2 29.7 ALF 171.18
                                                                                                                                            ARRIVAL DATE JAN 4 1968
                                                                             FLIGHT TIME 168.00
LAUNCH DATE JUL 20 1967
                                                                            DISTANCE 494.351
  HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.968 GAL -.88 A7L 93.67 MCA 243.87 SMA 123.83 ECC .22812 INC 3.6683 V1 29.308 RP 107.73 LAP 3.29 LOP 180.44 VP 37.312 GAP 10.90 A7P 88.38 TAL 182.99 TAP 66.86 RCA 95.58 APO 152.08 V2 35.178 RC 162.878 GL -25.99 GP 12.53 ZAL 94.20 ZAP 162.89 ETS 44.70 ZAE 129.03 ETE 169.91 ZAC 70.96 ETC 9.40 CLP-168.26
   PLANETOCENTRIC CONIC
    C3 14.371 VHL 3.791 DLA -32.39 RAL 189.12 RAD 6567.6 VEL 11.651 PTH
                                                                                                         2.05 VHP 7.191 DPA
                                                                                                                                         9.40 RAP 197.61 ECC 1.2365
    LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 1 29 1223.14
12 15 43 5697.58
                                                                                                   112.07
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       106.42
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5697.58
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119.75 12 52 47
104.37 15 31 12
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                   12 15 43
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       106.42
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                    11 14 41
                                    5886.33
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       110.00
                                  5370.43
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                                                                     245.74
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                    14 1 42
                                                      31.35
                                                                                     56.27
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5148.8 SGR 414.4 SG3 177.1
RRT -.3977 RRF -.4185 RTF .9031
SGB 5165.5 R23 .0626 R13 -.9033
SG1 5151.5 SG2 380.0 THA 178.16
                                                                                                                                ST 2621.5 SR 409.0 SS 724.0 CRT -.9985 CRS .9753 CST -.9738
    TDE-1.7308 TRA -.2010 TC3-5.8300 BAU 1.1202
    ROE .2705 RRA .0231 RC3 -.0704 FAU .03368
FOE -.7568 FRA .4054 FC3-2.0293 BSP 16097
                                                                                                                                LSA 2745.6 MSA 158.9 SSA 21.8
                                                                                                                                EL1 2653.2 EL2 22.5 ALF 171.14
    BDE 1.7518 BRA .2024 BC3 5.8304 FSP -568
                                                                                                                                           ARRIVAL DATE JAN 6 1968
                                                                             FLIGHT TIME 170.00
LAUNCH DATE JUL 20 1967
                                                                           DISTANCE 500.037
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.912 GAL -.40 AZL 93.52 MCA 247.10 SMA 123.50 ECC .23101 INC 3.5189 V1 29.30A
RP 107.76 LAP 3.24 LOP 183.67 VP 37.263 GAP 11.20 AZP 88.63 TAL 181.34 TAP 68.44 RCA 94.97 APO 152.03 V2 35.167
RC 164.869 GL -24.78 GP 11.93 ZAL 90.90 ZAP 163.90 ETS 45.43 ZAE 129.11 ETE 170.37 ZAC 68.80 ETC 9.15 CLP-169.12
   PLANETOCENTRIC CONIC
    C3 14.399 VHL 3.795 DLA -32.73 WAL 193.30 RAD 6567.6 VEL 11.653 PTH 2.05 VHP 7.338 DPA 7.89 RAP 199.49 ECC 1.2370
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                     8 13 23 1238.41
12 37 10 5683.17
8 13 23 1238.41
12 37 10 5683.17
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112.34 14 11 53
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                                                                                                                                    638.4
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        72.85
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                    12 37 10
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       107.15
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                    12 37 10
       107.15
                                                                    277.87
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                    11 39 44 5860.25
14 9 59 5397.37
                                                      18.55
       110.00
                   11 39 44
                                                                                                                                 4797.4
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                                                                    247.70
                                                                                     60.42
       110.00
                                                      30.88
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        RRT - .3993 RRF - .4122 RTF .9061
SGB 5231.5 R23 .0528 R13 - .9062
SGI 5217.0 SG2 389.3 THA 178.13
                                                                                                                               ST 2671.9 SR 419.8 SS 715.4
CRT -.9981 CRS .9679 CST -.9755
    TDE-1.7673 TRA .0022 TC3-5.9027 BAU 1.1363
    RDE .2779 RRA .0224 RC3 - .0692 FAU .03203
FDE - .7284 FRA .4611 FC3-1.9261 BSP 16398
                                                                                                                               LSA 2793,4 MSA 153.1 SSA 22.8
    BOE 1.7890 BRA .0225 BC3 5.9031 FSP -564
                                                                                                                               EL1 2704.5 EL2 25.5 ALF 171.09
                                                                             FLIGHT TIME 172.00
                                                                                                                                            ARRIVAL DATE JAN 8 1968
LAUNCH DATE JUL 20 1967
                                                                            DISTANCE 505.696
   HELIOCENTRIC CONTC
    RL 152.01 LAL .00 LOL 296.62 VL 25.858 GAL .0.9 AZE 93.38 HCA 250.32 SMA 123.17 ECC .23416 INC 3.3766 V1 29.308 RP 107.79 LAP 3.18 LOP 186.91 VP 37.215 GAP 11.52 AZP 88.86 TAL 179.69 TAP 70.01 RCA 94.33 APO 152.02 V2 35.156 RC 166.846 GL -23.52 GP 11.39 ZAL 87.52 ZAP 164.86 ETS 46.37 ZAE 129.17 ETE 170.78 ZAC 66.61 ETC 8.94 CLP-169.96
   PLANETOCENTRIC CONIC
    C3 14.560 VHL 3.816 DLA -33.01 RAL 197.58 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 7.494 DPA 6.44 RAP 201.41 ECC 1.2396
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.27 8 26 44 1252.39 24.69 353.16 62.52 112.64 8 47 37 652.4 27.54 345.25
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112.63 14 32 32
                                  5674.15
1252.39
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                                                                     266.70
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       107.73
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                                                      19.26
                                                                     276.61
                                                                                     59.70
                    12 4 25
       110.00
                                                                     249.59
                                                                                     64.80
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                                                      30.39
       110.00
                    14 19 27
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5257.1 SGR 432.0 SG3 168.6
RRT - .3974 RRF - .3988 RTF .9060
SGB 5274.8 R23 .0400 R13 - .9062
                                                                                                                               $J 2688.0 SR 427.7 SS 689.5
CRT -.9962 CRS .9568 CST -.9752
LSA 2803.6 MSA 151.8 SSA 23.5
    TDE-1.7861 TRA .2246 TC3-5.9012 BAU 1.1488
    RDE .2848 RRA .0193 RC3 -.0670 FAU .03018
FDE -.6834 FRA .5243 FC3-1.7943 BSP 16437
BDE 1.8087 BRA .2254 BC3 5.9016 FSP -530
                                                                        SG1 5259.9 SG2 396.2 THA 178.12
                                                                                                                                ELT 2721.6 EL2 37.0 ALF 170.99
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FLIGHT TIME 166.00

ARRIVAL DATE JAN 10 1968

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FLIGHT TIME 174.00
LAUNCH DATE JUL 20 1967
                                                                                  DISTANCE 511.329
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.804 GAL .61 AZL 93.24 HCA 253.55 SMA 122.85 ECC .23758 INC 3.2400 VI 29.308 RP 107.83 LAP 3.11 LOP 190.14 VP 37.167 GAP 11.84 AZP 89.08 TAL 178.03 TAP 71.58 RCA 93.62 APO 152.04 V2 35.145 RC 168.808 GL -22.23 GP 10.91 ZAL 84.07 ZAP 165.76 ETS 47.55 ZAE 129.24 ETE 171.15 ZAC 64.39 ETC 8.77 CLP-170.80
   PLANETOCENTRIC CONIC
                                                                                                                                                   5.04 RAP 203.37 ECC 1.2446
    C3 14.864 VHL 3.855 DLA -33.21 RAL 201.92 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 7.659 DPA
    C3 14.864 VHL 3.855 DLA -33.21 RAL 201.92 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 7.659 DPA 5.04 RAP 203.37 ECC 1.2446 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.87 8 41 33 1264.78 24.71 354.13 67.25 112.93 9 2 38 664.8 27.60 346.23 108.13 13 17 50 5670.95 24.72 266.46 67.25 112.92 14 52 21 5070.9 27.61 258.56 108.13 13 17 50 5670.95 24.72 266.46 67.25 112.93 9 2 38 664.8 27.60 346.23 108.13 13 17 50 5670.95 24.72 266.46 67.25 112.93 9 2 38 664.8 27.60 346.23 108.13 13 17 50 5670.95 24.72 266.46 67.25 112.92 14 52 21 5070.9 27.61 258.56 110.00 12 27 44 5824.80 19.71 275.78 64.65 118.51 14 4 9 5224.8 23.37 268.54 110.00 14 30 50 5446.97 29.93 251.25 69.40 107.34 16 137 4847.0 32.01 242.65 DEFERRALLY CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 2701.4 SR 438.3 SS 675.7
CRT -.9927 CRS .9464 CST -.9764
                                                                              SGT 5300.4 SGR 441.8 SG3 164.4

RRT -.4001 RRF -.3994 RTF .9080

SGB 5318.7 R23 .0370 R13 -.9081

SGI 5303.3 SG2 404.7 THA 178.08
    TOE-1.8082 TRA .4533 TC3-5.8322 BAU 1.1591
    RDE .2949 RRA .0158 RC3 -.0629 FAU .02829
FDE -.6544 FRA .5793 FC3-1.6479 BSP 16618
BDE 1.8321 BRA .4536 BC3 5.8326 FSP -528
                                                                                                                                          LSA 2814.8 MSA 151.0 SSA 23.9
                                                                                                                                          EL1 2736.2 EL2 52.3 ALF 170.85
                                                                                                                                                       ARRIVAL DATE JAN 12 1968
                                                                                    FLIGHT TIME 176.00
LAUNCH DATE JUL 20 1967
                                                                                   DISTANCE 516.930
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.750 GAL 1.15 A7L 93.11 MCA 256.77 SMA 122.54 ECC .24130 INC 3.1079 V1 29.308 RP 107.86 LAP 3.03 LOP 193.37 VP 37.119 GAP 12.18 A7P 89.29 TAL 176.38 TAP 73.15 RCA 92.97 APO 152.11 V2 35.134 RC 170.755 GL -20.89 GP 10.48 ZAL 80.60 ZAP 166.61 ETS 48.99 ZAE 129.29 ETE 171.47 ZAC 62.15 ETC 8.64 CLP-171.62
   PLANETOCENTRIC CONIC
                                                                                                                                                    3.69 RAP 205.36 ECC 1.2521
    C3 15.321 VHL 3.914 DLA -33.32 RAL 206.30 RAD 6567.6 VEL 11.692 PTH
                                                                                                                  2.06 VHP 7.834 DPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                675.6
                                                                                                                                                                27.52
                                                                           354.91
                                                                                             72.12
                                                                                                           113.21
                                                                                                                           9 18 58
        71.67
                       8 57 43 1275.56
                                                           24.60
                                                                                                            113.19 15 11 9
                                                                                                                                                                  27.53
                                                                                                                                                                                  258.75
                                                                                             72.13
                                                                                                                                                5073.7
                     13 36 36 5673.72
                                                           24.61
                                                                           266.63
        108.33
                                                                                                                                                                  27.52
                                                                                             72.12
                                                                                                             113.21
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                                                                                                                                                675.6
                        8 57 43
                                       1275.56
                                                           24.60
                                                                           354.91
         71.67
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118.43 14 25 33
107.98 16 16 1
                                                                                                                                                5073.7
                                                                                                                                                                  27.53
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                                                                                             72.13
                     13 36 36 5673.72
                                                           24.61
                                                                           266.63
        108.33
                                                                                                                                                                                 26A.31
                                                                                                                                               5221.2
                                                                                                                                                                  23.47
                                                                           275.56
        110.00
                      12 48 32
                                      5821.19
                                                           19.83
                                                                                             69.63
                                                                                                                                                                  31.74
                                                                                                                                                                                 243.92
                     14 44 57 5464.14
                                                                                            74.22
                                                                                                                                              4854.1
                                                                          252.46
        110.00
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5346.9 SGR 449.8 SG3 160.3

RRT -.4049 RRF -.3991 RTF .9110

SGB 5365.8 R23 .0306 R13 -.9110

SGI 5350.0 SG2 411.0 THA 178.04
                                                                                                                                         ST 2693.0 SR 447.3 SS 654.3
CRT -.9876 CRS .9337 CST -.9768
    TOE-1.8206 TRA .6907 TC3-5.7160 BAU 1.1708
RDE .3055 RRA .0110 RC3 -.0556 FAU .02666
FDE -.6197 FRA .6324 FC3-1.5065 BSP 16817
                                                                                                                                         LSA 2802.9 MSA 153.4 SSA 23.8
EL1 2729.0 EL2 69.2 ALF 170.68
    BOE 1.8461 BRA .6908 BC3 5.7163 FSP -519
                                                                                                                                                       ARRIVAL DATE JAN 14 1968
                                                                                    FLIGHT TIME 178.00
LAUNCH DATE JUL 20 1967
                                                                                  DISTANCE 522.497
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.697 GAL 1.71 AZL 92.98 MCA 259.99 SMA 122.24 ECC .24534 INC 2.9794 V1 29.308

RP 107.90 LAP 2.93 LOP 196.60 VP 37.071 GAP 12.53 AZP 89.48 TAL 174.72 TAP 74.71 RCA 92.25 APO 152.22 V2 35.122

RC 172.686 GL -19.53 GP 10.09 ZAL 77.12 ZAP 167.41 ETS 50.70 ZAE 129.34 ETE 171.76 ZAC 59.89 ETC 8.55 CLP-172.44
    PLANETOCENTRIC CONIC
     C3 15.944 VML 3.993 DLA -33.31 RAL 210.66 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 8.020 DPA
                                                                                                                                                  2.38 RAP 207.38 ECC 1.2624
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.45 15 28 42
113.46 9 36 31
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                                                                          355.49
                        9 15 7 1284.55
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         71.67
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                                                            24.37
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                      13 53 59
                                       5682.74
        108.33
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         71.67
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118.62 14 43 5
108.31 16 33 35
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                      13 5 55
15 2 22
                                     5830.23
5473.10
                                                            19.54
                                                                           276.10
                                                                                             74.57
                                                                                                                                               5230.2
                                                                                                                                                                  23.20
        110.00
                                                                                                                                                                                 244.58
                                                                                                                                              4873.1
                                                                                                                                                                  31.60
                                                                           253.09
                                                                                             79.25
                                                           29.38
        110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2662.5 SR 455.1 SS 629.9

CRT - .9809 CRS .9187 CST - .9768

LSA 2768.9 MSA 158.8 SSA 23.3

EL1 2699.7 EL2 87.3 ALF 170.47
                                                                               RRT -.4098 RRF -.4003 RTF .9135
SGB 5405.8 R23 .0260 R13 -.9136
SGI 5389.7 SG2 416.4 THA 178.00
     TOE-1.8222 TRA .9405 TC3-5.5394 BAU 1.1808
     ROE .3172 RRA .0048 RC3 -.0477 FAU .02499
FDE -.5834 FRA .6849 FC3-1.3568 BSP 16969
     BOE 1.8496 BRA .9405 BC3 5.5396 FSP -506
                                                                                                                                                        ARRIVAL DATE JAN 16 1968
                                                                                    FLIGHT TIME 180.00
LAUNCH DATE JUL 20 1967
                                                                                    DISTANCE 528.027
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.645 GAL 2.30 AZL 92.85 MCA 263.21 SMA 121.93 ECC .24973 INC 2.8535 V1 29.308
RP 107.94 LAP 2.83 LOP 199.82 VP 37.023 GAP 12.90 AZP 89.66 TAL 173.07 TAP 76.28 RCA 91.48 APO 152.39 V2 35.110
RC 174.603 GL -18.16 GP 9.73 ZAL 73.68 ZAP 168.17 ETS 52.73 ZAE 129.38 ETE 172.02 ZAC 57.62 ETC 8.51 CLP-173.24
   PLANETOCENTRIC CONIC
     C3 16.749 VHL 4.092 DLA -33.21 RAL 214.97 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 8.219 DPA
                                                                                                                                                   1.12 RAP 209.43 ECC 1.2756
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.88 9 33 39 1291.61 23.98 355.85 82.15 113.69 9 55 11 691.6 26.97 348.05
                                                                                         82.15
                                                                                                           113.69
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                      14 9 48
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                                                            23.99
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        108.12
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                                      1291.61
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                       14 9 48
                                       5698.17
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        108.12
                                                                                                              119.08 14 57 11
108.33 16 54 13
                                                                                                                                                                                  270.24
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                       13 19 39
                                                                                             79.40
                                        5852.22
                                                            18.82
                                                                           277.39
        110.00
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                                        5473.61
                                                                           253.12
                                                                                             84.46
                                                                                                                                               4873.6
                                                                                                                                                                  31.59
        110.00
                       15 22 59
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 2608.7 SR 461.4 SS 602.5
CRT -.9721 CRS .9000 C6T -.9762
                                                                               SGT 5417.1 SGR 462.5 SG3 151.7

RRT -.4148 RRF -.4019 RTF .9155

SGB 5436.8 R23 .0218 R13 -.9156
     TOE-1.8101 TRA 1.2059 TC3-5.3046 BAU 1.1878
     ROE .3295 RRA -.0031 RC3 -.0395 FAU .02329
FOE -.5446 FRA .7392 FC3-1.2040 BSP 17050
BDE 1.8398 BRA 1.2059 BC3 5.3048 FSP -492
                                                                                                                                           LSA 2711.5 MSA 167.8 SSA 22.6
                                                                                                                                         EL1 2647.0 EL2 106.7 ALF 170.23
                                                                                SG1 5420.5 SG2 420.6 THA 177.96
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ARRIVAL DATE JAN IR 1968

LAUNCH DATE JUL 20 1967

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HELIOCENTRIC CONIC
                                                                                                  DISTANCE 533.515
     PLANETOCENTRIC CONIC
      C3 17.755 VHL 4.214 DLA -33.00 RAL 219.18 RAD 6567.7 VEL 11.796 PTH 2:09 VHP 8.430 DPA
                                                                                                                                                                             -.10 RAP 211.50 ECC 1.2922
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        9 53 8 1296.82 23.47
14 23 55 5719.93 23.48
9 53 8 1296.82 23.47
14 23 55 5719.93 23.48
13 30 8 5885.38 17.71
                                                                                                                             113.89 10 14 45
113.88 15 59 15
                                                                                                        87.21
                                                                                                                                                                                                                 348.25
                                                                                                                                                                         696.8
                                                                                                                                                                                               26.49
                                                                    23.47
                                                                                       356.01
                                                                                            10.08 10 59 15 5119.9

10.01 87.21 113.89 10 14 45 696.8

10.05 87.21 113.88 15 59 15 5119.9

10.33 84.10 119.73 15 8 14 5285.4

10.69 89.79 108.10 17 17 13 4867.4

MIO-COURSE EXECUTION ACCURACY ORBIT DETER
                                                                                        269.65
                                                                                                             87.21
                                                                                                                                                                         5119.9
                                                                                                                                                                                               26.50
                                                                                                                                                                                               26.49
                                                                                                                                                                                                                 348.25
                                                                                        356.01
         107.69
                                                                                        269.65
                                                                                                                                                                                               26.50
                                                                                                                                                                                                                261.89
                                                                                        279.33
                                                                                                                                                                                               21.53
                                                                                                                                                                                                                 272.28
                         15 46 5
                                                                                       252.69
                                                                                                                                                                                              31.69
         110.00
                                               5467.41
                                                                   29.50
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5450.0 SGR 467.4 SG3 147.6

RRT -.4216 RRF -.4058 RTF .9184

SGB 5470.0 R23 .0179 R13 -.9184

SGI 5453.6 SG2 423.5 THA 177.92
                                                                                                                                                                   ST 2542.2 SR 466.3 SS 575.4
CRT -.9612 CRS .8790 CST -.9756
     TOE-1.7907 TRA 1.4797 TC3-5.0371 BAU 1.1957
     RDE .3429 RRA -.0122 RC3 -.0304 FAU .02176
FDE -.5072 FRA .7904 FC3-1.0611 BSP 17208
BDE 1.8232 BRA 1.4797 BC3 5.0372 FSP -482
                                                                                                                                                                   LSA 2641.8 MSA 178.9 SSA 21.6
                                                                                                                                                                   EL1 2581.5 EL2 126.7 ALF 169.98
                                                                                                   FLIGHT TIME 184.00
                                                                                                                                                                                   ARRIVAL DATE JAN 20 1968
                                                                                                  DISTANCE 538.956
   HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.543 GAL 3.55 AZL 92.61 MCA 269.64 SMA 121.35 ECC .25968 INC 2.6061 V1 29.308
RP 108.01 LAP 2.61 LOP 206.26 VP 36.929 GAP 13.69 AZP 89.98 TAL 169.77 TAP 79.41 RCA 89.84 APO 152.86 V2 35.084
RC 178.389 GL -15.43 GP 9.12 ZAL 67.01 ZAP 169.53 ETS 57.86 ZAE 129.44 ETE 172.46 ZAC 53.04 ETC 8.55 CLP-174.84
     RC 178.389 GL -15.43 GP
    PLANETOCENTRIC CONIC
     C3 18.986 VHL 4.357 OLA -32.69 RAL 223.26 RAO 6567.8 VEL 11.848 PTH 2.10 VHP 8.656 OPA -1.29 RAP 213.60 ECC 1.3125 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.94 10 13 30 1299.87 22.83 355.93 92.25 114.06 10 35 10 699.9 25.88 348.23 107.06 14 36 7 5748.28 22.84 271.52 92.26 114.05 16 11 55 5148.3 25.89 263.82 107.06 14 36 7 5748.28 22.84 271.52 92.26 114.05 16 11 55 5148.3 25.89 263.82 107.06 14 36 7 5748.28 22.84 271.52 92.26 114.05 16 11 55 5148.3 25.89 263.82 110.00 13 38 10 639.00 16.28 303.81 88.67 120.48 13 48 49 39.0 20.21 296.89 110.00 16 10 38 5457.14 29.72 251.97 95.18 107.72 17 41 35 4857.1 31.85 243.40 INDESERVATION ACCURACY
     C3 18.986 VHL 4.357 OLA -32.69 RAL 223.26 RAD 6567.8 VEL 11.848 PTH
                                                                                                                                      2.10 VHP 8.656 OPA
                                                                                                                                                                             -1.29 RAP 213.60 ECC 1.3125
                                                                                           71.52 92.26 114.05 16 11 55

55.93 92.25 114.06 10 35 10

71.52 92.26 114.05 16 11 55

03.81 88.67 120.48 13 48 49

51.97 95.18 107.72 17 41 35

MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 5477.0 SGR 471.1 SG3 143.5
RRT - .4287 RRF - .4108 RTF .9212
SGB 5497.2 R23 .0149 R13 - .9212
SGI 5480.7 SG2 425.3 THA 177.88
                                                                                                                                                                  ST 2461.7 SR 469.5 SS 548.6

CRT -.9477 CRS .8543 CST -.9748

LSA 2558.1 MSA 192.4 SSA 20.6

EL1 2501.7 EL2 147.5 ALF 169.72
     TOE-1.7604 TRA 1.7671 TC3-4.7334 BAU 1.2015
      RDE .3570 RRA -.0227 RC3 -.0218 FAU .02024
     FOE -.4700 FRA .8418 FC3 -.9231 BSP 17352
      BOE 1.7963 BRA 1.7673 BC3 4.7335 FSP -472
                                                                                                                                                                                 ARRIVAL DATE JAN 22 1968
                                                                                                  FLIGHT TIME 186.00
LAUNCH DATE JUL 20 1967
                                                                                                 DISTANCE 544.344
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.493 GAL 4.22 AZL 92.48 MCA 272.86 SMA 121.07 ECC .26532 INC 2.4831 VI 29.308 RP 108.05 LAP 2.48 LOP 209.48 VP 36.882 GAP 14.12 AZP 90.12 TAL 168.13 TAP 80.99 RCA 88.95 APO 153.19 V2 35.071 RC 180.257 GL -14.09 GP 8.85 ZAL 63.82 ZAP 170.13 ETS 61.03 ZAE 129.46 ETE 172.65 ZAC 50.75 ETC 8.64 CLP-175.63
    PLANETOCENTRIC CONIC
     C3 20.469 VHL 4.524 DLA -32.29 RAL 227.18 RAD 6567.8 VEL 11.910 PTH 2.12 VHP 8.897 DPA -2.43 RAP 215.72 ECC 1.3369
     C3 20.469 VHL 4.524 DLA -32.29 RAL 227.18 RAD 6567.8 VEL 11.910 PTH 2.12 VHP 8.897 DPA -2.43 RAP 215.72 ECC 1.3369
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.79 10 34 41 1300.57 22.07 355.62 97.25 114.19 10 56 21 700.6 25.15 347.98
106.21 14 46 15 5783.28 22.09 273.83 97.26 114.18 16 22 38 5183.3 25.16 266.19
106.21 14 46 15 5783.28 22.09 273.83 97.26 114.19 10 56 21 700.6 25.15 347.98
106.21 14 46 15 5783.28 22.09 273.83 97.26 114.19 10 56 21 700.6 25.15 347.98
110.00 13 44 23 686.69 14.62 306.50 93.13 121.25 13 55 50 86.7 18.65 299.71
110.00 16 35 43 5445.15 29.96 251.12 100.57 107.28 18 6 28
DIFFERENTIAL CORRECTIONS
TDE-1.7200 TRA 2.0690 TC3-4.4048 BAU 1.2054 SGT 5499.0 SGR 473.7 SGS 139.5
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 2371.4 SR 470.9 SS 522.9

CRT -.9310 CRS .8256 CST -.9739

LSA 2464.8 MSA 207.8 SSA 19.5

EL1 2411.8 EL2 169.0 ALF 169.47
                                                                                          SGT 5499.0 SGR 473.7 SG3 139.5
RRT - .4363 RRF - .4167 RTF .9240
SGB 5519.3 R23 .0123 R13 - .9241
SGI 5502.9 SG2 425.9 THA 177.83
     TOE-1.7200 TRA 2.0690 TC3-4.4048 BAU 1.2054
     ROE .3716 RRA -.0347 RC3 -.0138 FAU .01877
FOE -.4332 FRA .8935 FC3 -.7937 BSP 17467
     BDE 1.7597 BRA 2.0693 BC3 4.4049 FSP -461
                                                                                                  FLIGHT TIME 188.00
                                                                                                                                                                                  ARRIVAL DATE JAN 24 1968
LAUNCH DATE JUL 20 1967
                                                                                                 DISTANCE 549.673
   HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.443 GAL 4.92 AZL 92.36 MCA 276.07 SMA 120.79 ECC .27146 INC 2.3595 VI 29.308 RP 108.09 LAP 2.35 LOP 212.69 VP 36.835 GAP 14.58 AZP 90.25 TAL 166.50 TAP 82.57 RCA 88.00 APO 153.58 V2 35.058 RC 182.108 GL -12.79 GP 8.61 ZAL 60.75 ZAP 170.68 ETS 64.67 ZAE 129.47 ETE 172.83 ZAC 48.45 ETC 8.78 CLP-176.42
   PLANETOCENTRIC CONIC
     C3 22.236 VHL 4.716 DLA -31.82 RAL 230.93 RAD 6567.9 VEL 11.984 PTH 2.14 VMP 9.156 DPA -3.53 RAP 217.86 ECC 1.3659
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.84 10 56 41 1298.43 21.22 355.04 102.18 114.29 11 18 19 698.4 24.32 347.46
                                                                                                                             114.29 11 18 19
114.28 16 31 12
114.29 11 18 19
114.28 16 31 12
121.98 14 1 39
106.83 18 31 11
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         105.16
                          14 54 6
                                             5825.29
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                                                                                                            97.46
                                                                                                                                                                      4833.2
                                                                                                                                                                                               32.21
         110.00
                         17 0 38
                                               5433.18
                                                                     30.20
                                                                                       250.27
                                                                                                           105.91
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SCT 5513.2 SCR 474.7 SC3 135.7
RRT -.4435 RRF -.4222 RTF .9266
SCB 5533.6 R23 .0098 R13 -.9266
                                                                                                                                                                   ST 2272.5 SR 470.0 SS 498.0
CRT -.9101 CRS .7908 CST -.9727
      TOE-1.6666 TRA 2.3895 TC3-4.0543 BAU 1.2052
     ROE .3865 RRA -.0483 RC3 -.0073 FAU .01726
FDE -.3953 FRA .9472 FC3 -.6718 BSP 17479
BDE 1.7108 BRA 2.3899 BC3 4.0543 FSP -447
                                                                                                                                                                   LSA 2362.7 MSA 225.4 SSA 18.5
                                                                                                                                                                   EL1 2312.7 EL2 191.4 ALF 169.27
                                                                                             SG1 5517.3 SG2 425.1 THA 177.80
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FLIGHT TIME 182.00

ARRIVAL DATE JAN 26 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 20 1967
                                                                                                         DISTANCE 554.934
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.394 GAL 5.66 AZL 92.23 HCA 279.27 SHA 120.52 ECC .27815 INC 2.2345 V1 29.308 RP 108.13 LAP 2.21 LOP 215.90 VP 36.789 GAP 15.06 AZP 90.36 TAL 164.89 TAP 84.16 RCA 87.00 APO 154.04 V2 35.045 RC 183.942 GL -11.52 GP 8.39 ZAL 57.81 ZAP 171.16 ETS 68.81 ZAE 129.47 ETE 172.98 ZAC 46.15 ETC 8.97 CLP-177.21
    PLANETOCENTRIC CONIC
                                                                                                                                              2.16 VHP 9.435 DPA -4.60 RAP 220.02 ECC 1.4004
      C3 24.326 VHL 4.932 DLA -31.29 RAL 234.47 RAD 6568.0 VEL 12.071 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        114.35 11 41 8
114.34 16 37 25
                                                                                                                                                                                                        23.39
                                                                                                                  107.02
                                                                                                                                                                                     692.9
                                                                                                                                                                                                                             346.64
           76.10 11 19 35 1292.90
103.90 14 59 30 5874.66
                                                                                              354.17
                                                                          20.27
                                                                                                                                                                                     5274.7
                                                                                                                                                                                                            23.40
                                                                                                                                                                                                                               272.38
                                                                                                                  107.03
                                                                          20.29
                                                                                              279.90
          103.90
                                                                                                                                         114.35 11 41 8
114.34 16 37 25
122.64 14 6 34
106.41 18 55 17
                                                                                                                                                                                                            23.39
                                                                                                                                                                                      692.9
                                                                                                                                                                                                                               346.64
                            11 19 35 1292.90
14 59 30 5874.66
                                                                                                                   107.02
                                                                                              354.17
                                                                           20.27
                                                                                                                                                                                                                               272.38
                                                                                                                                                                                    5274.7
                                                                                                                                                                                                            23.40
                                                                                                                  107.03
          103.90
                                                                          20.29
                                                                                              279.90
                                                                                                                                                                                      193.2
                                                                                                                                                                                                                               305.82
                                                                                                                                                                                                            15.01
                             13 53 21
                                                   793.21
                                                                           10.78
                                                                                              312.37
                                                                                                                  101.68
          110.00
                                                                                                                                                                                                                               240.82
                                                                                                                                                                                    4822.3
                                                                                                                                                                                                          32.36
                             17 24 55
                                                 5422.34
                                                                           30.41
                                                                                              249.49
                                                                                                                  111.18
          110.00
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                   RTI - 4518 RRF - 4296 RTF - 9297
SGB 5547.0 R23 .0080 R13 - 9297
SGI 5530.8 SG2 423.2 THA 177.76
                                                                                                                                                                              ST 2177.2 SR 467.7 SS 477.0
CRT -.8856 CRS .7538 CST -.9721
      TDE-1.6096 TRA 2.7218 TC3-3.7051 BAU 1.2050
      RDE .4020 RRA -.0631 RC3 -.0014 FAU .01587
                                                                                                                                                                              LSA 2264.3 MSA 243.0 SSA 17.6
      FDE -.3609 FRA .9999 FC3 -.5647 BSP 17588
                                                                                                                                                                              ELI 2216.6 EL2 213.4 ALF 169.13
      BOE 1.6590 BRA 2.7225 BC3 3.7051 FSP -437
                                                                                                                                                                                               ARRIVAL DATE JAN 28 1968
                                                                                                         FI IGHT TIME 192.00
                                                                                                         DISTANCE 560.117
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.346 GAL 6.44 AZL 92.11 HCA 282.48 SMA 120.25 ECC .28545 INC 2.1073 V1 29.308 RP 108.18 LAP 2.06 LOP 219.10 VP 36.743 GAP 15.58 AZP 90.46 TAL 163.29 TAP 85.77 RCA 85.93 APO 154.58 V2 35.032 RC 185.758 GL -10.31 GP 8.18 ZAL 55.02 ZAP 171.58 ETS 73.46 ZAE 129.46 ETE 173.13 ZAC 43.86 ETC 9.23 CLP-178.01
    PLANETOCENTRIC CONIC
                                                                                                                                                                                        -5.62 RAP 222.19 ECC 1.4408
                                                                                                                                               2.18 VHP 9.735 DPA
      C3 26.787 VHL 5.176 DLA -30.70 RAL 237.82 RAD 6568.1 VEL 12.172 PTH
      26.787 WH 5.176 DEA -30.70 WAE 237.82 WAD 6368.1 VEL 12.172 WAD 1.176 DEA 1.
                                                                                                                 111.76
                            11 43 37 1282.88
                                                                          19.26
                                                                                              352.92
           77.61
                                                                                                                                         114.38 15 12 52
114.39 12 5 0
114.38 15 12 52
123.19 14 10 50
106.07 19 18 29
                                                                                                                                                                                                                                298.37
                                                                                                                                                                                         44.2
                                                                                                                                                                                                             22.40
                                                   644.21
                                                                           19.27
                                                                                              305.84
                                                                                                                    111.77
                             15 2 8
                                                                                                                                                                                        682.9
                                                                                                                                                                                                                                 345.46
                             11 43 37 1262.88
                                                                           19.26
                                                                                              352.92
                                                                                                                    111.76
                                                                                                                                                                                                                                298.37
                            15 2 8 644.21
13 56 40 849.77
                                                                                                                   111.77
                                                                                                                                                                                         44.2
                                                                                                                                                                                                            22.40
                                                                           19.27
                                                                                              305.84
          102.39
                                                                                                                                                                                      249.8
                                                                                                                                                                                                            12.99
                                                                                                                                                                                                                                 308.96
                                                                                                                    105.79
                                                                           8.69
                                                                                              315.41
          110.00
                                                                                                                                                                                     4813.4
                                                                                                                                                                                                                                240.15
                           17 48 16 5413.36
                                                                           30.59
                                                                                              248.85
                                                                                                                   116.35
          110.00
                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                               ST 2084.1 SR 463.4 SS 458.7
CRT -.8564 CRS .7129 CST -.9719
                                                                                                   SGT 5534.5 SGR 473.5 SG3 128.4
RRT -.4601 RRF -.4373 RTF .9329
      TOE-1.5449 TRA 3.0715 TC3-3.3559 BAU 1.2018
      RDE .4177 RRA -.0792 RC3 .0032 FAU .01451
FDE -.3276 FRA 1.0538 FC3 -.4689 BSP 17664
BDE 1.6004 BRA 3.0725 BC3 3.3559 FSP -427
                                                                                                   SGB 5554.7 R23 .0063 R13 -.9329
SG1 5538.8 SG2 420.1 THA 177.73
                                                                                                                                                                              LSA 2168.0 MSA 260.9 SSA 16.7
                                                                                                                                                                               EL1 2122.0 EL2 234.9 ALF 169.08
                                                                                                                                                                                              ARRIVAL DATE JAN 30 1968
                                                                                                         FLIGHT TIME 194.00
LAUNCH DATE JUL 20 1967
    HELIOCENTRIC CONJC
                                                                                                        DISTANCE 565.210
     RL 152.01 LAL .00 LOL 296.62 VL 25.299 GAL 7.27 AZL 91.98 MCA 285.68 SMA 119.99 ECC .29344 INC 1.9769 V1 29.308
RP 108.22 LAP 1.90 LOP 222.31 VP 36.698 GAP 16.13 AZP 90.53 TAL 161.71 TAP 87:39 RCA 84.78 APO 155.20 V2 35.019
RC 187.557 GL -9.14 GP 8.00 ZAL 52.38 ZAP 171.91 ETS 78.62 ZAE 129.44 ETE 173.26 ZAC 41.57 ETC 9.56 CLP-178.81
    PLANETOCENTRIC CONIC
      C3 29.673 VHL 5.447 DLA -30.08 RAL 240.95 RAD 6568.2 VEL 12.290 PTH 2.21 VHP 10.060 DPA -6.61 RAP 224.38 ECC 1.4883
     C3 29.673 VHL 5.447 DLA -30.08 RAL 240.95 RAD 6568.2 VEL 12.290 PTH 2.21 VHP 10.060 DPA -6.61 RAP 224.38 ECC 1.4883 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.40 12 9 22 1266.30 18.18 351.17 116.39 114.39 12 30 28 666.3 21.32 343.77 19.40 12 9 22 1266.30 18.18 351.17 116.39 114.38 15 13 14 111.8 21.33 302.97 100.60 15 1 22 711.84 18.19 310.38 116.40 114.38 15 13 14 111.8 21.33 302.97 100.60 15 1 22 711.84 18.19 310.38 116.40 114.38 15 13 14 111.8 21.33 302.97 110.00 13 59 25 907.53 6.52 318.48 109.79 123.63 14 14 33 307.5 10.90 312.12 110.00 18 10 29 5406.65 30.71 248.37 121.42 105.81 19 40 36 4806.6 32.57 259.64 DIFFFERENTIAL CORRECTIONS
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ST 1997.1 SR 457.4 SS 443.9
                                                                                                   RET - 4666 RRF - .4456 RTF .9363
SGB 5558.1 RC3 .0050 R13 - .9363
SGB 5558.1 R23 .0050 R13 - .9363
SGI 5542.5 SGZ 415.7 THA 177.71
      TOE-1.4746 TRA 3.4397 TC3-3.0141 BAU 1.1957
                                                                                                                                                                              CRT -.8227 CRS .6693 CST -.9724
LSA 2077.8 MSA 278.2 SSA 15.8
      ROE .4336 RRA -.0966 RC3 .0067 FAU .01319
FOE -.2962 FRA 1.1091 FC3 -.3848 BSP 17743
BOE 1.5370 BRA 3.4411 BC3 3.0141 FSP -417
                                                                                                                                                                              EL1 2032.9 EL2 255.5 ALF 169.16
                                                                                                                                                                                               ARRIVAL DATE FEB 1 1968
                                                                                                          FLIGHT TIME 196.00
LAUNCH DATE JUL 20 1967
                                                                                                         DISTANCE 570.200
    HELIOCENTRIC CONIC
     RL 152.01 LAL .00 LOL 296.62 VL 25.253 GAL 8.15 AZL 91.84 MCA 288.88 SMA 119.74 ECC .30218 INC 1.8426 V1 29.308
RP 108.26 LAP 1.74 LOP 225.51 VP 36.653 GAP 16.73 AZP 90.60 TAL 160.16 TAP 89.04 RCA 83.56 APO 155.92 V2 35.005
RC 189.337 GL -8.04 GP 7.83 ZAL 49.89 ZAP 172.16 ETS 84.26 ZAE 129.40 ETE 173.38 ZAC 39.30 ETC 9.96 CLP-179.62
     PLANETOCENTRIC CONIC
      C3 33.053 VHL 5.749 DLA -29.44 RAL 243.87 RAD 6568.3 VEL 12.427 PTH 2.25 VHP 10.413 DPA -7.56 RAP 226.57 ECC 1.5440
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       INJ AZMTH INJ TIME
114.36 12 58 41
114.35 15 9 14
117.10 14 39 24
111.69 16 2 27
123.94 14 17 49
105.64 20 1 32
                                                                                                                120.91
                                                                                                                                                                                        639.1
            81.61 12 38 2 1239.05
                                                                           17.06
                                                                                               348.61
                                                                                                                                                                                        193.3
                                                                                                                                                                                                             20.22
                                                                                                                                                                                                                                 308.54
                            14 56 1
                                                    793.32
                                                                            17.07
                                                                                               315.89
                                                                                                                    120.91
            98.39
                                                                                                                                                                                        294.3
                                                                                                                                                                                                             16.65
                                                                                                                                                                                                                                 314.39
                                                                                               321.40
                                                                                                                    118.94
                           14 24 30
                                                    894.27
                                                                           13.12
          100.00
                                                                                                                                                                                         13.3
                                                                                                                                                                                                            23.85
                                                                                               304.36
                                                                                                                    122.72
          100.00
                            15 52 14
                                                    613.33
                                                                           21.09
                                                                                                                                                                                                               8.73
                                                                                                                                                                                                                                 315.27
                                                                                                                                                                                        366.0
                                                                             4.30
                                                                                               321.56
                                                                                                                    113.69
          110.00
                            14 1 43
                                                                                                                                                                                     4802.4
                                                                                                                                                                                                             32.62
                                                                                               248.06
          110.00
                             18 31 29
                                                  5402.40
                                                                           30.79
                                                                                                                    126.36
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                               ST 1916.6 SR 449.6 SS 432.0
CRT -.7834 CRS .6216 CST -.9732
                                                                                                  SGT 5536.2 SGR 467.D 3G3 121.6
RRT -.4768 RRF -.4537 RTF .9396
SGB 5555.8 R23 .0037 R13 -.9396
       TDE-1.3957 TRA 3.8316 TC3-2.6792 BAU 1.1839
      ROE .4493 RRA -.1154 RC3 .0087 FAU .01183
FOE -.2651 FRA 1.1676 FC3 -.3099 BSP 17705
                                                                                                                                                                               LSA 1993.8 MSA 294.7 SSA 15.1
                                                                                                                                                                                EL1 1949.4 EL2 274.7 ALF 169.37
       BDE 1.4663 BRA 3.8333 BC3 2.6793 FSP -404
                                                                                                    SG1 5540.7 SG2 410.1 THA 177.68
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ARRIVAL DAIE FEB 3 1968

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HELIOCENTRIC CONIC
                                                                              DISTANCE 575.069
    RL 152.01 LAL .00 LOL 296.62 VL 25.207 GAL 9.09 AZL 91.70 MCA 292.08 SMA 119.49 ECC .31178 INC 1.7031 V1 29.308 RP 108.30 LAP 1.58 LOP 228.70 VP 36.609 GAP 17.38 AZP 90.64 TAL 158.64 TAP 90.72 RCA 82.24 APO 156.75 VZ 34.992 RC 191.100 GL -6.98 GP 7.67 ZAL 47.56 ZAP 172.31 ETS 90.28 ZAE 129.34 ETE 173.50 ZAC 37.04 ETC 10.45 CLP 179.56
   PLANETOCENTRIC CONIC
     C3 37.009 VHL 6.083 DLA -28.77 RAL 246.58 RAD 6568.4 VEL 12.585 PTH
                                                                                                         2.28 VHP 10.796 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   125.30
                                                       15.91
                                                                     344.35
                                                                                                    114.30 13 33 13
                                                                                                                                       588.5
                    13 13 24 1188.59
        84.67
                                                                                                      114.29 14 57 18
                                                                                                                                       300.9
                                                       15.92
                                                                      323.28
                                                                                     125.31
                                                                                                                                                       19.07
                                     900.86
        95.33
                    14 42 17
                                                                                                      118.42 14 27 17
110.38 18 5 18
124.13 14 20 43
105.57 20 21 14
                    14 10 34 1003.02
16 27 48 5849.70
                                                                      327.63
                                                                                     122.14
                                                                                                                                       403.0
                                                                                                                                                       13.40
                                                        9.67
       100.00
                                                                     278.95
                                                                                   128.10
                                                                                                                                      5249.7
                                                                                                                                                      24.93
                                                       22.36
       100.00
                    14 3 38
                                    1024.81
                                                        2.06
                                                                      324.64
                                                                                    117.50
                                                                                                                                       424.8
                                                                                                                                                        6.53
       110.00
                                                                                                                                                    32.65
                    18 51 13
                                                                                                                                      4800.7
                                                                     247.94
                                                                                     131.17
       110.00
                                    5400.67
                                                       30.82
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         RIT - 14852 RRF - 1462.8 RIT - 14852 RRF - 1462.8 RIT - 19434
SGB 5549.4 R23 .0028 RIT - 19435
SGI 5534.7 SGZ 403.5 THA 177.67
                                                                                                                                 ST 1847.2 SR 440.4 SS 423.9
CRT -.7408 CRS .5757 CST -.9752
LSA 1921.0 MSA 308.5 SSA 14.4
    TOE-1.3159 TRA 4.2409 TC3-2.3654 BAU 1.1703
    ROE .4653 RRA -.1350 RC3 .0100 FAU .01058
FOE -.2374 FRA 1.2269 FC3 -.2476 BSP 17764
                                                                                                                                 ELI 1876.5 ELZ 291.2 ALF 169.73
    BDE 1.3957 BRA 4.2430 BC3 2.3654 FSP -395
                                                                                                                                             ARRIVAL DATE FEB 5 1968
                                                                              FLIGHT TIME 200,00
LAUNCH DATE JUL 20 1967
                                                                             DISTANCE 579:795
  HELIOCENTRIC CONIC
                         .00 LOL 296.62 VL 25.163 GAL 10.09 AZL 91.56 MCA 295.27 SMA 119.25 ECC .32233 INC 1.5572 V1 29.308 1.41 LOP 231.90 VP 36.566 GAP 18.08 AZP 90.66 TAL 157.16 TAP 92.43 RCA 80.81 APO 157.69 V2 34.979 -5.99 GP 7.53 ZAL 45.38 ZAP 172.36 ETS 96.61 ZAE 129.26 ETE 173.61 ZAC 34.80 ETC 11.04 CLP 178.72
    RL 152.01 LAL
    RP 108.34 LAP
    RC 192.846 GL
   PLANETOCENTRIC CONIC
    C3 41.641 VHL 6.453 DLA -28.10 RAL 249.09 RAD 6568.6 VEL 12.767 PTH
                                                                                                         2.32 VHP 11.215 OPA
                                                                                                                                         -9.32 RAP 230.98 ECC 1.6853
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 37 16 1173.82 11.97 341.37 128.25 115.85 13 56 50 573.8 15.36 334.33
                                                                                                                  14 54 42
                    14 38 27
                                      975.21
                                                       17.54
                                                                      329.46
                                                                                     130.84
                                                                                                      112.59
                                                                                                                                       375.2
                                                                                                                                                       20.46
        90.00
                   14 2 32 1092.10
16 55 53 5820.20
14 5 13 1083.65
                                                                                                      119.19 14 20 44
109.59 18 32 53
124.18 14 23 16
105.60 20 39 42
                                                         6.75
                                                                      332.63
                                                                                    125.49
                                                                                                                                       492.1
       100.00
                                                                                   133.10
       100.00
                                                       23.04
                                                                     277.02
                                                                                                                                      5220.2
                                                                                                                                                     25.50
                                                                                                                                                                    269.09
                                                        -.19
                                                                     327.70
                                                                                                                                      483.7
                                                                                                                                                                    321.49
       110.00
                    19 9-41
                                                                     247.99
                                                                                     135.85
                                                                                                                                      4601.4
                                                                                                                                                       32.64
                                                                                                                                                                      239.25
                                    5401.41
                                                       30.81
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          SGT 5520.6 SGR 455.3 SG3 115.3
RRT -.4936 RRF -.4717 RTF .9474
                                                                                                                                 ST 1788.3 SR 429.8 SS 418.8
CRT -.6948 CRS .5298 CST -.9775
    TOE-1.2329 TRA 4.6754 TC3-2.0691 BAU 1.1519
    ROE .4812 RRA -.1555 RC3 .0104 FAU .00934
FOE -.2112 FRA 1.2892 FC3 -.1942 BSP 17802
BDE 1.3235 BRA 4.6780 BC3 2.0692 FSP -385
                                                                                                                                 LSA 1859.0 MSA 319.7 SSA 13.7
EL1 1813.8 EL2 304.8 ALF 170.24
                                                                          SGB 5539.3 R23 .0020 R13 -.9474
SG1 5525.2 SG2 395.6 THA 177.66
                                                                                                                                            ARRIVAL DATE FEB 7 1968
LAUNCH DATE JUL 20 1967
                                                                              FLIGHT TIME 202.00
                                                                            DISTANCE 584.352
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 25.119 GAL 11.17 AZL 91.40 MCA 298.47 SMA 119.01 ECC .33396 INC 1.4036 V1 29.30A RP 108.38 LAP 1.23 LOP 235.09 VP 36.524 GAP 18.85 AZP 90.67 TAL 155.72 TAP 94.18 RCA 79.27 APO 158.76 V2 34.966 RC 194.574 GL -5.05 GP 7.40 ZAL 43.36 ZAP 172.30 ETS 103.06 ZAE 129.15 ETE 173.71 ZAC 32.59 ETC 11.74 CLP 177.86
   PLANETOCENTRIC CONIC
    C3 47.074 VHL 6.861 DLA -27.43 RAL 251.41 RAD 6568.8 VEL 12.978 PTH 2.37 VHP 11.675 DPA -10.14 RAP 233.18 ECC 1.7747
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  INJ AZMTH INJ TIME
117.28 13 36 46
111.06 15 34 15
119.64 14 16 26
109.08 18 56 39
124.11 14 25 31
105.72 20 56 57
                                                                                  130.94
                                                                                                                                                  11.48
                                                                    349.10
                                                                                                                                      707.8
        90.00
                  13 14 58 1307.81
                                                       7.89
                                                                                                                                      302.9
                                                                                                                                                      22.07
                                                                     324.94
                                                                                    136.23
        90.00
                   15 19 12
                                    902.91
                                                       19.38
                   15 19 12 902.91 19.38
13 56 54 1172.35 4.06
17 19 58 5801.64 23.46
14 6 28 1142.27 -2.43
19 26 52 5404.48 30.75
                                                                                                                                      572.4
                                                                                                                                                       7.98
                                                                     337.07
                                                                                   128.86
       100.00
                                                                                                                                     5201.6
                                                                                                                                                      25.85
                                                                                                                                                                     267.82
                                                                                   137.64
       100.00
                                                                     275.80
                                                                                                                                     542.3
                                                                                                                                                       2.07
                                                                                   124.62
       110.00
                                                                     330.76
                                                                                                                                    4804.5
                                                                                                                                                      32.60
       110.00
                                                                                    140.40
                                                                     248.21
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        RRT -.5016 RRF -.4807 RTF ..9514
SGB 5524.1 R23 .0013 R13 -.9514
SGI 5510.5 SGZ 386.7 THA 177.65
                                                                                                                               ST 1739.1 SR 418.0 SS 416.6

CRT - 6464 CRS .4853 CST - 9803

LSA 1807.0 MSA 327.7 SSA 13.1

EL1 1760.7 EL2 315.0 ALF 178.87
    TDE-1.1470 TRA 5.1360 TC3-1.7919 BAU 1.1277
    RDE .4970 RRA -.1769 RC3 .0100 FAU .00810 FDE -.1866 FRA 1.3549 FC3 -.1490 BSP 17827
    BOE 1.2500 BRA 5.1390 BC3 1.7920 FSP - -376
                                                                                                                                             ARRIVAL DATE FEB 9 1968
LAUNCH DATE JUL 20 1967
                                                                              FLIGHT TIME 204.00
                                                                             DISTANCE 588.710
  HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 25.076 GAL 12.33 AZL 91.24 MCA 301.66 SMA 118.79 ECC .34681 INC 1.2405 V1 29.308 RP 108.42 LAP 1.06 LOP 238.28 VP 36.482 GAP 19.69 AZP 90.65 TAL 154.33 TAP 95.98 RCA 77.59 APO 159.98 V2 34.953 RC 196.285 GL -4.16 GP ' 7.28 ZAL 41.49 ZAP 172.12 ETS 109.47 ZAE 129.01 ETE 173.82 ZAC 30.42 ETC 12.57 CLP 176.97
  PLANETOCENTRIC CONIC
    C3 53.462 VHL 7.312 DLA -26.77 RAL 253.53 RAD 6568.9 VEL 13.222 PTH 2.42 VMP 12.180 DPA -10.92 RAP 255.37 ECC 1.8798
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   117.94 13 26 50
110.27 16 2 10
                                                                                  133.99
                                                                                                                                      805.9
                                                                                                                                                        8.49
        90.00 13 3 24 1405.92
90.00 15 47 42 868.20
                                                       4.79
                                                                     354.64
                                                                     322.74
                                                                                                                                      268.2
                                                                                                                                                      22.79
                                                                                                                                                                     315.01
                                                                                   141.03
                                                       20.21
                                                                                                     119.86 14 13 19
108.75 19 17 44
                                                                                                                                      647.2
                                                                                                                                                        5,50
                                  1247.18
5790.22
                                                                                                                                                                     334.64
       100.00
                   13 52 32
                                                       1.53
                                                                     341.19
                                                                                     132.19
       100.00
                    17 41 14
                                                       23.71
                                                                     275.05
                                                                                     142.37
                                                                                                                                     5190.2
                                                                                                                                                      26.05
                                                                                                                                                                     267.03
                                                                                                     123.90 14 27 26
105.92 21 13 0
                                  1200.45
5409.71
                                                                                     128.35
                                                                                                                                      600.4
                                                                                                                                                        -.16
                                                                                                                                                                     327.59
                    14 7 26
                                                       -4.64
                                                                     333.81
       110.00
                                                                                                                                    4809.7
                                                                                                                                                      32.53
                                                                                     144.80
       110.00
                    19 42 50
                                                      30.65
                                                                     248.59
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5488.3 SGR 438.0 SG3 109.6
RRT -.5092 RRF -.4895 RTF .9555
SG8 5505.8 R23 .0007 R13 -.9555
SG1 5492.9 SG2 376.7 THA 177.66
                                                                                                                                ST 1698.7 SR 404.9 SS 417.3
CRT -.5956 CRS .4414 CST -.9832
    TOE-1.0549 TRA 5.6305 TC3-1.5320 BAU 1.0950
    ROE .5123 RRA -.1991 RC3 .0088 FAU .00681
FDE -.1627 FRA 1.4259 FC3 -.1103 BSP 17746
BDE 1.1728 BRA 5.6340 BC3 1.5320 FSP -364
                                                                                                                                LSA 1764.3 MSA 332.6 SSA 12.5
                                                                                                                                ELI 1716.4 EL2 321.9 ALF 171.62
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FLIGHT TIME 198.00

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ARRIVAL CATE FEB 11 1968
LAUNCH DATE JUL 20 1967
                                                                            FLIGHT TIME 206.00
                                                                            DISTANCE 592.825
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 25.035 GAL 13.58 AZL 91.07 HCA 304.84 SMA 118.56 ECC .36105 INC 1.0659 V1 29.308 RP 108.46 LAP .87 LOP 241.46 VP 36.442 GAP 20.62 AZP 90.61 TAL 153.01 TAP 97.85 RCA 75.76 APO 161.37 V2 34.941 RC 197.979 GL -3.32 GP 7.17 ZAL 39.78 ZAP 171.82 ETS 115.69 ZAE 128.84 ETE 173.92 ZAC 28.28 ETC 13.55 CLP 176.05
   PLANETOCENTRIC CONIC
    C3 60.997 VHL 7.810 DLA -26.11 RAL 255.46 RAD 6569.1 VEL 13.504 PTH 2.47 VHP 12.738 DPA -11.65 RAP 237.55 ECC 2.0039
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                  352.75
                   12 55 19 1491.19
16 11 11 847.61
                                                       2.05
                                                                   359.41
                                                                                  137.10
                                                                                                   118.25 13 20 10
                                                                                                                                   891.2
                                                                                                                                                    5.81
        90.00
                                     847.61
                                                                                   145.51
                                                                                                    109.78 16 25 19
                                                                                                                                    247.6
                                                                                                                                                    23.20
                                                                                                                                                                  313.64
                    16 11 11
                                                      20.69
                                                                    321.42
        90.00
                                                                                                 119.88 14 10 53
108.58 19 36 40
123.58 14 29 3
106.20 21 27 53
                   13 48 55 1318.09
18 0 16 5783.98
                                                        -.87
                                                                    345.07
                                                                                   135.47
                                                                                                                                    718.1
                                                                                                                                                     3.11
                                                                                                                                                                  338.55
       100.00
                                                                                                                                                                  266.60
                                                                                                                                  5184.0
                                                                                                                                                    26.16
                                                      23.85
                                                                    274.63
                                                                                   146.70
       100.00
                                 1257.97
                    14 8 5
                                                                                                                                   658.0
                                                                                                                                                   -2.36
                                                                                                                                                                  330.59
                                                      -6.82
                                                                    336.84
                                                                                   131.79
       110.00
                                                                                                                                                                  240.41
                    19 57 36
                                                                                                                                 4816.9
                                                                                                                                                  32.43
                                                                    249.10
                                                                                   149.05
                                   5416.87
                                                      30.52
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1667.3 SR 390.9 SS 420.5
CRT -.5463 CRS .4026 CST -.9862
                                                                        SGT 5465.4 SGR 427.4 SG3 106.8
RRT -.5166 RRF -.4983 RTF .9598
SGB 5482.1 R23 .0003 R13 -.9598
    TOE -.9654 TRA 6.1536 TC3-1.2954 BAU 1.0564
    ROE .5277 RRA -: 2214 RC3 .0074 FAU .00556
FOE -: 1415 FRA 1.5003 FC3 -: 0789 BSP 17755
                                                                                                                              LSA 1731.5 MSA 333.6 SSA 11.9
    BOE 1.1002 BRA 6.1576 BC3 1.2955 FSP -356
                                                                        SG1 5469.9 SG2 365.7 THA 177.68
                                                                                                                              EL1 1681.5 EL2 324.6 ALF 172.42
                                                                                                                                          ARRIVAL DATE FEB 13 1968
                                                                            FLIGHT TIME 208.00
LAUNCH DATE JUL 20 1967
                                                                            DISTANCE 596.648
  HELIOCENTRIC CONIC
                         .00 LOL 296.62 VL 24.994 GAL 14.95 A7L 90.88 MCA 308.03 SMA 118.35 ECC .37687 INC .8774 V1 29.308 .69 LOP 244.65 VP 36.402 GAP 21.64 AZP 90.54 TAL 151.76 TAP 99.79 RCA 73.75 APO 162.96 V2 34.929 -2.53 GP 7.06 ZAL 38.23 ZAP 171.41 ETS 121.60 ZAE 128.62 ETE 174.02 ZAC 26.20 ETC 14.72 CLP 175.10
   RL 152.01 LAL
RP 108.50 LAP
    RC 199.655 GL
  PLANETOCENTRIC CONIC
    C3 69.923 VHL 8.362 OLA -25.47 RAL 257.21 RAD 6569.3 VEL 13.830 PTH
                                                                                                       2.53 VHP 13.358 OPA -12.34 RAP 239.71 ECC 2.1508
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  118.31 13 15 9
                                                                                                                                     969.0
                                                                                                                                                    3.33
                                                                                                                                                                  357.12
                                                      - .45
                                                                      3.75
                                                                                  140.18
        90.00 12 49 0 1569.00
                   13 45 44 1385.83
18 17 25 5781.73
14 8 25 1314.63
20 11 12 5428
                                                                                                                                     235.3
                                                                                                                                                     23.44
                                                                                                                                                                   312.82
                                                      20.97
                                                                     320.62
                                                                                    149.75
                                                                                                    109.48
                                                                                                                16 45 23
        90.00
                                                                                                                                    785.8
                                                                                                                                                                   342.27
                                                                    348.80
                                                                                    138.68
                                                                                                    119.74 14 8 50
                                                                                                                                                      .82
                                                       -3.17
       100.00
                                                                                                    108.51 19 53 46
123.13 14 30 20
106.54 21 41 38
                                                                                                                                   5181.7
                                                                                                                                                    26.20
                                                                                                                                                                  266.44
       100.00
                                                      23.90
                                                                    274.48
                                                                                   150.84
                                                                                                                                   714.6
                                                                                                                                                    -4.52
                                                                                                                                                                   333.56
                                                      -8.94
                                                                    339.86
                                                                                   135.13
       110.00
                                                      30.35
                                                                    249.73
                                                                                   153.12
                                                                                                                                   4825.7
                                                                                                                                                    32.31
                                                                                                                                                                  241.07
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 1642.7 SR 376.0 SS 426.3

CRT - 4980 CRS .3669 CST - 9890

LSA 1706.4 MSA 331.2 SSA 11.3

EL1 1653.8 EL2 323.8 ALF 173.24
                                                                        SGT 5438.7 SGR 415.5 SG3 104.2
RRT -.5233 RRF -.5066 RTF .9641
    TOE -.8742 TRA 6.7142 TC3-1.0787 BAU 1.0084
    RDE .5427 RRA -.2438 RC3 .0056 FAU .00426
FDE -.1216 FRA 1.5806 FC3 -.0528 BSP 17746
BDE 1.0289 BRA 6.7186 BC3 1.0788 FSP -347
                                                                        SGB 5454.5 R23 -.0000 R13 -.9641
                                                                        SG1 5443.0 SG2 353.7 THA 177.70
                                                                                                                                          ARRIVAL DATE FEB 15 1968
                                                                            FLIGHT TIME 210.00
LAUNCH DATE JUL 20 1967
                                                                           DISTANCE 600.115
   HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.82 VL 24.956 GAL 16.44 AZL 90.67 MCA 311.21 SMA 118.15 ECC .39452 INC .6718 VI 29.30A
RP 108.53 LAP .51 LOP 247.83 VP 36.364 GAP 22.79 AZP 90.44 TAL 150.62 TAP 101.82 RCA 71.54 APO 164.76 V2 34.917
RC 201.315 GL -1.79 GP 6.97 ZAL 36.84 ZAP 170.88 ETS 127.12 ZAE 128.36 ETE 174.13 ZAC 24.18 ETC 16.09 CLP 174.10
   PLANETOCENTRIC CONIC
    C3 80.549 VHL 8.975 DLA -24.84 RAL 258.77 RAD 6569.6 VEL 14.209 PTH 2.59 VHP 14.050 OPA -12.98 RAP 241.84 ECC 2.3256
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 43 41 1641.55 -2.80 7.80 143.20 118.19 13 11 2 1041.5 .99 1.17 90.00 16 49 16 828.55 21.12 320.19 153.75 109.31 17 3 5 228.5 23.57 312.37
                                                                                                  118.19 13 11 2
109.31 17 3 5
119.45 14 6 57
                                                                                                                                    850.8
                                                                                                                                                    -1.39
                                                                                                                                                                  345.84
                                                                                   141.79
                     13 42 46 1450.80
                                                      -5.35
                                                                    352.38
       100.00
                                                                                                   108.54 20 9 15
122.57 14 31 17
106.93 21 54 17
                                                                                                                                  5182.6
                                                                                                                                                    26.19
                                                                                                                                                                  266.50
                   18 32 52 5782.57
14 8 27 1370.24
20 23 41 5435.90
                                                                                   154.77
       100.00
                                                    23.88
                                                                    274.54
                                                                                                                                    770.2
                                                                                                                                                    -6.62
                                                                                                                                                                  336.49
                                                     -10.99
                                                                    342.85
                                                                                   138.36
                                                                                                                                   4835.9
                                                                                                                                                    32.17
                                                                                                                                                                  241.83
                                                     30.15
                                                                    250.46
                                                                                   157.02
                                                                       NID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5407.8 SGR 402.1 SG3 101.6
RRT - .5293 RRF - .5143 RTF . .9683
SGB 5422.7 R23 - .0003 R13 - .9683
SGI 5412.0 SGZ 340.9 THA 177.74
                                                                                                                              ST 1623.6 SR 360.3 SS 434.7
CRT -.4520 CRS .3345 CST -.9915
LSA 1687.8 MSA 325.7 SSA 10.8
    TOE -. 7821 TRA 7.3169 TC3 -. 8809 BAU .9486
    RDE .5575 RRA -.2660 RC3 .0036 FAU .00289
FDE -.1030 FRA 1.6678 FC3 -.0310 BSP 17722
                                                                                                                               EL1 1632.1 ELZ 319.7 ALF 174.04
    BOE .9605 BRA 7.3217 BC3 .8809 FSP
                                                        - 339
                                                                                                                                           ARRIVAL DATE FEB 17 1968
LAUNCH DATE JUL 20 1967
                                                                            FLIGHT TIME 212,00
                                                                            DISTANCE 603.142
   HELIOCENTRIC CONIC
    RL 152.01 LAL .00 LOL 296.62 VL 24.918 GAL 18.07 AZL 90.45 MCA 314.39 SMA 117.95 ECC .41425 INC .4454 V1 29.308 RP 108.57 LAP .32 LOP 251.01 VP 36.327 GAP 24.07 AZL 90.31 TAL 149.58 TAP 103.97 RCA 69.09 APO 166.81 V2 34.905 RC 202.957 GL -1.09 GP 6.88 ZAL 35.60 ZAP 170.23 ETS 132.21 ZAE 128.03 ETE 174.24 ZAC 22.23 ETC 17.71 CLP 173.04
   PLANETOCENTRIC CONIC
    C3 93.272 VHL 9.658 DLA -24.23 RAL 260.16 RAD 6569.8 VEL 14.650 PTH 2.65 VHP 14.825 DPA -13.57 RAP 243.92 ECC 2.5350
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 38 55 1709.91 -4.99 11.63 146.12 117.91 13 7 25 1109.9 -1.21 4.99 90.00 17 5 3 825.81 21.18 320.01 157.52 109.24 17 18 49 225.8 23.62 312.18
                                                                                   157.52
        90.00
                                                                                                                14 5 5
                                                                                                                                     913.2
                                                                                                                                                     -3.50
                                                                                                                                                                   349.26
                                                                                                     119.04
       100.00
                    13 39 52 1513.18
18 46 48 5785.82
                                                       -7.43
                                                                    355.85
                                                                                   144.79
                                                                                                     108.63 20 23 14
                                                                                                                                   5185.8
                                                                                                                                                  26.13
                                                                                                                                                                   266.73
       100.00
                                                     23.81
                                                                    274.76
                                                                                   158.49
                                                                                                    121.91 14 31 52
107.35 22 5 49
                                                                                                                                                                   339.38
                                                                                                                                     824.6
                    14 8 7 1424.57
20 35 2 5447.19
       110.00
                                                    -12.97
                                                                     345.82
                                                                                   141.48
                                                                                                                                                  32.00
                                                                                   160.72
                                                                                                                                   4847.2
                                                                                                                                                                  242.67
       110.00
                                                     29.92
                                                                    251.26
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1608.6 SR 343.8 SS 445.7
CRT -.4075 CRS .3040 CST -.9936
                                                                  SCT 5374.5 SGR 387.4 SC3 99.3
RRT -.5341 RRF -.5209 RTF .9724
SGB 5388.4 R23 -.0005 R13 -.9724
    TDE -.6861 TRA 7.9711 TC3 -.6997 BAU .8725
    RDE .5718 RRA -.2876 RC3 .0014 FAU .00136
                                                                                                                              LSA 1674.4 MSA 317.5 SSA 10.2
    FOE -.0847 FRA 1.7641 FC3 -.0126 BSP 17588
BDE .8931 BRA 7.9763 BC3 .6997 FSP -329
                                                                        SG1 5378.5 SG2 327.3 THA 177.79
                                                                                                                               ELI 1615.0 EL2 312.7 ALF 174.83
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FLIGHT TIME 214.00
                                                                                                                               ARRIVAL DATE FEB 19 1968
LAUNCH DATE JUL 20 1967
                                                                      DISTANCE 605.622
  HELIOCENTRIC CONIC
                        .00 LOL 296.62 VL 24.883 GAL 19.88 AZL 90.19 HCA 317.57 SMA 117.77 ECC .43640 INC .1933 V1 29.308 .13 LOP 254.18 VP 36.292 GAP 25.51 AZP 90.14 TAL 148.69 TAP 106.25 RCA 66.37 APO 169.16 V2 34.894 -.43 GP 6.79 ZAL 34.54 ZAP 169.45 ETS 136.86 ZAE 127.63 ETE 174.35 ZAC 20.37 ETC 19.60 CLP 171.91
    RL 152.01 LAL
    RP 108.60 LAP
    RC 204.581 GL
   PLANETOCENTRIC CONIC
    C3 108.607 VHL 10.421 DLA -23.64 RAL 261.35 RAD 6570.1 VEL 15.164 PTH 2.72 VMP 15.698 DPA -14.12 RAP 245.94 ECC 2.7874
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  12 34 27
                                1774.62
                                                 -7.04
                                                               15.28
                                                                          148.92
                                                                                           117.50 13 4 2
                                                                                                                       1174.6
                                                                                                                                       -3.30
                                                                                                                                                       8.60
                                                                            161.04
                                                                                            109.25 17 32 49
                                                                                                                         226.0
                                                                                                                                        23.61
                                                                                                                                                     312.20
                 17 19 3
                                 826.00
                                                 21.18
                                                               320.02
                                                                                           118.51 14 3 8
108.77 20 35 48
121.15 14 32 1
107.80 22 16 16
      100.00
                  13 36 55
                                1573.02
                                                  -9.39
                                                              359.21
                                                                            147.66
                                                                                                                         973.0
                                                                                                                                        -5.51
                                                                                                                                                     352.57
                 18 59 17 5790.88
                                                                                                                        5190.9
                                                                                                                                        26.04
                                                                                                                                                     267.08
                                                23.70
                                                              275.09
                                                                            161.98
      100.00
                                1477.42
                                                              348.76
                                                                            144.46
                                                                                                                         877.4
                                                                                                                                       -10.61
                                                                                                                                                     342.22
      110.00
                  14 7 24
                                                -14.85
                 20 45 17
                                                                                                                                                    243.56
                                                                                                                       4859.2
                                                                                                                                      31.82
                                 5459.25
                                                29.68
                                                              252.11
                                                                           164.19
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5335.4 SGR 371.4 SG3 96.9
RRT -.5377 RRF -.5263 RTF .9764
                                                                                                                    ST 1596.1 SR 327.0 SS 459.2
CRT -.3682 CRS .2787 CST -.9953
   TOE -.5963 TRA 8.6740 TC3 -.5385 BAU .7818
   ROE .5861 RRA -.3077 RC3 -.0006 FAU-.00027
   FOE -.0689 FRA 1.8686 FC3 .0021 BSP 17566
BOE .8361 BRA 8.6794 BC3 .5385 FSP -321
                                                                  SGB 5348.3 R23 -.0007 R13 -.9764
                                                                                                                    LSA 1664.6 MSA 306.9 SSA 9.7
                                                                  SG1 5339.1 SG2 312.9 THA 177.85
                                                                                                                    ELI 1600.8 EL2 303.1 ALF 175.53
                                                                                                                               ARRIVAL DATE FEB 21 1968
                                                                      FLIGHT TIME 216,00
LAUNCH DATE JUL 20 1967
                                                                      DISTANCE 607.418...
  HELIOCENTRIC CONIC
                         .00 LOL 296.62 VL 24.849 GAL 21.90 AZL 89.91 HCA 320.74 SMA 117.59 ECC .46133 INC .0893 V1 29.308 -.06 LOP 257.36 VP 36.259 GAP 27.15 AZP 89.93 TAL 147.96 TAP 108.70 RCA 63.34 APO 171.84 V2 34.883 .19 GP 6.71 ZAL 33.65 ZAP 168.55 ETS 141.10 ZAE 127.14 ETE 174.48 ZAC 18.62 ETC 21.82 CLP 170.70
   RL 152.01 LAL
       108.64 LAP
   RC 206.187 GL
  PLANETOCENTRIC CONIC
   C3 127.227 VHL 11.280 DLA -23.07 RAL 262.35 RAD 6570.3 VEL 15.766 PTH
                                                                                               2.80 VHP 16.686 DPA -14.62 RAP 247.90 ECC 3.0938
   LNCH AZMTH LNCH TIME L-I TIME
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-8.95 18.78 151.57 116.98 13 0 40 1236.0 -5.26 12.04
       90.00 12 30 4 1835.96
                  17 31 24
                                                                                                       17 45 13
                                                                                                                         228.3
                                                                                                                                        23.57
       90.00
                                 828.30
                                                 21.13
                                                              320.17
                                                                            164.30
                                                                                            109.30
                                                                                                                                                      312.35
                                                                                           117.89 14 0 57
108.95 20 47 0
120.31 14 31 43
108.26 22 25 36
                                                                                                                         1030.3
                                                                                                                                        -7.41
                 13 33 47
                                1630.29
                                                -11.23
                                                                2.46
                                                                            150.37
                                                                                                                                                     355.75
                                                                            165.21
                                                                                                                        5197.2
                                                                                                                                        25.93
                                                                                                                                                     267.51
      100.00
                  19 10 23
                                5797.24
                                                23.56
                                                              275.51
                 14 6 14 1528.54
                                                                            147.27
                                                                                                                         928.5
                                                                                                                                      -12.48
                                                                                                                                                     345.01
      110.00
                                                -16.63
                                                              351.66
                 20 54 25
                                 5471.76
                                                 29.41
                                                              252.99
                                                                            167.41
                                                                                                                       4871.8
                                                                                                                                       31.62
                                                                                                                                                     244.48
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 5292.2 SGR 354.1 SG3 94.7
RRT -.5395 RRF -.5298 RTF .9801
                                                                                                                    ST 1584.6 SR 309.7 SS 475.6
CRT -.3322 CRS .2560 CST -.9966
LSA 1657.2 MSA 294.4 SSA 9.1
    TDE -.5078 TRA 9.4381 TC3 -.3933 BAU .6690
   RDE .6003 RRA -.3258 RC3 -.0025 FAU-.00214
FDE -.0543 FRA 1.9846 FC3 .0145 BSP 17511
BDE .7862 BRA 9.4437 BC3 .3933 FSP -314
                                                                  SGB 5304.1 R23 -.0008 R13 -.9801
                                                                  SG1 5295.7 SG2 297.9 THA 177.93
                                                                                                                    EL1 1588.1 EL2 291.4 ALF 176.16
                                                                                                                              ARRIVAL DATE FEB 23 1968
                                                                      FLIGHT TIME 218.00
LAUNCH DATE JUL 20 1967
                                                                     DISTANCE 608.347
  HELIOCENTRIC CONIC
   RL 152.01 LAL .00 LOL 296.62 VL 24.819 GAL 24.15 AZL 89.58 MCA 323.91 SMA 117.43 ECC .48948 INC .4170 V1 29.308
RP 108.67 LAP -.25 LOP 260.53 VP 36.227 GAP 29.02 AZP 89.66 TAL 147.44 TAP 111.36 RCA 59.95 APO 174.92 V2 34.872
RC 207.774 GL .77 GP 6.63 ZAL 32.96 ZAP 167.50 ETS 144.97 ZAE 126.54 ETE 174.62 ZAC 17.00 ETC 24.38 CLP 169.38
   PLANETOCENTRIC CONTC
    C3 150.022 VML 12.248 DLA -22.52 RAL 263.14 RAD 6570.6 VEL 16.473 PTH 2.87 VHP 17.813 DPA -15.07 RAP 249.75 ECC 3.4690
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 25 34 1894.02 -10.72 22.12 154.03 116.37 12 57 8 1294.0 -7.10 15.32
                                                                                        116.37 12 57 8
109.39 17 56 4
117.18 13 58 27
109.15 20 56 50
119.39 14 30 51
108.72 22 33 48
                                                                            167.26
                                                                                                                        232.0
                                                                                                                                       23.50
                                                                                                                                                     312.60
                                                21.04
                                                              320.41
                 17 42 12 832.04
13 30 22 1664.90
                                 832.04
       90.00
                                                                           152.88
                                                                                                                        1084.9
                                                                                                                                        -9.20
                                                                                                                                                    358.82
                                                                5.60
                                                -12.95
      100.00
                                                                                                                        5204.4
                                                                                                                                       25.80
                                                                                                                                                    268.01
                                                              275.99
                                                                            168.15
                                5804,43
                                                23.40
      100.00
                 19 20 6
                                                                                                                                                     347.73
                                                                                                                         977.7
                                                                                                                                     -14.24
                                                              354.50
                                                                            149.90
      110.00
                14 4 33 1577.71
21 2 24 5484.39
                                                -18.29
                                                                                                                        4884.4
                                                                                                                                       31.41
                                                                                                                                                    245 41
                                                                            170.34
                                                              253.87
      110.00
                                                29.14
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5244.8 SGR 335.4 SG3 92.7
RRT -.5388 RRF -.5308 RTF .9836
                                                                                                                    ST 1573.0 SR 292.1 SS 495.1
CRT -.2997 CRS .2359 CST -.9976
LSA 1651.0 MSA 280.5 SSA 8.6
    TOE -.4232 TRAID.2707 TC3 -.2636 BAU .5287
   ROE .6144 RRA -.3408 RC3 -.0042 FAU-.00432
   FOE -.0412 FRA 2.1139 FC3 .0249 BSP 17435
BOE .7461 BRA10.2763 BC3 .2636 FSP -307
                                                                  SG8 5255.5 R23 -.0008 R13 -.9836
                                                                  SG1 5247.9 SG2 282.4 THA 178.02
                                                                                                                    EL1 1575.5 EL2 278.2 ALF 176.71
                                                                                                                               ARRIVAL DATE FEB 25 1968
                                                                      FLIGHT TIME 220.00
LAUNCH DATE JUL 20 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 608.173
                        .00 LOU 296.62 VL 24.791 GAL 26.70 AZL 89.20 HCA 327.08 SMA 117.29 ECC .52133 INC .7962 VI 29.378
-.43 LOP 263.70 VP 36.199 GAP 31.17 AZP 89.33 TAL 147.18 TAP 114.26 RCA 56.14 APO 178.44 VZ 34.862
1.32 GP 6.55 ZAL 32.48 ZAP 166.30 ETS 148.49 ZAE 125.82 ETE 174.77 ZAC 15.53 ETC 27.29 CLP 167.94
   RL 152.01 LAL
RP 108.70 LAP
   RC 209.341 GL
  PLANETOCENTRIC CONIC
    C3 178.172 VHL 13.348 DLA -21.99 RAL 263.70 RAD 6570.9 VEL 17.306 PTH 2.95 VHP 19.104 DPA -15.48 RAP 251.49 ECC 3.9323
                                              LNCH AZMTH LNCH TIME L-I TIME
                                                                                          115.68 12 53 18
109.51 18 5 24
                                1948.82
       90.00 12 20 49
                                                                                                                         236.6
                                                                                                                                        23.41
                                                                                                                                                     312.91
                                                               320.71
                                                                            169.89
                                                20.94
       90.00
                  17 51 27
                                 836.64
                                                                                           116.41 13 55 26
109.36 21 5 17
118.42 14 29 21
109.16 22 40 47
                                                                                                                        1136.7
                                                                                                                                       -10.88
                                                                                                                                                       1.76
                                                                            155.16
      100.00
                 13 26 32
                                1736.73
                                                -14.54
                                                                8.63
                                                                                                                                                     268.53
                                                                            170.76
                                                                                                                         5212.0
                                                                                                                                      25.66
                  19 28 25
                                 5812.00
                                                23.23
                                                              276.49
       100.00
                                1624.67
                                                                                                                                      -15.89
                                                                                                                                                     350.37
                                                                                                                        1024.7
                 14 2 16
21 9 10
                                                              357.26
                                                                            152.29
                                               -19.84
      110.00
                                                                                                                                      31.20
                                                              254.74
                                                                            172.96
                                                                                                                       4896.8
                                                                                                                                                     246.31
       110.00
                                5496.82
                                                 28.86
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1560.2 SR 274.2 SS 518.4
CRT -.2695 CRS .2168 CST -.9984
LSA 1645.4 MSA 265.6 SSA 8.0
                                                                 SCT 5194.5 SCR 315.5 SC3 90.7
RRT -.5346 RRF -.5281 RTF .9867
SCB 5204.0 R23 -.0009 R13 -.9867
    TOE -.3410 TRAIL.1840 TC3 -.1475 BAU .3517
    RDE .6287 RRA -.3516 RC3 -.0057 FAU-.00699
FDE -.0289 FRA 2.2598 FC3 .0340 BSP 17238
                                                                   SG1 5197.2 SG2 266.5 THA 178.14
                                                                                                                   ELI 1562.0 EL2 263.8 ALF 177.21
    BOE .7152 BRA11.1895 BC3 .1477 FSP -299
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ARRIVAL DATE SEP 29 1967
LAUNCH DATE JUL 21 1967
                                                                  FLIGHT TIME 70.00
   HELIOCENTRIC CONIC
                                                                 DISTANCE 193.331
    RL 152.00 LAL .00 LOL 297.57 VL 27.623 GAL -12.26 A7L 92.71 MCA 86.16 SMA 134.99 ECC .24554 INC 2.7057 VL 29.310
RP 108.43 LAP -2.70 LOP 23.73 VP 38.274 GAP -8.62 A7P 90.18 TAL 227.63 TAP 313.79 RCA 101.84 APO 168.13 V2 34.951
RC 58.673 GL -11.62 GP -13.40 ZAL 155.04 ZAP 30.33 ETS 23.44 ZAE 152.70 ETE 351.33 ZAC 92.49 ETC 13.45 CLP -27.47
   PLANETOCENTRIC CONIC
    C3 40.044 VHL 6.328 DLA
                                     3.82 RAL 138.59 RAD 6568.5 VEL 12.705 PTH 2.31 VMP 6.380 OPA -7.67 RAP 172.40 ECC 1.6590
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 15 41 2505.37
13 10 34 4911.95
1 38 49 2237.23
14 30 8 4655.32
2 51 10 2010.79
15 34 16 4454.53
                                                                                                 0 57 27
       90.00
                                              -25.40
                                                           60.77
                                                                        13.25
                                                                                     102.96
                                                                                                                1905.4
                                                                                                                             -23.36
                                                                                                                                             52.69
       90.00
                                              20.83
                                                           213.84
                                                                         10.63
                                                                                       70.37
                                                                                                14 32 26
                                                                                                                 4311.9
                                                                                                                               17.96
                                                                                                                                            206.34
      100.00
                                              -26.69
                                                           40.71
                                                                         12.90
                                                                                       103.99
                                                                                                 2 16 6
                                                                                                                 1637.2
                                                                                                                              -24.50
                                                                                                                                            32.59
                                                                                       69.31 15 47 43
      100.00
                                              22.07
                                                           194.48
                                                                         10.13
                                                                                                                 4055.3
                                                                                                                              19.06
                                                                                                                                            186.98
      110,00
                                              -30.17
                                                            22.42
                                                                        11.81
                                                                                      106.89
                                                                                                 3 24 41
                                                                                                                 1410.8
                                                                                                                              -27.56
                                                                                                                                            14.20
                                                                                       66.33 16 48 30
      110.00
                                                           177.75
                                                                          8.64
                                                                                                                3854.5
                                                                                                                              22.00
                                                                                                                                           170.27
                                               25.42
   DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 519.8 SGR 446.8 SG3 158.2
RRT -.2135 RRF .4060 RTF -.4473
SG8 685.4 R23 -.1308 R13 .5329
SG1 543.8 SG2 417.2 THA 152.70
                                                                                                             ST 201.6 SR 388.0 SS 133.5
CRT - 38231 CRS - .1947 CST - .3718
    TOE .2010 TRA -.3157 TC3 .3111 BAU .1718
    RDE -.4230 RRA -.2285 RC3 -.0789 FAU .06037
    FOE -.0098 FRA -.8705 FC3-1.3051 BSP 1249
                                                                                                             LSA 424.7 MSA 167.5 SSA 24.2
    BOE .4683 BRA .3897 BC3 .3209 FSP
                                                                                                             EL1 424.6 EL2 104.6 ALF 114.76
LAUNCH DATE JUL 21 1967
                                                                                                                       ARRIVAL DATE OCT 1 1967
                                                                  FLIGHT TIME 72.00
  HELIOCENTRIC CONIC
                                                                  DISTANCE 200.100
   RL 152.00 LAL .00 LOL 297.57 VL 27.715 GAL -12.15 AZL 92.58 MCA 89.35 SMA 135.69 ECC .24104 INC 2.5810 V1 29.310
RP 108.39 LAP -2.58 LOP 26.92 VP 38.352 GAP -7.79 AZP 90.03 TAL 228.67 TAP 318.02 RCA 102.99 APO 168.40 V2 34.964
RC 60.521 GL -11.26 GP -14.32 ZAL 155.88 ZAP 34.02 ETS 21.66 ZAE 153.64 ETE 348.11 ZAC 93.22 ETC 13.31 CLP -31.20
   PLANETOCENTRIC CONIC
    C3 39.030 VHL 6.247 DLA
                                     4.39 RAL 137.97 RAD 6568.5 VEL 12.665 PTH 2.30 VMP 5.990 DPA -8.29 RAP 171.54 ECC 1.6423
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 8 56 2516.69
13 12 22 4887.68
1 32 20 2247.67
14 31 39 4631.93
       90.00
                                              -25.57
                                                           61.56
                                                                      12.39
                                                                                     102.60
                                                                                                 0 50 52
                                                                                                               1916.7
                                                                                                                             -23.58
                                                                                                                                            53.45
       90.00
                                               20.26
                                                           212.28
                                                                          9.42
                                                                                       69.79
                                                                                                 14 33 49
                                                                                                                 4287.7
                                                                                                                               17.33
                                                                                                                                            204.84
      100.00
                                              -26.86
                                                           41.44
                                                                         12.05
                                                                                       103.64
                                                                                                 2 9 48
                                                                                                                 1647.7
                                                                                                                               -24.72
                                                                                                                                            33.29
      100.00
                                              21.50
                                                           192.98
                                                                          8.91
                                                                                       68.72
                                                                                                15 48 51
                                                                                                                 4031.9
                                                                                                                               18.42
                                                                                                                                            185.54
                                                                                               3 18 58
16 49 3
                 2 45 18 2019.28
15 35 10 4433.08
      110.00
                                              -30.34
                                                            23.03
                                                                         10.98
                                                                                      106.56
                                                                                                                 1419.3
                                                                                                                              -27.77
                                                                                                                                            14.78
      110.00
                                               24.82
                                                           176.37
                                                                          7.40
                                                                                       65.71
                                                                                                                 3633.1
                                                                                                                               21.33
                                                                                                                                            168.96
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 514.5 SGR 459.9 SG3 178.5
RRT -.2177 RRF .4577 RTF -.4147
    TOE .1930 TRA -.3193 TC3 .3067 BAU .1687
                                                                                                             ST 198.1 SR 387.8 SS 144.6
    RDE -.4165 RRA -.2412 RC3 -.1024 FAU .06689
                                                                                                             CRT -.8046 CRS -.1272 CST -.4629
                                                                                                             LSA 421.8 MSA 178.9 SSA 24.4
    FDE .0132 FRA -.9910 FC3-1.4837 BSP 1241
                                                              SGB 689.9 R23 -.1616 R13 .5362
    BOE .4590 BRA .4002 BC3 .3233 FSP
                                                -481
                                                              SG1 543.9 SG2 424.4 THA 148.60
                                                                                                             EL1 421.8 EL2 108.1 ALF 114.02
LAUNCH DATE JUL 21 1967
                                                                  FLIGHT TIME 74.00
                                                                                                                      ARRIVAL DATE OCT 3 1967
   HELIOCENTRIC CONIC
                                                                 DISTANCE 206.839
   RL 152.00 LAL .00 LOL 297.57 VL 27.793 GAL -12.04 AZL 92.46 MCA 92.54 SMA 136.29 ECC .23715 INC 2.4563 VI 29.310 RP 108.35 LAP -2.45 LOP 30.12 VP 38.419 GAP -6.99 AZP 89.89 TAL 229.57 TAP 322.11 RCA 103.97 APO 168.61 V2 34.977 RC 62.420 GL -10.88 GP -15.31 ZAL 156.64 ZAP 37.93 ETS 20.05 ZAE 154.78 ETE 344.27 ZAC 94.16 ETC 13.11 CLP -35.14
   PLANETOCENTRIC CONIC
    C3 38.120 VHL 6.174 DLA 4.96 RAL 137.46 RAD 6568.5 VEL 12.629 PTH 2.29 VHP 5.636 DPA -8.90 RAP 170.46 ECC 1.6274
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 2 39 2528.40
                                             -25.74
                                                           62.37
                                                                      11.67
                                                                                    102.23
                                                                                                 0 44 47
                                                                                                              1928.4 -23.80
                 13 14 35
                               4864.04
                                              19.70
                                                          210.78
                                                                          8.37
                                                                                       69.24
                                                                                                14 35 39
                                                                                                                 4264.0
                                                                                                                               16.70
                                                                                                                                           203.39
                  1 26 19
                             2258.50
                                             -27.03
                                                           42.20
                                                                         11.35
                                                                                      103.27
                                                                                                 2 3 58
                                                                                                                1658.5
                                                                                                                              -24.93
                                                                                                                                            34.02
      100.00
                 14 33 36
                               4609.16
                                             20.93
                                                           191.52
                                                                          7.86
                                                                                       68.16 15 50 25
                                                                                                                4009.2
                                                                                                                              17.79
                                                                                                                                           184.15
      110.00
                   2 39 55
                             2028.18
                                             -30.51
                                                            23.66
                                                                         10.30
                                                                                      106.22
                                                                                                  3 13 43
                                                                                                                1428.2
                                                                                                                              -27.98
                                                                                       65.12 16 50 2
                 15 36 30
                               4412.26
                                              24.23
                                                           175.04
                                                                          6.31
                                                                                                                3812.3
                                                                                                                               20.68
                                                              MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 505.9 SGR 475.7 SG3 200.6
RRT -.2097 RRF .5118 RTF -.3658
SGB 694.4 R23 -.1935 R13 .5426
    TOE .1851 TRA -.3287 TC3 .2950 BAU .1642
                                                                                                             ST 195.1 SR 386.2 SS 156.4
                                                                                                            CRT -.7787 CRS -.0653 CST -.5527
LSA 417.7 MSA 191.3 SSA 24.5
   ROE - .4089 RRA - .2557 RC3 - .1294 FAU .07398
   FOE .0413 FRA-1.1193 FC3-1.6801 BSP 1226
BDE .4489 BRA .4165 BC3 .3221 FSP -550
                                                              SG1 541.9 SG2 434.2 THA 143.19
                                                                                                             EL1 417.6 EL2 113.2 ALF 113.29
LAUNCH DATE JUL 21 1967
                                                                  FLIGHT TIME 76.00
                                                                                                                       ARRIVAL DATE OCT 5 1967
                                                                 DISTANCE 213.548
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.857 GAL -11.94 AZL 92.33 MCA 95.74 SMA 136.79 ECC .23379 INC 2.3310 V1 29.310 RP 108.31 LAP -2.32 LOP 33.31 VP 38.478 GAP -6.24 AZP 89.77 TAL 230.32 TAP 326.06 RCA 104.81 APO 168.77 V2 34.990 RC 64.367 GL -10.46 GP -16.37 ZAL 157.31 ZAP 42.07 ETS 18.54 ZAE 156.07 ETE 339.62 ZAC 95.32 ETC 12.83 CLP -39.31
  PLANETOCENTRIC CONIC
   C3 37.287 VHL 6.106 DLA
                                    5.52 RAL 137.06 RAD 6568.5 VEL 12.596 PTH
                                                                                         2.28 VHP 5.316 DPA -9.49 RAP 169.16 ECC 1.6137
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                              2540.41
                                              -25.91
                                                           63.21
                                                                                     101.84 24 35 14
                                                                                                                1940.4
                                                                                                                              -24.02
       90.00
                 23 52 54
                                                                         11.10
                                                                                                14 37 56
                                                                                                                 4240.9
                13 17 15
                                                                                       66.72
       90.00
                               4840.87
                                              19.13
                                                           209.31
                                                                          7.48
                                                                                                                               16.07
                                                                                                                                            201.98
                                                                                      102.90
                   1 20 46 2269.64
                                                                         10.79
      100.00
                                             -27.20
                                                            42.98
                                                                                                  1 58 36
                                                                                                                 1669.6
                                                                                                                              -25.15
                                                                                                                                             34.78
                  14 35 59
                                                                                       67.63 15 52 26
                                                                                                                                            182.79
      100.00
                               4586.87
                                              20.36
                                                           190.12
                                                                         6.95
                                                                                                                 3986.9
                                                                                                                               17.15
                   2 34 59
                               2037.37
                                             -30.68
                                                                          9.77
                                                                                      105.87
                                                                                                 3 8 57
                                                                                                                 1437.4
                                                                                                                                            16.01
      110.00
                                                            24.33
                                                                                                                              -28.20
      110.00
                                                                                       64.56 16 51 27
                 15 38 15
                                              23.65
                                                           173.75
                                                                          5.38
                                                                                                                3791.9
                                                                                                                              20.02
                             4391.91
                                                                                                                                           166.48
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
   TDE .1787 TRA -.3433 TC3 .2763 BAU .1592
                                                              SGT 496.7 SGR 495.2 SG3 224.7
                                                                                                             ST 194.0 SR 383.4 SS 169.1
                                                                                                          CRT -.7468 CRS -0.0152 CST -.6328
LSA 413.1 MSA 204.9 SSA 24.5
                                                              RRT -.1872 RRF .5679 RTF -.2994
SGB 701.3 R23 -.2150 R13 .5611
   ROE -.4003 RRA -.2721 RC3 -.1604 FAU .08165
   FOE .0726 FRA-1.2554 FC3-1.8958 BSP 1234
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SG1 540.4 SG2 447.1 THA 135.46

EL1 412.6 EL2 119.9 ALF 112.72

BDE .4383 BRA .4381 BC3 .3194 FSP

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ARRIVAL DATE OCT 7 1967
                                                                        FLIGHT TIME 78.00
LAUNCH DATE JUL 21 1967
                                                                        DISTANCE 220.224
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.908 GAL -11.85 A7L 92.20 MCA 98.94 SMA 137.19 ECC .23087 INC 2.2042 V1 29.310 RP 108.27 LAP -2.18 LOP 36.51 VP 38.527 GAP -5.52 A7P 89.66 TAL 230.92 TAP 329.86 RCA 105.52 APO 168.87 V2 35.003 RC 66.356 GL -10.01 GP -17.50 TAL 157.90 TAP 46.42 ETS 17.08 TAE 157.45 ETE 333.93 TAC 96.69 ETC 12.46 CLP -43.71
   PLANETOCENTRIC CONIC
    C3 36.513 VHL 6.043 DLA 6.07 RAL 136.78 RAD 6568.4 VEL 12.565 PTH 2.28 VMP 5.032 DPA -10.05 RAP 167.63 ECC 1.6009
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                             101.44 24 30 3
68.23 14 40 38
                                                                                10.66
                                                                                                                           1952.7
                                                                                                                                         -24.24
                                                                                                                                                           55.88
                                                                 64.07
        90.00 23 47 30 2552.65
                                                  -26.08
                                                                                                                                           15.45
                                                                                                                                                          200.59
                                                                                 6.72
                                                                                                                            4218.0
                   13 20 20
                                  4818.02
                                                   18.56
                                                                207.88
        90.00
                                                                                               102.51
                                                                                                            1 53 41
                                                                                                                            1681.0
                                                                                                                                           -25.37
                                                                                                                                                          35.55
                                                                                10.35
                                                                 43,78
                    1 15 40
                                 2281.00
                                                  -27.37
                                                                                                67.13 15 54 53
                                                                                                                                                          181.47
                                                                                                                            3964.9
                                                                                                                                           16.52
      100.00
                                  4564.90
                                                   19.79
                                                                168.74
                                                                                 6.19
                                                                                              105.50 3 4 37
64.03 16 53 19
                                                                                                                            1445.8
                                                                                                                                          -28.42
                                                                                                                                                          16.65
                    2 30 30 2046.77
                                                  -30.85
                                                                 25.00
                                                                                 9.36
                                                                                                                          3771.9
                                                                                                                                           19.37
                                                                                                                                                         165.29
                                                                                 4.60
                  15 40 27
                                 4371.89
                                                   23.06
                                                                172.50
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 193.9 SR 378.9 SS 182.2
CRT -. 7024 CRS .0358 CST -. 7174
                                                                    SGT 487.5 SGR 518.1 SG3 249.8
RRT -.1350 RRF .6220 RTF -.2031
    TDE .1718 TRA -.3662 TC3 .2471 BAU .1536
    RDE -. 3899 RRA -. 2897 RC3 -. 1949 FAU .08958
                                                                    SGB 711.4 R23 -.1975 R13 .6019
SG1 538.9 SG2 464.3 THA 122.86
                                                                                                                        LSA 407.0 MSA 219.3 SSA 24.5
    FDE .1118 FRA-1.3911 FC3-2.1239 BSP 1229
BDE 4250 BBA .4559 BC3 .3147 FSP -708
                                                                                                                        EL1 405.6 EL2 128.9 ALF 112.12
    BOE .4260 BRA .4669 BC3 .3147 FSP
                                                                                                                                   ARRIVAL DATE OCT 9 1967
                                                                        FLIGHT TIME 80.00
                                                                        DISTANCE 226.866
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.948 GAL -11.75 AZL 92.07 HCA 102.14 SMA 137.51 ECC .22833 INC 2.0749 VI 29.310 RP 108.22 LAP -2.03 LOP 39.71 VP 38.568 GAP -4.83 AZP 89.56 TAL 231.38 TAP 333.52 RCA 106.11 APO 168.91 V2 35.016 RC 68.382 GL -9.53 GP -18.69 ZAL 158.41 ZAP 50.97 ETS 15.61 ZAE 158.81 ETE 326.95 ZAC 98.27 ETC 11.99 CLP -48.34
   PLANETOCENTRIC CONIC
                                                                                                  2.27 VHP 4.783 DPA -10.59 RAP 165.88 ECC 1.5888
                                         6.63 RAL 136.59 RAD 6568.4 VEL 12.536 PTH
    C3 35.779 VHL 5.982 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1965.1
                                                                                                                                         -24.46
                                                                                                                                                           56.73
                                                                                10.34
                                                                                              101.03 24 25 16
                   23 42 31
                                 2565.13
                                                  -26.24
                                                                 64.94
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105.12 3 0 42
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                                                                 171.26
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    NID-COURSE EXECUTION ACCORD.

SGT 483.1 SGR 545.7 SG3 276.0

RRT -.0540 RRF. .6743 RTF -.0794

SGB 728.8 R23 -.0801 R13 .6710

SG1 548.4 SG2 479.9 THA 101.92
                                                                                                                        ST 196.6 SR 373.1 SS 195.7
CRT -.6504 CRS .0758 CST -.7895
    TDE .1668 TRA -.3953 TC3 .2090 BAU .1499
    RDE -.3781 RRA -.3086 RC3 -.2335 FAU .09778
                                                                                                                        LSA 400.7 MSA 234.6 SSA 24.5
    FOE .1544 FRA-1.5275 FC3-2.3660 BSP 1271
BOE .4132 BRA .5015 BC3 .3133 FSP -797
                                                                                                                        EL1 397.8 EL2 140.1 ALF 111.75
                                                                                                                                  ARRIVAL DATE OCT 11 1967
                                                                        FLIGHT TIME 82.00
LAUNCH DATE JUL 21 1967
                                                                        DISTANCE 233.475
    RL 152.00 LAL .00 LOL 297.57 VL 27.977 GAL -11.66 A7L 91.94 MCA 105.34 SMA 137.74 ECC .22608 INC 1.9425 V1 29.310 RP 108.18 LAP -1.87 LOP 42.92 VP 38.601 GAP -4.18 A7P 89.49 TAL 231.70 TAP 337.04 RCA 106.60 APO 168.89 V2 35.029 RC 70.443 GL -9.02 GP -19.92 TAL 158.84 TAP 55.71 ETS 14.10 TAE 160.02 ETE 318.46 TAC 100.05 ETC 11.41 CLP -53.19
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 35.073 VHL 5.922 DLA 7.19 RAL 136.51 RAD 6568.4 VEL 12.508 PTH 2.26 VHP 4.568 DPA -11.09 RAP 163.93 ECC 1.5772
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 37 53 2577.85 -26.41 65.84 10.13 100.61 24 20 51 1977.8 -24.67 57.60 90.00 13 27 51 4772.50 17.39 205.06 5.59 67.29 14 47 24 4172.5 14.46 197.86
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15 46 8 4332.14
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       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 488.2 SCR 576.6 SC3 301.7
RRT .0655 RRF .7215 RTF .0769
SCB 755.6 R23 .0832 R13 .7173
SC1 579.7 SC2 484.6 THA 79.30
                                                                                                                        ST 201.9 SR 365.2 SS 209.6

CRT -.5863 CRS .1175 CST -.8581

LSA 393.6 MSA 250.0 SSA 24.5
    TOE .1623 TRA -.4332 TC3 .1586 BAU .1489 RDE -.3641 RRA -.3278 RC3 -.2752 FAU .10574
    FDE .2055 FRA-1.6527 FC3-2.6100 BSP 1336
                                                                                                                        EL1 387.8 EL2 154.0 ALF 111.51
    BDE .3987 BRA .5432 BC3 .3176 FSP
                                                      -880
                                                                                                                                   ARRIVAL DATE OCT 13 1967
                                                                         FLIGHT TIME 84.00
LAUNCH DATE JUL 21 1967
                                                                        DISTANCE 240.049
    RL 152.00 LAL .00 LOL 297.57 VL 27.997 GAL -11.56 A7L 91.81 MCA 108.54 SMA 137.90 ECC .22410 INC 1.8058 V1 29.310 RP 108.14 LAP -1.71 LOP 46.12 VP 36.627 GAP -3.55 A7P 89.43 TAL 231.88 TAP 340.42 RCA 107.00 APO 168.80 V2 35.042 RC 72.554 GL -8.48 GP -21.18 7AL 159.20 ZAP 60.61 ETS 12.52 ZAE 160.91 ETE 308.39 ZAC 101.99 ETC 10.70 CLP -58.24
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 34.384 VHL 5.864 DLA 7.75 RAL 136.53 RAD 6568.4 VEL 12.480 PTH 2.26 VHP 4.388 DPA -11.55 RAP 161.80 ECC 1.5659
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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104.33 2 53 56
62.55 17 1 31
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       100.00
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                                  2076.28
       110.00
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       110.00
                    15 49 39
                                  4312.05
                                                   21.22
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 211.2 SR 355.9 SS 223.4

CRT -.5187 CRS .1481 CST -.9090

LSA 387.7 MSA 265.2 SSA 24.5

EL1 377.2 EL2 170.4 ALF 111.77
                                                                     SGT 509.5 SGR 612.1 SG3 327.0
RRT .2074 RRF .7643 RTF .2471
SGB 796.4 R23 .1597 R13 .7529
     TOE .1607 TRA -.4775 TC3 .0978 BAU .1541
     RDE -. 3486 RRA -. 3473 RC3 -. 3206 FAU .11343
     FOE .2582 FRA-1.7679 FC3-2.8559 BSP 1480
                                                                     SG1 635.4 SG2 480.2 THA 65.83
     BOE .3838 BRA .5905 BC3 .3352 FSP -970
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ARRIVAL DATE OCT 15 1967

EL1 330.3 EL2 253.5 ALF 132.50

LAUNCH DATE JUL 21 1967

DISTANCE 246.589 HELTOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 28.008 GAL -11.47 AZL 91.66 HCA 111.75 SMA 137.99 ECC .22232 INC 1.6638 V1 29.310
RP 108.10 LAP -1.55 LOP 49.33 VP 38.647 GAP -2.95 AZP 89.38 TAL 231.93 TAP 343.68 RCA 107.31 APO 168.67 V2 35.056
RC 74.652 GL -7.89 GP -22.45 ZAL 159.48 ZAP 65.61 ETS 10.84 ZAE 161.28 ETE 297.05 ZAC 104.05 ETC 9.86 CLP -63.46 PLANETOCENTRIC CONIC C3 33.704 VHL 5.805 DLA 8.33 RAL 136.64 RAD 6568.3 VEL 12.453 PTH 2.25 VHP 4.242 DPA -11.98 RAP 159.54 ECC 1.5547 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 99.72 24 12 53 66.41 14 56 3 2004.4 -25.11 59.42 67.72 10.01 23 29 29 2604.44 13 37 18 4725.80 90.00 -26.73 195.10 4125.8 13 37 18 16,14 202.20 4.90 90.00 100.82 1 37 36 65.27 16 9 12 1729.1 -26.25 38.85 0 58 47 2329.07 14 54 36 4476.40 9.74 100,00 -28.03 47.20 3876.4 13.87 176.23 100.00 17.35 183.29 4.33 19.42 2 16 14 2086.70 15 53 38 4291.54 103.91 2 51 1 1485.7 -29.31 -31.54 27.91 A.A6 103.91 Z 51 1 62.08 17 5 10 110.00 16.68 3691.5 20.57 167.58 2.65 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 552.7 SCR 649.2 SC3 349.6 RRT .3590 RRF .8005 RTF .4153 SCB 852.6 R23 .1894 R13 .7897 SCI 710.5 SC2 471.4 THA 57.13 ST 224.4 SR 344.3 SS 237.3 CRT -.4460 CRS .1815 CST -.9495 TOE .1608 TRA -.5300 TC3 .0242 BAU .1661 ROE -.3305 RRA -.3652 RC3 -.3679 FAU .12016 LSA 383.9 MSA 277.9 SSA 24.4 ELI 364.5 EL2 189.6 ALF 112.65 FDE .3186 FRA-1.8574 FC3-3.0865 BSP 1678 BOE .3676 BRA .6436 BC3 .3687 FSP -1045 ARRIVAL DATE OCT 17 1967 FLIGHT TIME 88.00 DISTANCE 253.095 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 28.010 GAL -11.37 AZL 91.52 MCA 114.96 SMA 138.01 ECC .22072 INC 1.5152 V1 29.310
RP 108.06 LAP -1.37 LOP 52.54 VP 38.661 GAP -2.37 AZP 89.36 TAL 231.86 TAP 346.82 RCA 107.55 APO 168.47 V2 35.069
RC 76.795 GL -7.26 GP -23.72 ZAL 159.68 ZAP 70.66 ETS 9.04 ZAE 160.99 ETE 285.13 ZAC 106.19 ETC 8.91 CLP -68.80 PLANETOCENTRIC CONIC 8.93 RAL 136.85 RAD 6568.3 VEL 12.426 PTH 2.25 VHP 4.129 DPA -12.39 RAP 157.18 ECC 1.5435 C3 33.025 VHL 5.747 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.33 2018.6 60.40 99.24 24 9 13 23 25 35 2618.61 -26.89 68.73 10.10 90.00 13 42 50 4701.37 0 55 13 2342.21 14 59 50 4453.00 2 13 22 2097.61 15 58 9 4270.37 15 1 12 4101.4 12.09 15.47 200.72 4.71 65.98 90.00 1 34 15 1742.2 -26.48 -28.20 48.14 9.85 100.35 100.00 64.83 16 14 3 103.46 2 48 20 61.61 17 9 19 4.13 3853.0 13.15 174.86 16.68 161.88 100.00 1497.6 -29.54 20.18 -31.72 28.71 A.99 110.00 3670.4 15.95 159.42 110.00 19.89 166.31 2.43 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 619.5 SCR 688.9 SC3 369.7 RRT .4943 RRF .8316 RTF .5575 SCB 926.4 R23 .1977 R13 .8251 SCI 803.1 SC2 461.9 THA 51.07 ST 242.2 SR 331.1 SS 250.9 CRT -.3779 CRS .2055 CST -.9738 TDE .1647 TRA -.5878 TC3 -.0604 BAU .1862 RDE -.3108 RRA -.3817 RC3 -.4173 FAU .12592 LSA 385.8 MSA 286.0 SSA 24.4 EL1 351.7 EL2 211.1 ALF 114.97 FDE .3781 FRA-1.9245 FC3-3.3010 BSP 1957 BDE .3518 BRA .7009 BC3 .4217 FSP -1120 ARRIVAL DATE OCT 19 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 21 1967 DISTANCE 259.567 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 28.005 GAL -11.26 AZL 91.36 MCA 118.17 SMA 137.97 ECC .21927 INC 1.3585 VI 29.310 RP 108.02 LAP -1.20 LOP 55.75 VP 38.669 GAP -1.82 AZP 89.36 TAL 231.68 TAP 349.85 RCA 107.72 APO 168.22 V2 35.082 RC 78.938 GL -6.57 GP -24.98 ZAL 159.82 ZAP 75.71 ETS 7.12 ZAE 160.01 ETE 273.61 ZAC 108.34 ETC 7.85 CLP -74.20 PLANETOCENTRIC CONIC C3 32.344 VHL 5.687 DLA 9.56 RAL 137.15 RAD 6568.3 VEL 12.398 PTH 2.24 VHP 4.048 DPA -12.77 RAP 454.80 ECC 1.5323 LNCH AZHTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RY ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 98.73 24 5 41 65.55 15 6 57 2033.7 -25.56 10.29 61.45 23 21 47 2633.67 13 49 1 4675.61 -27.05 69.80 90.00 192.18 11.33 14.75 199.18 4.62 4075.8 90.00 0 51 46 2356.17 15 5 40 4428.54 2 10 41 2109.19 16 3 14 4248.28 40.73 1756.2 -26.71 10.04 99.85 1 31 2 -28.37 49.15 100.00 173.45 12.39 15.97 180.41 4.03 64.39 16 19 28 3828.5 100.00 21.00 -31.90 29.57 9.22 102.99 2 45 50 1509.2 -29.79 110.00 61.14 17 14 2 3648.3 15.18 158.17 165.01 2.30 19.17 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 264.2 SR 315.1 SS 264.7 CRT -.3130 CRS .2319 CST -.9879 LSA 396.2 MSA 285.7 SSA 24.5 EL1 338.4 EL2 233.7 ALF 120.26 SGT 710.2 SGR 727.2 SG3 385.1 RRT .6057 RRF .8570 RTF .6678 SGB 1016.5 R23 .1998 R13 .8541 TOE .1718 TRA -.6511 TC3 -.1571 BAU .2129 RDE -. 2884 RRA -. 3948 RC3 -. 4667 FAU .13003 FOE .4433 FRA-1.9561 FC3-3.4805 BSP 2287 BOE .3357 BRA .7615 BC3 .4924 FSP -1172 SG1 910.9 SG2 451.1 THA 46.12 ARRIVAL DATE OCT 21 1967 FLIGHT TIME 92.00 LAUNCH DATE JUL 21 1967 DISTANCE 266.006 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 27.994 GAL -11.15 A7L 91.19 MCA 121.38 SMA 137.88 ECC .21794 INC 1.1919 V1 29.310
RP 107.98 LAP -1.02 LOP 58.96 VP 38.672 GAP -1.29 A7P 89.38 TAL 231.39 TAP 352.77 RCA 107.63 APO 167.93 V2 35.094
RC 81.139 GL -5.83 GP -26.21 ZAL 159.87 ZAP 80.70 ETS 5.08 ZAE 158.38 ETE 263.28 ZAC 110.46 ETC 6.69 CLP -79.62 PLANETOCENTRIC CONIC C3 31.658 VHL 5.627 OLA 10.22 RAL 137.54 RAD 6568.3 VEL 12.371 PTH 2.23 VHP 3.998 OPA -13.16 RAP 152.44 ECC 1.5210 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 18 1 2649.95 -27.21 70.96 10.57 98.17 24 2 11 2049.9 -25.80 62.58 90.00 13 55 55 4648.75 13.99 197.57 4.62 65.13 15 13 24 4048.7 10.59 1407.61 41.79 1771.3 0 48 21 2371.26 50.24 10.34 99.30 1 27 53 -26.96 -28.54 100.00 171.96 4.02 63.95 16 25 34 3802.7 11.57 15 12 12 4402.66 15.20 178.88 100.00 21.88 2 43 28 17 19 21 1521.7 -30.04 -32.09 30.50 9.55 102.47 110.00 2 8 6 2121.71 14.36 156.86 3625.0 110.00 16 8 56 4224.97 18.40 163.64 2.27 60.67 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 291.1 SR 297.8 SS 277.6 CRT -.2577 CRS .2483 CST -.9925 LSA 415.1 MSA 278.7 SSA 24.5 SGT 820.7 SGR 765.6 SG3 396.4 RRT .6888 RRF .8784 RTF .7462 SGB 1122.3 R23 .1997 R13 .8773 TOE .1840 TRA -.7171 TC3 -.2633 BAU .2454 RDE -.2645 RRA -.4050 RC3 -.5166 FAU .13271 FOE .5032 FRA-1.9578 FC3-3.6292 BSP 2678

FLIGHT TIME 86.00

SGI 1031.9 SG2 441.4 THA 42.12

BOE .3222 BRA .8236 BC3 .5798 FSP -1219

ARRIVAL DATE OCT 23 1967

LAUNCH DATE JUL 21 1967

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HELIOCENTRIC CONIC
                                                                                       DISTANCE 272.413
    RL 152.00 LAL .00 LOL 297.57 VL 27.976 GAL -11.03 AZL 91.01 MCA 124.60 SMA 137.74 ECC .21672 INC 1.0134 V1 29.310
RP 107.94 LAP -.83 LOP 62.17 VP 38.671 GAP -.79 AZP 89.42 TAL 230.99 TAP 355.59 RCA 107.89 APO 167.59 V2 35.107
RC 83.336 GL -5.01 GP -27.42 ZAL 159.84 ZAP 85.55 ETS 2.91 ZAE 156.25 ETE 254.50 ZAC 112.48 ETC 5.47 CLP -84.99
   PLANETOCENTRIC CONIC
     C3 30.965 VHL 5.565 DLA 10.93 RAL 138.03 RAD 6568.2 VEL 12.343 PTH 2.23 VHP 3.978 DPA -13.57 RAP 150.15 ECC 175096
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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14 3 40 4619.71
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64.69 15 20 40
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        110.00
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                                                                              162.19
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SCT 947.9 SCR 799.7 SC3 401.7
RRT .7500 RRF .8956 RTF .8010
SCB 1240.1 R23 .2003 R13 .8945
SC1 1162.8 SC2 431.2 THA 38.58
                                                                                                                                                ST 322.4 SR 277.4 SS 291.7
CRT -.2078 CRS .2655 CST -.9918
    TOE .2010 TRA -.7848 TC3 -.3794 BAU .2815
    RDE -.2378 RRA -.4101 RC3 -.5644 FAU .13336
FDE .5663 FRA-1.9198 FC3-3.7265 BSP 3099
                                                                                                                                                LSA 441.6 MSA 265.3 SSA 24.6
    BDE .3114 BRA .8856 BC3 .6800 FSP -1240
                                                                                                                                                 EL1 336.8 EL2 259.8 ALF 153.00
                                                                                        FLIGHT TIME 96.00
                                                                                                                                                              ARRIVAL DATE OCT 25 1967
LAUNCH DATE JUL 21 1967
                                                                                       DISTANCE 278.789
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.953 GAL -10.91 AZL 90.82 MCA 127.81 SMA 137.55 ECC .21559 INC .8204 V1 29.310
RP 107.91 LAP -.65 LOP 65.39 VP 38.665 GAP -.30 AZP 89.50 TAL 230.50 TAP 358.31 RCA 107.90 APO 167.21 V2 35.119
RC 85.546 GL -4.10 GP -28.61 ZAL 159.73 ZAP 90.21 ETS .62 ZAE 153.77 ETE 247.30 ZAC 114.36 ETC 4.19 CLP -90.24
   PLANETOCENTRIC CONIC
    C3 30.267 VHL 5.502 DLA 11.70 RAL 138.61 RAD 6568.2 VEL 12.314 PTH
                                                                                                                       2.22 VHP 3.985 DPA -14.02 RAP 147.98 ECC 1.4981
    C3 30.267 WHL 5.502 DLA 11.70 RAL 138.61 RAD 6568.2 VEL 12.314 PTH 2.22 VHP 3.985 DPA -14.02 RAP 147.98 ECC 1.4981 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 10 4 2687.97 -27.55 73.69 11.47 96.84 23 54 52 2088.0 -26.31 65.24 90.00 14 12 26 4588.15 12.22 193.99 4.93 64.26 15 28 54 3988.1 8.66 187.12 100.00 0 41 16 2406.50 -28.90 52.79 11.27 98.00 1 21 23 1806.5 -27.49 44.27 100.00 15 27 50 4344.86 13.44 175.48 4.31 63.05 16 40 15 3744.9 9.72 168.67 110.00 2 2 56 2150.96 -32.50 32.68 10.56 101.24 2 38 47 1551.0 -30.61 23.97 110.00 16 22 40 4173.16 16.65 160.64 2.50 59.71 17 32 13 3573.2 12.50 153.99
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 358.6 SR 255.9 SS 304.9

CRT -.1637 CRS .2695 CST -.9884

LSA 473.6 MSA 249.4 SSA 24.7

EL1 363.3 EL2 249.2 ALF 167.27
                                                                                SCT 1086.7 SGR 832.3 SG3 402.6

RRT .7938 RRF .9104 RTF .8385

SGB 1368.8 R23 .2023 R13 .9078

SG1 1301.9 SG2 422.5 THA 35.61
    TOE .2242 TRA -.8516 TC3 -.5027 BAU .3204
     RDE -.2100 RRA -.4117 RC3 -.6118 FAU .13254
    FOE .6207 FRA-1.8554 FC3-3.7911 8SP 3561
     BOE .3072 BRA .9459 BC3 .7918 FSP -1255
                                                                                                                                                             ARRIVAL DATE OCT 27 1967
                                                                                       FLIGHT TIME 98.00
LAUNCH DATE JUL 21 1967
                                                                                      DISTANCE 285.133
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.925 GAL -10.78 AZL 90.61 MCA 131.03 SMA 137.33 ECC .21453 INC .6095 VI 29.310 RP 107.87 LAP -.46 LOP 68.61 VP 38.656 GAP .17 AZP 89.60 TAL 229.92 TAP .95 RCA 107.87 APO 166.79 V2 35.131 RC 87.767 GL -3.08 GP -29.80 ZAL 159.53 ZAP 94.63 ETS 358.20 ZAE 151.06 ETE 241.49 ZAC 116.05 ETC 2.88 CLP -95.33
   PLANETOCENTRIC CONIC
     C3 29.565 VHL 5.437 BLA 12.56 RAL 139.30 RAD 6568.2 VEL 12.286 PTH 2.21 VHP 4.020 DPA -14.56 RAP 145.97 ECC 1.4866
    LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 5 34 2711.02 -27.72 75.36 12.10 96.02 23 50 45 2111.0 -26.60 66.87 90.00 14 22 25 4553.33 11.18 191.96 5.25 63.82 15 38 18 3953.3 7.58 185.14
                        14 22 25 4575.55

0 37 19 2427.83

15 37 17 4311.75

2 0 8 2168.68

16 30 58 4143.67
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                                                                               54.35
                                                                                                11.92
                                                                                                                    97.20
                                                                                                                               1 17 46
                                                                                                                                                      1827.8
                                                                                                                                                                       -27.79
        100.00
                                                            -29.09
                                                                                                                    62.59 16 49 9
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                      15 37 17
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        100.00
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59.20 17 40 1
                                                            -32.73
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        110.00
                     16 30 58
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                                                                                                                                                                                         152.38
                                                            15.63
                                                                              158.97
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 1233.6 SGR 858.8 SG3 397.5
RRT .8256 RRF .9224 RTF .8643
SGB 1503.1 R23 .2064 R13 .9173
SGI 1445.0 SG2 413.7 THA 32.92
                                                                                                                                               ST 400.2 SR 231.1 SS 320.1 CRT -.1184 CRS .2683 CST -.9832 LSA 512.4 MSA 229.8 SSA 24.9 EL1 401.5 EL2 228.7 ALF 174.20
     TOE .2542 TRA -.9156 TC3 -.6324 BAU .3601
    RDE -.1789 RRA -.4074 RC3 -.6557 FAU .12974
FDE .6784 FRA-1.7549 FC3-3.7992 BSP 4021
     BOE .3109 BRA 1.0021 BC3 .9110 FSP -1239
                                                                                                                                                              ARRIVAL DATE OCT 29 1967
LAUNCH DATE JUL 21 1967
                                                                                       FLIGHT TIME 100.00
                                                                                       DISTANCE 291.449
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.892 GAL -10.65 A7L 90.38 MCA 134.25 SMA 137.07 ECC .21355 INC .3770 V1 29.310
RP 107.83 LAP -.27 LOP 71.83 VP 38.643 GAP .62 A7P 89.74 TAL 229.26 TAP 3.51 RCA 107.80 APO 166.34 V2 35.143
RC 89.996 GL -1.92 GP -31.03 ZAL 159.21 ZAP 98.75 ETS 355.67 ZAE 148.23 ETE 236.85 ZAC 117.51 ETC 1.55 CLP-100.23
   PLANETOCENTRIC CONIC
    C3 28.864 VHL 5.373 OLA 13.52 RAL 140.10 RAO 6568.2 VEL 12.257 PTH 2.21 VHP 4.080 DPA -15.20 RAP 144.12 ECC 1.4750
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 0 27 2738.00 -27.90 77.31 12.89 95.06 23 46 5 2138.0 -26.91 68.79 90.00 14 33 55 4514.35 10.00 189.70 5.72 63.37 15 49 9 3914.3 6.35 182.93 100.00 0 32 49 2432.80 -29.29 56.18 12.73 96.26 1 13 42 1852.8 -28.11 47.57
                                                                              171.44
                                                                                                  5.07
                                                                                                                    62.12 16 59 25
                                                                                                                                                      3674.8
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                                                                                                                                                                                          164.73
                      15 48 10
                                          4274.78
                                                              11.25
        100.00
                                                                                                                                2 33 29
                                                                                                                                                      1589.4
                                                                                                                                                                       -31.30
                                                                                                                                                                                           26.76
                                       2189.42
                                                            -32.97
                                                                               35.58
                                                                                                 12.13
                                                                                                                    99.58
                         1 57 0
        110.00
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                                                                                                                                                                       10.23
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                                       4110.92
                                                                                                                                                      3510.9
        110.00
                      16 40 29
                                                             14.48
                                                                              157.13
                                                                                                  3.19
                                                                                                                    58.69
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 447.6 SR 205.7 SS 335.1
CRT -.0649 CRS .2439 CST -.9789
LSA 557.2 MSA 209.5 SSA 25.1
                                                                               SGT 1385.8 SGR 884.0 SG3 388.9
RRT .8486 RRF .9331 RTF .8823
SGB 1643.8 R23 .2125 R13 .9245
SGI 1592.6 SG2 406.9 THA 30.64
     TDE .2917 TRA -.9751 TC3 -.7673 BAU .4007
     ROE -.1469 RRA -.3995 RC3 -.6995 FAU .12582
     FOE .7261 FRA-1.6368 FC3-3.7736 BSP 4517
BDE .3266 BRA 1.0538 BC3 1.0383 FSP -1223
                                                                                                                                               EL1 447.8 ELZ 205.2 ALF 177.84
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FLIGHT TIME 94.00

ARRIVAL DATE OCT 31 1967

EL1 743.4 EL2 87.8 ALF 6.02

LAUNCH DATE JUL 21 1967

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DISTANCE 297.735
  HELIOCENTRIC CONIC
                      .00 LOL 297.57 VL 27.855 GAL -10.50 AZL 90.12 MCA 137.48 SMA 136.78 ECC .21263 INC .1156 V1 29.310 -.08 LOP 75.05 VP 38.626 GAP 1.05 AZP 89.91 TAL 228.52 TAP 5.99 RCA 107.70 APO 165.86 V2 35.154 -.61 GP -32.33 ZAL 158.77 ZAP 102.55 ETS 352.99 ZAE 145.34 ETE 233.19 ZAC 118.74 ETC .21 CLP-104.90
   RL 152.00 LAL
   RP 107.80 LAP
   RC 92.232 GL
   PLANETOCENTRIC CONIC
   C3 28.171 VHL 5.308 DLA 14.62 RAL 141.03 RAD 6568.1 VEL 12.229 PTH 2.20 VHP 4.166 DPA -16.00 RAP 142.46 ECC 1.4636
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        13.85
                                                                                          93.89
                                                                                                  23 40 35
                                                                                                                    2170.3
                                                                                                                                  -27.24
                                                                                                                                                 71.09
       90.00 22 54 25 2770.27
                                               -28.07
                                                             79.66
                                                                                          62.93
                                                                                                                                                180.43
                                                                                                   16 1 51
                                                                                                                    3869.9
                                                                                                                                   4.94
                  14 47 21
                               4469.93
                                                8.64
                                                            187.16
                                                                            6.35
                                                                                                                    1882.6
                                                                                                                                  -28.47
                                                                                                                                                 49.72
                                                                                                     1 8 55
                                                                           13.72
                                                                                          95.12
                   0 27 32 2482.63
                                               -29.49
                                                             58.37
                                                                                                  17 11 24
                                                                                                                    3632.8
                                                                                                                                    6.03
                                                                                                                                                162.40
      100.00
                  16 9 51
                                4232.81
                                                 9.90
                                                            169.05
                                                                            5.68
                                                                                          61.65
                                                                                          98.49 2 30 14
58.16 17 59 27
                                                                                                                                                 28.57
                                                                                                                    1614.2
                                                                                                                                  -31.71
                   1 53 20
                              2214.19
                                               -33.24
                                                             37.46
                                                                           13.20
                                                                                                                    3474.0
                                                                                                                                                148.62
                                                            155.08
                                                                            3.75
      110.00
                 16 51 32
                                4074.02
                                               13.16
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 502.9 SR 177.7 SS 353.9
CRT .0138 CRS .1904 CST -.9747
                                                                SGT 1539.9 SGR 903.6 SG3 375.5
RRT .8654 RRF .9421 RTF .8947
SGB 1785.4 R23 .2209 R13 .9294
   TDE .3388 TRA-1.0277 TC3 -.9051 BAU .4403
   RDE -.1111 RRA -.3857 RC3 -.7400 FAU .12033
                                                                                                                LSA 611.5 MSA 187.3 SSA 25.3
   FDE .7769 FRA-1.4927 FC3-3.6979 BSP 4993
                                                                                                                EL1 502.9 EL2 177.7 ALF
                                                                SGI 1739.9 SGZ 400.7 THA 28.58
   BOE .3565 BRA 1.0977 BC3 1.1691 FSP -1181
                                                                                                                           ARRIVAL DATE NOV 2 1967
                                                                    FLIGHT TIME 104.00
LAUNCH DATE JUL 21 1967
                                                                   DISTANCE 303.994
  HELIOCENTRIC CONIC
                         .00 LOL 297.57 VL 27.815 GAL -10.35 AZL 89.82 MCA 140.70 SMA 136.46 ECC .21177 INC .1756 V1 29.310 .11 LOP 78.27 VP 38.607 GAP 1.47 AZP 90.14 TAL 227.71 TAP 8.41 RCA 107.56 APO 165.36 V2 35.165 .92 GP -33.74 ZAL 158.17 ZAP 105.97 ETS 350.16 ZAE 142.42 ETE 230.31 ZAC 119.70 ETC 358.84 CLP-109.33
   RL 152.00 LAL
RP 107.77 LAP
   RC 94.474 GL
  PLANETOCENTRIC CONIC
   C3 27.498 VHL 5.244 DLA 15.89 RAL 142.10 RAD 6568.1 VEL 12.201 PTH 2.19 VHP 4.278 DPA -16.98 RAP 140.97 ECC 1.4526
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    2209.8
                                                                                                                                  -27.58
                             2809.82
4418.35
                                                                                          92,45 23 33 48
                                               -28.22
                                                             82.54
                                                                          15.04
       90.00
                 22 46 58
                                                                                                                                     3.29
                                                                                                   16 16 58
                                                                                                                     3818.3
                                                 7.03
                                                            184.22
                                                                            7.21
                                                                                          62.50
       90.00
                  15 3 19
                                                                                                                                                  52.36
                  0 21 3 2519.09
16 15 52 4184.30
1 48 51 2244.39
                                                                                                                     1919.1
                                                                                                                                   -28.85
                                               -29.68
                                                              61.07
                                                                           14.95
                                                                                          93.72
                                                                                                     1 3 2
      100.00
                                                                                          61.18 17 25 36
97.15 2 26 15
57.63 18 11 45
                                                                                                                                                159.71
                                                                                                                     3584.3
                                                                                                                                     4.41
                                                6.32
                                                             166.32
                                                                            6.51
      100.00
                                                                                                                                                 30.81
                                                                                                                    1644.4
                                                                                                                                  -32.16
                                               -33.52
                                                              39.78
                                                                          14.52
      110.00
                              4031.77
                                                                                                                                                 146.37
                                                             152.76
                                                                            4.52
                                                                                                                    3431.8
                                                                                                                                     7.28
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 1695.2 SCR 922.7 SC3 359.3

RRT .8776 RRF .9503 RTF .9036

SCB 1930.1 R23 .2308 R13 .9332

SCI 1888.8 SC2 397.1 THA 26.81
                                                                                                                ST 567.3 SR 150.9 SS 374.1
CRT .1402 CRS .0768 CST -.9724
   TDE .3961 TRA-1.0722 TC3-1.0458 BAU .4797
   RDE -.0733 RRA -.3683 RC3 -.7804 FAU .11404
                                                                                                                LSA 675.7 MSA 165.4 SSA 25.6
EL1 567.8 EL2 149.3 ALF 2.30
   FDE .8203 FRA-1.3393 FC3-3.5904 BSP 5492
   BOE .4028 BRA 1.1337 BC3 1.3049 FSP -1138
                                                                                                                          ARRIVAL DATE NOV 4 1967
                                                                    FLIGHT TIME 106.00
LAUNCH DATE JUL 21 1967
                                                                   DISTANCE 310.227
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.771 GAL -10.19 AZL 89.49 MCA 143.93 SMA 136.12 ECC .21097 INC .5141 VI 29.310 RP 107.73 LAP .30 LOP 81.50 VP 38.585 GAP 1.87 AZP 90.42 TAL 226.83 TAP 10.75 RCA 107.40 APO 164.84 V2 35.175 RC 96.719 GL 2.71 GP -35.32 ZAL 157.38 ZAP 109.00 EES 347.14 ZAE 139.48 ETE 228.10 ZAC 120.41 ETC 357.44 CLP-113.52
   PLANETOCENTRIC CONIC
    C3 26.863 VHL 5.183 DLA 17.38 RAL 143.34 RAD 6568.1 WEL 12.175 PTH 2.19 VHP 4.417 DPA -18.19 RAP 139.63 ECC 1.4421
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         90.63 23 25 7
                                                                                                                   2259.5
                                                                                                                                -27.92
                  22 37 27 2859.54
                                                                          16.49
       90.00
                                              -28.31
                                                             86.18
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                                                                                                   16 35 21
                                                                            8.36
                                                                                          62.11
                                                                                                                    3757.0
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                  15 22 44
                               4357.00
                                                 5.09
                                                            140.76
       90,00
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                                                              64.45
                  0 12 48 2564.77
                                               -29.84
      100.00
                                                                                                   17 42 48
                                                                                          60.74
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                                                                            7.62
                  16 34 1
                               4127.00
                                                6.42
                                                            163.12
      100.00
                                                                                          95.46
                                                                                                     2 21 12
                                                                                                                     1682.0
                                                                                                                                  -32.67
                                                                                                                                                 33.62
                   1 43 10 2282.01
                                               -33.80
                                                              42.68
                                                                           16.15
      110.00
                                                                                          57.09 18 26 30
                                                                                                                                    5.42
                                                                                                                                                143.77
                                                                                                                     3362.5
                                                             150.09
                                                                            5.55
                  17 20 8
                               3982.52
                                                9.83
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 645.0 SR 127.3 SS 399.4
CRT .3580 CRS -.1413 CST -.9710
                                                                SGT 1849.3 SGR 938.1 SG3 339.8
RRT .8861 RRF .9575 RTF .9098
SGB 2073.6 R23 .2423 R13 .9357
    TOE .4674 TRA-1.1057 TC3-1.1864 BAU .5175
    RDE -.0309 RRA -.3452 RC3 -.8180 FAU .10670
                                                                                                                LSA 755.2 MSA 143.9 SSA 25.6
EL1 646.6 EL2 118.5 ALF 4.18
   FOE .8668 FRA-1.1711 FC3-3.4388 BSP 5968
BOE .4684 BRA 1.1584 BC3 1.4411 FSP -1077
                                                                SG1 2035.7 SG2 394.9 THA 25.22
                                                                                                                           ARRIVAL DATE NOV 6 1967
                                                                    FLIGHT TIME 108.00
LAUNCH DATE JUL 21 1967
                                                                    DISTANCE 316.434
   HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.724 GAL -10.03 AZL 89.09 HCA 147.15 SMA 135.76 ECC .21023 INC .9084 VI 29.310
RP 107.70 LAP .49 LOP 84.73 VP 38.560 GAP 2.25 AZP 90.76 TAL 225.89 TAP 13.04 RCA 107.22 APO 164.30 V2 35.185
RC 98.967 GL 4.84 GP -37.12 ZAL 156.34 ZAP 111.59 ETS 343.91 ZAE 136.50 ETE 226.45 ZAC 120.86 ETC 355.99 CLP-117.49
   PLANETOCENTRIC CONIC
    C3 26.294 VHL 5.128 DLA 19.16 RAL 144.79 RAD 6568.1 VEL 12.152 PTH 2.18 VHP 4.589 DPA -19.69 RAP 138.40 ECC 1.4327
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 24 42 2924.11 -28.27 90.90 18.29 88.27 23 13 26 2324.1 -28.21 82.23
                                                                         18.29
                                                                             9.92
                                                                                           61.80
                                                                                                    16 58 25
                                                                                                                     3681.8
                                                                                                                                   -1.11
                                                                                                                                                 159.92
                                                             176.55
                                                 2.68
       90.00
                  15 47 3
                                4281.81
                                                                                                    0 45 32
                                                                                                                     2023.7
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                   0 1 49
                                2623.66
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      100.00
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                  16 56 34
                                                             159.27
      100,00
                                4057.50
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      110.00
                   1 35 40
                                2330.03
                                               -34.05
                                                              46.41
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                                                             146.96
                                                                             6.95
      110.00
                  17 39 12
                                3923.88
                                                 7.64
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 739.3 SR 117.0 SS 428.5
CRT .6563 CR5 -.4748 CST -.9717
    TOE .5553 TRA-1.1269 TC3-1.3257 BAU
                                                                 SGT 2002.6 SGR 954.0 SG3 318.2
                                                   .5545
                                                                RRT .8917 RRF .9640 RTF .9143
SGB 2218.3 R23 .2545 R13 .9376
    ROE .0153 RRA -.3177 RC3 -.8548 FAU .09883
   FOE .9088 FRA -.9999 FC3-3.2540 BSP 6460 BDE .5555 BRA 1.1709 BC3 1.5774 FSP -1016
    FOE .9088 FRA -.9999 FC3-3.2540 BSP
                                                                                                                LSA 853.0 MSA 124.8 SSA 25.3
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FLIGHT TIME 102.00

SG1 2182.6 SG2 396.2 THA 23.85

LAUNCH DATE JUL 21 1967

ARRIVAL DATE NOV 8 1967

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DISTANCE 322.615
   HELIOCENTRIC CONIC
                             .00 LOL 297.57 VL 27.675 GAL -9.85 AZL 88.62 HCA 150.38 SMA 135.38 ECC .20954 INC 1.3789 VI 29.310 .68 LOP 87.96 VP 38.534 GAP 2.63 AZP 91.20 TAL 224.89 TAP 15.27 RCA 107.02 APO 163.75 VZ 35.195 7.42 GP -39.24 ZAL 154.94 ZAP 113.69 ETS 340.41 ZAE 133.45 ETE 225.27 ZAC 121.04 ETC 354.45 CLP-121.25
    RL 152.00 LAL
         107.67 LAP
    RC 101.218 GL
   PLANETOCENTRIC CONIC
     C3 25.838 VHL 5.083 DLA 21.32 RAL 146.51 RAD 6568.0 VEL 12.133 PTH 2.17 VHP 4.801 DPA -21.54 RAP 137.22 ECC 1.4252 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             85.08 22 56 46
61.69 17 28 40
86.56 24 27 31
60.13 18 31 50
90.36 2 5 12
56.13 19 7 27
                      22 6 34 3011.78
16 18 54 4185.47
                                                                                             20.50
                                                                                                                                               2411.8
                                                                                                                                                                -28.31
                                                                                                                                                                                   88.64
         90.00
                                                          -27.92
                                                                           97.29
         90.00
                                                           -.43
                                                                          171.17
                                                                                             12.13
                                                                                                                                               3585.5
                                                                                                                                                                 -4.21
                                                                                                                                                                                  164.53
                                                                                                                                               2102.5
                                                                                                                                                                -29.A7
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        100.00
                       23 42 29 2702.50
                                                          -29.71
                                                                           74.68
                                                                                             20.65
        100.00
                      17 25 40
                                     3969.98
                                                            1.14
                                                                           154.46
                                                                                             11.26
                                                                                                                                               3370.0
                                                                                                                                                                 -2.A4
                                                                                                                                                                                 147.94
                       1 25 19 2393.05
                                                          -34.18
                                                                            51.32
                                                                                             20.79
                                                                                                                                               1793.1
                                                                                                                                                               -33.75
                                                                                                                                                                                  42.10
        110.00
                      18 3 15
                                       3852.20
                                                            4.94
                                                                           143.17
                                                                                              8.89
                                                                                                                                               3252.2
                                                                                                                                                                   .45
                                                                                                                                                                                  136.95
        110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 2153.8 SGR 967.4 SG3 294.0
RRT .8946 RRF .9697 RTF .9174
SGB 2361.1 R23 .2672 R13 .9389
SG1 2327.0 SG2 400.2 THA 22.60
                                                                                                                                          ST 857.5 SR 131.4 SS 464.5

CRT .9006 CRS -.7898 CST -.9733

LSA 977.5 MSA 110.2 SSA 23.8

EL1 865.6 EL2 56.6 ALF 7.89
     TOE .6665 TRA-1.1319 TC3-1.4586 BAU
                                                               . 5896
    ROE .0685 RRA - .2833 RC3 - .8867 FAU .09018
    FOE .9542 FRA -.8212 FC3-3.0218 BSP 6928
BDE .6700 BRA 1.1668 BC3 1.7069 FSP -940
     BOE .6700 BRA 1,1668 BC3 1.7069 FSP
                                                                                    FLIGHT TIME 112.00
                                                                                                                                                        ARRIVAL DATE NOV 10 1967
                                                                                   DISTANCE 328.772
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.624 GAL -9.67 AZL 88.05 MCA 153.60 SMA 134.99 ECC .20890 INC 1.9529 V1 29.310 RP 107.65 LAP .87 LOP 91.19 VP 38.505 GAP 2.99 AZP 91.75 TAL 223.84 TAP 17.44 RCA 106.79 APO 163.19 V2 35.204 RC 103.470 GL 10.57 GP -41.74 ZAL 153.07 ZAP 115.24 ETS 336.61 ZAE 130.24 ETE 224.48 ZAC 120.98 ETC 352.77 CLP-124.86
   PLANETOCENTRIC CONIC
    C3 25.574 VHL 5.057 DLA 23.99 RAL 148.59 RAO 6568.0 VEL 12.122 PTH 2.17 VHP 5.065 OPA -23.81 RAP 136.01 ECC 1.4209 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 37 59 3140.50 -26.82 106.54 23.12 80.57 22 30 19 2540.5 -27.85 98.03 90.00 17 4 5 4051.67 -4.73 163.69 15.42 62.05 18 11 36 3451.7 -8.44 156.97 100.00 23 19 4 2814.57 -28.97 82.93 23.49 82.29 24 5 59 2214.6 -29.73 74.21 100.00 18 5 40 3852.84 -2.83 148.03 14.37 60.23 19 9 53 3252.8 -6.77 141.46 110.00 1 10 17 2478.91 -34.02 58.02 24.07 86.40 1 51 36 1878.9 -34.14 48.78 110.00 18 34 53 3761.26 1.47 138.41 11.68 55.84 19 37 34 3161.3 -3.02 132.20 INTERPERATIAL CORRECTIONS
    C3 25.574 VHL 5.057 DLA 23.99 RAL 148.59 RAD 6568.0 VEL 12.122 PTH
                                                                                                                 2.17 VHP 5.065 OPA -23.81 RAP 136.01 ECC 1.4209
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 2304.7 SGR 981.4 SG3 268.1
RRT .8948 RRF .9747 RTF .9199
SGB 2504.9 R23 .2790 R13 .9400
SGI 2471.4 SG2 408.7 THA 21.47
    TDE .8086 TRA-1.1176 TC3-1.5793 BAU .6236
                                                                                                                                           ST 1007.2 SR 173.8 SS 506.5
CRT .9858 CRS -.9387 CST -.9763
    ROE .1289 RRA -.2419 RC3 -.9125 FAU .08111
                                                                                                                                          LSA 1136.0 MSA 101.8 SSA 21.0
EL1 1021.7 EL2 28.7 ALF 9.66
    FOE .9967 FRA -.6440 FC3-2.7459 BSP 7416
BDE .8188 BRA 1.1435 BC3 1.8240 FSP -864
     BOE .8188 BRA 1.1435 BC3 1.8240 FSP
                                                                                   FLIGHT TIME 114.00
                                                                                                                                                      ARRIVAL DATE NOV 12 1967
LAUNCH DATE JUL 21 1967
                                                                                   DISTANCE 334.905
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.570 GAL -9.48 AZL 87.33 MCA 156.83 SMA 134.59 ECC .20832 INC 2.6743 VI 29.310
RP 107.62 LAP 1.05 LOP 94.42 VP 38.474 GAP 3.34 AZP 92.46 TAL 222.74 TAP 19.56 RCA 106.55 APO 162.62 V2 35.212
RC 105.723 GL 14.51 GP -44.77 ZAL 150.52 ZAP 116.15 ETS 332.43 ZAE 126.79 ETE 223.99 ZAC 120.66 ETC 350.87 CLP-128.37
   PLANETOCENTRIC CONIC
    C3 25.645 VHL 5.064 DLA 27.31 RAL 151.18 RAD 6568.0 VEL 12.125 PTH 2.17 VHP 5.404 DPA -26.58 RAP 134.65 ECC 1.4220
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            73.09 21 33 49
64.22 19 28 48
75.83 23 26 34
61.34 20 9 59
                    20 37 28 3381.16
18 25 16 3812.38
                                                                                                                                                              -25.16
                                                                                                                                                                              115.10
                                                                         123.14
                                                                                         25.56
                                                                                                                                             2781.2
         90.00
                                                         -23.06
                                                         -12.14
                                                                          150.01
                                                                                            21.09
                                                                                                                                               3212.4
                                                                                                                                                               -15.51
                                                                                                                                                                                 142.95
                                                                                                                                                                                  87.56
                                                                                            26.64
                                                                                                                                               2397.0
                                                                                                                                                              -2A.28
       100.00
                     22 36 37
                                     2997.03
                                                         -26.60
                                                                            95.96
       100.00
                    19 8 47
                                    3671.75
                                                          -8.87
                                                                          137.98
                                                                                            19.38
                                                                                                                                               3071.7
                                                                                                                                                               -12.63
                                                                                                                                                                                131.20
                       0 46 26 2603.11
19 19 24 3638.44
       110.00
                                                         -33.07
                                                                            67.59
                                                                                            28.18
                                                                                                               80.82
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       110.00
                                                          -3.22
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 2453.8 SCR 990.6 SC3 239.5
RRT .8918 RRF .9783 RTF .9219
SCB 2646.2 R23 .2897 R13 .9408
SCI 2612.5 SC2 421.0 THA 20.35
                                                                                                                                          ST 1202.6 SR 239.8 SS 557.5
CRT .9964 CRS -.9859 CST -.9800
    TOE .9979 TRA-1.0761 TC3-1.6723 BAU .6547
ROE .2005 RRA -.1691 RC3 -.9219 FAU .07131
    FOE 1.0415 FRA -.4641 FC3-2.4074 BSP 7864
                                                                                                                                         LSA 1343.2 MSA 101.1 SSA 16.6
ELI 1226.1 EL2 20.0 ALF 11.24
                                                                                                                                                       ARRIVAL DATE NOV 14 1967
LAUNCH DATE JUL 21 1967
                                                                                   FLIGHT TIME 116.00
                                                                                   DISTANCE 341.013
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.515 GAL -9.27 AZL 86.39 HCA 160.05 SHA 134.17 ECC .20778 INC 3.6146 VI 29.310
RP 107.60 LAP 1.23 LOP 97.66 VP 38.442 GAP 3.67 AZP 93.40 TAL 221.58 TAP 21.63 RCA 106.29 APO 162.05 V2 35.220
RC 107.975 GL 19.49 GP -48.45 ZAL 147.00 ZAP 116.29 ETS 327.82 ZAE 122.96 ETE 223.68 ZAC 120.09 ETC 348.65 CLP-131.89
   PLANETOCENTRIC CONIC
    C3 26.330 VHL 5.131 DLA 31.51 RAL 154.53 RAD 6568.1 VEL 12.153 PTH 2.18 VHP 5.857 DPA -29.96 RAP 132.97 ECC 1.4333
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           65.03 18 57 20
65.01 22 32 17
                                                                                        28.44
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                    17 51 12 3967.69
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         75.57
                                                         -19.87
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       104.43
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                                       3238.89
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65.01 22 32 17
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57.30 21 30 2
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       110.00
                     20 32 39
                                                         -10.55
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                                                                                             23.13
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                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 2605.5 SGR 994.0 SG3 208.9
RRT .8845 RRF .9803 RTF .9242
SGB 2788.6 R23 .2974 R13 .9421
                                                                                                                                           ST 1458.5 SR 321.6 SS 614.€
     TOE 1.2571 TRA -.9985 TC3-1.7177 BAU
                                                               .6834
                                                                                                                                         CRT .9913 CRS -.9978 CST -.9840
LSA 1611.5 MSA 105.9 SSA 12.1
    RDE .2837 RRA -.1221 RC3 -.9047 FAU .06105
    FOE 1.0813 FRA -.2893 FC3-2.0072 BSP 8341
BOE 1.2888 BRA 1.0060 BC3 1.9414 FSP -683
                                                                               SG1 2753.9 SG2 438.8 THA 19.15
                                                                                                                                         ELI 1493.0 ELZ 41.4 ALF 12.34
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FLIGHT TIME 110.00

ARRIVAL DATE NOV 16 1967

LAUNCH DATE JUL 21 1967

HELIOCENTRIC CONIC **DISTANCE 347.094** RL 152.00 LAL .00 LOL 297.57 VL 27.458 GAL -9.06 AZL 85.10 MCA 163.27 SMA 133.75 ECC .20730 INC 4.9005 VI 29.310 RP 107.58 LAP 1.41 LOP 100.89 VP 38.407 GAP 4.00 AZP 94.69 TAL 220.39 TAP 23.65 RCA 106.02 APO 161.48 V2 35.227 RC 110.226 GL 25.85 GP -52.98 ZAL 142.15 ZAP 115.50 ETS 322.65 ZAE 118.55 ETE 223.33 ZAC 119.28 ETC 345.90 CLP-135.65 PLANETOCENTRIC CONIC C3 28.219 VHL 5.312 DLA 36.80 RAL 159.12 RAD 6568.1 VEL 12.231 PTH 2.20 VHP 6.498 DPA -34.06 RAP 130.66 ECC 1.4644 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.45 17 755 4173.20 -22.34 182.63 35.82 59.96 18 17 28 3573.2 -26.16 175.33 22 58 12 3067.86 17 7 55 4173.20 22 58 12 3067.86 17 7 55 4173.20 23 49 20 18 17 28 92.13 114.55 -22.32 99.43 35.81 59.95 2467.9 -26.14 35.82 59.96 3573.2 -26.16 -22.34 182.63 65.45 23 49 20 2467.9 -26.14 92.13 -22.32 35.81 59.95 114.55 99.43 59.96 18 17 28 59.95 23 49 20 -22.34 3573.2 65.45 182.63 35.82 -22.32 99.43 2467.9 -26.14 92.13 114.55 22 5A 12 3067.86 35.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2760.8 SGR 978.0 SG3 175.8 RRT .8694 RRF .9787 RTF .9274 SGB 2928.9 R23 .3017 R13 .9438 SG1 2892.4 SG2 461.2 THA 17.58 ST 1796.1 SR 409.2 SS 676.8 CRT .9859 CRS -.9997 CST -.9878 TOE 1.6327 TRA -.8641 TC3-1.6748 BAU .7061 RDE .3784 RRA -.0313 RC3 -.8356 FAU .05010 LSA 1959.1 MSA 115.1 SSA 8.2 EL1 1840.9 EL2 66.9 ALF 12.68 FOE 1.1160 FRA -.1177 FC3-1.5371 BSP 8788 BOE 1.6760 BRA .8646 BC3 1.8717 FSP -579 FLIGHT TIME 120,00 ARRIVAL DATE NOV 18 1967 LAUNCH DATE JUL 21 1967 HELIOCENTRIC CONIC DISTANCE 353.144 RL 152.00 LAL .00 LOL 297.57 VL 27.400 GAL -8.84 AZL 83.22 MCA 166.47 SMA 133.32 ECC .20686 INC 6.7766 VI 29.310 RP 107.56 LAP 1.58 LOP 104.13 VP 38.372 GAP 4.31 AZP 96.59 TAL 219.14 TAP 25.62 RCA 105.74 APO 160.90 V2 35.233 33.95 GP -58.58 7AL 135.50 7AP 113.60 ETS 316.62 7AE 113.29 ETE 222.46 7AC 118.22 ETC 342.18 CLP-140.17 RC 112.475 GL PLANETOCENTRIC CONIC C3 32.735 WHL 5.721 DLA 43.30 RAL 165.85 RAD 6568.3 VEL 12.414 PTH 2.24 VHP 7.473 DPA -38.97 RAP 127.19 ECC 1.5387 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 16 50 3 4336.80 0 13 39 2978.72 47.26 3736.8 55.76 -24.28 197.86 52.98 18 2 20 -28.92 1 3 18 2378.7 93.30 47.25 52.97 -28.91 86.43 124.24 -24.27 16 50 3 4336.80 0 13 39 2978.72 190.98 3736.8 55.76 -24.28 197.86 47.26 52.98 18 2 20 -28.92 52.97 1 3 18 124.24 -24.27 93.30 47.25 2378.7 -28.91 86.43 16 50 3 4336.80 52.98 18 2 20 3736.8 190.98 55.76 -24.28 197.86 47.26 -28.92 0 13 39 52.97 1 3 18 2378.7 -24.91 124.24 2978.72 93.30 47.25 86.43 -24.27 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 2228.5 SR 464.4 SS 734.2 CRT .9795 CRS -.9975 CST -.9911 SCT 2925.6 SCR 920.5 SC3 141.2 RRT .8351 RRF .9668 RTF .9329 SCB 3067.0 R23 .3002 R13 .9469 SCI 3027.7 SC2 489.3 THA 15.13 TOE 2.2094 TRA -.6329 TC3-1.4897 BAU .7178 ROE .4615 RRA .0939 RC3 -.6864 FAU .03874 FOE 1.1347 FRA .0445 FC3-1.0246 BSP 9234 PAR 9 9470 Rea .6398 BC3 1.6402 FSP -473 LSA 2388.4 MSA 126.7 SSA 5.4 EL1 2274.5 EL2 91.7 ALF 11.55 FLIGHT TIME 122.00 ARRIVAL DATE NOV 20 1967 LAUNCH DATE JUL 21 1967 DISTANCE 359.154 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 27.341 GAL -8.61 A7L 80.21 MCA 169.66 SMA 132.89 ECC .20643 INC 9.7872 V1 29.310 RP 107.54 LAP 1.75 LOP 107.37 VP 38.335 GAP 4.61 A7P 99.63 TAL 217.85 TAP 27.51 RCA 105.46 APO 160.32 V2 35.239 RC 114.720 GL 43.89 GP -65.48 ZAL 126.69 ZAP 110.37 ETS 308.71 ZAE 106.74 ETE 219.75 ZAC 117.02 ETC 336.26 CLP-147.02 PLANETOCENTRIC CONIC C3 43.933 VHL 6.628 OLA 50.59 RAL 176.47 RAD 6568.7 VEL 12.857 PTH 2.34 VHP 9.120 DPA -44.65 RAP 121.48 ECC 1.7230 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.01 -24.02 3897.6 -29.63 206.94 46.15 16 58 8 4497.57 212.91 44.03 18 13 6 2 19 46 2366.5 85.91 133.85 1 30 20 2966.51 -24.00 91.88 65.00 44.02 -29.62 206.94 65.01 18 13 6 3897.6 -29.63 46.15 16 58 8 4497.57 -24.02 212.91 44.03 2 19 46 2366.5 85.91 133.85 1 30 20 2966.51 -24.00 91.88 65.00 44.02 -29.62 16 58 8 4497.57 1 30 20 2966.51 18 13 6 3897.6 206.94 46.15 -24.02 212.91 65.01 44.03 -29,63 HID-COURSE EXECUTION ACCURACY
SGT 3104 7 400 2366.5 85.91 133 85 -24.00 -91.88 -29.62 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3104.7 SGR 768.3 SG3 106.8 RRT .7208 RRF .9007 RTF .9434 SGB 3198.4 R23 .2895 R13 .9526 SG1 3155.2 SG2 524.1 THA 10.40 ST 2719.2 SR 373.2 SS 770.5 CRT .9471 CRS -.9775 CST -.9935 TDE 3.1438 TRA -.2060 TC3-1.1127 BAU .7017 RDE .4127 RRA .2649 RC3 -.4352 FAU .02720 FDE 1.1271 FRA .1989 FC3 -.5360 BSP 9654 LSA 2847.2 MSA 143.4 SSA EL1 2742.1 EL2 118.8 ALF 7.42 BOE 3.1708 BRA .3356 BC3 1.1948 FSP -364 ARRIVAL DATE NOV 22 1967 LAUNCH DATE JUL 21 1967 FLIGHT TIME 124,00 HELIOCENTRIC CONTC DISTANCE 365.092 RL 152.00 LAL .00 LOC 297.57 VL 27.281 GAL -8.35 AZL 74.59 HCA 172.79 SMA 132.46 ECC .20595 INC15.4066 VI 29.310 RP 107.52 LAP 1.91 LOP 110.62 VP 38.297 GAP 4.88 AZP 105.29 TAL 216.50 TAP 29.29 RCA 105.18 APO 159.74 VZ 35.244 RC 116.961 GL 54.85 GP -73.57 ZAL 115.91 ZAP 105.69 ETS 294.21 ZAE 98.07 ETE 210.09 ZAC 116.00 ETC 323.04 CLP-162.93 PLANETOCENTRIC CONIC C3 76.915 VHL 8.770 DLA 56.64 RAL 193.58 RAD 6569.5 VEL 14.081 PTH 2.57 VHP 12.358 DPA -50.55 RAP III.02 ECC 2.2658 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 38.66 17 44 28 4682.02 -18.64 226.28 90.77 35.48 19 2 30 4082.0 -25.08 221.59 90.75 35.47 3 51 27 2454.9 -25.07 3 0 32 3054.89 94.65 89.95 141.34 -18.63 90.77 17 44 28 226.28 19 2.30 4082.0 -25.08 221.59 38.66 4682.02 -18.64 35.48 3 51 27 2454.9 3 0 32 3054.89 90.75 -25.07 89.95 141.34 -18.63 94.65 35.47 17 44 28 90.77 19 2 30 4082.0 221.59 36.66 4682.02 -18.64 226.28 35.48 -25.08 MID-COURSE EXECUTION ACCURACY 2454.9 -25.07 89.95 141.34 3 0 32 3054.89 -1A.63 94.65 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY TOE 4.5690 TRA .7221 TC3 -.5676 BAU .5977 RDE -.4272 RRA .3767 RC3 -.1254 FAU .01572 ST 2996.2 SR 309.8 SS 769.4

CRT -.8601 CRS .8065 CST -.9953

LSA 3103.9 MSA 174.7 SSA 1.9

EL1 3008.0 EL2 157.4 ALF 174.90 SGT 3261.4 SGR 571.4 SG3 76.8 RRT -.1235 RRF .1310 RTF .9657 FDE 1.0845 FRA .3686 FC3 -.1770 BSP 10008 SGB 3311.1 R23 -.2559 R13 -.9647

FLIGHT TIME 118.00

-261

SG1 3262.2 SG2 566.9 THA 178.72

BOE 4.5889 BRA .8144 BC3 .5813 FSP

ARRIVAL DATE NOV 24 1967

LAUNCH DATE JUL 21 1967

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DISTANCE 370.838
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.220 GAL -8.05 AZL 60.85 HCA 175.75 SHA 132.02 ECC .20516 INC29.1460 V1 29.310 RP 107.51 LAP 2.07 LOP 113.86 VP 38.257 GAP 5.10 AZP 119.08 TAL 215.01 TAP 30.77 RCA 104.93 APO 159.10 V2 35.248 RC 119.197 GL 62.46 GP -77.38 ZAL 104.40 ZAP 99.72 ETS 245.20 ZAE 84.72 ETE 165.15 ZAC 116.60 ETC 273.47 CLP 140.58
   PLANETOCENTRIC CONIC
   C3 219.173 VHL 14.804 DLA 56.04 RAL 214.45 RAD 6571.3 VEL 18.452 PTH 3.04 VHP 20.562 DPA -53.61 RAP 89.78 ECC 4.6070 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 19 9 40 4878.52
4 21 46 3259.49
                                                                                              34.28 20 30 58
                                                                                                                           4278.5
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                                                   -7.33
                                                                             119.49
                                                                232.83
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      140.61
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      140.61
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                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 2366.2 SCR 2388.6 SC3 56.2
RRT -.9488 RRF -.9471 RTF ..9994
SCB 3362.1 R23 -.1652 R13 -.9857
                                                                                                                       ST 1669.4 SR 2094.8 SS 807.4
    TOE 4.0941 TRA 2.5290 TC3 -.0455 BAU
                                                      .1542
                                                                                                                       CRT -.9891 CRS .9880 CST-1.0000
LSA 2790.0 MSA 206.9 SSA 1.1
EL1 2671.7 EL2 192.5 ALF 128.48
   RDE-5.3321 RRA-1.7324 RC3 -.0264 FAU .00143
FOE 1.1117 FRA .7046 FC3 -.0056 BSP 9844
                                                                    SG1 3318.8 SG2 538.0 THA 134.72
    BOE 6.7226 BRA 3.0654 BC3 .0526 FSP
                                                     -180
                                                                                                                                    ARRIVAL DATE NOV 26 1967
                                                                         FLIGHT TIME 128.00
LAUNCH DATE JUL 21 1967
                                                                        DISTANCE 375.553
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 27.159 GAL -7.54 AZL 11.84 HCA 177.74 SMA 131.58 ECC .20225 INC78.1549 V1 29.310 RP 107.50 LAP 2.22 LOP 117.11 VP 38.217 GAP 5.02 AZP 166.15 TAL 212.93 TAP 30.66 RCA 104.97 APO 158.19 V2 35.252 RC 121.426 GL 47.64 GP -52.04 ZAL 95.53 ZAP 94.09 ETS 189.55 ZAE 54.81 ETE 114.73 ZAC 124.35 ETC 207.38 CLP 96.67
   PLANETOCENTRIC CONIC
    C31271.796 VHL 35.662 DLA 36.09 RAL 218.12 RAD 6573.1 VEL 37.324 PTH 3.54 VHP 47.652 DPA -37.16 RAP 54.31 ECC21.9305 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 21 9 34 4748.75
2 51 10 3680.77
21 9 34 4748.75
2 51 10 3680.77
21 9 34 4748.75
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      113.36
                                                                                                 53.91 22 28 43
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                                                                                                                                             -4.07
                                                                                                                                                           206.77
                                                      .63
                                                                 212.82
                                                                              129.00
        66.62
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                             -4.06
                                                                                                                                                           126.57
                                                                                                                             3080.8
                    2 51 10
                                                                 132.63
                                  3680.77
                                                      . 65
      113.38
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 673.9 SR 1544.7 SS 1210.8

CRT .9388 CRS .9985 CST .9188

LSA 2061.4 MSA 238.8 SSA .9

EL1 1671.6 EL2 214.4 ALF 67.33
                                                                     SGT 843.8 SGR 2725.7 SG3 48.1
    TOE-4.1921 TRA -.2559 TC3 -.0709 BAU 3.4368
                                                                     RRT .7594 RRF -.9980 RTF -.7179
    RDE-8.9458 RRA-9.4649 RC3 -.1893 FAU-.05557
    FOE 1.6645 FRA 2.0475 FC3 .0378 BSP 7615
BOE 9.8793 BRA 9.4684 BC3 .2021 FSP -138
                                                                     SG8 2853.3 R23 -.1078 R13 -.9941
                                                                     SG1 2803.0 SG2 533.9 THA 76.26
                                                                                                                                   ARRIVAL DATE NOV 28 1967
                                                                        FLIGHT TIME 130.00
LAUNCH DATE JUL 21 1967
                                                                        DISTANCE 384.304
   RL 152.00 LAL .00 LOL 297.57 VL 27.097 GAL -7.84 A7L 130.32 MCA 183.65 SMA 131.15 ECC .20838 INC40.3143 VI 29.310 RP 107.49 LAP 2.36 LOP 120.35 VP 38.176 GAP 6.09 AZP 49.74 TAL 213.04 TAP 36.69 RCA 103.82 APO 158.47 V2 35.255 RC 123.648 GL -61.24 GP 74.01 ZAL 100.37 ZAP 99.73 ETS 154.93 ZAE 78.77 ETE 231.58 ZAC 91.09 ETC 118.30 CLP 127.86
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 392.508 VHL 19.812 DLA -55.39 RAL 147.45 RAD 6572.1 VEL 22.667 PTH 3.26 VHP 24.211 DPA 77.10 RAP 314.80 ECC 7.4597
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PQ CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             145.32 3 24 51
145.32 12 1 58
145.32 3 24 51
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145.32 3 24 51
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       139.81
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 470.3 SR 2662.6 SS 1174.4
CRT .9241 CRS -.9985 CST -.9437
LSA 2942.1 MSA 183.6 SSA 1.2
                                                                     SGT 519.1 SGR 3441.4 SG3 57.4
RRT .3803 RRF .9910 RTF .4976
SGB 3480.3 R23 -.1225 R13 .9920
    TOE-1.6103 TRA .4290 TC3 -.0176 BAU .7235
    RDE-8.9155 RRA-4.3488 RC3 .1367 FAU-.00759
FDE-1.9036 FRA -.7200 FC3 .0167 BSP 10033
BDE 9.0598 BRA 4.3699 BC3 .1379 FSP -171
                                                                                                                        ELI 2698.0 ELZ 177.3 ALF 80.69
                                                                     SG1 3447.2 SG2 479.3 THA 86.65
                                                                                                                                    ARRIVAL DATE NOV 30 1967
                                                                         FLIGHT TIME 132.00
LAUNCH DATE JUL 21 1967
                                                                         DISTANCE 389.913
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 27.035 GAL -7.50 A7L 112.51 HCA 186.52 SHA 130.71 ECC .20761 INC22.5099 V1 29.310 RP 107.48 LAP 2.49 LOP 123.60 VP 36.134 GAP 6.26 A7P 67.62 TAL 211.43 TAP 37.96 RCA 103.57 APO 157.85 V2 35.257 RC 125.861 GL -61.05 GP 72.09 ZAL 106.83 ZAP 107.85 ETS 92.94 ZAE 94.46 ETE 171.76 ZAC 89.10 ETC 56.53 CLP-175.27
   PLANETOCENTRIC CONIC
    C3 137.521 VHL 11.727 DLA -50.54 RAL 138.75 RAD 6570.5 VEL 16.089 PTH 2.83 VHP 13.673 DPA 77.22 RAP 232.15 ECC 3.2632
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2356.1 SR 631.3 SS 836.7

CRT .9337 CRS -.9049 CST -.9973

LSA 2568.3 HSA 232.0 SSA 1.4
                                                                      SGT 3411.0 SGR 1434.3 563 80.3
     TDE-4.5627 TRA-3.3058 TC3 -.1933 BAU .3586
                                                                    RRT .9271 RRF .8628 RTF .9886
SGB 3700.3 R23 -.1968 R13 .9794
     ROE -.9917 RRA-1.7541 RC3 -.0262 FAU .01300
     FOE-1.4023 FRA -. 7777 FC3 -. 0819 BSP 11335
                                                                                                                         EL1 2429.3 EL2 219.2 ALF 14.16
     BOE 4.6693 BRA 3.7424 BC3 .1950 FSP -255
                                                                      SG1 3666.3 SG2 500.3 THA 21.72
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FLIGHT TIME 126.00

JPL TM 33-99

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ARRIVAL DATE DEC 2 1967
LAUNCH DATE JUL 21 1967
                                                                            FLIGHT TIME 134.00
                                                                            DISTANCE 395.752
   HELIOCENTRIC CONIC
    RL 152:00 LAL .00 LOL 297.57 VL 26.972 GAL -7.19 AZL 105.84 HCA 189.64 SMA 130.28 ECC .20749 INC15.8395 VI 29.310 RP 107.48 LAP 2.62 LOP 126.85 VP 38.091 GAP 6.50 AZP 74.37 TAL 209.93 TAP 39.57 RCA 103.25 APO 157.31 VZ 35.258 RC 128.066 GL -56.57 GP 62.45 ZAL 111.78 ZAP 115.82 ETS 70.84 ZAE 104.01 ETE 152.96 ZAC 89.91 ETC 34.67 CLP-160.34
   PLANETOCENTRIC CONIC
    C3 76.606 VML 8.753 DLA -45.22 RAL 139.15 RAD 6569.5 VEL 14.070 PTH 2.57 VMP 9.941 DPA 68.76 RAP 202.74 ECC 2.2607 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  32.84
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   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 3776.0 SGR 473.0 SG3 109.5
RRT .1816 RRF -.0755 RTF .9640
                                                                                                                               ST 2276.5 SR - 326.9 SS 792.7
    TDE-3.2016 TRA-3.1856 TC3 -.5995 BAU .6152
                                                                                                                             CRT -.7454 CRS .8391 CST -.9881
LSA 2420.6 MSA 241.9 SSA 2.3
EL1 2289.6 EL2 216.6 ALF 173.84
     RDE .4726 RRA -.3786 RC3 .0374 FAU .02492
                                                                        SGB 3805.6 R23 -.2575 R13 .9632
SG1 3777.0 SG2 465.1 THA 1.32
    FOE-1.3673 FRA -.8073 FC3 -.2816 BSP 11663
BOE 3.2363 BRA 3.2080 BC3 .6007 FSP -350
                                                                                                                                           APRIVAL DATE DEC 4 1967
LAUNCH DATE JUL 21 1967
                                                                             FLIGHT TIME 136.00
   HELIOCENTRIC CONIC
                                                                             DISTANCE 401.644
    RL 152.00 LAL .00 LOL 297.57 VL 26.910 GAL -6.90 AZL 102.43 MCA 192.82 SMA 129.85 ECC .20762 INC12.4298 V1 29.310 RP 107.48 LAP 2.74 LOP 130.10 VP 38.047 GAP 6.75 AZP 77.87 TAL 208.44 TAP 41.25 RCA 102.89 APO 156.81 V2 35.259 RC 130.261 GL -52.14 GP 53.69 ZAL 115.19 ZAP 122.93 ETS 63.17 ZAE 110.77 ETE 149.57 ZAC 90.90 ETC 27.27 CLP-156.62
   PLANETOCENTRIC CONIC
    C3 53.053 WHL 7.284 DLA -40.97 RAL 141.26 RAD 6568.9 VEL 13.207 PTH 2.41 VHP 8.239 DPA 60.44 RAP 191.93 ECC 1.8731 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      3 27 44 1776.53
10 19 49 5781.83
                                                                                                  127.33
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10 19 49 5781.83
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10 19 49 5781.83
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127.32 11 56 11
        59.06
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                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        RRT - .4532 RRF - .6986 RTF .9475
SGB 3895.7 R23 .2960 R13 - .9494
SGI 3872.2 SGZ 426.9 THA 176.74
     TOE-2.5030 TRA-2.8613 TC3-1.0146 BAU .7237
                                                                                                                               ST 2162.9 SR 444.7 SS 792.4
    ROE .5643 RRA -.0861 RC3 .1087 FAU .03426
FOE-1.3780 FRA -.8071 FC3 -.5590 BSP 11968
BOE 2.5658 BRA 2.8626 BC3 1.0204 FSP -443
                                                                                                                               CRT -.8838 CRS .9584 CST -.9805
                                                                                                                               LSA 2333.3 MSA 244.7 SSA
                                                                                                                                                                      3.1
                                                                                                                               EL1 2198.7 EL2 204.7 ALF 169.61
LAUNCH DATE JUL 21 1967
                                                                            FLIGHT TIME 138.00
                                                                                                                                          ARRIVAL DATE DEC 6 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 407.549
    RL 152.00 LAL .00 LOL 297.57 VL 26.847 GAL -6.60 AZL 100.36 MCA 196.03 SMA 129.42 ECC .20792 INC10.3628 VI 29.310 RP 107.48 LAP 2.85 LOP 133.35 VP 38.003 GAP 7.01 AZP 80.03 TAL 206.94 TAP 42.96 RCA 102.51 APO 156.33 VZ 35.259 RC 132.447 GL -48.37 GP 46.38 ZAL 117.40 ZAP 128.99 ETS 58.95 ZAE 115.68 ETE 150.10 ZAC 91.51 ETC 23.39 CLP-155.79
   PLANETOCENTRIC CONIC
    C3 41.192 VHL 6.418 DLA -37.71 RAL 148.72 RAD 6568.6 VEL 12.750 PTH 2.32 VHP 7.358 DPA 53.17 RAP 186.89 ECC 1.6779
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT 'INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
63.97 4 0 40 1647.19 19.39 21.33 26.62 123.00 4 28 7 1047.2 23.59 14.43
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123.00 11 42 53
123.00 4 28 7
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123.00 11 42 53
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                                                                                     26.64
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 3954.5 SGR 488.8 SG3 160.9

RRT -.5972 RRF -.8190 RTF .9362

SGB 3984.6 R23 .3171 R13 -.9386

SGI 3965.3 SG2 391.0 THA 175.74
                                                                                                                              ST 2094.0 SR 450.4 SS 792.1
CRT -.9016 CRS .9756 CST -.9745
LSA 2270.4 MSA 245.7 SSA 4.0
     TOE-2.1244 TRA-2.6176 TC3-1.4185 BAU .7854
    RDE .5045 RRA -.0134 RC3 .1476 FAU .04114
FDE-1.3644 FRA -.7694 FC3 -.8647 BSP 12265
     BOE 2.1834 BRA 2.6176 BC3 1.4262 FSP -519
                                                                                                                               EL1 2133.3 EL2 191.2 ALF 168.93
                                                                                                                                          ARRIVAL DATE DEC 8 1967
LAUNCH DATE JUL 21 1967
                                                                             FLIGHT TIME 140.00
                                                                            DISTANCE 413.454
    RL 152.00 LAL .00 LOL 297.57 VL 26.785 GAL -6.29 AZL 98.97 HCA 199.25 SMA 129.00 ECC .20834 INC 8.9719 VI 29.310 RP 107.48 LAP 2.95 LOP 136.60 VP 37.958 GAP 7.27 AZP 81.52 TAL 205.43 TAP 44.68 RCA 102.13 APO 155.88 VZ 35.258 RC 134.624 GL -45.26 GP 40.39 ZAL 118.66 ZAP 134.08 ETS 55.95 ZAE 119.24 ETE 151.89 ZAC 91.64 ETC 20.78 CLP-155.98
   PLANETOCENTRIC CONIC
    C3 34.167 VHL 5.845 DLA -35.27 RAL 146.23 RAD 6568.3 VEL 12.471 PTH 2.26 VHP 6.872 DPA 46.99 RAP 184.40 ECC 1.5623
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.04 4 32 28 1535.48 19.88 12.66 25.46 119.75 4 58 3 935.5 23.68 5.50
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                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 4046.3 SGR 466.5 SG3 177.5
                                                                                                                             ST 2050.8 SR 428.1 SS 785.2
CRT -.9056 CRS .9819 CST -.9695
    TDE-1.8918 TRA-2.4250 TC3-1.8059 BAU .8281
                                                                        RRT -.6331 RRF -.8439 RTF .9278
SGB 4073.1 R23 .3253 R13 -.9299
SG1 4057.1 SG2 360.1 THA 175.79
    RDE .4367 RRA .0029 RC3 .1585 FAU .04566
    FDE-1.3237 FRA -.7016 FC3-1.1570 BSP 12546
BDE 1.9416 BRA 2.4250 BC3 1.8128 FSP -572
                                                                                                                              LSA 2223.8 MSA 245.7 SSA 5.0
                                                                                                                               EL1 2087.4 EL2 178.4 ALF 169.21
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ARRIVAL DATE DEC 10 1967

LAUNCH DATE JUL 21 1967

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DISTANCE 419.353
   HELIOCENTRIC CONIC
     RL 152.00 LAL .00 LOL 297.57 VL 26.723 CAL -5.97 AZL 97.97 MCA 202.47 SMA 128.59 ECC .20890 INC 7.9676 V1 29.310 RP 107.48 LAP 3.04 LOP 139.85 VP 37.913 CAP 7.53 AZP 82.63 TAL 203.90 TAP 46.38 RCA 101.72 APO 155.45 V2 35.256 RC 136.791 GL -42.68 GP 35.50 ZAL 119.19 ZAP 138.35 ETS 53.55 ZAE 121.82 ETE 154.05 ZAC 91.31 ETC 18.79 CLP-156.61
    PLANETOCENTRIC CONIC
     C3 29.528 VHL 5.434 DLA -33.45 RAL 148.75 RAD 6568.2 VEL 12.284 PTH 2.21 VHP 6.600 DPA 41.74 RAP 183.28 ECC 1.4860
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.39. 5 2 30 1438.03 20.11 5.17 25.08 117.32 5 26 28 838.0 23.60 357.83
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117.32 5 26 28
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113.70 12 20 34
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         110.00
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                                              5636.33
                                                                        25.38
                                                                                             264.09
                                                                                                                   27.81
                           10 46 37
         110.00
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 4147.3 SGR 437.1 SG3 189.3
RRT -.6378 RRF -.8394 RTF .9217
SGB 4170.2 R23 .3216 R13 -.9235
SGI 4156.7 SG2 335.9 THA 176.13
                                                                                                                                                                              ST 2030.2 SR 404.5 SS 777.1
CRT -.9080 CRS .9856 CST -.9656
     TOE-1.7435 TRA-2.2649 TC3-2.1828 BAU .8638
     ROE .3836 RRA .0054 RC3 .1525 FAU .04847
FOE-1.2723 FRA -.6205 FC3-1.4211 BSP 12908
                                                                                                                                                                             LSA 2197.6 MSA 244.9 SSA 6.1
                                                                                                                                                                              EL1 2063.4 EL2 166.8 ALF 169.68
     BOE 1.7852 BRA 2.2649 BC3 2.1882 FSP -614
                                                                                                                                                                                               ARRIVAL DATE DEC 12 1967
                                                                                                         FLIGHT TIME 144.00
LAUNCH DATE JUL 21 1967
                                                                                                         DISTANCE 425.241
   HELIOCENTRIC CONIC
     RL 152.00 LAL .00 LOL 297.57 VL 26.660 GAL -5.65 AZL 97.20 HCA 205.71 SHA 128.17 ECC .20958 INC 7.2044 VI 29.310 RP 107.49 LAP 3.12 LOP 143.10 VP 37.867 GAP 7.79 AZP 83.50 TAL 202.37 TAP 48.07 RCA 101.31 APO 155.04 V2 35.254
     RC 138.949 GL -40.53 GP 31.49 ZAL 119.15 ZAP 141.95 ETS 51.55 ZAE 123.69 ETE 156.22 ZAC 90.62 ETC 17.20 CLP-157.44
     C3 26.220 VHL 5.121 OLA -32.13 RAL 151.29 RAD 6568.1 VEL 12.149 PTH 2.18 VHP 6.454 OPA 37.27 RAP 182.98 ECC 1.4315 LNON AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.15 5 30 24 1353.38 20.25 358.74 25.30 115.49 5 52 58 753.4 23.51 351.28 105.85 9 37 9 5851.15 20.26 278.10 25.31 115.48 11 14 40 5251.1 23.52 270.65 74.15 5 30 24 1353.38 20.25 358.74 25.30 115.49 5 52 58 753.4 23.51 351.28 105.85 9 37 9 5851.15 20.26 278.10 25.31 115.48 11 14 40 5251.1 23.52 270.65 105.85 9 37 9 5851.15 20.26 278.10 25.31 115.48 11 14 40 5251.1 23.52 270.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 20.65 110.00 8 34 5 786 57 12.04 310.48 20.65 110.00 8 34 5 786 57 12.04 310.48 20.65 110.00 8 34 5 786 57 12.04 310.48 20 60 100.24 8 46 47 12.04 310.00 8 34 5 786 57 12.04 310.48 20.65 110.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.04 310.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 34 5 786 57 12.00 8 3
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         110.00
                                                                                                    MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                   RRT -.6350 RRF -.8228 RTF ..9187
SGB 4294.6 R23 ..3057 R13 -.9201
SGI 4282.7 SGZ 319.1 THA 176.46
                                                                                                                                                                               ST 2038.4 SR 388.1 SS 776.0
CRT -.9127 CRS .9887 CST -.9632
      TDE-1.6564 TRA-2.1314 TC3-2.5661 BAU .9009
      RDE .3469 RRA .0073 RC3 .1400 FAU .05041
                                                                                                                                                                               ESA 2201.9 MSA 243.3 SSA 7.2
      FOE-1.2279 FRA -.5434 FC3-1.6645 BSP 13547
                                                                                                                                                                               EL1 2069.1 EL2 156.3 ALF 170.08
      BDE 1.6923 BRA 2.1314 BC3 2.5699 FSP -667
                                                                                                                                                                                             ARRIVAL DATE DEC 14 1967
                                                                                                         FLIGHT TIME 146.00
LAUNCH CATE : JUL 21 1967
     RL 152.00 LAL .00 LOL 297.57 VL 26.599 GAL -5.32 AZL 96.60 MCA 208.94 SMA 127.77 ECC .21038 INC 6.6017 V1 29.310
RP 107.50 LAP 3.19 LOP 146.35 VP 37.820 GAP 8.05 AZP 84.22 TAL 200.81 TAP 49.75 RCA 100.89 APO 154.65 V2 35.251
RC 141.095 GL -38.69 GP 28.19 ZAL 118.63 ZAP 145.01 ETS 49.86 ZAE 125.05 ETE 158.25 ZAC 89.63 ETC 15.87 CLP-158.36
                                                                                                        DISTANCE 431.123
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 23.724 VHL 4.871 DLA -31.20 RAL 153.87 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.385 OPA 33.40 RAP 183.22 ECC 1.3904
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.32 5 55 40 1281.86 20.39 353.39 25.98 114.14 6 17 1 681.9 23.48 345.85 103.68 9 32 29 5873.40 20.41 279.86 25.99 114.13 11 10 22 5273.4 23.49 272.32 76.32 5 55 40 1281.86 20.39 353.39 25.98 114.14 6 17 1 681.9 23.48 345.85
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                                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                             ST 2010.9 SR 367.0 SS 747.4

CRT -.9146 CRS .9913 CST -.9592

LSA 2163.1 MSA 240.4 SSA 8.4
                                                                                                   SGT 4304.7 SGR 361.6 SG3 197.3
RRT -.5895 RRF -.7761 RTF .9101
SGB 4321.6 R23 .2931 R13 -.9112
SGI 4310.6 SG2 307.8 THA 176.99
      TOE-1.5628 TRA-1.9645 TC3-2.8765 BAU .9129
      RDE .3120 RRA .0002 RC3 .1073 FAU .04936
FDE-1.1413 FRA -.4206 FC3-1.8011 BSP 13186
BDE 1.5937 BRA 1.9645 BC5 2.8785 FSP -622
                                                                                                                                                                              EL1 2038.9 EL2 146.3 ALF 170.47
                                                                                                                                                                                               ARRIVAL DATE DEC 16 1967
                                                                                                          FLIGHT TIME 148.00
LAUNCH DATE JUL 21 1967
                                                                                                        DISTANCE 436.991
     RL 152.00 LAL .00 LOL 297.57 VL 26.537 GAL -4.97 AZL 96.11 MCA 212.18 SMA 127.37 ECC .21131 INC 6.1108 V1 29.310 RP 107.51 LAP 3.25 LOP 149.60 VP 37.773 GAP 8.30 AZP 84.82 TAL 199.25 TAP 51.43 RCA 100.45 APO 154.28 V2 35.247 RC 143.232 GL -37.10 GP 25.44 ZAL 117.72 ZAP 147.66 ETS 48.45 ZAE 126.05 ETE 160.09 ZAC 88.41 ETC 14.75 CLP-159.33
     PLANETOCENTRIC CONIC
      C3 21.766 VHL 4.665 DLA -30.58 RAL 156.51 RAD 6567.9 VEL 11.964 PTH 2.13 VMP 6.368 DPA 30.02 RAP 183.85 ECC 1.3582
      LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.95 6 17 52 1224.07 20.57 349.13 27.05 113.13 6 38 16 624.1 23.53 341.53
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12 22 2 5355.76
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                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 4598.0 SGR 366.6 SG3 199.0
RRT - .5614 RRF - .7333 RTF .9067
SGB 4413.2 R23 .2681 R13 - .9075
SG1 4402.8 SG2 303.1 THA 177.31
                                                                                                                                                                              ST 2028.6 SR 358.5 SS 739.5
CRT -.9223 CRS .9940 CST -.9579
LSA 2175.9 MSA 236.6 SSA 9.6
       TOE-1.5222 TRA-1.8286 TC3-3.2230 BAU .9382
      RDE .2919 RRA .0010 RC3 .0825 FAU .04894
FDE-1.0875 FRA -.3288 FC3-1.9468 BSP 13507
BDE 1.5499 BRA 1.8286 BC3 3.2240 FSP -630
                                                                                                                                                                              EL1 2055.5 EL2 136.8 ALF 170.70
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 18 1967

LAUNCH DATE JUL 21 1967 HELIOCENTRIC CONIC DISTANCE 442.845 RL 152.00 LAL .00 LOL 297.57 VL 26.476 GAL -4.62 AZL 95.70 HCA 215.42 SHA 126.97 ECC .21238 INC 5.7011 V1 29.310 RP 107.53 LAP 3.30 LOP 152.85 VP 37.726 GAP 8.56 AZP 85.35 TAL 197.67 TAP 53.08 RCA 100.00 APO 153.94 V2 35.243 RC 145.356 GL -35.70 GP 23.13 7AL 116.46 ZAP 149.98 ETS 47.27 ZAE 126.79 ETE 161.73 ZAC 86.99 ETC 13.78 CLP-160.31 PLANETOCENTRIC CONIC C3 20.186 VHL 4.493 DLA -30.21 RAL 159.24 RAD 6567.8 VEL 11.898 PTH 2.11 VMP 6.387 DPA 27.03 RAP 184.75 ECC 1.3322 LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 28.46 112.40 6 56 16 23.67 20.82 346.03 581.2 6 36 35 1181.16 296.19 303.85 28.47 112.39 9 44 35 8.0 23.66 101.00 9 34 27 608.01 20.83 112.40 6 56 16 112.39 9 44 35 122.78 8 44 57 102.25 14 7 20 338.38 23.67 79.00 6 36 35 1181.16 20.82 346.03 28.46 581.2 608.01 101.00 9 34 27 20.83 303.85 28.47 8.0 23.68 296.19 22.76 206.6 14.54 306.56 110.00 8 31 31 806.56 10.29 313.09 232.95 5318.64 4718.6 33.52 110.00 12 38 41 32-17 241.92 32.41 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4495.3 SGR 358.7 SG3 199.6 RRT -.5334 RRF -.6876 RTF .9044 SGB 4509.5 R23 .2401 R13 -.9051 SGI 4499.3 SGZ 303.1 THA 177.55 ST 2060.6 SR 354.8 SS 735.4 CRT -.9319 CRS .9964 CST -.9576 TOE-1.5031 TRA-1.6941 TC3-3.5687 BAU .9632 ROE .2782 RRA .0033 RC3 .0582 FAU .04816 FOE-1.0407 FRA -.2422 FC3-2.0657 BSP 13879 BDE 1.5286 BRA 1.6941 BC3 3.5692 FSP -637 LSA 2204.3 MSA 231.6 SSA 10.8 EL1 2087.0 EL2 127.0 ALF 170.85 ARRIVAL DATE DEC 20 1967 DISTANCE 448.686 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 26.415 GAL -4.26 AZL 95.35 MCA 218.65 SMA 126.58 ECC .21359 INC 5.3518 V1 29.310 RP 107.54 LAP 3.34 LOP 156.10 VP 37.679 GAP 8.82 AZP 85.82 TAL 196.08 TAP 54.73 RCA 99.54 APO 153.62 V2 35.237 RC 147.469 GL -34.43 GP 21.18 ZAL 114.91 ZAP 152.03 ETS 46.32 ZAE 127.35 ETE 163.17 ZAC 85.43 ETC 12.95 CLP-161.30 PLANETOCENTRIC CONIC C3 18.886 WHL 4.346 OLA -30.05 RAL 162.09 RAD 6567.8 VEL 11.843 PTH 2.10 VMP 6.431 DPA 24.35 RAP 185.86 ECC 1.3108 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111,89 1153.73 21.12 344.12 30.19 7 10 49 553.7 23.90 336.42 79.49 6 51 35 303.67 30.20 111.88 9 52 11 3.9 23.91 295.97 100.51 9 42 7 603.90 21.13 1153.73 603.90 798.83 111.89 7 10 11 111.88 9 52 11 122.70 8 53 45 111.89 7 10 49 553.7 23.90 336.42 79.49 6 51 35 21.12 344.12 30.19 30.20 3.9 23.91 295.97 100.51 9 42 7 21.13 303.67 8 40 26 24.55 198.8 14.81 306.13 110.00 10.57 312.67 101.24 14 20 41 33.98 12 52 26 5294.84 4694.8 33.70 231.12 110.00 32.50 240.14 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2098.6 SR 353.9 SS 730.8 CRT -.9425 CRS .9981 CST -.9579 SGT 4581.2 SGR 355.2 SG3 198.3 RRT -.5030 RRF -.6392 RTF .9020 TOE-1.4960 TRA-1.5534 TC3-3.9016 BAU .9852 RDE .2685 RRA .0059 RC3 .0337 FAU .04689 SGB 4595.0 R23 .2124 R13 -.9025 SG1 4584.7 SG2 306.8 THA 177.76 FOE -.9953 FRA -.1557 FC3-2.1492 BSP 14166 LSA 2238.9 MSA 225.5 SSA 12.0 EL1 2125.0 EL2 116.8 ALF 170.94 BOE 1.5199 BRA 1.5534 BC3 3.9017 FSP -633 ARRIVAL DATE DEC 22-1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 21 1967 DISTANCE 454.512 HELIOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 26.355 GAL -3.88 AZL 95.05 MCA ZZ1.89 SMA 126.20 ECC .21495 INC 5.0487 V1 29.310 RP 107.56 LAP 3.37 LOP 159.35 VP 37.631 GAP 9.09 AZP 86.24 TAL 194.48 TAP 56.37 RCA 99.07 APO 153.33 V2 35.231 RC 149.570 GL -33.25 GP 19.51 ZAL 113.07 ZAP 153.87 ETS 45.57 ZAE 127.77 ETE 164.43 ZAC 83.74 ETC 12.22 CLP-162.27 PLANETOCENTRIC CONIC C3 17.807 VHL 4.220 DLA -30.06 RAL 165.06 RAD 6567.7 VEL 11.798 PTH 2.09 VHP 6.494 DPA 21.92 RAP 187.14 ECC 1.2931 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 111.55 7 22 14 111.55 11 32 9 111.55 7 22 14 111.55 12 32 9 111.55 12 32 9 123 54 9 5 30 335.56 540.6 24.21 32.23 21.47 343.30 79.46 7 3 13 1140.65 5277.5 24.22 272.91 5877.48 280.65 32.24 100.54 9 54 11 21.48 540.6 24.21 335.56 7 3 13 1140.65 9 54 11 5877.48 21.47 32.23 343.30 79.46 5277.5 24.22 272.91 280.65 32.24 100.54 21.48 784. 5281.53 122.54 9 5 30 100.68 14 32 11 184.6 15.31 305.33 110.00 26.73 8 52 26 11.09 311.90 230.09 4681.5 33.79 239.14 35.86 110.00 13 4 9 32.67 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4665.6 SCR 356.3 SG3 196.3 RRT -.4756 RRF -.5933 RTF .9002 SCB 4679.2 R23 .1855 R13 -.9007 SCI 4668.7 SG2 313.2 THA 177.91 ST 2146.6 SR 355.9 SS 728.1 CRT -.9535 CRS .9990 CST -.9590 TOE-1.5016 TRA-1.4086 TC3-4.2272 BAU 1.0064 ROE .2621 RRA .0091 RC3 .0111 FAU .04541 FOE -.9545 FRA -.0736 FC3-2.2075 BSP 14458 LSA 2284.0 MSA 218.3 SSA 13.2 EL1 2173.3 EL2 106.0 ALF 170.99 BOE 1.5243 BRA 1.4086 BC3 4.2272 FSP -628 FLIGHT TIME 156.00 ARRIVAL DATE DEC. 24 1967 LAUNCH DATE JUL 21 1967 DISTANCE 460.324 HELLOCENTRIC CONIC RL 152.00 LAL .00 LOL 297.57 VL 26.295 GAL -3.50 AZL 94.78 MCA 225.13 SMA 125.82 ECC .21647 INC 4.7817 VI 29.310
RP 107.58 LAP 3.39 LOP 162.60 VP 37.563 GAP 9.35 AZP 86.62 TAL 192.86 TAP 57.99 RCA 98.58 APO 153.06 V2 35.225
RC 151.657 GL -32.14 GP 18.08 ZAL 110.99 ZAP 155.53 ETS 45.02 ZAE 128.09 ETE 165.54 ZAC 81.94 ETC 11.59 CLP-163.23 PLANETOCENTRIC CONIC C3 16.910 WHL 4.112 DLA -30.21 RAL 168.17 RAD 6567.7 VEL 11.760 PTH 2.08 VHP 6.572 DPA 19.68 RAP 188.54 ECC 1.2783 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.02 7 12 18 1139.35 21.87 343.37 34.58 111.38 7 31 17 539.3 24.57 335.59 279.13 34.58 111.36 11 47 33 5254.8 24.59 271.36 21.68 10 9 56 5854.85 100.98 7 31 17 539.3 24.57 335.59 343.37 34.58 111.38 1139.35 79.02 7 12 18 21.87 111.36 11 47 33 122.32 9 19 49 100.48 14 42 20 5254.8 24.59 271.36 34.58 10 9 58 9 7 3 21.88 279.13 5854.85 100.98 11.60 165.3 15.98 304.24 765.30 310.85 29.26 110.00 13 14 23 5276.89 238.79 38.06 4676.9 33.82 229.73 32.73 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2198.0 SR 359.7 SS 724.5 CRT -.9641 CRS .9989 CST -.9603 SGT 4737.1 SGR 360.2 SG3 193.2 TOE-1.5141 TRA-1.2546 TC3-4.5329 BAU 1.0248 RDE .2581 RRA .0121 RC3 -.0100 FAU .04364 FDE -.9148 FRA .0073 FC3-2.2342 BSP 14653 BDE 1.5359 BRA 1.2547 BC3 4.5329 FSP -615 RRT -.4498 RRF -.5499 RTF .8982 LSA 2332.6 MSA 210.1 SSA 14.5 SGB 4750.8 R23 .1613 R13 -.8986 EL1 2225.2 EL2 94.3 ALF 171.02

FLIGHT TIME 150.00

SG1 4739.9 SG2 321.6 THA 178.03

ARRIVAL DATE DEC 26 1967

JPL TM 33-99

LAUNCH DATE JUL 21 1967

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DISTANCE 466.120
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 26.236 GAL -3.10 A7L 94.54 MCA 228.36 SMA 125.45 ECC .21815 INC 4.5433 VI 29.310 RP 107.80 LAP 3.39 LOP 165.85 VP 37.534 GAP 9.62 AZP 86.98 TAL 191.24 TAP 59.61 RCA 98.08 APO 152.82 VZ 35.217 RC 153.730 GL -31.07 GP 16.84 ZAL 108.67 ZAP 157.05 ETS 44.67 ZAE 128.35 ETE 166.51 ZAC 80.06 ETC 11.03 CLP-164.18
   PLANETOCENTRIC CONIC
    C3 16.169 VHL 4.021 OLA -30.46 RAL 171.45 RAD 6567.6 VEL 11.728 PTH 2.07 VMP 6.663 DPA 17.61 RAP 190.06 ECC 1.2661 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.28 7 19 54 1146.40 22.29 344.08 37.22 111.51 7 39 1 546.4 24.99 336.27
                                                                                                   INJ AZMTH INJ TIME
111.31 7 39 1
111.29 12 5 35
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122.03 9 36 24
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                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         RET -.4314 RRF -.5141 RTF .8976
SGB 4830.0 R23 .1386 R13 -.8979
SGI 4818.6 SG2 331.1 THA 178.11
                                                                                                                                 ST 2261.4 SR 365.7 SS 723.8
CRT -.9740 CRS .9976 CST -.9623
LSA 2393.9 MSA 201.2 SSA 15.8
    TOE-1.5382 TRA-1.0977 TC3-4.8315 BAU 1.0444
    RDE .2566 RRA .0155 RC3 -.0272 FAU .04195
FDE -.8811 FRA .0813 FC3-2.2464 BSP 14937
                                                                                                                                 EL1 2289.3 EL2 81.9 ALF 171.04
    BOE 1.5595 BRA 1.0978 BC3 4.8316 FSP
                                                        -607
                                                                                                                                             ARRIVAL DATE DEC 28 1967
                                                                              FLIGHT TIME 160,00
  HELIOCENTRIC CONIC
                                                                             DISTANCE 471.898
   RL 152.00 LAL .00 LOL 297.57 VL 26.177 GAL -2.69 AZL 94.33 MCA 231.60 SMA 125.09 ECC .22001 INC 4.3278 V1 29.310
RP 107.63 LAP 3.39 LOP 169.09 VP 37.486 GAP 9.89 AZP 87.31 TAL 189.61 TAP 61.21 RCA 97.57 APO 152.61 VZ 35.210
RC 155.789 GL -30.01 GP 15.75 ZAL 106.13 ZAP 158.45 ETS 44.50 ZAE 128.55 ETE 167.36 ZAC 78.11 ETC 10.54 CLP-165.10
  PLANETOCENTRIC CONIC
    C3 15.568 VHL 3.946 DLA -30.79 RAL 174.89 RAD 6567.6 VEL 11.703 PTH 2.06 VHP 6.765 DPA 15.68 RAP 191.66 ECC 1.2562 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   111.34
                                                                     345.19
                                                                                      40.17
                                                                                                                    7 46 19
                                                                                                                                      558.8
                                                                                                                                                      25.43
                                                       22.74
        77.38
                     7 27 1 1158.77
                                                                                                      111.32 12 25 26
                                                       22.75
                                                                                                                                      5197.7
                                                                     275.23
                                                                                       40.17
       102.62
                     10 48 48
                                   5797.74
                                                                                       40.17
                                                                                                                    7 46 19
                                                                                                                                       558.8
                                                                                                                                                                      337.36
                                                       22.74
                                                                     345.19
                                                                                                     111.34
        77.38
                      7 27 1
                                   1158.77
                                                                                                     111.32 12 25 26
121.67 9 55 2
100.98 15 0 2
                                   5797.74
                                                                                       40.17
                                                                                                                                     5197.7
                                                                                                                                                                      267.39
                                                       22.75
       102.62
                    10 48 48
                                                                     275.23
                                                                                                                                       115.8
                                                                                                                                                                      301.40
       110.00
                      9 43 6
                                      715.84
                                                       13.58
                                                                     308.13
                                                                                      35.37
                                   5288.67
                                                                                                                                   4688.7
                                                                                                                                                     33.75
                                                                     239.68
                                                                                       43.38
       110.00
                    13 31 53
                                                       32.58
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SGT 4891.6 SGR 375.8 SG3 187.3
RRT -.4173 RRF -.4841 RTF .8975
                                                                                                                                 ST 2330.1 SR 373.2 SS 723.3
CRT -.9824 CRS .9952 CST -.9646
    TDE-1.5689 TRA -.9335 TC3-5.1079 BAU 1.0632
    ROE .2569 RRA .0186 RC3 -.0416 FAU .04020
FOE -.8498 FRA .1516 FC3-2.2357 BSP 15207
BDE 1.5898 BRA .9337 BC3 5.1081 FSP -599
                                                                        SGB 4906.1 R23 .1186 R13 -.8977
SGI 4894.2 SGZ 341.4 THA 178.15
                                                                                                                                LSA 2460.6 HSA 191.9 SSA 17.1
                                                                                                                                 EL1 2358.7 EL2 68.8 ALF 171.05
                                                                                                                                            ARRIVAL DATE DEC 30 1967
                                                                              FLIGHT TIME 162.00
LAUNCH DATE JUL 21 1967
                                                                             DISTANCE 477.659
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 26.118 GAL -2.26 A7L 94.13 HCA 234.83 SNA 124.73 ECC .22205 INC 4.1308 V1 29.310 RP 107.65 LAP 3.38 LOP 172.34 VP 37.437 GAP 10.17 A7P 87.62 TAL 187.97 TAP 62.81 RCA 97.03 APO 152.42 V2 35.201 RC 157.834 GL -28.94 GP 14.80 ZAL 103.39 ZAP 159.74 ETS 44.51 ZAE 128.71 ETE 168.10 ZAC 76.10 ETC 10.11 CLP-166.01
   PLANETOCENTRIC CONIC
    C3 15.098 VHL 3.886 DLA -31.17 RAL 178.50 RAD 6567.6 VEL 11.683 PTH 2.05 VHP 6.876 DPA 13.86 RAP 193.34 ECC 1.2485
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    111.45 7 53 55
111.43 12 46 24
111.45 7 53 55
111.43 12 46 24
121.26 10 15 31
101.60 15 8 7
                                                                                                                                                   25.89
                                                                                                                                     574.2
                                                                                    43.42
                                                                     346.54
        76.39
                      7 34 21 1174.15
                                                       23.18
                                                                     273.22
                                                                                       43.42
                                                                                                                                     5168.6
                                                                                                                                                      25.90
                                                                                                                                                                     265.36
        103.61
                     11 10 16
                                    5768.56
                                                       23.19
                                                                                                                                       574.2
                                                                                                                                                      25.89
                                                                                                                                                                     33A . 68
                                                                                      43.42
                                                                     346.54
        76.39
                      7 34 21 1174.15
                                                       23.18
                                                                     273.22
                                                                                       43.42
                                                                                                                                     5168.6
                                                                                                                                                      25.90
                                                                                                                                                                     265.36
        103.61
                     11 10 16 5768.56
                                                       23.19
                                                                                      38.93
                                                                                                                                       87.5
                                                                                                                                                       18.62
                                                                                                                                                                     200.75
                                                                      306.55
       110.00
                    10 4 4
                                      687,48
                                                       14.59
                     13 39 44 5303.23
                                                                                                                                     4703.2
                                                                                                                                                      33.64
                                                                                                                                                                    231.76
                                                                     240.77
                                                                                       46.50
       110.00
                                                       32.38
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4962.7 SGR 385.5 SG3 184.0
RRT -.4071 RRF -.4597 RTF .8978
SGB 4977.6 R23 .1011 R13 -.8980
SGI 4965.1 SG2 352.0 THA 178.18
                                                                                                                                 ST 2400.4 SR 381.8 SS 722.0
     TOE-1.6037 TRA -.7610 TC3-5.3547 BAU 1.0809
                                                                                                                                 CRT -.9892 CRS .9916 CST -.9669
    RDE .2588 RRA .0210 RC3 -.0529 FAU .03841
FDE -.8199 FRA .2190 FC3-2.2026 BSP 15459
BDE 1.6244 BRA .7612 BC3 5.3550 FSP -589
                                                                                                                                 LSA 2528.9 MSA 182.5 SSA 18.5
                                                                                                                                 EL1 2430.0 EL2 55.3 ALF 171.05
                                                                                                                                             ARRIVAL DATE JAN 1 1968
                                                                              FLIGHT TIME 164.00
LAUNCH DATE JUL 21 1967
                                                                             DISTANCE 483.401
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 26.061 GAL -1.82 AZL 93.95 HCA 238.07 SMA 124.38 ECC .22428 INC 3.9491 VI 29.310 RP 107.68 LAP 3.35 LOP 175.58 VP 37.388 GAP 10.45 AZP 87.91 TAL 186.33 TAP 64.40 RCA 96.48 APO 152.27 V2 35.192 RC 159.863 GL -27.84 GP 13.97 ZAL 100.47 ZAP 160.95 ETS 44.71 ZAE 128.85 ETE 168.76 ZAC 74.04 ETC 9.74 CLP-166.91
   PLANETOCENTRIC CONIC
     C3 14.754 VHL 3.841 DLA -31.58 RAL 182.28 RAD 6567.6 VEL 11.668 PTH
                                                                                                         2.05 VHP 6.997 DPA 12.14 RAP 195.08 ECC 1.2428
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.39 7 42 29 1190.86 23.60 347.98 46.97 111.62 8 2 20 590.9 26.32 340.10
                                                                                                    111.62 8 2 20
111.61 13 8 0
111.62 8 2 20
                                                                                       46.97
                                                                                                                                      5141.5
                                                                                                                                                       26.34
                                                                                                                                                                      263.48
                                                       23.61
                                                                      271.36
                     11 32 18
                                    5741.54
        104.61
                                                                                                                                       590.9
                                                                                                                                                       26.32
                                                                                                                                                                      340.10
                                                                                       46.97
                      7 42 29
                                    1190.86
                                                       23.60
                                                                      347.98
        75.39
                                                                                                      111.61 13 8 0
120.80 10 37 38
102.41 15 16 0
                                                                                                                                      5141.5
                                                                                                                                                       26.34
                                                                                                                                                                      263.48
                                                                                       46.97
                                                       23.61
15.63
                                                                      271.36
                                    5741.54
        104.61
                     11 32 18
                                                                                                                                         58.0
                                                                                                                                                       19.60
                                                                                                                                                                      298.02
                                                                      304.89
                                                                                       42.81
       110.00
                     10 26 40
                                      657.95
                                    5322.45
                                                                                       49.91
                                                                                                                                      4722.5
                                                                                                                                                       33.48
                                                                                                                                                                     233.24
                                                                      242.20
        110.00
                     13 47 18
                                                       32.11
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2470.7 SR 391.2 SS 719.5
CRT -.9941 CRS .9868 CST -.9691
                                                                          SGT 5030.8 SGR 395.8 SG3 180.5
     TOE-1.6414 TRA -.5800 TC3-5.5659 BAU 1.0979
                                                                          RRT - .4005 RRF - .4406 RTF .8986
SGB 5046.4 R23 .0861 R13 - .8988
     RDE .2821 RRA .0227 RC3 -.0610 FAU .03662
FDE -.7909 FRA .2834 FC3-2.1486 BSP 15712
BDE 1.6622 BRA .5805 BC3 5.5663 FSP -579
                                                                                                                                LSA 2597.0 MSA 173.3 SSA 19.8
                                                                                                                                 EL1 2501.1 EL2 41.9 ALF 171.05
                                                                          SG1 5033.3 SG2 362.5 THA 178.19
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FLIGHT TIME 158.00

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FLIGHT TIME 166.00
                                                                                                                                      ARRIVAL DATE JAN 3 1968
LAUNCH DATE JUL 21 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 489.122
    RL 152.00 LAL .00 LOL 297.57 VL 26.004 GAL -1.37 AZL 93.78 MCA 241.30 SMA 124.03 ECC .22673 INC 3.7797 V1 29.310 RP 107.71 LAP 3.31 LOP 178.82 VP 37.340 GAP 10.74 AZP 88.18 TAL 184.68 TAP 65.98 RCA 95.91 APO 152.15 V2 35.183 RC 161.876 GL -26.71 GP 13.22 ZAL 97.39 ZAP 162.07 ETS 45.11 ZAE 128.96 ETE 169.34 ZAC 71.93 ETC 9.41 CLP-167.78
    PLANETOCENTRIC CONIC
     C3 14.534 VHL 3.812 DLA -31.99 RAL 186.22 RAD 6567.6 VEL 11.658 PTH 2.05 VMP 7.126 DPA 10.50 RAP 196.88 ECC 1.2392
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     7 51 47 1207.66
                                                                                50 .A1
                                                                                                111.84 8 11 55
111.83 13 29 47
                                                                                                                                             26.73
        74.45
                                                    23.98
                                                                  349.42
                                                                                                                                607.7
                                                                                                                                                            341.52
                   11 54 29
7 51 47
       105.55
                                   5718.05
                                                     23.99
                                                                  269.74
                                                                                   50.82
                                                                                                                               5118.1
                                                                                                                                               26.74
                                                                                                                                                             261.84
        74.45
                                   1207.66
                                                     23.98
                                                                  349.42
                                                                                   50.81
                                                                                                 111.84
                                                                                                            8 11 55
                                                                                                                                607.7
                                                                                                                                               26.73
                                                                                                                                                             341.52
                                                                                               111.84 8 11 55
111.83 13 29 47
120.29 11 1 3
103.36 15 23 57
                   11 54 29 5718.05
10 50 34 628.31
13 54 52 5345.40
       105.55
                                                     23.99
                                                                  269.74
                                                                                   50.82
                                                                                                                               5118.1
                                                                                                                                               26.74
                                                                                                                                                             261.84
       110.00
                                                     16.65
                                                                  303.20
                                                                                  46.99
                                                                                                                                28.3
                                                                                                                                               20.55
                                                                                                                                                             296.25
                                                                                                                             4745.4
       110.00
                                                                  243.90
                                                                                 53.60
                                                                                                                                              33.27
                                                                                                                                                             235.00
                                                     31.76
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5085.1 SGR 405.8 SG3 176.3
RRT -.3950 RRF -.4240 RTF .8990
SGB 5101.3 R23 .0730 R13 -.8991
SGI 5087.6 SG2 372.6 THA 178.18
                                                                                                                           ST 2530.0 SR 400.7 SS 711.7
CRT -.9972 CRS .9807 CST -.9708
     TOE-1.6756 TRA -.3867 TC3-5.7240 BAU 1.1123
     ROE .2665 RRA .0232 RC3 -.0666 FAU .03472
    FDE -.7586 FRA .3477 FC3-2.0680 BSP 15864
BDE 1.6966 BRA .3874 BC3 5.7244 FSP -564
                                                                                                                           LSA 2653.3 MSA 165.2 SSA 21.1
                                                                                                                           EL1 2561.3 EL2 29.7 ALF 171.03
LAUNCH DATE JUL 21 1967
                                                                          FLIGHT TIME 168.00
                                                                                                                                      ARRIVAL DATE JAN 5 1968
   HELIOCENTRIC CONIC
                                                                         DISTANCE 494.821
    RL 152.00 LAL .00 LOL 297.57 VL 25.947 GAL -.90 AZL 93.62 MCA 244.53 SMA 123.69 ECC .22941 INC 3.6206 V1 29.310
RP 107.74 LAP 3.27 LOP 182.06 VP 37.291 GAP 11.03 AZP 88.44 TAL 183.02 TAP 67.55 RCA 95.32 APO 152.07 V2 35.172
RC 163.875 GL -25.54 GP 12.56 ZAL 94.17 ZAP 163.13 ETS 45.69 ZAE 129.06 ETE 169.85 ZAC 69.78 ETC 9.13 CLP-168.65
   PLANETOCENTRIC CONIC
    C3 14.440 VHL 3.800 DLA -32.38 RAL 190.32 RAD 6567.6 VEL 11.654 PTH 2.05 VHP 7.263 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   8 2 27 1223.88
12 16 28 5698.95
                                                                                                                                                             342.88
        73.60
                                                     24.29
                                                                  350.79
                                                                               54.93
                                                                                                112.10 8 22 51
                                                                                                                                623.9
                                                                                                                                             27.07
                                                                                                           13 51 27
       106.40
                                                     24.30
                                                                  268.42
                                                                                   54.93
                                                                                                                                5099.0
                                                                                                 112.09
                                                                                                                                                27.08
                                                                                                                                                              260.51
                    8 2 27 1223.88
12 16 28 5698.95
                                                                                                 112.10 8 22 51
112.09 13 51 27
119.78 12 53 29
104.39 15 32 16
        73.60
                                                     24.29
                                                                  350.79
                                                                                  54.93
                                                                                                                                 623.9
                                                                                                                                                27.07
                                                                                                                                                              342.88
       106.40
                                                     24.30
                                                                  268.42
                                                                                  54.93
                                                                                                                                5099.0
                                                                                                                                               27.08
                                                                                                                                                              260.51
                   11 15 21 5867.98
14 2 45 5370.89
                                                                                51.46
       110.00
                                                     17.62
                                                                  279.48
                                                                                                                               5288.0
                                                                                                                                                             272.44
       110.00
                                                     31.35
                                                                  245.77
                                                                                  57.55
                                                                                                                               4770.9
                                                                                                                                                33.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SCT 5147.3 SCR 416.1 SC3 172.8

RRT -.3945 RRF -.4138 RTF ..9010

SCB 5164.1 R23 ..0614 R13 -.9011
                                                                                                                          ST 2586.9 SR 411.1 SS 704.2
CRT -.9984 CRS .9737 CST -.9726
    TDE-1.7121 TRA -.1876 TC3-5.8429 BAU 1.1280
    RDE .2725 RRA .0230 RC3 -.0680 FAU .03300
    FDE -.7294 FRA .4068 FC3-1.9784 BSP 16093
                                                                      SGB 5164.1 R23 .0614 R13 -.9011 LSA 2707.6 MSA 158.2 SSA 22.3 SG1 5149.9 SG2 382.2 THA 178.16 EL1 2619.2 EL2 22.7 ALF 170.98
                                                                                                                           LSA 2707.6 MSA 158.2 SSA 22.3
    BOE 1.7336 BRA .1890 BC3 5.8433 FSP -554
                                                                          FLIGHT TIME 170.00
                                                                                                                                     ARRIVAL DATE JAN 7 1968
LAUNCH DATE JUL 21 1967
                                                                         DISTANCE 500.496
    RL 152_DO LAL .00 LOL 297.57 VL 25.891 GAL -.41 AZL 93.47 MCA 247.76 SMA 123.36 ECC .23232 INC 3.4699 VI 29.310
RP 107.78 LAP 3.21 LOP 185.29 VP 37.242 GAP 11.34 AZP 88.69 TAL 181.36 TAP 69.12 RCA 94.70 APO 152.02 VZ 35.162
RC 165.860 GL -24.32 GP 11.98 ZÁL 90.83 ZAP 164.12 ETS 46.49 ZAE 129.15 ETE 170.30 ZAC 67.60 ETC 8.90 CLP-169.49
   PLANETOCENTRIC CONIC
    C3 14.475 VHL 3.805 DLA -32.72 RAL 194.54 RAO 6567.6 VEL 11.656 PTH 2.05 VHP 7.410 DPA
                                                                                                                                 7.43 RAP 200.63 ECC 1.2382
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              8 14 35 1239.04
12 38 1 5684.88
8 14 35 1239.04
                                                                              59.29
        72.88
                                                    24.52
                                                                                                                             639.0
                                                                                                                                            27.53 344.14
                                                                  352.06
                                                                                  59.30
                                                                                                                              5084.9
                                                                                                                                               27.34
                                                                                                                                                             259.53
       107.12
                                                     24.53
                                                                  267.45
                                                                                  59,29
                                                                                                                                639.0
                                                                                                                                               27.33
        72.88
                                                                  352.06
                                                    24.52
                    .e 38 1 5684.88
11 40 25 5862.55
14 11 22 5107
                                                                                                                              5084.9
                                                                                                                                               27.34
                                                                                                                                                             259.53
       107.12
                                                    24.53
                                                                  267.45
                                                                                  59.30
       110.00
                                                    18.47
                                                                  278.00
                                                                                                                              5262.5
                                                                                                                                               22.23
                                                                                                                                                             270.88
                                                                                  56.15
                                                                                                                              4797.4
                                                                                                                                                             238.95
       110.00
                                                    30.88
                                                                  247.70
                                                                                  61:76
                                                                                                                                               32.69
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SCT 5204.9 SCR 426.2 SC3 169.0
RRT -.3956 RRF -.4069 RTF .9028
SCB 5222.3 R23 .0520 R13 -.9029
SCI 5207.7 SC2 391.2 THA 178.13
                                                                                                                          ST 2631.7 SR 421.5 95 693.4

CRT -.9980 CRS ..9654 CST -.9740

LSA 2749.6 MSA 153.3 SSA 23.2

EL1 2665.1 EL2 26.4 ALF 170.92
    TDE-1.7452 TRA .0215 TC3-5.9040 BAU 1.1426
    RDE .2798 RRA .0216 RC3 -.0668 FAU .03127
FDE -.6992 FRA .4652 FC3-1.8700 BSP 16310
BDE 1.7675 BRA .0304 BC3 5.9044 FSP -544
LAUNCH DATE JUL 21 1967
                                                                          FLIGHT TIME 172.00
                                                                                                                                      ARRIVAL DATE JAN 9 1968
                                                                         DISTANCE 506.146
  HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 25.836 GAL .09 AZL 93.33 MCA 250.98 SMA 123.03 ECC .23549 INC 3.3262 V1 29.310 RP 107.81 LAP 3.14 LOP 188.52 VP 37.193 GAP 11.65 AZP 88.92 TAL 179.70 TAP 70.68 RCA 94.06 APO 152.00 V2 35.151 RC 167.829 GL -23.06 GP 11.45 ZAL 87.41 ZAP 165.05 ETS 47.50 ZAE 129.22 ETE 170.70 ZAC 65.39 ETC 8.70 CLP-170.33
   PLANETOCENTRIC CONIC
    C3 14.647 VHL 3.827 DLA -32.99 RAL 198.86 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 7.566 DPA
                                                                                                                                  5.99 RAP 202.56 ECC 1.2411
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   8 28 15 1252.69
12 58 50 5676.48
                                                    24.64
        72.32
                                                                  353.16
                                                                                  63.89
                                                                                                112.66
                                                                                                              8 49 8
                                                                                                                                652.7
                                                                                                                                               27.49
                                                                                                           14 33 26
       107.68
                                                    24:65
                                                                                  63.89
                                                                                                 112.65
                                                                                                                               5076.5
                                                                                                                                               27.50
                                                                                                                                                             258.95
                                                                  266.86
        72.32
                     8 28 15
                                   1252.69
                                                                  353.16
                                                                                                 112.66
                                                                                                              8 49 8
                                                                                                                                652.7
                                                                                                                                                             345.26
                                                    24.64
                                                                                  63.89
                                                                                                                                               27.49
                                                                                                           14 33 26
                   12 58 50
                                                                                                                               5076.5
                                   5676.48
                                                    24.65
                                                                  266.86
                                                                                  63.89
                                                                                                 112.65
                                                                                                                                               27.50
                                                                                                118.87 13 42 19
106.44 15 51 42
      110.00
                   12 4 57
                                   5842.25
                                                    19.14
                                                                  276.81
                                                                                  61.03
                                                                                                                               5242.2
                                                                                                                                               22.85
                                                                                                                                                             269.63
                   14 21 19
                                                                  249.54
                                   5422.96
                                                    30.40
                                                                                  66.19
                                                                                                                              4823.0
                                                                                                                                               32.35
                                                                                                                                                             240.86
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    TOE-1.7597 TRA .2483 TC3-5.8732 BAU 1.1502
RDE .2866 RRA .0182 RC3 -.0676 FAU .02894
FDE -.6540 FRA .5274 FC3-1.7106 BSP 16229
                                                                     SGT 5229.4 SGR 433.5 SG3 163.0 ST 2641.2 SR 429.3 SS 666.6

RRT - .3898 RRF - .3935 RTF .9004 CRT - .9958 CRS .9534 CST - .9736

SGB 5247.3 R23 .0440 R13 - .9005 LSA 2753.4 MSA 152.2 SSA 23.9
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SG1 5232.1 SG2 399.0 THA 178.14

EL1 2675.6 EL2 38.6 ALF 170.80

BOE 1.7829 BRA .2490 BC3 5.8736 FSP -510

ARRIVAL DATE, JAN 11 1968

LAUNCH DATE JUL 21 1967

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DISTANCE 511.767
    HELIOCENTRIC CONIC
     RL 152.00 LAL .00 LOL 297.57 VL 25.781 GAL .62 AZL 93.19 MCA 254.21 SMA 122.71 ECC .23894 INC 3.1879 V1 29.310 RP 107.84 LAP 3.07 LOP 191.76 VP 37.145 GAP 11.97 AZP 89.13 TAL 178.03 TAP 72.24 RCA 93.39 APO 152.03 V2 35.139 RC 169.783 GL -21.75 GP 10.97 ZAL 83.94 ZAP 165.94 ETS 48.76 ZAE 129.29 ETE 171.06 ZAC 63.16 ETC 8.55 CLP-171.15
    PLANETOCENTRIC CONIC
                                                                                                                                                                                         4.59 RAP 204.53 ECC 1.2463
      C3 14.964 VML 3.868 DLA -33.18 RAL 203.24 RAD 6567.6 VEL 11.677 PTH
                                                                                                                                              2.05 VHP 7.731 DPA
     ENCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                       27.53
                                                                                                                                     112.94
                            8 43 21 1264.83
13 18 42 5673.89
                                                                          24.64
                                                                                              354.10
                                                                                                                68.66
                                                                                                                                                           9 4 26
                                                                                                                                                                                     664.8
          71.95
                                                                                                                                                                                                                               258.77
                                                                                                                                                                                     5073.9
                                                                                                                                          112.93
                                                                                                                                                          14 53 16
                                                                                                                                                                                                            27.54
                                                                                              266.66
                                                                                                                     68.66
                                                                           24.66
         108.05
                           8 43 21 1264.83
13 18 42 5673.89
12 27 55 5829.91
14 33 19 5444.85
                                                                                                                                                                                                            27.53
                                                                                                                                                                                                                               346.21
                                                                                              354.10
                                                                                                                     68.66
                                                                                                                                          112.94
                                                                                                                                                           9 4 26
                                                                                                                                                                                       664.8
                                                                          24.64
          71.95
                                                                                                                                         112.94 9 4 26
112.93 14 53 16
118.62 14 5 4
107.27 16 4 4
                                                                                                                                                                                     5073.9
                                                                                                                                                                                                                               258.77
                                                                                                                                                                                                           27.54
                                                                                                                     68.66
                                                                        24.66
                                                                                              266.66
         108.05
                                                                                                                                                                                                                               268.86
                                                                                                                                                                                                           23.21
                                                                                                                    66.00
                                                                                                                                                                                     5229.9
                                                                                              276.08
                                                                          19.55
         110.00
                                                                                                                                                                                                                               242.49
                                                                                                                                                                                                            32.04
                                                                                                                   70.85
                                                                                                                                                                                    4844.8
                                                                                              251.10
                                                                         29.97
         110.00
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                   HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SCT 5293.8 SGR 443.3 SG3 160.5
RRT -.3988 RRF -.3968 RTF ..9057
SGB 5312.4 R23 ..0364 R13 -.9058
SG1 5296.8 SG2 406.3 THA 178.08
                                                                                                                                                                              ST 2658.6 SR 440.3 SS 655.3

CRT -.9922 CRS .9430 CST -.9750

LSA 2769.1 MSA 151.4 SSA 24.2
      TDE-1.7845 TRA .4762 TC3-5.8277 BAU 1.1659
     ROE .2972 RRA .0146 RC3 -.0590 FAU .02767
FDE -.6284 FRA .5794 FC3-1.6006 BSP 16610
BDE 1.8091 BRA .4764 BC3 5.8280 FSP -516
                                                                                                                                                                               EL1 2694.2 EL2 54.2 ALF 170.67
                                                                                                                                                                                               APRIVAL DATE JAN 13 1968
                                                                                                          FLIGHT TIME 176.00
LAUNCH DATE JUL 21 1967
                                                                                                         DISTANCE 517.356
     RL 152.00 LAL .09 LOL 297.57 VL 25.728 GAL 1.16 A7L 93.05 MCA 257.43 SMA 122.40 ECC .24269 INC 3.0541 V1 29.310 RP 107.88 LAP 2.98 LOP 194.98 VP 37.096 GAP 12.31 A7P 89.33 TAL 176.36 TAP 73.79 RCA 92.69 APO 152.10 V2 35.128 RC 171.722 GL -20.41 GP 10.55 ZAL 80.43 ZAP 166.77 ETS 50.28 ZAE 129.35 ETE 171.38 ZAC 60.91 ETC 8.43 CLP-171.96
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
71.77 8 59 50 1275.22 24.52 354.84 73.57 113.21 9 21 5 674.2 27 44
                           8 59 50 1275.22
13 37 23 5677.48
6 59 50 1275.22
13 37 23 5677.48
12 48 14 5828.35
14 48 10 5460.38
                                                                                                                                           113.20 15 12 1
                                                                           24.53
                                                                                               266.88
                                                                                                                      73.58
          108.23
                                                                                                                                          113.21 9 21 5
113.20 15 12 1
118.58 14 25 22
107.84 16 19 10
                                                                                                                                                                                       675.2
                                                                                                                                                                                                             27.44
                                                                                                                                                                                                                                 346.97
                                                                                               354.84
                                                                                                                      73.57
                                                                           24.52
           71.77
                                                                                                                                                                                                                                259.01
                                                                                                                                                                                      5077.5
                                                                                                                                                                                                             27.45
                                                                                                                     73.58
                                                                           24.53
                                                                                               266.88
         108.23
                                                                                                                                                                                                             23.26
                                                                                                                                                                                      5228.4
                                                                                                                     71.00
                                                                           19.60
                                                                                               275.99
         110.00
                                                                                                                                                                                                             31.80
                                                                                                                                                                                      4860.4
                                                                          29.65
                                                                                              252.19
                                                                                                                     75.73
                           14 48 10
         110.00
                                                 5460.38
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ST 2647.1 SR 449.2 SS 634.6
CRT -.9869 CRS .9298 CST -.9755
LSA 2754.5 MSA 154.0 SSA 24.1
                                                                                                  SGT 5338.3 SGR 451.3 SG3 156.5

RRT -.4040 RRF -.3975 RTF .9088

SGB 5357.3 R23 .0308 R13 -.9089

SGI 5341.4 SG2 412.6 THA 178.03
      TOE-1.7946 TRA .7161 TC3-5.7038 BAU 1.1772
      ROE .3080 RRA .0095 RC3 -.0516 FAU .02604
FOE -.5949 FRA .6312 FC3-1.4603 BSP 16798
BOE 1.8208 BRA .7162 BC3 5.7040 FSP -508
                                                                                                                                                                              EL1 2684.0 EL2 71.6 ALF 170.49
                                                                                                                                                                                              ARRIVAL DATE JAN 15 1968
                                                                                                          FLIGHT TIME 178.00
LAUNCH DATE JUL 21 1967
                                                                                                         DISTANCE 522.912
     RL 152.00 LAL .00 LOL 297.57 VL 25.674 GAL 1.73 A7L 92.92 MCA 260.65 SMA 122.09 ECC .24677 INC 2.9237 V1 29.310 RP 107.92 LAP 2.88 LOP 198.21 VP 37.048 GAP 12.67 A7P 89.52 TAL 174.70 TAP 75.35 RCA 91.96 APO 152.22 V2 35.116 RC 173.647 GL -19.05 GP 10.16 7AL 76.94 ZAP 167.55 ETS 52.08 ZAE 129.40 ETE 171.66 ZAC 58.64 ETC 8.36 CLP-172.77
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 16.081 VHL 4.010 DLA -33.24 RAL 212.04 RAD 6567.6 VEL 11.725 PTH 2.07 VHP 8.094 DPA 1.95 RAP 208.57 ECC 1.2646
     C3 16.081 VHL 4.010 OLA -33.24 RAL 212.04 RAD 6567.6 VEL 11.725 PTH 2.07 VHP 8.094 DPA 1.95 RAP 208.57 ECC 1.2646 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ABC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T1.81 9 17 35 1283.69 24.26 355.37 78.59 113.46 9 38 59 683.7 27.22 347.54 108.19 13 54 38 5687.49 24.27 267.53 78.60 113.45 15 29 26 5087.5 27.23 259.69 108.19 13 54 38 5687.49 24.27 267.53 78.60 113.45 15 29 26 5087.5 27.23 259.69 110.00 13 5 7 5839.50 19.23 276.65 75.94 118.82 14 42 27 5239.5 22.93 269.46 110.00 15 6 17 5467.72 29.50 252.71 80.82 108.11 16 37 24
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5378.9 SGR 458.1 SG3 152.5
RRT -.4098 RRF -.3990 RTF .9118
SG8 5398.4 R23 .0253 R13 -.9119
SG1 5382.2 SG2 417.6 THA 177.99
                                                                                                                                                                              ST 2614.0 SR 456.8 SS 610.4

CRT -.9798 CRS .9139 CST -.9754

LSA 2718.1 MSA 160.1 SSA .23.5
      TDE-1.7938 TRA .9684 TC3-5.5238 BAU 1.1876

ROE .3197 RRA .0029 RC3 -.0430 FAU .02447

FDE -.5591 FRA .6833 FC3-1.3172 BSP 16955

BDE 1.8221 BRA .9684 BC3 5.5240 FSP -496
                                                                                                                                                                               EL1 2652.1 EL2 90.1 ALF 170.27
                                                                                                                                                                                                ARRIVAL DATE JAN 17 1968
 LAUNCH DATE JUL 21 1967
                                                                                                          FLIGHT TIME 180.00
                                                                                                          DISTANCE 528.429
      RL 152.00 LAL .00 LOL 297.57 VL 25.622 GAL 2.32 AZL 92.80 HCA 263.87 SMA 121.79 ECC .25121 INC 2.7958 V1 29.310 RP 107.96 LAP 2.78 LOP 201.43 VP 37.000 GAP 13.03 AZP 89.70 TAL 173.03 TAP 76.90 RCA 91.19 APO 152.38 V2 35.103 RC 175.555 GL -17.68 GP 9.81 ZAL 73.48 ZAP 168.28 ETS 54.20 ZAE 129.45 ETE 171.92 ZAC 56.36 ETC 8.33 CLP-173.56
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC

C3 16.911 VHL 4.112 OLA -33.12 RAL 216.37 RAD 6567.7 VEL 11.760 PTH 2.08 VHP 8.294 DPA .70 RAP 210.63 ECC 1.2783

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.07 9 36 26 1290.30 23.86 355.69 83.66 113.68 9 57 57 690.3 26.85 347.90 107.93 14 10 18 5703.92 23.87 268.60 83.67 113.67 15 45 22 5103.9 26.86 260.81 17.07 9 36 26 1290.30 23.86 355.69 83.66 113.68 9 57 57 690.3 26.85 347.90 107.93 14 10 18 5703.92 23.87 268.60 83.67 113.67 15 45 22 5103.9 26.86 260.81 107.93 14 10 18 5703.92 23.87 268.60 83.67 113.67 15 45 22 5103.9 26.86 260.81 110.00 13 18 27 5863.27 18.45 278.04 80.78 119.30 14 56 10 5265.3 22.21 270.93 110.00 15 27 28 5466.98 29.51 252.66 86.08 108.09 16 58 35 4867.0 31.70 244.13
     PLANETOCENTRIC CONIC
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 5408.1 SGR 463.6 SG3 148.4 ST 2556.9 SR 462.7 SS 583.4 RRT -.4151 RRF -.4011 RTF .9140 CRT -.9704 CRS .8940 CST -.9747 SG8 5428.0 R23 .0213 R13 -.9140 LSA 2657.6 MSA 169.8 SSA 22.7 SG1 5411.6 SG2 421.5 THA 177.95 EL1 2596.1 EL2 110.1 ALF 170.02
        TDE-1.7784 TRA 1.2369 TC3-5.2824 BAU 1.1943
       ROE .3321 RRA -.0055 RC3 -.0348 FAU .02280
FDE -.3209 FRA .7371 FC3-1.1673 BSP 17028
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FLIGHT TIME 174.00

BOE 1.8091 BRA 1.2369 8C3 5.2825 FSP -482

ARRIVAL DATE JAN 19 1968

LAUNCH DATE JUL 21 1967

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DISTANCE 533.904
    HELIOCENTRIC CONIC
     RL 152.00 LAL .00 LOL 297.57 VL 25.570 GAL 2.94 AZL 92.67 MCA 267.08 SMA 121.49 ECC .25603 INC 2.6695 V1 29.310 RP 107.99 LAP 2.67 LOP 204.65 VP 36.952 GAP 13.42 AZP 89.86 TAL 171.38 TAP 78.46 RCA 90.39 APO 152.60 V2 35.091 RC 177.448 GL -16.31 GP 9.49 ZAL 70.08 ZAP 168.97 ETS 56.66 ZAE 129.49 ETE 172.15 ZAC 54.07 ETC 8.35 CLP-174.36
    PLANETOCENTRIC CONIC
                                                                                                                                                                -.52 RAP 212.72 ECC 1.2954
     C3 17.947 VHL 4.236 OLA -32.88 RAL 220.59 RAD 6567.7 VEL 11.804 PTH
                                                                                                                           2.09 VHP 8.506 DPA
    C3 17.947 VHL 4.236 OLA -32.88 RAL 22U.59 RAD 6567.7 VEL 11.804 PTH 2.09 VMP 8.506 DPA -.52 RAP Z1Z.72 ECC 1.2954
LNCH A7MTM LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
72.54 9 56 19 1294.75 23.32 355.78 88.75 113.87 10 17 54 694.8 26.34 348.03
107.46 14 24 9 5727.01 23.33 270.12 88.76 113.85 15 59 36 5127.0 26.36 262.38
107.46 14 24 9 5727.01 23.33 270.12 88.76 113.87 10 17 54 694.8 26.34 348.03
107.46 14 24 9 5727.01 23.33 270.12 88.76 113.85 15 59 36 5127.0 26.36 262.38
110.00 13 28 41 609.72 17.29 302.14 85.49 119.96 13 38 51 9.7 21.14 293.13
110.00 15 50 56 546.04 29.66 252.17 91.44 107.83 17 21 56 4860.0 31.81 243.62
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                     SGT 5438.8 SGR 468.2 SG3 144.5
RRT -.4218 RRF -.4051 RTF ..9169
SGB 5458.9 R23 .0176 R13 -.9169
SGI 5442.4 SG2 424.3 THA 177.91
                                                                                                                                                      ST 2487.4 SR 467.2 SS 556.7
CRT -.9588 CRS .8714 CST -.9740
     TDE-1.7553 TRA 1.5140 TC3-5.0072 BAU 1.2014
    ROE .3454 RRA -.0150 RC3 -.0260 FAU .02127
FOE -.4838 FRA .7881 FC3-1.0262 BSP 17180
                                                                                                                                                     LSA 2584.9 MSA 181.7 SSA 21.7
                                                                                                                                                       EL1 2527.5 EL2 130.6 ALF 169.76
     BOE 1.7890 BRA 1.5141 BC3 5.0073 FSP -472
                                                                                                                                                                    ARRIVAL DATE JAN 21 1968
                                                                                           FLIGHT TIME 184.00
LAUNCH DATE JUL 21 1967
                                                                                           DISTANCE 539.330
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 25.519 GAL 3.59 ATL 92.54 MCA 270.30 SMA 121.20 ECC .26127 INC 2.5441 V1 29.310 RP 108.03 LAP 2.54 LOP 207.87 VP 36.904 GAP 13.83 AZP 90.01 TAL 169.72 TAP 80.02 RCA 89.53 APO 152.87 VZ 35.078 RC 179.325 GL -14.95 GP 9.20 TAL 66.77 ZAP 169.60 ETS 59.52 ZAE 129.52 ETE 172.35 ZAC 51.77 ETC 8.41 CLP-175.14
   PLANETOCENTRIC CONTC
                                                                                                                           2.10 VHP 8.734 DPA
                                                                                                                                                               -1.69 RAP 214.82 ECC 1.3162
     C3 19.214 VHL 4.383 DLA -32.56 RAL 224.68 RAD 6567.8 VEL 11.857 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 22.66
                                                                                                                      114.02 10 36 42
                                                                                                                                                             696.9
                                                                                                                                                                                                 347.93
          73.22 10 17 5 1296.94
                                                                                 355.63
                                                                                                  93.82
                        14 36 0 5756.84
10 17 5 1296.94
                                                                                                                                     16 11 56
                                                                                                                                                                                                  264.40
        106.78
                                                                 22.67
                                                                                 272.09
                                                                                                     93.82
                                                                                                                       114.01
                                                                                                                                                            5156.8
                                                                                                                                                                                25.72
                                                                                                                       114.01 10 11 56
114.02 10 38 42
114.01 16 11 56
120.70 13 47 26
107.44 17 46 31
                                                                                                                                                                                                  347.93
                                                                                                     93.82
                                                                                                                                                              696.9
                                                                                                                                                                                25.71
          73.22
                                                                 22.66
                                                                                 355.63
                        14 36 0 5756.84
13 36 34 652.31
16 15 41 5449.46
                                                                                                                                                                                                 264.40
                                                                                                                                                                                25.72
        106.78
                                                                 22.67
                                                                                 272.09
                                                                                                     93.82
                                                                                                                                                            5156.8
                                                                                                                                                                                                 297.68
        110.00
                                                                 15.82
                                                                                 304.57
                                                                                                     90.07
                                                                                                                                                                                19.78
                                                                                 251.42
                                                                                                     96.86
                                                                                                                                                            4849.5
                                                                                                                                                                                31.97
                                                                                                                                                                                                 242.84
        110.00
                                                                 29.88
   DIFFERENTIAL CORRECTIONS
                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      SGT 5465.3 SGR 471.7 SG3 140.6
RRT -.4292 RRF -.4102 RTF .9199
                                                                                                                                                       ST 2404.8 SR 469.9 SS 530.6
CRT -.9443 CRS .8448 CST -.9731
     TOE-1.7214 TRA 1.8049 TC3-4.6994 BAU 1.2071
     ROE .3594 RRA -.0260 RC3 -.0175 FAU .01980
FOE -.4469 FRA .8396 FC3 -.8923 BSP 17314
BOE 1.7585 BRA 1.8051 BC3 4.6994 FSP -462
                                                                                      $68 5485.6 R23 .0144 R13 -.9199
                                                                                                                                                       LSA 2499.3 MSA 196.0 SSA 20.6
                                                                                      SG1 5469.1 SG2 425.8 THA 177.87
                                                                                                                                                       EL1 2445.5 EL2 152.1 ALF 169.50
                                                                                                                                                                    ARRIVAL DATE JAN 23 1968
                                                                                           FLIGHT TIME 186.00
LAUNCH DATE JUL 21 1967
                                                                                          DISTANCE 544.703
    HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 25.468 GAL 4.27 AZL 92.42 MCA 273.51 SMA 120.92 ECC .26698 INC 2.4186 V1 29.310 RP 108.07 LAP 2.41 LOP 211.08 VP 36.857 GAP 14.26 AZP 90.15 TAL 168.08 TAP 81.58 RCA 88.63 APO 153.20 V2 35.065 RC 181.185 GL -13.61 GP 8.94 ZAL 63.57 ZAP 170.18 ETS 62.79 ZAE 129.54 ETE 172.54 ZAC 49.46 ETC 8.52 CLP-175.93
    PLANETOCENTRIC CONTC
     C3 20.739 VHL 4.554 OLA -32.14 RAL 228.61 RAD 6567.8 VEL 11.921 PTH 2.12 VHP 8.977 DPA -2.82 RAP 216.96 ECC 1.3413
     C3 20.739 VML 4.554 OLA -32.14 RAL 228.61 RAD 6567.8 VEL 11.921 PTH 2.12 VMP 8.977 DPA -2.82 RAP 216.96 ECC 1.3413 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.12 10 38 41 1296.66 21.89 355.23 98.83 114.14 11 0 17 696.7 24.96 347.60 105.88 14 45 43 5793.48 21.90 274.52 98.84 114.13 16 22 17 5193.5 24.97 266.88 105.88 14 45 43 5793.48 21.90 274.52 98.83 114.14 11 0 17 696.7 24.96 347.60 105.88 14 45 43 5793.48 21.90 274.52 98.84 114.13 16 22 17 5193.5 24.97 266.88 110.00 13 42 43 700.67 14.12 307.29 94.53 121.46 13 54 24 100.7 18.18 300.52 110.00 16 40 51 5437.46 30.12 250.57 102.26 106.99 18 11 28 4837.5 32.15 241.95
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SCT 5485.8 SCR 473.9 SC3 136.8
RRT -.4367 RRF -.4160 RTF .9228
SCB 5506.3 R23 .0118 R13 -.9226
SCI 5489.8 SC2 426.1 THA 177.83
                                                                                                                                                      ST 2313.3 SR 470.7 SS 505.6

CRT -.9263 CRS .8138 CST -.9720

LSA 2404.8 MSA 212.3 SSA 19.5
     TOE-1.6771 TRA 2.1101 TC3-4.3659 BAU 1.2105
     ROE .3739 RRA -.0384 RC3 -.0100 FAU .01834
     FOE -.4104 FRA .8913 FC3 -.7657 BSP 17422
BQE 1.7183 BRA 2.1105 BC3 4.3659 FSP -452
                                                                                                                                                       EL1 2354.2 EL2 174.3 ALF 169.27
                                                                                                                                                                    ARRIVAL DATE JAN 25 1968
                                                                                           FLIGHT TIME 188.00
LAUNCH DATE JUL 21 1967
   HELIOCENTRIC CONIC
                                                                                          DISTANCE 550.016
    RL 152.00 LAL .00 LOL 297.57 VL 25.418 GAL 4.98 A7L 92.29 MCA 276.72 SMA 120.64 ECC .27320 INC 2.2924 VI 29.310 RP 108.11 LAP 2.28 LOP 214.29 VP 36.810 GAP 14.72 AZP 90.27 TAL 166.44 TAP 83.16 RCA 87.68 APO 153.60 V2 35.052 RC 183.028 GL -12.31 GP 8.70 ZAL 60.50 ZAP 170.70 ETS 66.52 ZAE 129.56 ETE 172.71 ZAC 47.16 ETC 8.68 CLP-176.71
    PLANETOCENTRIC CONIC
     C3 22.557 VHL 4.749 DLA -31.65 RAL 232.34 RAD 6567.9 VEL 11.997 PTH 2.14 VHP 9.238 DPA -3.92 RAP 219.11 ECC 1.3712
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                      114.23 11 22 43
114.22 16 30 21
                        11 1 10 1293.26
14 53 4 5837.41
                                                                                 354.55
                                                                                                                                                                                                 346.98
                                                                                                  103.78
                                                                 21.01
         75.24
                                                                                                                                                            5237.4
                                                                                                                                                                                                  269.86
                                                                                 277.44
                                                                                                    103.78
                                                                 21.03
        104.76
                        11 1 10 1293.26
                                                                                                                                     11 22 43
                                                                                                    103.78
                                                                                                                       114.23
                                                                                                                                                              693.3
                                                                                                                                                                                                  346.98
                                                                 21.01
                                                                                 354.55
          75.24
                                                                                                                                    16 30 21
                                                                                                   103.78
                                                                                                                                                            5237.4
                                                                                                                                                                                                  269.86
        104.76
                        14 53 4 5837.41
13 47 39 755.00
                                                                 21.03
                                                                                 277.44
                                                                                                                       114.22
                                                                                                                       122.17 14 0 12
106.54 18 36 11
                                                                                                                                                                                                  303.54
                                                                 12.24
                                                                                                                                                             153.0
        110.00
                                             753.00
                                                                                 310.18
                                                                                                    98.88
                        17 5 46
                                                                                 249.73
                                                                                                                                                            4825.7
                                                                                                                                                                                32.31
                                           5425.66
                                                                 30.35
                                                                                                    107.62
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      SGT 5499.4 SGR 474.7 SG3 133.1
RRT -.4439 RRF -.4218 RTF .9255
SGB 5519.9 R23 .0095 R13 -.9255
                                                                                                                                                   ST 2214.5 SR 469.4 S5 482.0
CRT -.9038 CRS .7767 CST -.9708
LSA 2302.9 MSA 230.6 SSA 18.5
     TDE-1.6202 TRA 2.4339 TC3-4.0125 BAU 1.2100
     RDE .3886 RRA -.0525 RC3 -.0039 FAU .01686
FDE -.3733 FRA .9451 FC3 -.6471 BSP 17443
     BDE 1.6662 BRA 2.4344 BC3 4.0125 FSP -439
                                                                                      SG1 5503.5 SG2 425.1 THA 177.79
                                                                                                                                                       EL1 2255.1 EL2 197.2 ALF 169.07
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FLIGHT TIME 182.00

ARRIVAL DATE JAN 27 1968

LAUNCH DATE JUL 21 1967

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DISTANCE 555.259
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 25.369 GAL 5.74 AZL 92.16 MCA 279.92 SMA 120.37 ECC .27999 INC 2.1646 V1 29.310 RP 108.16 LAP 2.13 LOP 217.50 VP 36.764 GAP 15.21 AZP 90.37 TAL 164.82 TAP 84.74 RCA 86.66 APO 154.07 V2 35.039 RC 184.853 GL -11.06 GP 8.48 ZAL 57.56 ZAP 171.16 ETS 70.74 ZAE 129.56 ETE 172.87 ZAC 44.86 ETC 8.90 CLP-177.50
   PLANETOCENTRIC CONTC
                                                                                                              2.16 VHP 9.520 OPA -4.97 RAP 221.28 ECC 1.4066
    C3 24.707 VHL 4.971 DLA -31.10 RAL 235.88 RAD 6568.0 VEL 12.087 PTH
    C3 24.707 VHL 4.971 OLA -31.10 RAL 235.88 RAD 6568.0 VEL 12.087 PTM 2.16 VMP 9.220 DPA -4.97 RAP 221.28 ELC 1.4068 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.58 11 24 38 1286.13 20.05 355.55 108.63 114.28 11 46 4 686.1 23.16 346.04 103.42 14 57 50 601.01 20.07 302.97 108.63 114.28 11 46 4 686.1 23.16 346.04 103.42 14 57 50 601.01 20.07 302.97 108.63 114.28 11 46 4 686.1 23.16 346.04 103.42 14 57 50 601.01 20.07 302.97 108.63 114.27 15 7 51 1.0 23.17 295.46 110.00 13 51 39 808.06 10.23 313.17 103.10 122.80 14 5 7 208.1 14.48 306.65 110.00 17 29 59 5415.12 30.55 248.98 112.89 106.13 19 0 14 4815.1 32.46 240.28
                                    5415.12
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5511.2 SGR 474.5 SG3 129.5

RRT -.4521 RRF -.4291 RTF ..9287

SGB 5531.6 R23 .0076 R13 -.9287

SGI 5515.4 SG2 422.9 THA 177.76
                                                                                                                                      ST 2119.9 SR 466.5 SS 462.1
CRT -.8774 CRS .7370 CST -.9702
    TOE-1.5594 TRA 2.7694 TC3-3.6608 BAU 1.2092
    RDE .4040 RRA -.0677 RC3 .0016 FAU .01549
FDE -.3393 FRA .9978 FC3 -.5428 BSP 17542
BDE 1.6109 BRA 2.7703 BC3 3.6608 FSP -429
                                                                                                                                     LSA 2205.2 MSA 248.8 SSA 17.5
                                                                                                                                      EL1 2159.4 EL2 219.7 ALF 168.96
                                                                                                                                                   ARRIVAL DATE JAN 29 1968
                                                                                 FLIGHT TIME 192.00
LAUNCH DATE JUL 21 1967
                                                                                 DISTANCE 560.421
   HELIOCENTRIC CONIC
                          .00 LOL 297.57 VL 25.321 GAL 6.53 AZL 92.03 HGA 283.13 SMA 120.10 ECC .28740 INC 2.0343 V1 29.310 1.98 LOP 220.71 VP 36.718 GAP 15.73 AZP 90.46 TAL 163.22 TAP 86.34 RCA 85.58 APO 154.61 V2 35.025 -9.85 GP 8.28 ZAL 54.77 ZAP 171.55 ETS 75.44 ZAE 129.55 ETE 173.01 ZAC 42.56 ETC 9.19 CLP-178.29
    RL 152.00 LAL
    RP 108.20 LAP
    RC 186.660 GL
   PLANETOCENTRIC CONIC
                                                                                                              2.19 VHP 9.823 DPA
                                                                                                                                             -5.98 RAP 223.46 ECC 1.4483
    C3 27.238 VHL 5.219 DLA -30.50 RAL 239.21 RAD 6568.1 VEL 12.191 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       113.37
                                                                                                        114.30 12 10 39
                                                                                                                                          673.8
                                                                                                                                                            22.14
                                                                        352.13
                     11 49 26 1273.81
        78.17
                                                         19.02
                                                                                                                      15 10 37
                                                                                                                                                             22.15
                                                                                                                                                                            299.57
                                                         19.03
                                                                         307.02
                                                                                        113.38
                                                                                                          114.29
                                                                                                                                              61.6
       101.83
                     14 59 35
                                       661.58
                                                                                                          114.30 12 10 39
114.29 15 10 37
123.32 14 9 23
105.80 19 23 20
                    11 49 26 1273.81
14 59 35 661.58
13 54 58 864.91
                                                                                                                                            673.8
                                                                                                                                                             22.14
                                                                                                                                                                            344.68
                                                                                        113.37
                                                         19.02
                                                                         352.13
        78.17
                                                                                                                                             61.6
                                                                                                                                                             22.15
                                                                                                                                                                            299.57
                                                         19.03
                                                                         307.02
                                                                                        113.38
       101.83
                                                                                                                                            264.9
                                                                                                                                                             12.45
                                                                                                                                                                            309.80
                                                           8.12
                                                                         316.22
                                                                                        107.22
       110.00
                                       864.91
                                     5406.52
                                                         30.71
                                                                        248.36
                                                                                        118.07
                                                                                                                                          4806.5
                                                                                                                                                             32.57
                                                                                                                                                                            239.63
       110.00
                    17 53 14
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5518.5 SGR 472.9 SG3 126.1
RRT -.4603 RRF -.4369 RTF .9321
                                                                                                                                     ST 2028.6 SR 461.7 SS 445.2
CRT -.8460 CRS .6937 CST -.9702
    TOE-1.4911 TRA 3.1228 TC3-3.3110 BAU 1.2057
    RDE .4195 RRA -.0841 RC3 .0058 FAU .01417
FDE -.3067 FRA 1.0517 FC3 -.4503 BSP 17627
BDE 1.5490 BRA 3.1259 BC3 3.3110 FSP -419
                                                                          SGB 5538.8 R23 .0060 R13 -.9321
SGI 5522.8 SG2 419.5 THA 177.73
                                                                                                                                     LSA 2110.7 MSA 267.1 SSA 16.6
                                                                                                                                    EL1 2066.4 EL2 241.7 ALF 168.95
                                                                                                                                                 ARRIVAL DATE JAN 31 1968
                                                                                FLIGHT TIME 194.00
LAUNCH DATE JUL 21 1967
                                                                                DISTANCE 565.493
   HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 25.274 GAL 7.37 AZL 91.90 MCA 286.33 SMA 119.84 ECC .29550 INC 1.9007 V1 29.310 RP 108.24 LAP 1.82 LOP 223.91 VP 36.672 GAP 16.29 AZP 90.53 TAL 161.64 TAP 87.96 RCA 84.43 APO 155.25 V2 35.012 RC 188.449 GL -8.70 GP 8.10 ZAL 52.14 ZAP 171.85 ETS 80.63 ZAE 129.53 ETE 173.14 ZAC 40.27 ETC 9.54 CLP-179.09
   PLANETOCENTRIC CONIC
    C3 30.208 VHL 5.496 DLA -29.86 RAL 242.33 RAD 6568.2 VEL 12.312 PTH 2.22 VHP 10.152 DPA -6.95 RAP 225.65 ECC 1.4971
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      114.29 12 37 9
114.28 15 9 51
115.01 14 59 51
113.56 15 21 5
123.73 14 13 7
105.56 19 45 19
                                                                                                                                                                       342.73
                                                                                                                                                       21.06
                                                                                    118.01
                                                                                                                                       653.8
                                                                        350.12
                     12 16 15 1253.84
                                                        17.93
        80.10
                                                                                       118.01
                                                                                                                                            133.3
                                                                                                                                                            21.07
                                                                                                                                                                           304.45
                    14 57 38
                                     733.25
                                                         17.95
                                                                        311.85
                                                                                                                                           167.0
                                                                                                                                                            20.17
                                                                                                                                                                           306.57
                                                                                       117.53
                     14 47 4
                                       766.99
                                                         16.94
                                                                        313.87
       100.00
                                                                                                                                             95.3
                                                                                                                                                                           302.01
                                                                                                                                                            21.97
                                                                                       118.48
                    15 9 30
                                      695.33
                                                         18.94
                                                                        309.50
                                                                                                                                                                           312.95
                                                                                                                                            322.9
                                                                                                                                                            10.33
                                                                                       111.23
                     13 57 44
                                       922.91
                                                          5.94
                                                                        319.29
                                                                                                                                                                           239.16
                                                                                                                                                            32.65
                    18 15 19 5400.23
                                                                                                                                          4800.2
                                                         30.83
                                                                        247.90
                                                                                       123.12
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT - 4686 RRF - -4450 RTF - 9356
SGB 5540.8 R23 .0046 R13 - 9356
SGB 5552.2 SG2 414.9 ŶĤA 177.70
                                                                                                                                     ST 1944.2 SR 455.2 SS 431.6
CRT -.8096 CRS .6472 CST -.9708
LSA 2022.9 MSA 284.8 SSA 15.8
    TOE-1.4168 TRA 3.4953 TC3-2.9681 BAU 1.1987
    RDE .4352 RRA -.1019 RC3 .0088 FAU .01286
FDE -.2755 FRA 1.1076 FC3 -.3685 BSP 17681
                                                                                                                                      EL1 1979.4 EL2 262.5 ALF 169.07
     BOE 1.4822 BRA 3.4968 BC3 2.9681 FSP
                                                           -409
                                                                                                                                                  ARRIVAL DATE FEB 2 1968
                                                                                 FLIGHT TIME 196.00
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 570.457
    RL 152.00 LAL .00 LOL 297.57 VL 25.227 GAL 8.27 AZL 91.76 MCA 289.53 SMA 119.58 ECC .30438 INC 1.7628 V1 29.310 RP 108.28 LAP 1.66 LOP 227.11 VP 36.628 GAP 16.90 AZP 90.59 TAL 160.08 TAP 89.61 RCA 83.19 APO 155.98 V2 34.999 RC 190.221 GL -7.60 GP 7.93 ZAL 49.65 ZAP 172.07 ETS 86.26 ZAE 129.49 ETE 173.26 ZAC 38.00 ETC 9.98 CLP-179.90
   PLANETOCENTRIC CONIC
    C3 33.687 VHL 5.804 DLA -29.20 RAL 245.23 RAD 6568.3 VEL 12.452 PTH 2.25 VHP 10.509 DPA -7.89 RAP 227.86 ECC 1.5544
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     122.52
                                                                                                         114.25 13 7 13
114.24 15 3 51
                                                                                                                                            620.2
                                                                                                                                                             19.93
                                                                                                                                                                            330.76
                                   1220.22
         82.54 12 46 53
                                                                        347.10
                                                         16.80
                                                                                                                                            221.7
                                                                                                                                                             19.95
                                                                                                                                                                            310.53
                                                                                        122.53
                                                                         317.A7
         97.46
                     14 50 9
                                      821.73
                                                         16.81
                                                                                                         117.60 14 31 33
111.00 17 41 36
124.01 14 16 24
105.41 20 6 7
                                                                                                                                            331.2
                                                                                                                                                             15.57
                                                                                                                                                                            316.60
                    14 16 2
                                      931.24
                                                         11.97
                                                                         323.54
                                                                                        120.10
                                                                                                                                           5274.0
                                                                                                                                                             24.43
                                                                                                                                                                            272.73
                                                                                        124.72
                     16 3 42
                                    5873.98
                                                         21.77
                                                                        280.51
        100.00
                                                                                                                                            381.6
                                                                                                                                                              8.15
                                                                                                                                                                            316.10
                    14 0 3
                                                                         322.37
                                                                                        115.14
                                        981.56
                                                           3.71
                                                                                                                                          4796.4
                                                                                                                                                            32.70
                                                                                                                                                                            238.87
                     18 36 10 5396.43
                                                                        247.63
                                                                                        128.06
                                                         30.90
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5517.0 SGR 465.7 SG3 119.6

RRT -,4766 RRF -,4530 RTF ,9392

SGB 5536.6 R23 ,0033 R13 -,9393

SG1 5521.5 SG2 409.1 THA 177.68
                                                                                                                                    ST 1867.0 SR 446.9 S5 421.E
CRT -.7674 CRS .5973 CST -.9720
LSA 1942.2 MSA 301.2 SSA 15.0
     TOE-1.3342 TRA 3.8910 TC3-2.6326 BAU 1.1856
     RDE .4508 RRA -.1209 RC3 .0104 FAU .01153
FDE -.2449 FRA 1.1664 FC3 -.2963 BSP 17632
                                                                                                                                     ELI 1899.0 EL2 281.7 ALF 169.35
     BOE 1.4083 BRA 3.8929 BC3 2.6326 FSP -397
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FLIGHT TIME 190.00

ARRIVAL DATE FEB 4 1968

EL1 1682.2 EL2 326.6 ALF 171.90

LAUNCH DATE JUL 21 1967

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DISTANCE 575.297
   HELIOCENTRIC CONIC
    RL 152.00 LAL .00 LOL 297.57 VL 25.181 GAL 9.22 AZL 91.62 MCA 292.72 SMA 119.34 ECC .31413 INC 1.6194 VI 29.310 RP 108.32 LAP 1.49 LOP 230.30 VP 36.583 GAP 17.55 AZP 90.63 TAL 158.56 TAP 91.28 RCA 81.85 APO 156.82 VZ 34.986 RC 191.975 GL -6.56 GP 7.77 ZAL 47.33 ZAP 172.19 ETS 92.23 ZAE 129.43 ETE 173.38 ZAC 35.74 ETC 10.52 CLP 179.28
   PLANETOCENTRIC CONIC
    C3 37.761 VHL 6.145 DLA -28.53 RAL 247.93 RAD 6568.5 VEL 12.615 PTH
                                                                                                        2.29 VHP 10.898 OPA
                                                                                                                                      -8.78 RAP 230.07 ECC 1.6215
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 114.17 13 47 47
114.16 14 45 45
118.69 14 22 11
109.90 18 13 25
124.16 14 19 19
105.36 20 25 39
                                   1149.05
        86.35
                    13 28 38
                                                      15.64
                                                                     341.32
                                                                                   126.91
                                                                                                                                     549.0
                                                      15.65
                                                                                    126.92
                                                                                                                                     350.6
                                                                                                                                                     18.79
        93.65
                    14 29 54
                                     950.57
                                                                     326.80
                    14 5 0
                                                                                                                                     431.0
                                                                                                                                                     12.53
                                                                                                                                                                   322.44
                                   1030.99
                                                        8.76
                                                                     329.21
                                                                                    123.42
       100.00
                   16 36 13
       100.00
                                                                                                                                                    25.28
                                                                                                                                                                   269.89
                                                       22.77
                                                                    277.79
                                                                                    129.97
                                                                                                                                    5231.9
                                    5831.90
                    14 1 58 1040.51
       110.00
                                                        1.46
                                                                     325.45
                                                                                   118.95
                                                                                                                                     440.5
                                                                                                                                                      5.94
                                                                                                                                                                   319.22
                    18 55 44
                                                                                   132.87
                                                                                                                                    4795.2
       110.00
                                    5395.15
                                                                    247.54
                                                                                                                                                     32.72
                                                       30.92
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        RIG-COURSE ERECUTION ACCORDANT

SGT -5511.8 SGR 460.2 SG3 116.5

RRT -,4847 RRF -.4618 RTF .9431

SGB 5530.9 R23 .0026 R13 -.9432

SGI 5516.3 SG2 402.2 THA 177.67
                                                                                                                               ST 1801.6 SR 437.4 SS 414.4
CRT -.7217 CRS .5494 CST -.9743
    TOE-1.2503 TRA 4.3057 TC3-2.3213 BAU 1.1719
    RDE .4666 RRA -.1407 RC3 .0113 FAU .01030
FDE -.2175 FRA 1.2263 FC3 -.2361 BSP 17703
                                                                                                                               LSA 1873.3 MSA 314.9 SSA 14.3
    BDE 1.3345 BRA 4.3080 BC3 2.3214 FSP -388
                                                                                                                               EL1 1829.8 EL2 298.1 ALF 169.79
                                                                             FLIGHT TIME 200.00
                                                                                                                                           ARRIVAL DATE FEB 6 1968
LAUNCH DATE JUL 21 1967
  HELIOCENTRIC CONIC
                                                                             DISTANCE 579.990
                         .00 LOL 297.57 VL 25.137 GAL 10.24 AZL 91.47 MCA 295.92 SMA 119.09 ECC .32486 INC 1.4693 V1 29.310 1.32 LOP 233.49 VP 36.540 GAP 18.26 AZP 90.64 TAL 157.07 TAP 92.98 RCA 80.41 APO 157.78 V2 34.973 -5.58 GP 7.63 ZAL 45.17 ZAP 172.21 ETS 98.44 ZAE 129.35 ETE 173.49 ZAC 33.51 ETC 11.16 CLP 178.44
    RL 152.00 LAL
        108.36 LAP
    RC 193.712 GL
   PLANETOCENTRIC CONIC
    C3 42.535 VHL 6.522 DLA -27.85 RAT 250.41 RAD 6568.6 VEL 12.802 PTH 2.33 VHP 11.323 DPA -9.62 RAP 232.28 ECC 1.7000 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 13 24 16 1225.95
                                                      10.41
                                                                                                                                     625.9
                                                                    344.40
                                                                                  129.22
                                                                                                   116.48 13 44 42
                                                                                                                                                    13.88
                                                                                                                                                                    337.45
        90.00
                                                       14.61
                                                                     326.88
                                                                                                     111.74
                                                                                                                15 9 41
                                                                                                                                      333.6
                                                                                                                                                                    319.32
                     14 54 8
                                     933.79
                                                                                    133.01
                                                                                                                                                     21.40
                    13 58 5 1116.63
17 3 0 5806.38
14 3 33 1099.43
                                                                                                     119.35 14 16 41
       100.00
                                                                     333.99
                                                                                    126.82
                                                                                                                                      516.6
                                                                                                                                                       9.80
                                                                                                                                                                    327.34
                                                        5.93
       100.00
                                                                                                     109.21 18 39 46
124.18 14 21 52
105.40 20 43 57
                                                       23.35
                                                                     276.12
                                                                                   134.90
                                                                                                                                    5206.4
                                                                                                                                                     25.76
                                                                                                                                                                    268.14
       110.00
                                                        - . 79
                                                                     328.53
                                                                                   122.66
                                                                                                                                                       3.70
                                                                                                                                                                    322.32
                                                                                                                                    499.4
                    19 14 1
                                   5396.34
                                                       30.90
       110.00
                                                                     247.62
                                                                                    137.54
                                                                                                                                    4796.3
                                                                                                                                                     32.70
                                                                                                                                                                    238.87
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        RET - 4927 RRF - 4706 RTF - 9472
SGB 5518.9 R23 .0018 R13 - 9472
SGI 5504.8 SG2 394.1 THA 177.66
                                                                                                                               ST 1746.8 SR 426.4 SS 410.5
CRT -.6730 CRS .5021 CST -.9770
    TDE-1.1636 TRA 4.7436 TC3-2.0269 BAU 1.1526
    ROE .4823 RRA -.1614 RC3 .0113 FAU .00907
FOE -.1917 FRA 1.2892 FC3 -.1847 83P 17752
BOE 1.2598 BRA 4.7465 BC3 2.0269 FSP -379
                                                                                                                               LSA 1815.4 MSA 325.5 SSA
                                                                                                                                                                      13.6
                                                                                                                               ELI 1771.0 EL2 311.1 ALF 170.37
                                                                             FLIGHT TIME 202.00
                                                                                                                                          ARRIVAL DATE FEB 8 1968
LAUNCH DATE JUL 21 1967
                                                                            DISTANCE 584.509
   HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 25.093 GAL 11.33 AZL 91.31 MCA 299.11 SMA 118.86 ECC .33669 INC 1.3108 VI 29.310 RP 108.40 LAP 1.15 LOP 236.68 VP 36.488 GAP 19.04 AZP 90.64 TAL 155.63 TAP 94.74 RCA 78.84 APO 158.88 VZ 34.960 RC 195.431 GL -4.65 GP 7.50 ZAL 43.16 ZAP 172.12 ETS 104.73 ZAE 129.24 ETE 173.60 ZAC 31.30 ETC 11.92 CLP 177.58
   PLANETOCENTRIC CONIC
    C3 48.138 VHL 6.938 DLA -27.18 RAL 252.70 RAD 6568.8 VEL 13.019 PTH 2.38 VHP 11.790 DPA -10.43 RAP 234.49 ECC 1.7922
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 117.54 13 30 14
110.56 15 43 27
119.73 14 12 59
108.75 19 2 47
124.06 14 24 7
105.54 21 1 2
                                                                                                                                740.9
                                                                                                                                                 10.49
                                                                                                                                                               344.18
        90.00
                     13 7 53 1340.92
                                                       6.85
                                                                    350.98
                                                                                 132.17
                                                                                                                                                                   315.86
        90.00
                     15 28 46
                                     880.99
                                                       19.91
                                                                    323.55
                                                                                    138.14
                                                                                                                                     261.0
                                                                                                                                                    22.53
                                   1194.97
                                                                                                                                                                   331.74
       100.00
                     13 53 4
                                                        3.30
                                                                    338.32
                                                                                   130.22
                                                                                                                                    595.0
                                                                                                                                                     7.23
                                                                                                                                                                   267.03
                                                                                                                                   5190.2
       100.00
                   17 26 17 5790.21
                                                     23.71
                                                                    275.05
                                                                                   139.60
                                                                                                                                                    26.05
                  14 4 49 1158.09
19 31 2 5399.86
                                                                                                                                                                   325.3A
       110.00
                                                       -3.03
                                                                    331.59
                                                                                    126.29
                                                                                                                                    55A . 1
                                                                                                                                                     1.46
       110.00
                                                       30.84
                                                                    247.88
                                                                                   142.07
                                                                                                                                   4799.9
                                                                                                                                                    32.66
                                                                                                                                                                   239.13
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ST 1701.9 SR 414.2 SS 409.6

CRT -.6217 CRS .4563 CST -.9801

LSA 1767.8 MSA 332.9 SSA 13.0

EL1 1722.0 EL2 320.7 ALF 171.08
                                                                        SCT 5485.2 SCR 445.0 SC3 110.7
RRT -.5004 RRF -.4794 RTF .9514
SCB 5503.2 R23 .0012 R13 -.9514
SCI 5489.7 SC2 385.0 THA 177.66
    TOE-1.0733 TRA 5.2106 TC3-1.7513 BAU 1.1271
    ROE .4978 RRA -.1829 RC3 .0106 FAU .00784
FOE -.1672 FRA 1.3559 FC3 -.1411 BSP 17756
    BOE 1.1831 BRA 5.2138 BC3 1.7513 FSP -370
                                                                             FLIGHT TIME 204.00
LAUNCH DATE JUL 21 1967
                                                                                                                                           ARRIVAL DATE FEB 10 1968
  HELIOCENTRIC CONIC
                                                                             DISTANCE 588.821
    RL 152.00 LAL
                         .00 LOL 297.57 VL 25.050 GAL 12.51 AZL 91.14 MCA 302.30 SMA 118.63 ECC .34978 INC 1.1424 V1 29.310 .97 LOP 239.87 VP 36.456 GAP 19.90 AZP 90.61 TAL 154.24 TAP 96.54 RCA 77.14 APO 160.13 V2 34.947 -3.78 GP 7.38 ZAL 41.31 ZAP 171.92 ETS 110.95 ZAE 129.10 ETE 173.70 ZAC 29.13 ETC 12.82 CLP 176.70
        108.44 LAP
    RC 197,134 GL
   PLANETOCENTRIC CONIC
    C3 54.731 VHL 7.398 DLA -26.51 RAL 254.80 RAD 6569.0 VEL 13.270 PTH 2.42 VHP 12.304 DPA -11.18 RAP 236.69 ECC 1.9007
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 58 0 1433.60 3.90 358.19 135.29 118.07 13 21 54 833.6 7.63 349.49
                                                                                135.29
                                                                                                  118.07 13 21 54
109.88 16 9 36
                    12 58 0 1433.60
                   15 55 24
                                                                                                                                     252.1
                                                                                                                                                     23.11
                                                                                                                                                                    313.94
        90.00
                                    852.11
                                                      20.59
                                                                    321.71
                                                                                   142.85
                                                                                                    119.88 14 10 15
108.48 19 23 19
123.83 14 26 2
105.76 21 16 54
                                                                                                                                                                    335.82
      100.00
                   13 49 6
17 46 59
                                   1266.55
                                                         .81
                                                                    342.36
                                                                                   133.58
                                                                                                                                     668.5
                                                                                                                                                      4.78
       100.00
                                   5780.44
                                                      23.93
                                                                    274.40
                                                                                   144.10
                                                                                                                                    5180.4
                                                                                                                                                    26.23
                                                                                                                                                                    266.36
                     14 5 46 1216.25
                                                                                   129.82
                                                                                                                                     616.2
                                                                                                                                                      -.76
                                                                                                                                                                    328.42
       110.00
                                                       -5.24
                                                                     334.64
                    19 46 48
                                                                                                                                    4805.5
                                                                                                                                                    32.58
                                                                                                                                                                   239.56
      110.00
                                   5405.50
                                                       30.73
                                                                    248.29
                                                                                    146.46
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5466.6 SGR 435.3 SG3 108.0
RRT -.5076 RRF -.4879 RTF .9556
SGB 5483.9 R23 .0006 R13 -.9556
                                                                                                                             ST 1666.1 SR 400.8 SS 411.4

CRT -.5686 CRS .4118 CST -.9833

LSA 1729.8 MSA 336.8 SSA 12.4
    TOE -.9776 TRA 5.7104 TC3-1.4939 BAU 1.0931
    RDE .5129 RRA -.2050 RC3 .0092 FAU .00657
FDE -.1435 FRA 1.4276 FC3 -.1039 BSP 17683
BDE 1.1040 BRA 5.7141 BC3 1.4940 FSP -359
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FLIGHT TIME 198.00

SGI 5471.1 SG2 374.8 THA 177.67

ARRIVAL DATE FEB 12 1968

LAUNCH DATE JUL 21 1967

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DISTANCE 592.882
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 25.008 GAL 13.79 A7L 90.96 MCA 305.48 SMA 118.41 ECC .36429 INC .9619 V1 29.310 RP 108.48 LAP .78 LOP 243.06 VP 36.416 GAP 20.84 AZP 90.56 TAL 152.93 TAP 98.41 RCA 75.28 APO 161.55 V2 34.935 RC 198.819 GL -2.96 GP 7.27 ZAL 39.62 ZAP 171.60 ETS 116.97 ZAE 128.92 ETE 173.81 ZAC 27.00 ETC 13.90 CLP 175.78
   PLANETOCENTRIC CONIC
                                                                                                                                2.48 VHP 12.873 DPA -11.90 RAP 238.87 ECC 2.0288
    C3 62.515 VHL 7.907 DLA -25.85 RAL 256.71 RAD 6569.2 VEL 13.560 PTH
    C3 62.515 VHL 7.907 DLA -25.85 RAL 256.71 RAD 6569.2 VEL 13.560 PTH 2.48 VMP 12.873 DPA -11.90 RAP 258.67 ECC 2.5286 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 50 47 1516.05 1.25 .80 138.44 118.29 13 16 3 916.0 5.02 354.15 100.00 13 45 46 1338.52 -1.56 346.20 136.87 119.86 14 8 4 738.5 2.42 339.67 100.00 18 5 33 5775.47 24.03 274.07 148.41 108.33 19 41 48 5175.5 26.31 266.01 110.00 14 6 25 1273.70 -7.41 337.68 133.26 123.47 14 27 39 673.7 -2.96 331.42 110.00 20 1 23 5413.05 30.59 248.83 150.69 106.05 21 31 36 4813.1 32.49 240.12
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         RIT - 5143.0 SGR 424.3 SG3 105.4
RRT - 5144 RRF - .4962 RTF .9600
SGB 5459.5 R23 .0002 R13 - .9600
SGI 5447.4 SG2 363.6 THA 177.69
                                                                                                                                                            ST 1638.8 SR 386.6 SS 415.8

CRT -.5174 CRS .3724 CST -.9865

LSA 1701.3 MSA 336.7 SSA 11.8

EL1 1651.5 EL2 328.3 ALF 172.75
     TOE -.8836 TRA 6.2399 TC3-1.2601 BAU 1.0531
    ROE .5281 RRA -.2272 RC3 .0075 FAU .00533
FOE -.1222 FRA 1.5033 FC3 -.0738 BSP 17694
    BOE 1.0294 BRA 6.2440 BC3 1.2601 FSP -351
                                                                                                                                                                            ARRIVAL DATE FEB 14 1968
                                                                                               FLIGHT TIME 208.00
                                                                                              DISTANCE 596.641
  HELIOCENTRIC CONIC
   RL 152.00 LAL .00 LOL 297.57 VL 24.968 GAL 15.18 AZL 90.77 HCA 308.66 SMA 118.20 ECC .38043 INC .7664 VI 29.310 RP 108.51 LAP .60 LOP 246.24 VP 36.376 GAP 21.89 AZP 90.48 TAL 151.69 TAP 100.36 RCA 73.23 APO 163.17 V2 34.923 RC 200.487 GL -2.18 GP 7.17 ZAL 38.08 ZAP 171.16 ETS 122.68 ZAE 128.70 ETE 173.91 ZAC 24.93 ETC 15.18 CLP 174.82
   PLANETOCENTRIC CONIC
    C3 71.746 VHL 8.470 DLA -25.21 RAL 258.43 RAD 6569.4 VEL 13.896 PTH 2.54 VHP 13.505 DPA -12.57 RAP 241.03 ECC 2.1808 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          118.29 13 11 32
109.21 16 51 7
119.67 14 6 12
108.30 19 58 31
122.99 14 28 56
106.41 21 45 9
                                                                                                     141.54
                                                                                                                                                                     992.0
                                                                                                                                                                                         2.59
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                                                                                     5.04
         90.00
                         12 45 0 1592.03
                                                                  -1.20
                                                                                                                                                                     224.4
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                                                                                     319.92
                                                                                                        151.47
          90.00
                        16 37 22
                                             824.40
                                                                   21.22
                                                                                                                                                                     805.5
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                                                                                                                                                                                                           343.35
                                                                                                        140.08
                                                                                     349.88
        100.00
                         13 42 46
                                           1405.49
                                                                   -3.63
                      18 22 17 5774.21
14 6 46 1330.23
20 14 47 5422.23
                                                                                                                                                                                        26.33
                                                                                                                                                                   5174.2
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                                                                   24.06
                                                                                     273.96
                                                                                                    136.60
                                                                                                        152.51
        100.00
                                                                                                                                                                   730.2
                                                                                                                                                                                         -5.11
                                                                                                                                                                                                           334.38
                                                                   -9.52
                                                                                     340.69
        110.00
                                                                                     249.49
                                                                                                        154.75
                                                                                                                                                                   4822.2
                                                                                                                                                                                        32.36
                                                                                                                                                                                                          240.81
        110.00
                                                                   30.42
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 1618.1 SR 371.5 SS 422.6

CRT -.4678 CRS .3365 CST -.9893

LSA 1680.4 MSA 333.3 SSA 11.2

EL1 1627.8 EL2 326.4 ALF 173.61
                                                                                         SGT 5415.3 SGR 411.9 SG3 102.8
RRT -.5206 RRF -.5041 RTF .9644
     TDE -.7880 TRA 6.8078 TC3-1.0456 BAU 1.0029
    RDE .5429 RRA -.2494 RC3 .0056 FAU .00403
FDE -.1022 FRA 1.5850 FC3 -.0486 BSP 17681
BOE .9569 BRA 6.8124 BC3 1.0456 FSP -342
                                                                                          SGB 5431.0 R23 -. 0001 R13 -. 9644
                                                                                         SG1 5419.6 SG2 351.5 THA 177.72
                                                                                                                                                                           ARRIVAL DATE FEB 16 1968
                                                                                               FLIGHT TIME 210.00
LAUNCH DATE JUL 21 1967
                                                                                              DISTANCE 600.028
    RL 152.00 LAL .00 LOL 297.57 VL 24.929 GAL 16.70 A7L 90.55 MCA 311.85 SMA 117.99 ECC .39844 INC .5530 V1 29.310 RP 108.55 LAP .41 LOP 249.42 VP 36.338 GAP 23.05 A7P 90.37 TAL 150.55 TAP 102.40 RCA 70.98 APO 165.01 V2 34.911 RC 202.138 GL -1.45 GP 7.07 TAL 36.71 ZAP 170.61 ETS 128.01 ZAE 128.43 ETE 174.02 ZAC 22.92 ETC 16.69 CLP 173.81
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 82.748 VHL 9.097 DLA -24.58 RAL 259.97 RAD 6569.6 VEL 14.286 PTH 2.60 VHP 14.210 DPA -13.19 RAP 243.16 ECC 2.3618
    C3 82.748 VHL 9.097 DLA -24.58 RAL 259.97 RAD 6569.6 VEL 14.286 PTM 2.60 VMP 14.210 DPA -13.19 RAP 243.16 ECC 2.3616 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 40 2 1663.21 -3.49 9.01 144.57 118.12 13 7 45 1063.2 29 2.38 90.00 16 54 37 819.15 21.33 319.58 155.43 109.07 17 8 16 219.2 23.74 311.74 100.00 13 39 57 1469.77 -5.98 353.43 143.20 119.34 14 4 27 869.8 -2.03 346.88 100.00 18 37 23 5775.87 24.02 274.10 156.41 108.34 20 13 39 5175.9 26.31 266.04 110.00 14 6 46 1385.64 -11.56 343.69 139.83 122.40 14 29 52 785.6 -7.20 337.31 110.00 20 27 3 5432.76 30.21 250.24 158.62 106.81 21 57 36 4832.8 32.21 241.60
                       14 6 46 1385.64
20 27 3 5432.76
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SCT 5383.8 SGR 398.2 SG3 100.4
RRT -.5259 RRF -.5112 RTF .9687
SGB 5398.5 R23 -.0003 R13 -.9687
                                                                                                                                                             ST 1602.5 SR 355.6 SS 431.9

CRT -.4207 CRS .3042 CST -.9919

LSA 1665.6 MSA 326.7 SSA 10.7
     TOE -.6914 TRA 7.4186 TC3 -.8504 BAU .9408
     RDE .5575 RRA -.2711 RC3 .0035 FAU .00265 FDE -.0835 FRA 1.6738 FC3 -.0277 BSP 17652
                                                                                          SG1 5387.9 SG2 338.5 THA 177.76
                                                                                                                                                              ELI 1609.7 ELZ 321.2 ALF 174.44
     BOE .8881 BRA 7.4236 BC3 .8504 FSP
                                                                      -334
                                                                                                                                                                             ARRIVAL DATE FEB 18 1968
LAUNCH DATE JUL 21 1967
                                                                                               FLIGHT TIME 212.00
   HELIOCENTRIC CONIC
                                                                                              DISTANCE 602.958
                                 .00 LOL 297.57 VL 24.892 GAL 18.37 AZL 90.32 HCA 315.02 SMA 117.80 ECC .41860 INC .3175 V1 29.310 .22 LOP 252.60 VP 36.302 GAP 24.36 AZP 90.22 TAL 149.54 TAP 104.56 RCA 68.49 APO 167.11 V2 34.899 -.77 GP 6.98 ZAL 35.50 ZAP 169.94 ETS 132.94 ZAE 128.09 ETE 174.13 ZAC 20.99 ETC 18.47 CLP 172.75
    RL 152.00 LAL
RP 108.59 LAP
     RC 203.771 GL
    PLANETOCENTRIC CONIC
     C3 95.939 VHL 9.795 DLA -23.97 RAL 261.33 RAD 6569.9 VEL 14.740 PTH 2.67 VHP 15.002 DPA -13.76 RAP 245.24 ECC 2.5789
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    147.50
                                                                                                                          117.80 13 4 22
109.03 17 23 33
                                                                                                                                                                   1130.4
          90.00 12 35 32 1730.44
                                                                   -5.64
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                                                                                                                                                                     217.6
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                                                                                                       159.15
          90.00
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                                              817.56
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                                                                                     319.48
                                                                                                                            118.89 14 2 41
108.46 20 27 18
121.70 14 30 25
107.25 22 8 56
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                        13 37 10 1531.48
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         100.00
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                                             5779.80
                                                                   23.94
                                                                                     274.36
                                                                                                        160.10
                          18 50 58
         100.00
                                                                                                                                                                     839.7
                                                                                                                                                                                         -9.22
                                                                                                                                                                                                           340.19
                        14 6 26 1439.71
20 38 12 5444.33
                                                                                     346.66
                                                                                                        142.94
                                                                 -13.51
         110.00
                                                                                                                                                                  4844.3
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                                                                                                                                                                                                          242.45
                                                                                     251.06
                                                                                                        162.28
         110.00
                                                                  29.98
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1590.6 SR 339.1 SS 443.6

CRT -.3757 CRS .2738 CST -.9939

LSA 1655.5 MSA 317.6 SSA 10.1

EL1 1595.9 EL2 313.2 ALF 175.24
                                                                                        SGT 5349.6 SGR 383.1 SG3 98.1
RRT -.5299 RRF -.5170 RTF .9728
SGB 5363.3 R23 -.0005 R13 -.9728
      TOE -.5906 TRA 8.0815 TC3 -.6720 BAU
                                                                        .4619
     RDE .5716 RRA - .2921 RC3 .0012 FAU .00111
     FOE -.0649 FRA 1.7719 FC3 -.0100 BSP 17521
BOE .8220 BRA 8.0868 BC3 .6720 FSP -325
                                                                                          SG1 5353.5 SG2 324.7 THA 177.82
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FLIGHT TIME 206.00

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ARRIVAL DATE FEB 20 1968
                                                                                                                                    FLIGHT TIME 214.00
LAUNCH DATE JUL 21 1967
                                             .00 LOL 297.57 VL 24.856 GAL 20.22 AZL 90.05 HCA 318.20 SMA 117.62 ECC .44124 INC .0514 V1 29.310 .04 LOP 255.77 VP 36.267 GAP 25.84 AZP 90.04 TAL 148.66 TAP 106.86 RCA 65.72 APO 169.51 V2 34.888 -12 GP 6.90 ZAL 34.46 ZAP 169.15 ETS 137.46 ZAE 127.68 ETE 174.25 ZAC 19.15 ETC 20.58 CLP 171.61
                                                                                                                                   DISTANCE 605.318
     HELIOCENTRIC CONIC
       RL 152.00 LAL
        RP 108.62 LAP
        RC 205.386 GL
      PLANETOCENTRIC CONIC
        C3 111.863 VHL 10.577 OLA -23.38 RAL 262.49 RAD 6570.1 VEL 15.271 PTH 2.74 VHP 15.895 OPA -14.29 RAP 247.26 ECC 2.8410
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                              1194.1
                                                                                                                                                                                                                                                              -3.92
                                                                                                                                                                      117.35 13 1 9
109.06 17 37 8
                                                                                                                                           150.29
                                   12 31 15 1794.15
                                                                                            -7.65
                                                                                                                        16.39
               90.00
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                                                                                                                                                162.63
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                                                                                             21.34
                                                                                                                      319.55
                                                                818.66
               90.00
                                   17 23 29
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                                    13 34 18 1590.65
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             100.00
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                                                                                                                      274.73
                                                                                                                                                163.54
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                                  19 3 8 5785.43
14 5 41 1492.22
20 48 14 5456.63
                                                             5785.43
                                                                                            23.82
             100.00
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107.70 22 19 10
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                                                                                            -15.37
             110.00
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                                                                                                                                                                                                                                  4856.6
                                                                                                                      251.93
                                                                                                                                                165.72
             110.00
                                                                                             29.73
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                             HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                          ST 1580.5 SR 322.1 SS 458.3

CRT -.3358 CRS .2485 CST -.9956

LSA 1648.6 MSA 306.1 SSA 9.6

ELI 1584.3 EL2 302.7 ALF 175.94
                                                                                                                             SGT 5309.7 SGR 366.7 SG3 95.8
RRT -.5325 RRF -.5215 RTF .9768
        TDE -.4953 TRA 8.7947 TC3 -.5131 BAU .7673
        RDE .5858 RRA -.3113 RC3 -.0008 FAU-.00055
                                                                                                                             SGB 5322.3 R23 -.0006 R13 -.9768
        FDE -.0487 FRA 1.8787 FC3 .0042 BSP 17488
BDE .7671 BRA 8.8002 BC3 .5131 FSP -317
                                                                                                                             SG1 5313.3 SG2 310.2 THA 177.89
                                                                                                                                                                                                                                               ARRIVAL DATE FEB 22 1968
                                                                                                                                     FLIGHT TIME 216,00
 LAUNCH DATE JUL 21 1967
      HELIOCENTRIC CONIC
                                                                                                                                     DISTANCE 606.962
                                             .00 LOL 297.57 VL 24.823 GAL 22.28 AZL 89.76 HCA 321.37 SMA 117.45 ECC .46675 INC .2427 VI 29.310 -.15 LOP 258.94 VP 36.234 GAP 27.52 AZP 89.81 TAL 147.97 TAP 109.34 RCA 62.63 APO 172.26 V2 34.878 .49 GP 6.82 ZAL 33.60 ZAP 168.23 ETS 141.59 ZAE 127.18 ETE 174.38 ZAC 17.43 ETC 23.05 CLP 170.38
        RL 152.00 LAL
               108.65 LAP
        RC 206.983 GL
      PLANETOCENTRIC CONIC
                                                                                                                                                                                     2.81 VHP 16.908 OPA -14.77 RAP 249.20 ECC 3.1597
        C3 131.228 VHL 11.455 DLA -22.82 RAL 263.46 RAD 6570.4 VEL 15.892 PTH
       C3 131.228 VHL 11.455 DLA -22.82 RAL 263.46 RAD 6570.4 VEL 15.892 PTH 2.81 VHP 16.908 DPA -14.77 RAP 249.20 ECC 5.1597
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 27 0 1854.52 -9.52 19.84 152.93 116.79 12 57 55 1254.5 -5.85 13.09
100.00 13 31 14 1647.22 -11.77 3.43 151.75 117.68 13 58 41 1047.2 -7.97 356.70
100.00 19 13 54 5792.27 23.67 275.18 166.73 108.81 20 50 26 5192.3 26.02 267.17
110.00 14 4 30 1542.93 -17.12 352.48 148.71 120.05 14 30 12 942.9 -13.00 345.80
110.00 20 57 7 5469.34 29.46 252.82 168.89 108.17 22 28 17 4869.3 31.66 244.30
                                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                             MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                           ST 1571.0 SR 304.8 SS 475.6
CRT -.2997 CRS .2260 CST -.9969
                                                                                                                              SGT 5265.7 SGR 349.0 SG3 93.7
RRT -.5331 RRF -.5239 RTF .9806
         TOE -.4017 TRA 9.5700 TC3 -.3705 BAU .6500
         ROE .5999 RRA -.3282 RC3 -.0027 FAU-.00245
                                                                                                                                                                                                                           LSA 1643.5 MSA 293.0 SSA 9.0
EL1 1573.7 EL2 290.3 ALF 176.55
                                                                                                                              SGB 5277.3 R23 -.0006 R13 -.9806
        FOE -.0337 FRA 1.9972 FC3 .0162 BSP 17433
BDE .7220 BRA 9.5756 BC3 .3705 FSP -311
                                                                                                                              SG1 5269.0 SG2 295.1 THA 177.97
                                                                                                                                                                                                                                               ARRIVAL DATE FEB 24 1968
                                                                                                                                     FLIGHT TIME 218.00
 LAUNCH DATE JUL 21 1967
                                                                                                                                    DISTANCE 607.699
        RL 152.00 LAL .00 LOL 297.57 VL 24.793 GAL 24.59 A7L 89.41 MCA 324.54 SMA 117.29 ECC .49556 INC .5848 VI 29.310 RP 108.69 LAP -.34 LOP 262.12 VP 36.203 GAP 29.43 A7P 89.52 TAL 147.48 TAP 112.03 RCA 59.17 APO 175.41 V2 34.867 RC 208.560 GL 1.06 GP 6.74 7AL 32.95 7AP 167.16 ETS 145.36 7AE 126.56 ETE 174.53 7AC 15.85 ETC 25.92 CLP 169.05
       PLANETOCENTRIC CONIC
         C3 154.976 VHL 12.449 DLA -22.28 RAL 264.21 RAD 6570.7 VEL 16.622 PTH 2.89 VHP 18.063 OPA -15.20 RAP 251.04 ECC 3.5505
         C3 154.976 VHL 12.449 OLA -22.28 RAL 264.21 RAD 6570.7 VEL 10.622 PM 2.89 VAP 13.08 OF 27.08 PM 2.89 VAP 14.08 OF 27.08 PM 2.89 VAP 14.08 OF 27.08 OF 27.08 PM 2.89 VAP 14.08 OF 27.08 OF 27.08 PM 2.89 VAP 14.08 OF 27.08 
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                                    19 23 17 5799.87
14 2 46 1591.59
21 4 51 5482.14
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108.64 22 36 13
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31.45
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                                                                                              -18.76
                                                                                                                       355.31
              110.00
                                                                                                                                                                                                                                   4882.1
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                                                                                                                                                 171.78
                                                                                               29.19
                                                                                                                       253.72
              110.00
                                                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                            ST 1560.8 SR 287.2 SS 496.1
CRT -.2671 CRS .2058 CST -.9979
                                                                                                                              SGT 5217.4 SGR 330.0 SG3 91.7
RRT -.5309 RRF -.5233 RTF .9840
SGB 5227.9 R23 -.0007 R13 -.9840
          TOE -.3114 TRAID.4152 TC3 -.2432 BAU .5040
         RDE .6141 RRA -.3416 RC3 -.0044 FAU-.00470
                                                                                                                                                                                                                            LSA 1639.2 MSA 278.5 SSA
                                                                                                                                                                                                                                                                                                  8.5
         FOE -.0199 FRA 2.1295 FC3 .0263 BSP 17353
BOE .6886 BRAID.4208 BC3 .2432 FSP -304
                                                                                                                              SG1 5220.4 SGZ 279.5 THA 178.07
                                                                                                                                                                                                                            EL1 1562.7 EL2 276.4 ALF 177.10
                                                                                                                                                                                                                                                ARRIVAL DATE FEB 26 1968
                                                                                                                                      FLIGHT TIME 220,00
  LAUNCH DATE JUL 21 1967
                                                                                                                                      DISTANCE 607.280
       HELIOCENTRIC CONIC
         RL 152.00 LAL .00 LOL 297.57 VL 24.766 GAL 27.20 AZL 89.02 MCA 327.71 SMA 117.15 ECC .52818 INC .9840 V1 29.310 RP 108.72 LAP -.53 LOP 265.29 VP 36.175 GAP 31.64 AZP 89.17 TAL 147.27 TAP 114.98 RCA 55.27 APO 179.02 V2 34.858 RC 210.118 GL 1.60 GP 6.66 ZAL 32.50 ZAP 165.93 ETS 148.82 ZAE 125.81 ETE 174.69 ZAC 14.44 ETC 29.19 CLP 167.58
        PLANETOCENTRIC CONIC
                                                                                                                                                                                     2.97 VHP 19.389 DPA -15.59 RAP 252.75 ECC 4.0340
          C3 184.357 VHL 13.578 DLA -21.76 RAL 264.73 RAD 6571.0 VEL 17.484 PTH
         C3 184.357 VHL 13.578 DLA -21.76 RAL 264.73 RAD 6571.0 VEL 17.484 PTH 2.97 VHP 19.389 DPA -15.59 RAP 252.75 ECC 4.0340 PTM 19.00 PTM -15.59 RAP 252.75 ECC 4.0340 PTM -15.50 RAP 252.75 RAP
                                                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             MID-COURSE EXECUTION ACCURACY
        DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                            ST 1548.9 SR 269.5 SS 520.4

CRT - 2368 CRS .1865 CST -.9985

LSA 1635.0 MSA 263.2 SSA 7.9
                                                                                                                             SGT 5166.2 SGR 309.7 SG3 89.8
RRT -.5248 RRF -.5187 RTF .9871
          TDE -.2236 TRA11.3423 TC3 -.1295 BAU .3196
           RDE .6285 RRA -.3502 RC3 -.0058 FAU-.00746
          FOE -.0070 FRA 2.2788 FC3 .0350 BSP 17149
BOE .6671 BRA11.3477 BC3 .1297 FSP -296
                                                                                                                              SGB 5175.4 R23 -.0008 R13 -.9871
                                                                                                                                                                                                                             ELI 1550.3 ELZ 261.6 ALF 177.57
                                                                                                                              SG1 5168.7 SG2 263.5 THA 178.19
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LAUNCH DATE JUL 22 1967
                                                                                          FLIGHT TIME 70.00
                                                                                                                                                                 ARRIVAL DATE SEP 30 1967
    HELIOCENTRIC CONIC
                                                                                          DISTANCE 194.468
     RL 151.99 LAL .00 LOL 298.53 VL 27.759 GAL -12.59 AZL 92.65 MCA 86.80 SMA 136.01 ECC .24627 INC 2.6454 V1 29.312 RP 108.41 LAP -2.64 LOP 25.32 VP 38.375 GAP -8.19 AZP 90.15 TAL 229.65 TAP 316.46 RCA 102.51 APO 169.50 V2 34.957 RC 59.590 GL -11.18 GP -14.05 ZAL 156.47 ZAP 32.64 ETS 22.45 ZAE 153.55 ETE 349.14 ZAC 93.32 ETC 13.29 CLP -29.77
    PLANETOCENTRIC CONIC
     C3 41.561 VHL 6.447 DLA
                                                  4.37 RAL 138.29 RAD 6568.6 VEL 12.764 PTH 2.32 VHP 6.223 DPA -7.99 RAP 171.50 ECC 1.6840
                                                           INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                  102.12 0 48 38 70.18 14 31 19 103.12 2 7 33 69.14 15 46 20 105.97 3 16 41 66.19 16 46 34
                        0 6 26 2531.93
13 9 34 4904.16
                                                                                               13.87
                                                              -25.79
                                                                                                                                                      1931.9
                                                                                  62.62
                                                               20.65
                                                                                213.34
                                                                                                    10.83
                                                                                                                                                          4304.2
                                                                                                                                                                                              205.86
                         1 29 50 2262.95
                                                              -27.10
                                                                                42.51
                                                                                                    13.54
                                                                                                                                                          1662.9
                                                                                                                                                                            -25.02
         100.00
                       14 28 52
                                          4648.38
                                                              21.91
                                                                                194.03
                                                                                                    10.33
                                                                                                                                                          4048.4
                                                                                                                                                                            18.87
                                                                                                                                                                                             186.55
                       2 42 47 2034.63
15 32 24 4449.47
                                                                                                                                                                            -28.14
        110.00
                                                              -30.63
                                                                                 24.13
                                                                                                   12.50
                                                                                                                                                          1434.6
                                                                                                                                                                                               15.82
                                                                                177.42
        110.00
                                                               25.28
                                                                                                     8.81
                                                                                                                                                          3849.5
                                                                                                                                                                             21.84
                                                                                                                                                                                              169.96
                                                                                    MID-COURSE EXECUTION ACCURACY
SCT 504.9 SGR 451.2 SG3 163.4
RRT -.2040 RRF .4276 RTF -.4066
SGB 677.1 R23 -.1473 R13 .5173
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                                   ST 196.0 SR 385.8 SS 137.3
CRT -.8065 CRS -.0982 CST -.4853
LSA 419.4 MSA 172.1 SSA 23.8
     TOE .1969 TRA -.3271 TC3 .2894 BAU .1681
     RDE -.4280 RRA -.2406 RC3 -.0882 FAU .06325
     FOE .0194 FRA -.9332 FC3-1,3174 BSP 1198
BDE .4711 BRA .4061 BC3 .3026 FSP -437
                                                                                     SG1 531.4 SG2 419.7 THA 149.45
     BOE .4711 BRA .4061 BC3 .3026 FSP
                                                                                                                                                    EL1 419.4 EL2 106.6 ALF 113.92
LAUNCH DATE JUL 22 1967
                                                                                          FLIGHT TIME 72.00
                                                                                                                                                                  ARRIVAL DATE OCT 2 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 201,228
    RL 151.99 LAL .00 LOL 298.53 VL 27.842 GAL -12.47 AZL 92.52 MCA 89.99 SMA 136.65 ECC .24210 INC 2.5183 VI 29.312 RP 108.37 LAP -2.52 LOP 28.52 VP 38.447 GAP -7.37 AZP 90.00 TAL 230.62 TAP 320.61 RCA 103.57 APO 169.74 V2 34.970 RC 61.464 GL -10.81 GP -15.01 ZAL 157.25 ZAP 36.48 ETS 20.75 ZAE 154.61 ETE 345.53 ZAC 94.18 ETC 13.11 CLP -33.64
    PLANETOCENTRIC CONIC
    PLANFOCENTRIC CONIC
C3 40.540 WHL 6.367 DLA 4.93 RAL 137.75 RAD 6568.6 VEL 12.724 PTH 2.31 VHP 5.849 DPA -8.59 RAP 170.50 ECC 1.6672
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 0 3 2543.18 -25.95 63.40 13.10 101.75 0 42 26 1943.2 -24.07 55.24
90.00 13 11 38 4880.36 20.09 211.82 9.72 69.62 14 32 58 4280.4 17.14 204.39
100.00 1 23 43 2273.32 -27.26 43.24 12.79 102.77 2 1 36 1673.3 -25.23 35.03
100.00 14 30 39 4625.45 21.34 192.56 9.21 68.56 15 47 44 4025.4 18.24 185.14
110.00 2 37 17 2043.08 -30.79 24.74 11.76 105.65 3 11 20 1443.1 -28.34 16.40
110.00 15 33 34 4428.45 24.69 176.07 7.67 65.58 16 47 23 3828.5 21.19 168.68
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                    SGT 498.5 SGR 465.5 SG3 184.0
RRT -.1990 RRF .4798 RTF -.3628
     TOE .1892 TRA -.3350 TC3 .2810 BAU .1640
                                                                                                                                                     ST 193.2 SR 385.0 SS 149.0
     ROE -.4209 RRA -.2543 RC3 -.1124 FAU .06999
                                                                                                                                                    CRT -.7834 CRS -.0360 CST -.5705
     FOE .0466 FRA-1.0565 FC3-1.4947 8SP 1183
80E .4815 BRA .4206 8C3 .3026 FSP -501
                                                                                   SGB 682.1 R23 -.1792 R13 .5220
                                                                                                                                                   LSA 416.4 MSA 184.0 SSA 24.0
                                                                                     SG1 530.6 SG2 428.7 THA 144.51
                                                                                                                                                   EL1 416.2 EL2 111.1 ALF 113.21
                                                                                         FLIGHT TIME 74.00
                                                                                                                                                                 ARRIVAL DATE OCT 4 1967
LAUNCH DATE JUL 22 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 207.957
    RL 151.99 LAL .00 LOL 298.53 VL 27.910 GAL -12.35 AZL 92.39 MCA 93.19 SMA 137.19 ECC .23850 INC 2.3913 V1 29.312 RP 108.33 LAP -2.39 LOP 31.72 VP 38.509 GAP -6.60 AZP 89.87 TAL 231.43 TAP 324.62 RCA 104.47 APO 169.92 V2 34.983 RC 63.388 GL -10.41 GP -16.03 ZAL 157.95 ZAP 40.53 ETS 19.18 ZAE 155.84 ETE 341.18 ZAC 95.26 ETC 12.86 CLP -37.74
    PLANETOCENTRIC CONIC
     C3 39.614 VHL 6.294 DLA 5.49 RAL 137.32 RAD 6568.5 VEL 12.688 PTH 2.30 VHP 5.511 DPA -9.17 RAP 169.28 ECC 1.6519
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 50 12 2554.74 -26.11 64.21 12.48 101.38 24 32 47 1954.7 -24.27 56.02 90.00 13 14 6 4857.12 19.53 210.34 8.77 69.08 14 35 3 4257.1 16.51 202.97 100.00 1 18 4 2284.02 -27.42 43.99 12.17 102.40 1 56 8 1684.0 -25.43 35.76 100.00 14 32 51 4603.08 20.78 191.14 8.24 68.01 15 49 34 4003.1 17.61 183.78
                       1 18 4 2284.02
14 32 51 4603.08
2 32 15 2051.85
15 35 10 4408.01
                                                                                                                    105.30 3 6 27
65.00 16 48 38
                                                                                                                                                                                              17.00
                                                                                                                                                         1451.9
                                                                                                                                                                          -28.54
        110.00
                                                             -30.95
                                                                                25.37
                                                                                                  11.17
                                                                                174.77
                                                                                                                                                         3808.0
                                                                                                                                                                            20.54
        110 00
                                                             24.11
                                                                                                     6.66
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 191.5 SR 382.9 SS 161.6
CRT -.7525 CRS .0200 CST -.6526
LSA 412.4 MSA 196.8 SSA 24.1
                                                                                    SGT 490.5 SGR 482.7 SG3 206.3
RRT -.1788 RRF .5337 RTF -.3005
SGB 686.2 R23 -.2059 R13 .5347
     TOE .1819 TRA -.3487 TC3 .2653 BAU .1588
    RDE -.4126 RRA -.2698 RC3 -.1399 FAU .07726
FDE .0790 FRA-1.1863 FC3-1.6884 BSP 1167
BDE .4509 BRA .4409 BC3 .2999 FSP -570
                                                                                                                                                    EL1 411.7 EL2 117.3 ALF 112.56
                                                                                    SG1 528.5 SG2 440.8 THA 137.58
                                                                                                                                                                 ARRIVAL DATE OCT 6 1967
                                                                                         FLIGHT TIME 76.00
LAUNCH DATE JUL 22 1967
   HELIOCENTRIC CONTC
                                                                                         DISTANCE 214.653
    RL 151.99 LAL .00 LOL 298.53 VL 27.966 GAL -12.25 A7L 92.26 HCA 96.38 SMA 137.64 ECC .23537 INC 2.2633 V1 29.312 RP 108.29 LAP -2.25 LOP 34.91 VP 38.561 GAP -5.85 AZP 89.75 TAL 232.09 TAP 328.47 RCA 105.24 APO 170.03 V2 34.996 RC 65.357 GL -9.98 GP -17.12 ZAL 158.56 ZAP 44.80 ETS 17.68 ZAE 157.18 ETE 335.87 ZAC 96.55 ETC 12.52 CLP -42.05
   PLANETOCENTRIC CONIC
                                                 6.04 RAL 137.00 RAD 6568.5 VEL 12.654 PTH 2.30 VHP 5.208 OPA -9.73 RAP 167.84 ECC 1.6379
    C3 38.759 VHL 6.226 DLA
    LNOH AZMTH LNCH TIME L-1 TIME
90.00 23 44 44 2566.55
90.00 13 17 0 4834.30
100.00 1 12 53 2294.95
                                                          INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -26.26 65.04 11.99 100.99 24 27 31 1966.5 -24.48 56.83 18.97 208.90 7.96 68.58 14 37 34 4234.3 15.89 201.58
                                                                                                                                                                                               36.50
                                                                                44.77
                                                                                                                     102.02
                                                                                                                                    1 51 8
                                                                                                                                                         1695.0
                                                                                                                                                                           -25.64
                                                              -27.57
                                                                                                   11.69
                                                                                                                      67.50 15 51 50
                                                                                189.75
                                                                                                                                                         3981.1
                                                                                                     7.43
                                                                                                                                                                           16.99
                                                                                                                                                                                              182.45
                                                              20.21
        100.00
                      14 35 29
                                        4581.13
                                                                                                                     104.94 3 2 1
64.46 16 50 18
                                                                                                                                                                           -28.74
                                                                                                   10.72
                                                                                                                                                         1460.9
                         2 27 41 2060.87
15 37 10 4387.98
                                                                                 26.02
        110.00
                                                             -31.11
                                                                                                                                                         3788.0
                                                                                                                                                                            19.90
                                                                                173.50
                                                                                                     5.83
        110.00
                      15 37 10
                                                              23.53
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 483.1 SGR 503.7 SG3 230.3

RRT -.1402 RRF .5889 RTF -.2176

SGB 697.9 R23 -.2039 R13 .5691

SGI 528.3 SG2 456.0 THA 126.69
                                                                                                                                                  ST, 191.9 SR 379.5 SS 174.6
CRT -.7154 CRS .0632 CST -.7233
LSA 408.0 MSA 210.7 SSA 24.1
     TOE .1763 TRA -.3679 TC3 .2424 BAU .1538
     RDE -.4031 RRA -.2870 RC3 -.1713 FAU .08505
    FOE .1143 FRA-1.3222 FC3-1.8997 BSP 1183
                                                                                                                                                 EL1 406.4 EL2 125.2 ALF 112.10
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BOE .4400 BRA .4667 BC3 .2968 FSP

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ARRIVAL DATE OCT 8 1967
                                                                            FLIGHT TIME 78.00
LAUNCH DATE JUL 22 1967
                                                                            DISTANCE 221.315
   RL 151.99 LAL .00 LOL 298.53 VL 28.010 GAL -12.15 A7L 92.13 MCA 99.58 SMA 137.99 ECC .23264 INC 2.1336 V1 29.312 RP 108.25 LAP -2.10 LOP 38.11 VP 38.605 GAP -5.14 A7P 89.64 TAL 232.61 TAP 332.19 RCA 105.89 APO 170.09 V2 35.009 RC 67.365 GL -9.52 GP -18.27 ZAL 159.09 ZAP 49.27 ETS 16.20 ZAE 158.55 ETE 329.36 ZAC 98.06 ETC 12.08 CLP -46.60
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                          6.58 RAL 136.78 RAD 6568.5 VEL 12.622 PTH 2.29 VHP 4.941 DPA -10.25 RAP 166.17 ECC 1.6247
    C3 37.957 VHL 6.161 DLA
    LNCH AZHTH LNCH TIME L-I-TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   100.59 24 22 40
68.09 14 40 31
101.64 1 46 32
67.00 15 54 31
104.58 2 58 1
63.94 16 52 24
                                                                                                                               1978.6
                                                                                                                                                -24.69
                                                                                  11.62
                   23 39 41 2578.55
13 20 19 4811.72
                                                     -26.42
                                                                     65.89
                                                                                                                                    4211.7
                                                                                                                                                    15.27
                                                                                                                                                                   200.21
                                                                                      7.28
                                                                    207.49
                                                     18.40
                                                                                                                                                                    37.26
                                                                                                                                   1706.1
                                                                                                                                                   -25.84
                                                                    45.56
                                                                                     11.33
                      1 8 6 2306.08
                                                     -27.73
                                                                                                                                   3959.4
                                                                                                                                                    16.36
                                                                                                                                                                   181.14
                   14 36 31 4559.43
2 23 31 2070.06
15 39 36 4368.21
                                                                                      6,74
                                                     19.64
                                                                    188.40
                                                                                                                                                   -28.95
                                                                                                                                                                    18.26
                                                                                                                                    1470.1
                                                                                     10.38
       110.00
                                                     -31.27
                                                                      26.69
                                                                                                                                                    19.25
                                                                                                                                    3768.2
                                                                                                                                                                   165.07
                                                                                      5.12
       110.00
                                                      22.95
                                                                     172.27
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 478.3 SGR 527.9 SG3 254.8
RRT -.0682 RRF .6410 RTF -.1027
SGB 712.3 R23 -.1136 R13 .6337
SGI 532.9 SG2 472.6 THA 107.29
                                                                                                                              ST 193.7 SR 374.3 SS 188.4

CRT -.6654 CRS .1093 CST -.7972

LSA 402.3 MSA 225.2 SSA 24.1
    TOE .1703 TRA -.3958 TC3 .2090 BAU
                                                          .1489
    RDE -.3917 RRA -.3051 RC3 -.2059 FAU .09295
    FDE .1584 FRA-1.4547 FC3-2.1200 BSP 1194
                                                                                                                               EL1 399.0 EL2 135.6 ALF 111.62
    BOE .4271 BRA .4998 BC3 .2934 FSP
                                                          -728
                                                                                                                                           ARRIVAL DATE OCT 10 1967
                                                                             FLIGHT TIME 80.00
LAUNCH DATE JUL 22 1967
                                                                             DISTANCE 227.943
   HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 28.042 GAL -12.05 AZL 92.00 HCA 102.78 SMA 138.25 ECC .23024 INC 2.0013 V1 29.312 RP 108.20 LAP -1.95 LOP .41.32 VP 36.640 GAP -4.47 AZP 89.56 TAL 232.97 TAP 335.76 RCA 106.42 APO 170.08 V2 35.023 RC 69.409 GL -9.04 GP -19.46 ZAL 159.55 ZAP 53.94 ETS 14.69 ZAE 159.82 ETE 321.41 ZAC 99.76 ETC 11.54 CLP -51.37
   PLANETOCENTRIC CONIC
    C3 37.191 VHL 6.096 DLA 7.13 RAL 136.66 RAD 6568.4 VEL 12.592 PTH 2.28 VHP 4.710 DPA -10.75 RAP 164.30 ECC 1.6121 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  11.36
                                                                                                    100.18 24 18 12
67.63 14 43 53
                                                                                                                                                   -24.89
        90,00 23 35 1 2590,76
90,00 13 24 4 4789,20
                                                                                                                                   1990.8
                                                     -26.57
                                                                     66.75
                                                                                                                                                                    198.66
                                                                                                                                    4189.2
                                                                                                                                                     14.64
                                                       17.63
                                                                     206.09
                                                                                      6.73
                                                                                                                                                                     38.04
                                                                                                                   1 42 20
                                                                                                                                    1717.4
                                                                                                                                                    -26.05
                                                                                      11.08
                                                                                                     101.24
       100.00
                      1 3 42 2317.40
                                                      -27.88
                                                                      46.37
                                                                                                     101.24 1 42 20
66.53 15 57 38
104.20 2 54 24
63.44 16 54 55
                                                                                                                                                                    179.85
                                                                                                                                    3937.8
                                                                                                                                                     15.72
                     14 42 0 4537.80
                                                       19.06
                                                                     187.05
                                                                                       6.18
       100.00
                                                                                                                                                   -29.15
                                                                                                                                                                     18.91
                                                                                                                                    1479.4
                    2 19 45 2079.42
15 42 27 4348.54
                                                     -31.42
                                                                      27.38
                                                                                      10.16
       110.00
                                                                                                                                   3748.5
                                                                                                                                                    18.60
                                                       22.35
                                                                     171.05
                                                                                      4.54
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 481.3 SGR 555.8 SG3 279.7
RRT .0363 RRF .6900 RTF .0407
SGB 735.2 R23 .0574 R13 .6878
SG1 556.9 SG2 480.0 THA 82.96
                                                                                                                                ST 198.2 SR 367.4 SS 202.4
CRT -.6067 CRS .1497 CST -.8613
     TDE .1658 TRA -.4310 TC3 .1656 BAU .1466
     ROE -.3764 RRA -.3239 RC3 -.2438 FAU .10084
                                                                                                                               LSA 396.3 MSA 240.1 SSA 24.1
     FOE .2080 FRA-1.5819 FC3-2.3473 BSP 1248
BOE .4132 BRA .5392 BC3 .2948 FSP -808
                                                                                                                                EL1 390.2 EL2 148.4 ALF 111.37
                                                                                                                                           ARRIVAL DATE OCT 12 1967
                                                                             FLIGHT TIME 82.00
LAUNCH DATE JUL 22 1967
    RL 151.99 LAL .00 LOL 298.53 VL 28.065 GAL -11.95 A7L 91.87 MCA 105.99 SMA 138.43 ECC .22810 INC 1.8656 VI 29.312 RP 108.16 LAP -1.79 LOP 44.52 VP 38.669 GAP -3.82 A7P 89.49 TAL 233.21 TAP 339.19 RCA 106.85 APO 170.01 V2 35.036 RC 71.485 GL -8.51 GP -20.69 7AL 159.93 7AP 58.77 ETS 13.13 ZAE 160.83 ETE 311.88 ZAC 101.63 ETC 10.87 CLP -56.35
                                                                             DISTANCE 234.536
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 36.449 VML 6.037 OLA 7.68 RAL 136.65 RAD 6568.4 VEL 12.563 PTH 2.28 VMP 4.513 OPA -11.21 RAP 162.25 ECC 1.5999
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  99.76 24 14 4
67.18 14 47 43
100.83 1 38 28
66.07 16 1 11
                                                                                                                                                   -25.09
                                                                                                                                                                    59.34
                                                                                                                                    2003.2
                    23 30 40 2603.24
                                                      -26.71
                                                                     67.63
                                                                                   11.21
         90.00
                                                                                                                                                                   197.51
                                                                                                                                                    13.99
                                                                                                                                    4166.5
                                                                                       6.29
                    13 28 16
                                    4766.53
                                                       17.23
                                                                     204.69
         90.00
                                                                                                                                                   -26.25
                                                                                                                                    1729.0
                                                                                                                                                                    38.84
                                                                                      10.94
                                                       -28.03
                                                                      47.19
        100.00
                      0 59 39
                                   2328.97
                                                                                                                                                    15.08
                                                                                                                                                                    178.56
                                                                                                                                    3916.0
                                                                                       5.73
                     14 45 55 4516.04
2 16 19 2089.00
15 45 44 4328.77
                                                      18.47
                                                                     185.71
        100.00
                                                                                                                                                   -29.36
                                                                                                               2 31
16 57 52
                                                                                                                  2 51 8
                                                                                                                                                                     19.58
                                                                                                                                    1489.0
                                                                                      10.04
                                                                                                     103.81
                                                      -31.58
                                                                       28.08
        110.00
                                                                                                                                    3728.8
                                                                                                                                                     17.94
                                                                     169.83
                                                                                       4.06
                                                                                                      62.95
        110.00
                     15 45 44
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 206.7 SR 359.1 SS 216.4
CRT -.5441 CRS .1799 CST -.9096
                                                                         SGT 497.8 SGR 588.0 SG3 304.4

RRT .1651 RRF .7352 RTF .2013

SGB 770.4 R23 .1495.R13 .7243

SG1 604.6 SG2 477.5 THA 67.69
     TOE .1640 TRA -.4730 TC3 .1124 BAU .1494
     ROE -.3637 RRA -.3432 RC3 -.2853 FAU .10859
FDE .2594 FRA-1.7005 FC3-2.5792 BSP 1367
BOE .3990 BRA .5843 BC3 .3066 FSP -894
                                                                                                                                LSA 391.0 MSA 255.0 SSA 24.1
                                                                                                                                EL1 380.7 EL2 163.6 ALF 111.56
                                                                                                                                            ARRIVAL DATE OCT 14 1967
                                                                              FLIGHT TIME 84.00
 LAUNCH DATE JUL 22 1967
                                                                              DISTANCE 241.094
    HELIOCENTRIC CONIC
     RL 151.99 LAL .00 LOL 298.53 VL 28.078 GAL -11.84 AZL 91.73 MCA 109.19 SMA 138.53 ECC .22620 INC 1.7252 V1 29.312 RP 108.12 LAP -1.63 LOP 47.72 VP 38.690 GAP -3.20 AZP 89.43 TAL 233.30 TAP 342.49 RCA 107.20 APO 169.87 V2 35.049 RC 73.590 GL -7.96 GP -21.93 ZAL 160.23 ZAP 63.73 ETS 11.48 ZAE 161.40 ETE 300.91 ZAC 103.63 ETC 10.09 CLP -61.50
    PLANETOCENTRIC CONIC
                                           8.24 RAL 136.72 RAD 6568.4 VEL 12.534 PTH 2.27 VHP 4.351 OPA -11.63 RAP 160.06 ECC 1.5879
     C3 35.720 VHL 5.977 OLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 26 37 2616.08 -26.86 68.55 11.15 99.33 24 10 13 2016.1 -25.29 60.23 90.00 13 32 57 4743.50 16.62 203.28 5.95 66.74 14 52 0 4143.5 13.33 196.14
                                                                                                                                                                      39.67
                       0 55 52 2340.86
14 50 18 4493.94
2 13 13 2098.84
15 49 27 4308.73
                                                                                                                   1 34 53
                                                                                                                                     1740.9
                                                                      48.05
                                                                                      10.89
                                                                                                      100.40
                                                       -28.18
        100.00
                                                                                                       65.62 16 5 12
103.41 2 48 11
62.48 17 1 16
                                                                                                                                                                    177.26
                                                                                                                                     3893.9
                                                                                                                                                      14.41
                      14 50 18
                                                       17.85
                                                                      184.36
                                                                                        5.38
        100.00
                                                                                                                                     1498.8
                                                                                                                                                                      20.27
                                                                                                                                                     -29.57
                                                       -31.74
                                                                       28.80
                                                                                      10.03
                                                                                                      103.41
        110.00
                                                                                                                                     3708.7
                                                                                                                                                      17.27
                                                                                                                                                                     161.61
                                                                      168.62
                                                                                        3.69
                     15 49 27
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          RRT .3104 RRF .7741 RTF .3672
SGB 819.5 R23 .1850 R13 .7634
SGI 671.5 SG2 469.7 THA 58.25
                                                                                                                                ST 218.4 SR 348.5 SS 230.6
CRT -.4751 CRS .2122 CST -.9488
LSA 387.1 MSA 268.2 SSA 24.1
      TOE .1636 TRA -.5230 TC3 .0472 BAU .1586
      RDE -.3464 RRA -.3613 RC3 -.3287 FAU .11556
      FOE .3185 FRA-1.7982 FC3-2.8007 BSP 1540
                                                                                                                                EL1 369.1 EL2 181.5 ALF 112.22
      BDE .3831 BRA .6356 BC3 .3321 FSP
                                                            -969
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ARRIVAL DATE OCT 16 1967

LAUNCH DATE JUL 22 1967

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HELIOCENTRIC CONIC
                                                                           DISTANCE 247.616
    RL 151.99 LAL .00 LOL 298.53 VL 28.082 GAL -11.74 AZL 91.58 MCA 112.40 SMA 138.57 ECC .22448 INC 1.5793 V1 29.312
RP 108.08 LAP -1.46 LOP 50.93 VP 38.705 GAP -2.61 AZP 89.40 TAL 233.27 TAP 345.67 RCA 107.47 APO 169.68 V2 35.062
RC 75.721 GL -7.36 GP -23.17 ZAL 160.46 ZAP 68.76 ETS 9.72 ZAE 161.36 ETE 289.08 ZAC 105.73 ETC 9.18 CLP -66.79
   PLANETOCENTRIC CONIC
                                         8.81 RAL 136.89 RAD 6568.4 VEL 12.505 PTH 2.26 VHP 4.223 OPA -12.02 RAP 157.75 ECC 1.5760
    C3 34.998 VHL 5.916 DLA
    UNCH AZMTH LNCH TIME L-I TIME
90.00 23 22 46 2629.42
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               11.20
                                                                                                                                            -25.50
                                                                                                                            2029.4
                                                                                                                                                              61.15
                                                    -27.00
                                                                                                98.87 24 6 35
                                                                   69.50
                    13 38 9 4719.84
0 52 20 2353.23
                                                                                                             14 56 49
                                                                                                                                4119.8
         90.00
                                                     15.98
                                                                   201.84
                                                                                   5.72
                                                                                                   66.31
                                                                                                                                                12.64
                                                                                                                                                              194.75
                                                    -28.33
                                                                    46.93
                                                                                10.95
                                                                                                   99.96
                                                                                                             1 31 33
                                                                                                                                1753.2
                                                                                                                                               -26.66
                                                                                                                                                               40.53
       100.00
                                                                                                            16 9 43
2 45 30
17 5 8
                   14 55 12 4471.27
2 10 21 2109.07
                                                   17.21
                                                                   182.98
                                                                                    5,14
                                                                                                   65.17
                                                                                                                                3671.3
                                                                                                                                                13.72
                                                                                                                                                             175.93
       100.00
                                                                                                                                1509.1
                                                    -31.90
                                                                    29.56
                                                                                   10.11
                                                                                                  102.99
                                                                                                                                               -29.78
                                                                                                                                                               20.99
       110.00
       110.00
                   15 53 40
                                   4288.19
                                                    20.47
                                                                   167.38
                                                                                    3.43
                                                                                                   62.01
                                                                                                                                3688.2
                                                                                                                                                16.56
                                                                                                                                                              160.43
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 590.8 SGR 659.1 SG3 347.8
RRT .4464 RRF .8081 RTF .5135
SGB 885.1 R23 .1950 R13 .8026
SG1 755.4 SG2 461.2 THA 51.89
                                                                                                                           ST 234.8 SR 336.5 $5 244.3

CRT -.4099 CRS .2348 CST -.9726

LSA 387.2 MSA 278.5 SSA 24.1
    TOE .1670 TRA -.5784 TC3 -.0283 BAU .1757
    ROE -.3276 RRA -.3763 RC3 -.3744 FAU .12172
FDE .3764 FRA-1.8759 FC3-3.0108 BSP 1790
BDE .3677 BRA .6914 BC3 .3755 FSP -1045
                                                                                                                            EL1 357.3 EL2 201.7 ALF 114.05
LAUNCH DATE JUL 22 1967
                                                                           FLIGHT TIME 88.00
                                                                                                                                       ARRIVAL DATE OCT 18 1967
   HELIOCENTRIC CONTC
                                                                           DISTANCE 254.104
    RL 151.99 LAL .00 LOL 298.53 VL 28.079 GAL -11.63 A7L 91.43 MCA 115.61 SMA 138.55 ECC .22291 INC 1.4262 V1 29.312 RP 108.04 LAP -1.29 LOP 54.14 VP 38.715 GAP -2.05 A7P 89.38 TAL 233.13 TAP 348.73 RCA 107.66 APO 169.43 V2 35.075 RC 77.874 GL -6.72 GP -24.39 ZAL 160.62 ZAP 73.80 ETS 7.85 ZAE 160.63 ETE 277.30 ZAC 107.87 ETC 8.17 CLP -72.16
   PLANETOCENTRIC CONIC
    C3 34.276 VHL 5.855 DLA
                                          9.41 RAL 137.15 RAD 6568.4 VEL 12.476 PTH
                                                                                                      2.26 VHP
                                                                                                                   4.127 OPA -12.38 RAP 155.40 ECC 1.5641
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   23 19 4 2643.46
13 43 55 4695.28
0 48 58 2366.23
15 0 39 4447.74
                                                                                11.33
                                                                                                   98.39 24 3 8
65.88 15 2 11
                                                                    70.50
                                                                                                                                2043.5
        90.00
                                                    -27.14
                                                                                                                                              -25.70
                                                                                                                                4095.3
        90.00
                                                    15.30
                                                                   200.35
                                                                                    5.58
                                                                                                               1 28 24
                                                                                                                                1766.2
       100.00
                                                    -28.48
                                                                    49.87
                                                                                   11.09
                                                                                                   99.48
                                                                                                                                                                41.44
                                                                                                            16 14 47
2 43 2
                                                    16.53
                                                                   181.56
                                                                                                    64.73
                                                                                                                                3847.7
                                                                                                                                                12.99
                                                                                                                                                              174.56
                                                                                    4.99
                                                                                                                                               -30.00
                                2119.82
4266.92
                                                                    30.35
                                                                                                  102.55
                                                                                                                                1519.8
                                                                                                                                                                21.75
       110.00
                      2 7 42
                                                   -32.06
                                                                                  10.29
                                                                                                   15.83
                    15 58 24
                                                                                                                               3666.9
       110.00
                                                                   166.11
                                                                                    3.25
                                                                                                                                                              159.22
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                       SGT 671.5 SGR 695.3 SG3 364.4
RRT .5634 RRF .8362 RTF .6317
SGB 966.6 R23 .1976 R13 .8354
                                                                                                                           ST 255.1 SR 321.9 SS 258.2
CRT -.3467 CRS .2601 CST -.9870
    TOE .1732 TRA -.6407 TC3 -.1155 BAU .1998
    RDE -.3062 RRA -.3922 RC3 -.4203 FAU .12640
                                                                                                                           LSA 394.0 MSA 282.1 SSA 24.1
EL1 344.6 EL2 223.6 ALF 117.96
    FOE .4399 FRA-1.9204 FC3-3.1927 BSP 2094
    BOE .3518 BRA .7512 BC3 .4359 FSP -1102
                                                                       SG1 854.8 SG2 451.3 THA 46.77
                                                                                                                                      ARRIVAL DATE OCT 20 1967
                                                                          FLIGHT TIME 90.00
LAUNCH DATE JUL 22 1967
                                                                          DISTANCE 260.558
   HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 28.069 CAL -11.52 ATL 91.26 MCA 118.82 SMA 138.46 ECC .22147 INC 1.2647 VI 29.312 RP 108.00 LAP -1.11 LOP 57.35 VP 38.719 CAP -1.50 ATP 89.39 TAL 232.87 TAP 351.69 RCA 107.80 APO 169.13 V2 35.088 RC 80.046 GL -6.02 CP -25.59 TAL 160.70 TAP 78.81 ETS 5.86 TAE 159.24 ETE 266.46 TAC 110.00 ETC 7.07 CLP -77.57
   PLANETOCENTRIC CONIC
    C3 33.552 VHL 5.792 DLA 10.03 RAL 137.51 RAO 6568.3 VEL 12.447 PTH 2.25 VHP 4.063 DPA -12.74 RAP 153.05 ECC 1.5522
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  23 15 27 2658.46
13 50 21 4669.48
0 45 41 2380.14
15 6 44 4423.06
2 5 12 2131.31
16 3 42 4244.64
                                                                                11.56
                                                                                                                                            -25.92
                                                                                                 97.87 23 59 46
                                                                                                                              2058.5
                                                   -27.29
                                                                   71.57
        90.00
                                                                                    5.53
                                                                                                   65.45 15 8 10
                                                                                                                               4069.5
                                                                  198.80
        90.00
                                                    14.58
                                                  -28.63
                                                                   50.88
                                                                                  11.34
                                                                                                   98.98
                                                                                                              1 25 21
                                                                                                                               1760.1
                                                                                                                                              -27.10
       100.00
                                                                                                   64.29 16 20 27
                                                                                                                               3823.1
                                                                                                                                              12.22
                                                                  180.09
                                                                                    4.93
       100.00
                                                   15.81
                                                                                                  102.07 2 40 43
61.07 17 14 27
                                                                                                                               1531.3
                                                                                                 102.07
                                                                                                                                             -30.23
       110,00
                                                   -32.23
                                                                   31.21
                                                                                  10.56
                                                                                                                                                15.05
                                                                                                                               3644.6
       110.00
                                                    19.05
                                                                  164.79
                                                                                   3.17
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 772.3 SGR 731.7 SG3 377.3
RRT .6536 RRF .8601 RTF .7184
SGB 1063.9 R23 .1972 R13 .8623
SG1 967.8 SG2 441.9 THA 42.64
                                                                                                                           ST 280.1 SR 305.9 SS 271.4

CRT -.2921 CRS .2764 CST -.9922

LSA 408.9 MSA 279.2 SSA 24.1
    TOE .1840 TRA -.7060 TC3 -.2122 BAU .2301
    ROE -.2833 RRA -.4035 RC3 -.4669 FAU .12976
FDE .4987 FRA-1.9373 FC3-3.3481 BSP 2458
BOE .3378 BRA .8131 BC3 .5129 FSP -1153
                                                                                                                           EL1 334.9 EL2 244.7 ALF 126.59
                                                                                                                                      ARRIVAL DATE OCT 22 1967
LAUNCH DATE JUL 22 1967
                                                                          FLIGHT TIME 92.00
                                                                          DISTANCE 266.979
   HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 28.052 GAL -11.40 AZL 91.09 MCA 122.03 SMA 138.33 ECC .22014 INC 1.0927 V1 29.312 RP 107.96 LAP -.93 LOP 60.56 VP 38.718 GAP -.99 AZP 89.42 TAL 232.50 TAP 354.53 RCA 107.87 APO 168.78 V2 35.101 RC 82.236 GL -5.25 GP -26.76 ZAL 160.71 ZAP 85.70 ETS 3.75 ZAE 157.30 ETE 257.10 ZAC 112.04 ETC 5.89 CLP -82.95
   PLANETOCENTRIC CONIC
    C3 32.822 VHL 5.729 DLA 10.70 RAL 137.95 RAD 6568.3 VEL 12.417 PTH
                                                                                                    2.24 VHP 4.029 DPA -13.10 RAP 150.76 ECC 1.5402
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 11 49 2674.82 -27.44 72.75 11.89 97.30 23 56 23 2074.8 -26.14 64.32
                                4642.05
2395.26
                                                                                                   65.02
                                                                                                             15 14 53
                                                                                                                                4042.0
                                                                                                                                                10.31
                                                                  197.17
                                                                                   5.58
                                                    13.79
        90.00
                   13 57 31
                                                                                                               1 22 21
                                                                                                                                1795.3
                                                                                                                                              -27.32
                                                   -28.79
                                                                                                   98.42
       100.00
                    0 42 25
                                                                   51.97
                                                                                  11.68
                                                                                                   63.85 16 26 48
101.54 2 38 30
60.59 17 20 0
                                                                                                                                3796.8
                                                                                                                                               11.39
                                                                                                                                                             171.63
                   15 13 31 4396.84
2 2 47 2143.82
16 9 39 4221.05
                                                    15.03
                                                                  178.53
                                                                                    4.97
       100.00
                                                                                                  101.54
                                                                                                                               1543.8
       110.00
                                                   -32.40
                                                                    32.14
                                                                                  10.94
                                                                                                                               3621.1
                                                                                                                                                14.22
                                                                                    3.19
       110.00
                                                   18.27
                                                                  163.41
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 890.5 SGR 764.5 SG3 384.8
RRT .7214 RRF .8794 RTF .7800
SG8 1173.6 R23 .1973 R13 .8824
                                                                                                                           ST 309.4 SR 287.1 SS 285.0
CRT -.2436 CRS .2942 CST -.9920
    TOE .1994 TRA -.7737 TC3 -.3183 BAU .2644
    RDE -.2578 RRA -.4101 RC3 -.5117 FAU .13118
    FOE .5604 FRA-1.9156 FC3-3.4601 BSP 2854
BDE .3259 BRA .8757 BC3 .6027 FSP -1180
                                                                                                                           LSA 431.5 MSA 269.4 SSA 24.2
                                                                      SG1 1091.2 SG2 432.0 THA 39.01
                                                                                                                           EL1 334.2 EL2 257.8 ALF 143.52
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FLIGHT TIME 86.00

ARRIVAL DATE OCT 24 1967

LAUNCH DATE JUL 22 1967

DISTANCE 273.367 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 28.029 GAL -11.28 AZL 90.91 MCA 125.25 SMA 138.14 ECC .21891 INC .9079 V1 29.312 RP 107.92 LAP -.74 LOP 63.78 VP 38.713 GAP -.49 AZP 89.48 TAL 232.04 TAP 357.29 RCA 107.90 APO 168.39 V2 35.113 RC 84.440 GL -4.41 GP -27.91 ZAL 160.63 ZAP 88.44 ETS 1.53 ZAE 154.95 ETE 249.33 ZAC 113.96 ETC 4.65 CLP -88.23 PLANETOCENTRIC CONTC C3 32.086 VHL 5.664 DLA 11.42 RAL 138.48 RAD 6568.3 VEL 12.388 PTH 2.24 VHP 4.023 DPA -13.50 RAP 148.58 ECC 1.5281 LNCH A7MTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 8 2 2692.95 -27.59 74.05 12.32 96.66 23 52 55 2093.0 -26.38 65.59 90.00 14 5 34 4612.50 12.94 195.42 5.73 64.59 15 22 27 4012.5 9.41 188.52 90.00 23 8 2 2692.95 90.00 14 5 34 4612.50 44.66 97.80 1 19 16 1812.0 -27.57 0 39 4 2412.03 15 21 9 4368.65 100.00 -28.95 53.20 12.13 63.40 16 33 58 170.02 3768.7 10.49 100.00 14.17 176.87 5.11 2 36 18 24.45 2 0 21 2157.69 16 16 22 4195.76 100.95 1557.7 -30.73 -32.59 33.18 11.43 110.00 17 26 17 3595.8 13.31 60.11 17.42 161.94 3.29 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 343.2 SR 267.1 SS 297.8 CRT -.2022 CRS .3015 CST -.9888 SCT 1021.4 SGR 795.8 SG3 388.0 RRT .7706 RRF .8959 RTF .8225 SGB 1294.8 R23 .1987 R13 .8979 SG1 1223.6 SG2 423.4 THA 35.94 TDE .2204 TRA -.8415 TC3 -.4319 BAU .3021 RDE -.2311 RRA -.4130 RC3 -.5561 FAU .13115 FDE .6139 FRA-1.8664 FC3-3.5385 BSP 3290 BDE .3194 BRA .9374 BC3 .7042 FSP -1200 LSA 460.0 MSA 256.1 SSA 24.3 EL1 352.5 EL2 254.7 ALF 160.70 ARRIVAL DATE OCT 26 1967 FLIGHT TIME 96.00 DISTANCE 279.726 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 28.002 GAL -11.15 AZL 90.71 MCA 128.47 SMA 137.92 ECC .21776 INC .7078 V1 29.312 RP 107.89 LAP -.55 LOP 67.00 VP 38.704 GAP -.01 AZP 89.56 TAL 231.48 TAP 359.95 RCA 107.89 APO 167.95 V2 35.125 RC 86.655 GL -3.48 GP -29.05 ZAL 160.47 ZAP 92.95 ETS 359.19 ZAE 152.34 ETE 243.02 ZAC 115.72 ETC 3.38 CLP -93.38 PLANETOCENTRIC CONIC 2.23 VHP 4.044 DPA -13.96 RAP 146.53 ECC 1.5159 C3 31.348 VHL 5.599 DLA 12.20 RAL 139.12 RAD 6568.2 VEL 12.358 PTH UNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 3 58 2713.49 -27.74 75.54 12.87 95.93 23 49 11 2113.5 -26.63 67.05 95,93 25 49 11 64.15 15 31 1 97.08 1 15 59 62.95 16 42 5 100.27 2 34 2 59.62 17 35.25 14 14 41 4580.26 0 35 28 2431.04 15 29 47 4337.94 1 57 48 2173.42 16 23 56 4168.32 3980.3 8.41 90.00 11.99 193.53 5.98 1831.0 -27.83 -29.12 54.58 12.70 100.00 3737.9 9.50 13.23 175.08 5.35 100.00 100.27 1573.4 -31.02 -32.78 34.37 12.04 110.00 12.33 3568.3 16.48 160.37 3.51 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1162.1 SGR 834.1 SG3 390.6 RRT .8056 RRF .9121 RTF .8526 SGB 1430.4 R23 .2017 R13 .9114 SG1 1367.4 SG2 420.0 THA 33.63 ST 381.4 SR 250.6 SS 304.8 CRT -.1675 CRS .2770 CST -.9883 TOE .2468 TRA -.9080 TC3 -.5526 BAU .3436 RDE -.2079 RRA -.4169 RC3 -.6057 FAU .13091 LSA 490.7 MSA 244.6 SSA 24.4 EL1 385.3 EL2 244.6 ALF 169.41 FOE .6331 FRA-1.8189 FC3-3.6154 BSP 3845 BOE .3227 BRA .9991 BC3 .8199 FSP -1270 ARRIVAL DATE OCT 28 1967 FLIGHT TIME 98.00 LAUNCH DATE JUL 22 1967 DISTANCE 286.050 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 27.969 GAL -11.01 AZL 90.49 MCA 131.69 SMA 137.66 ECC .21667 INC .4887 V1 29.312 RP 107.85 LAP -.37 LOP 70.22 VP 38.691 GAP .45 AZP 89.67 TAL 230.84 TAP 2.53 RCA 107.83 APO 167.49 V2 35.137 RC 88.880 GL -2.43 GP -30.20 ZAL 160.20 ZAP 97.19 ETS 356.74 ZAE 149.59 ETE 237.97 ZAC 117.25 ETC 2.10 CLP -98.33 PLANETOCENTRIC CONIC C3 30.604 VHL 5.532 DLA 13.07 RAL 139.85 RAD 6568.2 VEL 12.328 PTH 2.22 VHP 4.091 DPA -14.51 RAP 144.66 ECC 1.5037 C5 50.604 VML 5.532 DLA 13.07 RAL 139.85 RAD 0568.2 VEL 12.328 PM 2.22 VMP 4.091 UPA -14.71 RAP 144.00 ECC 13037 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 59 27 2737.13 -27.89 77.25 13.56 95.09 23 45 4 2137.1 -26.90 68.72 90.00 14 25 4 4544.54 10.92 191.45 6.36 63.71 15 40 49 3944.5 7.30 184.64 100.00 0 31 31 2452.89 -29.29 56.18 13.40 96.26 1 12 24 1852.9 -28.11 47.58 100.00 15 39 37 4504.01 12.17 173.12 5.71 62.49 16 51 21 3704.0 8.39 166.37 110.00 15 83 3 2101.51 -32.00 35 74 99.49 2 31 35 59.12 17 41 33 26.91 -31.33 1 55 3 2191.51 16 32 35 4138.15 -32.99 35.74 12.60 1591.5 110.00 152.08 353A.2 11.23 158.66 3.63 110.00 15.44 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 425.8 SR 220.3 SS 325.7 CRT -.1204 CRS .2938 CST -.9795 LSA 535.4 MSA 220.6 SSA 24.6 \$GT 1308.1 SGR 846.1 SG3 379.6 RRT .8329 RRF .9214 RTF .8727 SGB 1557.9 R23 .2077 R13 .9176 TOE .2817 TRA -.9700 TC3 -.6777 BAU .3810 ROE -.1711 RRA -.4046 RC3 -.6387 FAU .12607 FOE .7150 FRA-1.6788 FC3-3.5665 BSP 4212 EL1 427.0 EL2 218.1 ALF 175.17 SG1 1503.7 SG2 _ 407.3 THA 30.82 BOE .3296 BRA 1.0510 BC3 .9312 FSP -1187 ARRIVAL DATE OCT 30 1967 FLIGHT TIME 100.00 LAUNCH DATE JUL 22 1967 DISTANCE 292.347 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 27.932 GAL -10.87 AZL 90.25 MCA 134.91 SMA 137.37 ECC .21565 INC .2463 V1 29.312 RP 107.82 LAP -.17 LOP 73.44 VP 38.675 GAP .89 AZP 89.83 TAL 230.12 TAP 5.03 RCA 107.74 APO 166.99 V2 35.149 RC 91.113 GL -1.24 GP -31.40 ZAL 159.82 ZAP 101.12 ETS 354.17 ZAE 146.76 ETE 233.96 ZAC 118.56 ETC .80 CLP-103.06 -1.24 GP RC 91.113 GL PLANETOCENTRIC CONIC C3 29.866 VHL 5.465 DLA 14.05 RAL 140.70 RAD 6568.2 VEL 12.298 PTH 2.22 VMP 4.163 DPA -15.19 RAP 142.97 ECC 1.4915 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 22 54 14 2765.05 14 37 4 4504.38 94.08 23 40 19 63.27 15 52 9 14.39 2165.0 -27.18 -28.05 90.00 79.28 6.03 182.37 3904.4 90.00 9.70 189.13 6.88 95.27 1 8 16 62.02 17 2 4 98.55 2 28 47 58.60 17 50 55 -28.42 49.43 1878.7 -29.47 58.08 14.26 100.00 0 26 58 2478.69 170.94 6.22 3666.0 7.14 100.00 15 50 58 4265.98 10.96 28.47 1612.9 -31.68 -33.22 37.36 13.73 110.00 1 51 54 2212.89 9.99 4104.54 3504.5 110.00 16 42 30 14.25 156.77 4.30 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 476.1 SR 194.6 SS 340.9 CRT -. 0658 CRS .2622 CST -. 9758 TOE .3235 TRA-1.0272 TC3 -.8074 BAU- .4210 SGT 1458.2 SGR 867.0 SG3 369.6 RDE -.1385 RRA -.3940 RC3 -.6781 FAU .12162 FDE .7577 FRA-1.5541 FC3-3.5255 BSP 4701 BDE .3519 BRA 1.1002 BC3 1.0544 FSP -1165 RRT .8523 RRF .9318 RTF .8872 SGB 1696.5 R23 .2153 R13 .9236 LSA 583.1 MSA 200.6 SSA 24.8 EL1 476.5 EL2 194.1 ALF 178.15 SG1 1648.4 SG2 401.2 THA 28.73

FLIGHT TIME 94.00

ARRIVAL DATE NOV 1 1967

LAUNCH DATE JUL 22 1967

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DISTANCE 298.615
   HELIOCENTRIC CONIC
                           .00 LOL 298.53 VL 27.891 GAL -10.72 AZL 89.98 MCA 138.13 SMA 137.04 ECC .21469 INC .0198 V1 29.312 .02 LOP 76.66 VP 38.655 GAP 1.32 AZP 90.02 TAL 229.33 TAP 7.46 RCA 107.62 APO 166.46 V2 35.160 .12 GP -32.69 ZAL 159.31 ZAP 104.71 ETS 351.46 ZAE 143.90 ETE 230.79 ZAC 119.62 ETC 359.50 CLP-107.57
    RL 151.99 LAL
        107.78 LAP
    RC 93.352 GL
   PLANETOCENTRIC CONIC
    C3 29.141 VHL 5.398 DLA 15.18 RAL 141.68 RAD 6568.2 VEL 12.268 PTH 2.21 VHP 4.258 DPA -16.05 RAP 141.47 ECC 1.4796 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                22 47 58 2798.71
14 51 8 4458.40
0 21 30 2509.74
16 4 13 4222.60
                                                                            15.41
                                                                                            92.86 23 34 37
                                                                                                                          2198.7
                                                                                                                                        -27.49
                                                                                                                                                         73.13
        90.00
                                                  -28.18
                                                                81.73
                                                   8.28
                                                                186.50
                                                                                7.58
                                                                                               62.82
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        90.00
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                                                  -29.64
                                                                 60.37
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                                                                                               94.08
       100.00
                                                   9.57
                                                                168.47
                                                                                6.90
                                                                                               61.55 17 14 36
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18 1 49
                    1 48 10
                                2238.58
                                                  -33.47
                                                                 39.33
                                                                               14.86
                                                                                               97.41
                                                                                                                           1634.6
                                                                                                                                         -32.08
                                                                                                                                                         30.37
                                                                154.66
                   16 54 3
                                                  12.89
                                                                                4.92
                                                                                               58.06
                                                                                                                           3466.5
                                                                                                                                          8.58
                                                                                                                                                        148.22
                                 4066.53
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 534.5 SR 166.9 SS 359.4

CRT .0196 CRS .1965 CST -.9724

LSA 640.4 MSA 179.1 SSA 25.0

EL1 534.6 EL2 166.9 ALF .39
                                                                    SGT 1609.1 SGR 883.1 SG3 355.5
RRT .8665 RRF .9407 RTF .8973
SGB 1835.5 R23 .2252 R13 .9280
    TOE .3753 TRA-1.0767 TC3 -.9394 BAU .4599
    RDE -.1023 RRA -.3778 RC3 -.7147 FAU .11584
    FOE .8027 FRA-1.4073 FC3-3.4414 BSP 5165
    BDE .3889 BRA 1.1410 BC3 1.1804 FSP -1120
                                                                    SG1 1792.4 SG2 395.7 THA 26.85
                                                                        FLIGHT TIME 104.00
                                                                                                                                  ARRIVAL DATE NOV 3 1967
                                                                       DISTANCE 304.856
  HELIOCENTRIC CONIC
                         .00 LOL 298.53 VL 27.847 GAL -10.56 AZL 89.67 HCA 141.36 SMA 136.69 ECC .21379 INC .3315 VI 29.312 .21 LOP 79.88 VP 38.633 GAP 1.73 AZP 90.26 TAL 228.47 TAP 9.83 RCA 107.47 APO 165.92 VZ 35.170 1.71 GP -34.11 ZAL 158.63 ZAP 107.93 ETS 348.58 ZAE 141.04 ETE 228.32 ZAC 120.42 ETC 358.18 CLP-111.83
    RL 151.99 LAL
RP 107.75 LAP
         95.596 GL
   PLANETOCENTRIC CONIC
    C3 28.442-WHL 5.333 DLA 16.49 RAL 142.81 RAD 6568.1 VEL 12.240 PTH 2.20 VHP 4.381 DPA -17.07 RAP 140.12 ECC 1.4681
    LNOW AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 22 40 9 2840.27
15 7 56 4404.71
0 14 43 2547.98
16 19 59 4172.23
1 43 31 2270.14
17 7 40 4022.84
                                                                             16.66
                                                                                                                           2240.3
                                                  -28.29
                                                                84.77
                                                                                              91.34
                                                                                                         23 27 29
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       90.00
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                                                                                8.52
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        90.00
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                                                  -29.79
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       100.00
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                                                  -33.72
                                                                 41.76
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       110.00
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      110.00
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                                                                                               57.52
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                                                                                                                                            6.94
                                                  11.31
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 1760.6 SGR 899.1 SG3 339.1
RRT .8769 RRF .9489 RTF .9046
SGB 1976.9 R21 .2364 R13 .9313
SGI 1937.5 SG2 392.8 THA 25.23
                                                                                                                      ST 603.0 SR 140.8 SS 379.7
CRT .1613 CRS .0627 CST -.9710
    TOE .4379 TRA-1.1174 TC3-1.0735 BAU .4982
    ROE -.0641 RRA -.3583 RC3 -.7514 FAU .10939
                                                                                                                      LSA 708.5 MSA 158.0 SSA 25.2
EL1 603.4 EL2 138.8 ALF 2.28
    FDE .8413 FRA-1.2543 FC3-3.3295 89P 5655
BDE .4425 BRA 1.1735 BC3 1.3103 FSP -1073
                                                                                                                                 ARRIVAL DATE NOV 5 1967
                                                                       FLIGHT TIME 106.00
LAUNCH DATE JUL 22 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 311.071
                         .00 LOL 298.53 VL 27.800 GAL -10.40 AZL 89.31 MCA 144.58 SMA 136.33 ECC .21295 INC .6865 VI 29.312 .40 LOP 83.11 VP 38.608 GAP 2.12 AZP 90.56 TAL 227.54 TAP 12.13 RCA 107.30 APO 165.36 V2 35.180 3.56 GP -35.71 ZAL 157.73 ZAP 110.74 ETS 345.52 ZAE 138.15 ETE 226.45 ZAC 120.97 ETC 356.82 CLP-115.86
   RL 151.99 LAL
RP 107.72 LAP
    RC 97.843 GL
   PLANETOCENTRIC CONIC
    C3 27.790 VHL 5.272 DLA 18.03 RAL 144.11 RAD 6568.1 VEL 12.213 PTH 2.19 VHP 4.532 DPA -18.36 RAP 138.91 ECC 1.4574
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             89.41 23 18 14
62.02 16 40 48
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                  22 30 1 2892.98
15 28 28 4340.44
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        90.00
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16 39 8 4112.39
1 37 32 2309.72
17 24 2 3971.69
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      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 685.5 SR 119.0 SS 405.4
CRT .4056 CRS -.1887 CST -.9703
                                                                   SCT 1910.1 SCR 911.4 SC3 319.6
RRT .8840 RRF .9562 RTF .9096
SCB 2116.4 R23 .2492 R13 .9333
    TOE .5155 TRA-1.1463 TC3-1.2064 BAU .5348
    ROE -.0209 RRA -.3329 RC3 -.7852 FAU .10198
FOE .8840 FRA-1.0878 FC3-3.1768 BSP 6110
                                                                                                                      LSA 793.0 MSA 137.6 SSA 25.1
EL1 687.2 EL2 108.5 ALF 4.13
    BDE .5160 BRA 1.1936 BC3 1.4395 ESP -1014
                                                                   5G1 2079.9 SG2 391.4 THA 23.76
                                                                       FLIGHT TIME 108.00
                                                                                                                                 ARRIVAL DATE NOV 7 1967
LAUNCH DATE JUL 22 1967
                                                                       DISTANCE 317.260
  HELIOCENTRIC CONIC
                         .00 LOL 298.53 VL 27.750 GAL -10.22 AZL 88.90 HCA 147.81 SMA 135.94 ECC .21215 INC 1.1026 V1 29.312 .59 LOP 86.34 VP 38.581 GAP 2.50 AZP 90.93 TAL 226.56 TAP 14.37 RCA 107.10 APO 164.78 V2 35.190 5.78 GP -37.56 ZAL 156.56 ZAP 113.11 ETS 342.23 ZAE 135.23 ETE 225.07 ZAC 121.26 ETC 355.40 CLP-119.68
   RL 151.99 LAL
RP 107.69 LAP
    RC 100.092 GL
   PLANETOCENTRIC CONIC
    C3 27.219 VHL 5.217 DLA 19.88 RAL 145.63 RAD 6568.1 VEL 12.190 PTH 2.19 VHP 4.715 OPA -19.95 RAP 137.79 ECC 1.4480
    UNCH AZHTH LNCH TIME L-I TIME
90.00 22 16 12 2962.18
                                                INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -28.29
                                                                            20.08
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61.75 17 5 26
                                                  -28.16
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                   15 54 25
                                  4260.91
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                                                                175,38
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        90.00
                 23 50 12 2659.08
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      100.00
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      100.00
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      110.00
                   17 44 12
                                  3910.49
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                                                                                                                                          2.68
                                                                                                                                                        139.99
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .6105 TRA-1.1625 TC3-1.3379 BAU
                                                                                                                      ST 785.6 SR 113.0 SS 434.5
CRT .7144 CRS -.5432 CST -.9715
                                                                    SGT 2059.5 SGR 925.2 SG3 298.7
                                                                  RRT .8883 RRF .9629 RTF .9133
SGB 2257.8 R23 .2624 R13 .9350
    ROE .0259 RRA -.3035 RC3 -.8186 FAU .09418
    FOE .9216 FRA -.9212 FC3-2.9955 BSP 6595
BOE .6111 BRA 1.2015 BC3 1.5685 FSP -955
                                                                                                                      LSA 896.5 MSA 120.1 SSA 24.6
                                                                   SG1 2223.2 SG2 393.6 THA 22.50
                                                                                                                      EL1 789.8 EL2 78.7 ALF 5.93
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FLIGHT TIME 102.00

ARRIVAL DATE NOV 9 1967

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LAUNCH DATE JUL 22 1967
                                                                       DISTANCE 323.424
  HELIOCENTRIC CONIC
                        .00 LOL 298.53 VL 27.697 GAL -10.04 AZL 88.40 MCA 151.04 SMA 135.53 ECC .21141 INC 1.6008 V1 29.312 .78 LOP 89.57 VP 38.552 GAP 2.87 AZP 91.40 TAL 225.52 TAP 16.56 RCA 106.88 APO 164.19 V2 35.199 8.47 GP -39.74 ZAL 155.01 ZAP 114.97 ETS 338.67 ZAE 132.21 ETE 224.12 ZAC 121.31 ETC 353.88 CLP-123.31
    RL 151.99 LAL
        107.66 LAP
   RC 102.344 GL
  PLANETOCENTRIC CONIC
    C3 26.783 VHL 5.175 DLA 22.13 RAL 147.44 RAD 6568.1 VEL 12.172 PTH 2.18 VHP 4.941 DPA -21.91 RAP 136.70 ECC 1.4408 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2457.7
                  21 56 6 3057.68
16 28 57 4157.38
                                                 -27.61
                                                               100.61
                                                                              22.37
                                                                                              83.44 22 47 4
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       90.00
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                                                 -1.34
                                                               169.60
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       90.00
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                   23 33 18 2744.28
17 34 26 3946.00
                                                 -29.50
                                                                 77.77
                                                                               22.59
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      100.00
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      100.00
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                                                 -34.16
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                                                                 54.04
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      110.00
                    1 18 22 2427.91
                                                                                               56.05 19 13 43
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                                                                142.27
      110.00
                   18 9 48
                                 3835.14
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 911.2 SR 132.9 SS 470.9
CRT .9296 CRS -.8336 CST -.9736
                                                                   SCT 2206.7 SCR 936.5 SC3 275.3
RRT .8901 RRF .9687 RTF .9159
SCB 2397.1 R23 .2758 R13 .9360
    TDE .7309 TRA-1.1615 TC3-1.4613 BAU .6047
    RDE .0798 RRA -.2669 RC3 -.8464 FAU .08566
                                                                                                                      LSA 1028.3 MSA 107.4 SSA 22.8
EL1 919.5 EL2 48.5 ALF 7.74
    FOE .9632 FRA -.7483 FC3-2.7688 BSP 7050
                                                                   SG1 2363.8 SG2 398.5 THA 21.33
    BOE .7352 BRA 1.1918 BC3 1.6887 FSP
                                                     -881
                                                                                                                                 ARRIVAL DATE NOV 11 1967
                                                                       FLIGHT TIME 112.00
LAUNCH DATE JUL 22 1967
                                                                       DISTANCE 329.564
  HELIOCENTRIC CONIC
                        .00 LOL 298.53 VL 27.643 GAL -9.85 AZL 87.79 MCA 154.26 SMA 135.12 ECC .21073 INC 2.2122 VI 29.312 .96 LOP 92.80 VP 38.521 GAP 3.22 AZP 91.99 TAL 224.43 TAP 18.69 RCA 106.65 APO 163.59 V2 35.208 11.77 GP -42.35 ZAL 152.94 ZAP 116.27 ETS 334.78 ZAE 129.02 ETE 223.52 ZAC 121.12 ETC 352.21 CLP-126.80
    RL 151.99 LAL
    RP 107.63 LAP
   RC 104.596 GL
  PLANETOCENTRIC CONIC
    C3 26.575 VHL 5.155 DLA 24.90 RAL 149.64 RAD 6568.1 VEL 12.164 PTH 2.18 VHP 5.223 DPA -24.30 RAP 135.54 ECC 1.4374
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               78.49 22 16 20
                                                                                                                          2603.0
                                                                                                                                         -27.38
                                  3202.99
                                                  -26.05
                                                                110.95
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                   21 22 57
        90.00
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                                  400A .21
                                                                161.24
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        90.00
                   17 19 37
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60.35 19 22 8
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                                  286A.27
                                                  -28.42
                                                                 86.82
      100.00
                   23 6 46
                                                                                                                           3218.2
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                                                                                                                                                        139.53
                   18 18 29
                                  3818.16
                                                   -4.00
                                                                146.12
                                                                               16.51
      100.00
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55.82 19 46 12
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                                  2520.70
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      110.00
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                                                                                                                                                        131.01
                                                      .60
      110.00
                                  3738.49
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                    SGT 2353.9 SGR 948.0 SG3 250.2
RRT .8890 RRF .9736 RTF .9181
SGB 2537.7 R23 .2880 R13 .9371
                                                                                                                      ST 1070.2 SR 178.8 SS 512.8
CRT .9913 CRS -.9543 CST -.9769
    TDE .8849 TRA-1.1400 TC3-1.5706 BAU .6374
    RDE .1409 RRA -.2231 RC3 -.8672 FAU .07676
    FOE 1.0020 FRA -.5777 FC3-2.5005 BSP 7531
ROF .8961 BRA 1.1616 BC3 1.7941 FSP -809
                                                                                                                       LSA 1195.7 MSA 100.9 SSA 19.7
                                                                    SG1 2504.6 SG2 408.0 THA 20.26
                                                                                                                      ELI 1084.8 ELZ 23.2 ALF 9.41
                                                                                                                                 ARRIVAL DATE NOV 13 1967
                                                                       FLIGHT TIME 114.00
LAUNCH DATE JUL 22 1967
                                                                       DISTANCE 335.679
   HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 27.587 GAL -9.65 A7L 87.01 MCA 157.49 SMA 134.69 ECC .21009 INC 2.9856 V1 29.312 RP 107.61 LAP 1.14 LOP 96.04 VP 38.488 GAP 3.56 A7P 92.76 TAL 223.29 TAP 20.77 RCA 106.39 APO 162.99 V2 35.216 RC 106.849 GL 15.89 GP -45.50 ZAL 150.13 ZAP 116.91 ETS 330.51 ZAE 125.56 ETE 223.17 ZAC 120.68 ETC 350.30 CLP-130.22
   PLANETOCENTRIC CONIC
    C3 26.768 VHL 5.174 DLA 28.38 RAL 152.39 RAD 6568.1 VEL 12.171 PTH 2.18 VHP 5.588 DPA -27.21 RAP 134.20 ECC 1.4405
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             67.60 20 17 16
                                                                                                                        3059.2
                                                                                                                                       -20.78 134.00
                   19 16 16 3659.23
19 48 16 3555.54
                                                                             25.70
                                                  -17:89
                                                                141,49
        88.09
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                                                                                               67.59
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                                                  -17.88
                                                                133.90
                                                                                               72.96
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                                                                                                                          2487.7
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                    22 13 25
                                  3087,68
                                                  -24.94
                                                                102.18
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       100.00
                   19 33 49
                    0 34 38 2657.24
TT 1 3604.83
                                  3602.33
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                                                                134.04
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       110.00
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                                                                  71.72
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                   19 33 1
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                                                                               18.42
       110,00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 2499.3 SGR 953.8 SG3 222.7
RRT .8842 RRF .9770 RTF .9199
SGB 2675.1 R23 .2988 R13 .9379
SGI 2641.7 SG2 421.5 THA 19.15
                                                                                                                      ST 1277.9 SR 246.0 SS 563.8
CRT .9953 CRS -.9904 CST -.9807
    TOE 1.0917 TRA-1.0886 TC3-1.6479 BAU .6668
    RDE .2133 RRA - .1668 RC3 - .8697 FAU .06713
                                                                                                                       LSA 1414.5 MSA 101.7 SSA 15.3
    FDE 1.0437 FRA -.4044 FC3-2.1712 BSP 7958
BDE 1.1123 BRA 1.1013 BC3 1.8633 FSP -721
                                                                                                                       EL1 1301.2 EL2 23.3 ALF 10.85
    BDE 1.1123 BRA 1.1013 BC3 1.8633 FSP
                                                                                                                                  ARRIVAL DATE NOV 15 1967
                                                                        FLIGHT TIME 116.00
LAUNCH DATE JUL 22 1967
                                                                        DISTANCE 341.770
    RL 151.99 LAL .00 LOL 298.53 VL 27.529 GAL -9.44 AZL 86.00 HCA 160.71 SMA 134.26 ECC .20951 INC 4.0027 V1 29.312 RP 107.59 LAP 1.32 LOP 99.28 VP 38.453 GAP 3.89 AZP 93.78 TAL 222.10 TAP 22.81 RCA 106.13 APO 162.39 V2 35.223 RC 109-101 GL 21.11 GP -49.35 ZAL 146.29 ZAP 116.75 ETS 325.79 ZAE 121.67 ETE 222.94 ZAC 120.01 ETC 348.02 CLP-133.71
   PLANETOCENTRIC CONIC
    C3 27.698 VHL 5.263 DLA 32.75 RAL 155.99 RAD 6568.1 VEL 12.210 PTH 2.19 VHP 6.080 OPA -30.75 RAP 132.46 ECC 1.4558
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                         18 41 56
                                                                                                                           3437.8
                                                                                                                                         -23.59
                                                                                                                                                        163 36
                                                                                31.08
                                                                                               63.67
                                   4037.81
                                                  -20.22
                                                                170.77
        72.81
                   17 34 36
                                                                                                63.66 22 51 51
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       107.19
                                                                108.11
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                    21 58 37
                                  3193.95
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                                                                                                                           3437.8
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                                                                                                63.67
                                                                                                         18 41 56
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        72.81
                    17 34 36
                                   4037.81
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                                  3193.95
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                                                  -27.53
                                                                  89.69
       110.00
                    23 30 52
                                  2909.91
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                                                                                                                                        -17.34
                                                                                                                                                        110.94
                                                                117.63
                                                                                27.03
       110.00
                    21 1 33
                                  3369.85
                                                  -13.22
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1548.3 SR 325.1 SS 619.6
CRT .9893 CRS -.9988 CST -.9847
                                                                    SGT 2648.8 SGR 952.6 SG3 193.3
RRT .8743 RRF .9782 RTF .9225
SGB 2814.9 R23 .3059 R13 .9394
     TOE 1.3760 TRA -.9981 TC3-1.6735 BAU .6940
    RDE .2957 RRA -.0955 RC3 -.8437 FAU .05712
FDE 1.0792 FRA -.2375 FC3-1.7853 BSP 8436
                                                                                                                      LSA 1695.7 MSA 107.3 SSA 11.0
EL1 1581.4 EL2 46.4 ALF 11.75
                                                                    SG1 2780.2 SG2 440.5 THA 17.92
     BDE 1.4074 BRA 1.0027 BC3 1.8741 FSP -634
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FLIGHT TIME 110.00

LAUNCH DATE JUL 22 1967

ARRIVAL, DATE NOV 17 1967

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DISTANCE 347.832
   HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 27.470 CAL -9.22 AZL 84.59 MCA 163.92 SMA 133.82 ECC .20897 INC 5.4093 V1 29.312
RP 107.57 LAP 1.50 LOP 102.51 VP 38.417 GAP 4.21 AZP 95.20 TAL 220.87 TAP 24.79 RCA 105.85 APO 161.78 V2 35.230
    RC 111.351 GL 27.77 GP -54.09 ZAL 141.02 ZAP 115.63 ETS 320.46 ZAE 117.16 ETE 222.57 ZAC 119.11 ETC 345.14 CLP-137.53
   PLANETOCENTRIC CONIC
    C3 30.098 VHL 5.488 DLA 38.24 RAL 160.97 RAD 6568.2 VEL 12.307 PTH
                                                                                            2.22 VMP 6.785 DPA -35.03 RAP 129.99 ECC 1.4953
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 16 59 39 4223.49
23 13 20 3049.81
       63.15
                                               -22.55
                                                            186.87
                                                                           39.19
                                                                                          58.26 18 10 3
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                                                                                           58.25 24 4 10
                                               -22.53
                                                              98.09
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      116.85
                                4223.49
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       63.15
                  16 59 39
                 16 59 39 4223.49
23 13 20 3049.81
                                                                                          58.25 24 4 10
58.26 18 10 3
58.25 24 4 10
                                              -22.53
                                                              98.09
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      116.85
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                              3049.81
                                                                           39.18
                                                                                                                    2449.8
      116.85
                                               -22.53
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SCT 2802.0 SGR 928.5 SG3 161.6

RRT .8339 RRF .9743 RTF .9263

SGB 2951.9 R23 .3088 R13 .9416

SGI 2915.1 SG2 464.4 THA 16.22
   TOE 1.7924 TRA -.8432 TC3-1.6022 BAU .7141
RDE .3843 RRA .0010 RC3 -.7631 FAU .04648
                                                                                                                ST 1902.6 SR 402.1 SS 678.9
CRT .9835 CRS -.9993 CST -.9884
                                                                                                                       .9835 CRS -.9993 CST -.9884
   FOE 1.1078 FRA -.0749 FC3-1.3369 BSP
                                                  8883
                                                                                                                LSA 2056.4 MSA 116.5 SSA 7.5
                                                                                                                 EL1 1943.3 EL2 71.2 ALF 11.76
   BDE 1.8331 BRA .8432 BC3 1.7746 FSP
                                                    -538
                                                                    FLIGHT TIME 120.00
                                                                                                                           ARRIVAL DATE NOV 19 1967
LAUNCH DATE JUL 22 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 353.863
                       .00 LOL 298.53 VL 27.409 GAL -8.99 AZL 82.50 MCA 167.12 SMA 133.37 ECC .20847 INC 7.4958 V1 29.312 1.67 LOP 105.75 VP 38.379 GAP 4.52 AZP 97.31 TAL 219.59 TAP 26.71 RCA 105.57 APO 161.18 V2 35.236 36.19 GP -59.94 ZAL 133.89 ZAP 113.36 ETS 314.14 ZAE 111.70 ETE 221.47 ZAC 118.00 ETC 341.11 CLP-142.34
   RL 151.99 LAL
RP 107.55 LAP
   RC 113.598 GL
  PLANETOCENTRIC CONIC
   C3 35.776 VHL 5.981 DLA 44.88 RAL 168.36 RAD 6568.4 VEL 12.536 PTH
                                                                                            2.27 VHP 7.879 DPA -40.11 RAP 126.18 ECC 1.5888
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   -24.07
                                                                           51.72
                                                                                          50.91 18 0 45
                                                            201.73
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                 0 28 12 2978.84
16 47 44 4381.52
0 28 12 2978.84
16 47 44 4381.52
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      126.39
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                                                             201.73
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  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                RET 2965.1 SGR 853.6 SG3 128.6
RRT .8047 RRF .9536 RTF .9329
SGB 3085.5 R23 .3057 R13 .9454
SG1 3045.8 SG2 493.4 THA 13.40
                                                                                                                ST 2348.9 SR 430.5 SS 733.0
CRT .9737 CRS -.9950 CST -.9915
   TOE 2.4395 TRA -.5747 TC3-1.3806 BAU .7198
   ROE .4452 RRA .1360 RC3 -.5987 FAU .03535
FOE 1.1230 FRA .0816 FC3 -.8553 BSP 9288
                                                  9288
-433
                                                                                                                LSA 2494.7 MSA 129.2 SSA
   BOE 2.4798 BRA .5906 BC3 1.5049 FSP
                                                                                                                EL1 2386.1 EL2 96.5 ALF 10.14
                                                                                                                          ARRIVAL DATE NOV 21 1967
                                                                   FLIGHT TIME 122.00
LAUNCH DATE JUL 22 1967
                                                                   DISTANCE 359.848
   RL 151.99 LAL .00 LOL 298.53 VL 27.348 GAL -8.75 AZL 79.07 MCA 170.30 SMA 132.92 ECC .20798 INC10.9274 V1 29.312 RP 107.53 LAP 1.83 LOP 109.00 VP 38.340 GAP 4.81 AZP 100.77 TAL 218.27 TAP 28.56 RCA 105.28 APO 160.57 V2 35.241 RC 115.842 GL 46.36 GP -67.11 ZAL 124.62 ZAP 109.74 ETS 305.42 ZAE 104.84 ETE 217.91 ZAC 116.82 ETC 334.29 CLP-150.24
  PLANETOCENTRIC CONIC
   C3 50.121 VHL 7.080 DLA 52.02 RAL 180.14 RAD 6568.8 YEL 13.095 PTH 2.39 VHP 9.776 DPA -45.89 RAP 119.72 ECC 1.8249
   LNCH AZMTH LNCH TIME L-I TIME
44.35 17 3 16 4543.45
135.65 1 46 37 2986.67
44.35 17 3 16 4543.45
135.65 1 46 37 2986.67
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               -28.70
                                                                                                                                            210.70
                                                                        70.93
                                                                                       41.91 18 18 59
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                                               -22.87
                                                           216.37
                                              -22.85
                                                             92.65
                                                                           70.92
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                                                                                                                    2386.7
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                             4543.45
                                              -22.87
                                                            216.37
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                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   2386.7
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                   1 46 37 2986.67
                                              -22.85
                                                             92.65
      135.65
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 3139.5 SGR 676.3 SG3 96.6
RRT .6126 RRF .8262 RTF .9458
SGB 3211.5 R23 .2906 R13 .9527
                                                                                                                ST 2819.4 SR 268.4 SS 762.7
CRT .8844 CRS -.9308 CST -.9938
   TOE 3.4832 TRA -.0716 TC3 -.9737 BAU .6915
   ROE .2946 RRA .3102 RC3 -.3418 FAU .02420
FDE 1.1098 FRA .2313 FC3 -.4180 BSP 9734
BDE 3.4956 BRA .3184 BC3 1.0320 FSP -331
                                                                                                                LSA 2929.3 MSA 147.8 SSA 2.9
                                                                SG1 3167.5 SG2 529.8 THA
                                                                                                                EL1 2829.4 EL2 124.8 ALF
                                                                                                                                                  4.82
                                                                                                                           ARRIVAL DATE NOV 23 1967
                                                                    FLIGHT TIME 124.00
LAUNCH DATE JUL 22 1967
                                                                    DISTANCE 365.748
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 27.286 GAL -8.49 AZL 72.40 MCA 173.41 SMA 132.47 ECC .20740 INC17.6016 V1 29.312 RP 107.52 LAP 1.99 LOP 112.24 VP 38.300 GAP 5.07 AZP 107.49 TAL 216.87 TAP 30.28 RCA 105.00 APO 159.95 V2 35.246
                      57.04 GP -75.14 TAL 113.56 ZAP 104.68 ETS 287.36 ZAE 95.54 ETE 204.54 ZAC 116.04 ETC 317.28 CLP-171.00
   RC 118.080 GL
  PLANETOCENTRIC CONIC
   C3 94.591 VHL 9.726 DLA 57.08 RAL 198.59 RAD 6569.8 VEL 14.695 PTH 2.66 VHP 13.658 DPA -51.52 RAP 107.64 ECC 2.5567
   LNCH AZHTH LNCH TIME L-I TIME
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                               224.00
                                4731.45
                                               -16.13
                                                            228.48
                                                                          97.81
                                                                                          34.45
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                                                                                                                    4131.4
                                                                                                                                 -22.67
       38.12
                 17 59 2
                   3 18 2 3098.45
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                                                                                                                    2498.4
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                                              -16.12
                                                             96.14
      141.88
                                                                           97.81
                                                                                          34,45
                                                                                                   19 17 54
                                                                                                                    4131.4
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                                                                                                                                                224.00
                                4731.45
                                              -16.13
                                                            228.48
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                 17 59 2
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                              3098.45
                                              -16.12
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      141.88
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                 17 59 2
3 18 2
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                              3098.45
                                                              96.14
      141.88
  DIFFERENTIAL CORRECTIONS
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SCT 3238.9 SGR 703.9 SG3 69.8
RRT -.5787 RRF -.3812 RTF .9732
SGB 3314.5 R23 -.2451 R13 -.9679
SG1 3265.2 SG2 569.4 THA 172.61
                                                                                                                ST 2930.8 SR 622.2 SS 762.2
CRT -.9623 CRS .9335 CST -.9959
    TDE 4.9396 TRA 1.0684 TC3 -.4243 BAU .5418
   RDE-1.0433 RRA .2980 RC3 -.0593 FAU .01292
FDE 1.0723 FRA .4138 FC3 -.1182 BSP 10011
                                                                                                                LSA 3086.1 MSA 182.3 SSA 1.6
                                                                                                                EL1 2991.5 EL2 165.9 ALF 168.42
   BDE 5.0486 BRA 1.1091 BC3 .4284 FSP -237
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FLIGHT TIME 118.00

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ARRIVAL DATE NOV 25 1967
                                                                       FLIGHT TIME 126.00
LAUNCH DATE JUL 22 1967
                                                                      DISTANCE 371.387
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 27.223 GAL -8.16 A7L 54.82 MCA 176.28 SMA 132.02 ECC .20635 INC35.1777 VI 29.312 RP 107.50 LAP 2.14 LOP 115.48 VP 38.259 GAP 5.25 A7P 125.12 TAL 215.31 TAP 31.59 RCA 104.78 APO 159.26 V2 35.250 RC 120.312 GL 62.20 GP -75.01 TAL 102.26 TAP 98.49 ETS 227.11 TAE 80.33 ETE 148.23 TAC 117.68 ETC 255.61 CLP 124.82
  PLANETOCENTRIC CONIC
    C3 307.998 VHL 17.550 DLA 53.80 RAL 217.88 RAD 6571.8 VEL 20.720 PTH 3.18 VHP 24.150 DPA -52.54 RAP 83.18 ECC 6.0689
    LNCH AZMTH LNCH-TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
42.14 19 27 14 4906.85 -4.67 232.30 124.47 36.34 20 49 0 4306.9 -11.09 227.89
137.86 4 23 45 3320.83 -4.66 105.39 124.45 36.34 5 19 6 2720.8 -11.08 100.99
       42.14 19 27 14
137.86 4 23 45
                                                                                                          5 19 6
                                                                                              36.34
                                 3320.83
                                                  -4.66
                                                               105.39
      137.86
                                                                                              36.34 20 49 0
                                                                                                                          4306.9
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                  19 27 14 4906.85
4 23 45 3320.83
                                                                             124.47
        42.14
                                                  -4.67
                                                               232.30
                                                                                              36.34
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                                                                                                                                        -11.08
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      137.86
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                                                                                              36.34 20 49 0
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                  19 27 14
                               4906.85
3320.83
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                                                                             124.47
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                                                                                                         5 19 6
                                                               105.39
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                                                                                              36.34
      137.86
                    4 23 45
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 933.6 SR 2362.8 SS 860.5
CRT -.9749 CRS .9924 CST -.9949
LSA 2674.2 MSA 208.4 SSA 1.2
                                                                   SGT 1595.5 SGR 2917.0 SG3 52.8
RRT -.9293 RRF -.9736 RTF .9882
SGB 3324.8 R23 -.1438 R13 -.9891
    TDE 2.5739 TRA 2.4533 TC3 -.0064 BAU
                                                      .3418
    RDE-7.0526 RRA-3.1971 RC3 -.0828 FAU-.00391
   FDE 1.1867 FRA .8526 FC3 .0110 BSP 9619
BDE 7.5076 BRA 4.0299 BC3 .0830 FSP -166
                                                                                                                     EL1 2533.1 EL2 193.9 ALF 111.20
                                                                   SG1 3283.3 SG2 523.7 THA 117.71
                                                                                                                                 ARRIVAL DATE NOV 27 1967
                                                                       FLIGHT TIME 128.00
  HELIOCENTRIC CONIC
                                                                       DISTANCE 380.237
   RL 151.99 LAL .00 LOL 298.53 VL 27.160 GAL -8.48 AZL 174.91 HCA 182.30 SMA 131.57 ECC .21289 INC84.9083 V1 29.312 RP 107.49 LAP 2.29 LOP 118.73 VP 38.217 GAP 6.35 AZP 5.09 TAL 215.37 TAP 37.67 RCA 103.56 APO 159.58 V2 35.253 RC 122.538 GL -44.52 GP 50.96 ZAL 95.82 ZAP 95.07 ETS 177.69 ZAE 52.48 ETE 250.38 ZAC 102.31 ETC 142.02 CLP 98.06
  PLANETOCENTRIC CONIC
    C31455.985 VAL 38.157 DLA -47.90 RAL 175.60 RAD 6573.2 VEL 39.715 PTH
                                                                                                3.56 VHP 48.471 DPA
                                                                                                                            56.68 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            137.89
                                                                                                                         1713.8
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                    5 3 57 2313.82
                                                  -1.05
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                                                                              86.53
       49.60
                                                                  137.89 13 23 37

151.60 86.53 137.89 13 23 37

151.60 86.53 137.89 13 23 37

151.60 86.54 137.89 13 23 37

151.60 86.53 137.89 5 42 31

151.60 86.53 137.89 13 23 37

MID-COURSE EXECUTION ACCURACY
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                  13 9 40
                                  837.00
                                                  -1.03
                                                                306.03
      130.40
                                2313.82
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                                                                 61.60
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        49.60
                                                                                                                           237.0
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                  13 9 40
                                 837.00
                                                  -1.03
                                                                306.03
       130.40
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                                                                                                                                           4.88
                    5 3 57
                                2313.82
                                                  -1.05
                                                                 61.60
        49.60
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                  13 9 40
                                                                306.03
       130.40
                                   837.00
                                                  -1.03
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 692.0 SR 2132.1 SS 2005.2

CRT -.9750 CRS-1.0000 CST .9731

LSA 3003.7 MSA 152.9 SSA 1.8

EL1 2236.8 EL2 146.5 ALF 107.64
                                                                  SGT 1132.3 SGR 2572.6 SG3 48.6
RRT -.8785 RRF .9990 RTF -.8607
SGB 2810.8 R23 -.1081 R13 .9937
    TOE 4.4569 TRA 2.6018 TC3 -.0921 BAU 4.0512
    RD-14.1890 RRA-1.0074 RC3 .1866 FAU-.06461
    FDE-3.1873 FRA -.1662 FC3 .0384 BSP 8188
BDE14.8725 BRA 2.7901 BC3 .2081 FSP -148
                                                                   SG1 2765.3 SG2 503.3 THA 111.90
                                                                                                                                ARRIVAL DATE NOV 29 1967
                                                                       FLIGHT TIME 130.00
LAUNCH DATE JUL 22 1967
                                                                      DISTANCE 384.870
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 27.096 GAL -7.94 AZL 125.14 MCA 184.22 SMA 131.12 ECC .20965 INC35.1401 V1 29.312 RP 107.49 LAP 2.43 LOP 121.98 VP 38.175 GAP 6.25 AZP 54.93 TAL 213.30 TAP 37.52 RCA 103.63 APO 158.61 V2 35.256
    RC 124.755 GL -62.03 GP 75.38 7AL 101.90 ZAP 101.41 ETS 142.79 ZAE 82.74 ETE 219.47 ZAC 90.39 ETG 105.19 CLP 141.62
   PLANETOCENTRIC CONIC
    C3 305.865 VML 17.489 DLA -54.91 RAL 144.60 RAD 6571.8 VEL 20.668 PTH 3.17 VMP 21.182 DPA 79.22 RAP 296.57 ECC 6.0338
    ENCH AZHTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            144.77 3 10 39
144.77 11 44 36
144.77 3 10 39
144.77 11 44 36
                                                                                                                                       11.28
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                                                                                                                       1670.7
                                                  4.77
                                                                64.36
                   2 32 49 2270.68
        40.77
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                                                               295.54
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                                   667.33
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                   2 32 49 2270,68
                                                    4.77
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                                  667.33
      139.23
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                                  667.33
                                                    4.78
      139.23
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                                                                     ST 1006.9 SR 2418.2 SS 1044.8
CRT .9791 CRS -.9965 CST -.9927
                                                                   SGT 1060.3 SGR 3374.5 SG3 60.4
    TOE-3.0571 TRA -.6088 TC3 -.0083 BAU .3717
   ROE-7.0334 RRA-4.2902 RC3 .0905 FAU-.00158
FOE-1.6989 FRA -.7427 FC3 .0045 BSP 10701
                                                                   RRT .8795 RRF .9840 RTF .9490
SGB 3537.1 R23 -.1372 R13 .9901
                                                                                                                     LSA 2813.2 MSA 196.6 SSA 1.1
EL1 2612.6 EL2 189.4 ALF 67.70
                                                                   SG1 3503.6 SG2 486.1 THA 74.24
    BOE 7.6691 BRA 4.3331 BC3 .0909 FSP -189
                                                                                                                                 ARRIVAL DATE DEC 1 1967
                                                                       FLIGHT TIME 132,00
LAUNCH DATE JUL 22 1967
                                                                       DISTANCE 390.543
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 27.032 GAL -7.61 A7L 110.95 MCA 187.17 SMA 130.68 ECC .20901 INC20.9453 V1 29.312 RP 107.48 LAP 2.56 LOP 125.22 VP 38.131 GAP 6.44 A7P 69.20 TAL 211.71 TAP 38.88 RCA 103.36 APO 157.99 V2 35.258 RC 126.964 GL -60.14 GP 70.17 ZAL 108.16 ZAP 109.59 ETS 86.91 ZAE 96.53 ETE 165.92 ZAC 89.21 ETC 49.53 CLP-171.25
  PLANETOCENTRIC CONIC
    C3 121.981 VHL 11.045 DLA -49.51 RAL 138.99 RAD 6570.3 VEL 15.599 PTH 2.78 VHP 12.822 DPA 75.67 RAP 222.95 ECC 3.0075
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           138.43 3 5 36
138.42 12 28 12
138.43 3 5 36
138.42 12 28 12
138.43 3 5 36
138.42 12 28 12
138.43 3 5 36
138.42 12 28 12
                                                                                                                                      17.81
                                                                                                                       1479.2
                                                                                                                                                        47.88
                                 2079.20
                                                                            38.62
        47.53
                     2 30 57
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                  10 50 35
                                  5856.57
                                                   11.90
                                                                272.01
                                                                               38.64
                                                                                                                                          17.82
      152.47
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                                                                                                                                          17.81
                                                                                                                          1479.2
                    2 30 57
                                 2079.20
                                                   11.88
                                                                 53.03
                                                                               38.62
        47.53
                                                                272.01
                                                                               38.64
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                                                                                                                                          17.82
                                                                                                                                                       266.86
                  10 50 35
                                  5856.57
                                                   11.90
       132.47
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                  2 30 57
10 50 35
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                                                                 53.03
                                                                               38.62
                                                                                                                          1479.2
        47.53
                                 2079.20
                                                  11.88
                                                                                                                                          17.82
                                                                                                                                                       266.86
                                 5856.57
                                                  11.90
                                                                272.01
                                                                               38.64
                                                                                                                          5256.6
       132.47
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2341.8 SR 396.8 SS 807.1
                                                                    SGT 3540.3 SGR 1104.6 SG3 83.9
    TOE-4.2319 TRA-3.4003 TC3 -.2617 BAU .4284
                                                                                                                      CRT .8258 CRS -.7681 CST -.9954
                                                                   RRT .8860 RRF .7895 RTF .9830
SGB 3708.6 R23 -.2128 R13 .9757
    ROE -.4420 RRA-1.3510 RC3 -.0231 FAU .01542
                                                                                                                     LSA 2497.4 MSA 236.6 SSA -1.6
    FDE-1.3571 FRA -.7806 FC3 -.1095 BSP 11329
                                                                                                                      EL1 2364.9 EL2 221.6 ALF 8.04
    BOE 4.2549 BRA 3.6589 BC3 .2627 FSP -267
                                                                    SG1 3675.7 SG2 493.2 THA 15.74
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LAUNCH DATE JUL 22 1967

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ARRIVAL DATE DEC 3 1967
                                                                                                                  DISTANCE 396.386
    HELIOCENTRIC CONIC
     RL 151.99 LAL .00 LOL 298.53 VL 26.968 GAL -7.31 AZL 105.16 MCA 190.30 SMA 130.23 ECC .20889 INC15.1556 V1 29.312 RP 107.48 LAP 2.68 LOP 128.47 VP 38.087 GAP 6.68 AZP 75.08 TAL 210.20 TAP 40.50 RCA 103.03 APO 157.44 V2 35.259 RC 129.165 GL -55.54 GP 60.65 ZAL 112.83 ZAP 117.41 ETS 69.58 ZAE 105.36 ETE 152.09 ZAC 89.99 ETC 32.43 CLP-159.90
     PLANETOCENTRIC CONIC
       C3 71.940 VHL 8.482 DLA -44.35 RAL 139.92 RAD 6569.4 VEL 13.903 PTH 2.54 VHP 9.642 DPA 66.97 RAP 200.07 ECC 2.1840
      LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                                                                        32.60
                             2 58 51 1903.33
10 30 9 5802.40
2 58 51 1903.33
10 30 9 5802.40
                                                                                                                                                 131.87
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            54.32
                                                                               16.21
                                                                                                      40.75
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           125.68
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          125.68
                                                                                 16.23
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131.86 12 6 51
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                                2 58 51 1903.33
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                              10 30 9
                                                     5802.40
                                                                                                     271.34
                                                                                                                              32.62
           125.68
                                                                                 16.23
                                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                           SCT 3786.9 SCR 457.5 SG3 112.2
RRT .0786 RRF -.1925 RTF .9596
SGB 3814.4 R25 -.2698 R13 .9593
SG1 3787.0 SG2 456.1 THA .55
                                                                                                                                                                                           ST 2224.4 SR 345.9 SS 776.2
CRT -.7773 CRS .8714 CST -.9860
      TOE-3.0138 TRA-3.1598 TC3 -.6682 BAU
                                                                                      .6442
      RDE .4940 RRA -.3208 RC3 .0463 FAU .02656
FDE-1.3373 FRA -.8026 FC3 -.3196 BSP 11738
BDE 3.0540 BRA 3.1761 BC3 .6698 FSP -360
                                                                                                                                                                                             LSA 2368.6 MSA 244.2 SSA
                                                                                                                                                                                                                                                        2.4
                                                                                                                                                                                            EL1 2240.7 EL2 216.0 ALF 173.04
                                                                                                                                                                                                              ARRIVAL DATE DEC 5 1967
                                                                                                                  FLIGHT TIME 136.00
                                                                                                                  DISTANCE 402.272
   HELIOCENTRIC CONIC
     RL 151.99 LAL .00 LOL 298.53 VL 26.904 GAL -7.00 AZL 102.06 MCA 193.49 SMA 129.79 ECC .20901 INC12.0609 V1 29.312
RP 107.48 LAP 2.79 LOP 131.72 VP 36.042 GAP 6.93 AZP 78.26 TAL 208.69 TAP 42.17 RCA 102.67 APO 156.92 V2 35.259
RC 131.355 GL -51.22 GP 52.23 ZAL 116.04 ZAP 124.30 ETS 62.89 ZAE 111.69 ETE 149.74 ZAC 90.82 ETC 26.01 CLP-156.93
    PLANETOCENTRIC CONIC
                                                                                                                                                           2.40 WHP 8.138 DPA 58.83 RAP 191.08 ECC 1.8432
     C3 51.234 VHL 7.158 DLA -40.29 RAL 142.13 RAD 6568.9 VEL 13.138 PTH 2.40 VHP 8.138 DPA 58.83 RAP 191.08 ECC 1.8432 LNCN AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.06 3 31 41 1755.52 18.36 29.61 29.07 126.51 4 0 57 1155.5 22.98 23.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.99 265.13 60.06 3 31 41 1755.52 18.36 29.61 29.07 126.51 4 0 57 1155.5 22.98 23.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.99 265.13 60.06 3 31 41 1755.52 18.36 29.61 29.07 126.51 4 0 57 1155.5 22.98 23.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.99 265.13 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.99 265.13 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 23.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 29.08 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 25.05 119.94 10 14 56 5785.53 18.37 271.69 126.51 11 51 22 5185.5 22.98 126
      C3 51.234 VHL 7.158 DLA -40.29 RAL 142.13 RAD 6568.9 VEL 13.138 PTH
                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                         RGT 3876.0 SGR 467.5 SG3 138.4
RRT - .4429 RRF - .6966 RTF .9438
SGB 3904.1 R23 .3053 R13 - .9456
SG1 3881.6 SG2 418.6 THA 176.91
                                                                                                                                                                                           ST 2120.9 SR 432.4 S5 774.4
CRT -.8779 CRS .9581 CST -.9783
      TDE-2.3996 TRA-2.8527 TC3-1.0760 BAU .7408
      ROE .5381 RRA -.0850 RC3 .1092 FAU .03520
FOE-1.3399 FRA -.7921 FC3 -.5947 8SP 12022
BOE 2.4594 BRA 2.8540 BC3 1.0816 FSP -446
                                                                                                                                                                                           LSA 2285.6 MSA 246.7 SBA
                                                                                                                                                                                          EL1 2154.9 EL2 203.8 ALF 169.76
                                                                                                                                                                                                             ARRIVAL DATE DEC 7 1967
                                                                                                                  FLIGHT TIME 138.00
LAUNCH DATE JUL 22 1967
                                                                                                                  DISTANCE 408.168
    HELIOCENTRIC CONIC
     #L 151.99 LAL .00 LOL 298.53 VL 26.840 GAL -6.70 A7L 100.14 MCA 196.69 SMA 129.36 ECC .20928 INC10.1355 V1 29.312 RP 107.48 LAP 2.90 LOP 134.97 VP 37.996 GAP 7.18 A7P 80.28 TAL 207.17 TAP 43.87 RCA 102.29 APO 156.43 V2 35.259 RC 133.557.GL -47.57 GP 45.23 ZAL 118.09 ZAP 130.16 ETS 58.97 ZAE 116.29 ETE 150.54 ZAC 91.24 ETC 22.45 CLP-156.31
     PLANETOCENTRIC CONIC
       C3 40.388 WHL 6.355 DLA -37.19 RAL 144.60 RAO 6568.6 VEL 12.718 PTH 2.31 VHP 7.342 DPA 51.80 RAP 186.79 ECC 1.6647
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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122.40 11 38 16
4 31 45
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                            4 4 35 1629.57
10 1 44 5792.07
4 4 35 1629.57
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            64.81
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            64.81
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                             10 1 44 5792.07
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10 1 44 5792.07
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            64.81
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                                                                               19.35
                                                                                                     272.94
           115.19
                                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                         RID-COURSE EXECUTION ACCURACY
SGT 3967.0 SGR 469.3 SG3 159.5
RRT -.5723 RRF -.8045 RTF .9327
SGB 3994.7 R23 .3239 R13 -.9349
SGI 3976.2 SGZ 384.0 THA 176.09
                                                                                                                                                                                           ST 2057.4 SR 432.9 SS 771.5
CRT -.8939 CRS .9741 CST -.9720
      TOE-2.0566 TRA-2.6208 TC3-1.4725 BAU .7988
      ROE .4801 RRA -.0219 RC3 .1415 FAU .04147
FOE-1.3189 FRA -.7477 FC3 -.8889 BSP 12329
BOE 2.1119 BRA 2.6208 BC3 1.4793 FSP -515
                                                                                                                                                                                           LSA 2225.8 MSA 247.7 SSA 4.3
                                                                                                                                                                                           EL1 2093.7 EL2 190.8 ALF 169.26
                                                                                                                                                                                                               ARRIVAL DATE DEC 9 1967
                                                                                                                  FLIGHT TIME 140.00
LAUNCH DATE JUL 22 1967
                                                                                                                  DISTANCE 414.063
     RL 151.99 LAL .00 LOL 298.53 VL 26.777 GAL -6.39 AZL 98.82 MCA 199.92 SMA 128.93 ECC .20969 INC 8.8177 VI 29.312 RP 107.48 LAP 2.99 LOP 138.22 VP 37.950 GAP 7.44 AZP 81.70 TAL 205.65 TAP 45.56 RCA 101.90 APO 155.96 V2 35.267 RC 135.709 GL -44.56 GP 39.50 ZAL 119.24 ZAP 135.07 ETS 56.11 ZAE 119.64 ETE 152.38 ZAC 91.19 ETC 19.99 CLP-156.57
     PLANETOCENTRIC CONIC
                                                                                                                                                          2.25 WHP 6.898 DPA 45.82 RAP 184.68 ECC 1.5562
       CI 33.797 WHL 5.814 DLA -34.86 RAL 147.11 RAD 6568.3 VEL 12.457 PTH
      C: 35.797 WHL 5.814 OLA -34.86 RAL 147.11 RAO 6568.3 VEL 12.457 PTM 2.25 VMP 6.898 DPA 45.82 RAP 184.68 ECC 1.5562 LNCM AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 66.76 4 36 13 1520.17 19.76 11.38 26.04 119.32 5 1 33 920.2 23.52 4.20 111.24 9 50 9 5811.46 19.78 274.77 26.05 119.31 11 27 0 5211.5 23.53 267.58 68.76 4 36 13 1520.17 19.76 11.38 26.04 119.32 5 1 33 920.2 23.52 4.20 111.24 9 50 9 5811.46 19.78 274.77 26.05 119.31 11 27 0 5211.5 23.53 267.58 68.76 4 36 13 1520.17 19.76 11.36 26.04 119.32 5 1 33 920.2 23.52 4.20 111.24 9 50 9 5811.46 19.78 274.77 26.05 119.31 11 27 0 5211.5 23.53 267.58 111.24 9 50 9 5811.46 19.78 274.77 26.05 119.31 11 27 0 5211.5 23.53 267.58
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                         SGT 4056.3 SGR 446.6 SG3 174.3

RRT -.6054 RRF -.8267 RTF .9242

SGB 4080.8 R23 .3302 R13 -.9262

SG1 4065.4 SG2 354.7 THA 176.16
                                                                                                                                                                                           ST 2015.4 SR 412.0 SS 762.4

CRT -.8980 CRS .9805 CST -.9668

LSA 2179.8 MSA 247.7 SSA 5.3
       TOE-1.8403 TRA-2.4321 TC3-1.8507 BAU .8389
       ROE .4180 RRA -.0060 RC3 .1482 FAU .04546
FOE-1.2737 FRA -.6756 FC3-1.1645 88P 12569
                                                                                                                                                                                           EL1 2049.3 EL2 178.3 ALF 169.52
       BOE 1.8871 BRA 2.4321 BC3 1.8566 FSP -561
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FLIGHT TIME 134.00

ARRIVAL DATE DEC 11 1967

EL1 2023.6 EL2 138.1 ALF 170.73

LAUNCH DATE JUL 22 1967 HELIOCENTRIC CONIC DISTANCE 419.951 RL 151.99 LAL .00 LOL 298.53 VL 26.713 GAL -6.06 AZL 97.85 MCA 203.14 SMA 128.51 ECC .21022 INC 7.8546 VL 29.312 RP 107.49 LAP 3.08 LOP 141.48 VP 37.903 GAP 7.69 AZP 82.77 TAL 204.10 TAP 47.25 RCA 101.49 APO 155.52 V2 35.255 RC 137.871 GL -42.06 GP 34.82 7AL 119.68 ZAP 139.19 ETS 53.80 ZAE 122.07 ETE 154.51 ZAC 90.73 ETC 18.11 CLP-157.21 PLANETOCENTRIC CONIC 2.21 VHP 6.648 OPA 40.73 RAP 183.78 ECC 1.4833 C3 29.365 VHL 5.419 DLA -33.13 RAL 149.63 RAD 6568.2 VEL 12.278 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23.43 5 6 5 9 40 23 1424.32 19.97 4.03 25.78 117.00 5 29 50 824.3 356.69 72.03 11 17 40 5236.6 23.44 269.50 276.85 25.79 116.99 5836.63 19.99 107.97 5 29 50 4.03 25.78 117.00 824.3 23.43 356.69 5 6 5 1424.32 9 40 23 5836.63 19.97 72.03 116.99 11 17 40 269.50 25.79 5236.6 23.44 276.85 107.97 19.99 121.55 9 0 38 112.66 12 30 10 9 0 38 17.97 300.69 8 48 51 10 56 48 307.63 22.22 106.9 110.00 706.95 13.90 5002.0 253.81 261.85 28.96 110.00 5602.00 26.30 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4155.4 SGR 419.8 SG3 184.7 RRT -.6094 RRF -.8205 RTF ..9181 SGB 4176.5 R25 .3246 R13 -.9197 SGI 4163.3 SG2 332.2 THA 176.45 ST 1995.6 SR 391.3 SS 753.4 CRT -.9009 CRS .9846 CST -.9627 TDE-1.7012 TRA-2.2734 TC3-2.2206 BAU .8735 RDE .3700 RRA -.0020 RC3 .1405 FAU .04791 FDE-1.2215 FRA -.5935 FC3-1.4123 BSP 12916 BDE 1.7410 BRA 2.2734 BC3 2.2250 FSP -598 LSA 2154.5 MSA 246.8 35A 6.4 EL1 2026.7 EL2 167.2 ALF 169.91 ARRIVAL DATE DEC 13 1967 FLIGHT TIME 144.00 LAUNCH DATE JUL 22 1967 HELIOCENTRIC CONIC DISTANCE 425.827 RL 151.99 LAL .00 LOL 298.53 VL 26.650 GAL -5.74 AZL 97.12 NCA 206.38 SMA 128.09 ECC .21089 INC 7.1163 V1 29.312 RP 107.50 LAP 3.16 LOP 144.73 VP 37.856 GAP 7.95 AZP 83.62 TAL 202.55 TAP 48.93 RCA 101.07 APO 155.10 V2 35.253 RC 140.023 GL -39.96 GP 30.97 ZAL 119.58 ZAP 142.67 ETS 51.88 ZAE 123.84 ETE 156.62 ZAC 89.93 ETC 16.59 CLP-158.03 PLANETOCENTRIC CONIC 36.38 RAP 183.63 ECC 1.4306 2.18 VHP 6.513 OPA C3 26.165 VHL 5.115 DLA -31.88 RAL 152.17 RAD 6568.1 VEL 12.147 PTH LNON AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.71 5 33-49 1340.92 20.11 357.72 26.07 115.26 5 56 10 740.9 23.35 350.26 5 33 49 1340.92 115.25 11 10 37 115.26 5 56 10 115.25 11 10 37 122.43 8 41 18 108.43 13 8 47 5862.55 278.90 26.OA 5262.6 271.44 105.29 9 32 55 20.13 740.9 23.35 1340.92 357.72 26.07 74.71 5 33 49 20.11 9 32 55 5862.55 20.13 278.90 26.08 5262.6 23.36 271.44 105.29 11.45 311.37 174.9 15.65 304.79 110.00 8 28 24 774.94 21.12 4876.5 31.54 244.83 110.00 11 37 31 5476.53 29.31 253.33 30.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2023.0 SR 381.6 SS 762.3 CRT -.9085 CRS .9883 CST -.9613 SGT 4318.1 SGR 405.2 SG3 196.7 RRT -.6197 RRF -.8096 RTF .9174 TOE-1.6360 TRA-2.1563 TC3-2.6226 BAU .9185 ROE .3407 RRA .0053 RC3 .1330 FAU .05033 FOE-1.1936 FRA -.5328 FC3-1.6654 BSP 13936 BDE 1.6711 BRA 2.1563 BC3 2.6259 FSP -660 SGB 4337.1 R23 .3032 R13 -.9188 SG1 4325.4 SG2 317.5 THA 176.65 LSA 2181.6 MSA 245.3 SSA EL1 2052.7 EL2 157.2 ALF 170.22 ARRIVAL DATE DEC 15 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 22 1967 DISTANCE 431.701 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 26.587 GAL -5.40 AZL 96.53 HCA 209.61 SMA 127.67 ECC .21167 INC 6.5291 VI 29.312 RP 107.51 LAP 3.22 LOP 147.98 VP 37.808 GAP 8.20 AZP 84.32 TAL 200.98 TAP 50.59 RCA 100.65 APO 154.70 V2 35.249 RC 142.165 GL -38.17 GP 27.79 ZAL 119.00 ZAP 145.64 ETS 50.25 ZAE 125.14 ETE 158.58 ZAC 88.85 ETC 15.31 CLP-158.93 PLANETOCENTRIC CONIC C3 23.723 VHL 4.871 OLA -31.00 RAL 154.76 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.451 OPA 32.62 RAP 183.98 ECC 1.3904 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23.34 344.95 113.97 6 20 1 113.96 11 6 38 670.7 26.82 20.27 352.49 76.82 5 58 50 1270.68 5284.6 23.35 5884.57 20.28 280.64 26.82 670.7 23.34 6 20 1 5 58 50 1270.68 20.27 352.49 26.82 113.97 76.82 113.96 11 6 38 122.75 8 35 51 23.35 273.10 5284.6 9 28 34 5884.57 20.28 280.64 26.82 203.5 14.64 110.00 8 22 28 803.51 10.40 312.92 21.30 105.54 13 34 6 32.66 12 4 6 5399.74 247,87 31.01 4799.7 110.00 30.84 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 4311.5 SGR 371.5 SG3 191.7 RRT -.5615 RRF -.7539 RTF .9064 - SGB 4327.5 R23 .2929 R13 -.9074 SGI 4316.6 SG2 307.0 THA 177.22 ST 1978.0 SR 359.5 SS 724.0 CRT -.9094 CRS ..9910 CST -.9562 TOE-1.5314 TRA-1.9733 TC3-2.9054 BAU .9220 ROE .3056 RRA -.0035 RC3 .0960 FAU .04845 FDE-1.0944 FRA -.3970 FC3-1.7683 BSP 13198 LSA 2123.0 MSA 242.1 SSA EL1 2005.0 EL2 147.5 ALF 170.56 BOE 1.5616 BRA 1.9733 BC3 2.9070 FSP -603 ARRIVAL DATE DEC 17 1967 FLIGHT TIME 148.00 DISTANCE 437.557 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 26.524 GAL -5.05 AZL 96.05 MCA 212.85 SMA 127.27 ECC .21259 INC 6.0483 V1 29.312 RP 107.52 LAP 3.28 LOP 151.23 VP 37.760 GAP 8.46 AZP 84.91 TAL 199.40 TAP 52.25 RCA 100.21 APO 154.32 V2 35.245 RC 144.295 GL -36.61 GP 25.14 ZAL 118.04 ZAP 148.22 ETS 48.89 ZAE 126.10 ETE 160.35 ZAC 87.55 ETC 14.24 CLP-159.88 PLANETOCENTRIC CONIC C3 21.795 VHL 4.669 DLA -30.42 RAL 157.42 RAD 6567.9 VEL 11.966 PTH 2.13 VMP 6.438 DPA 29.31 RAP 184.68 ECC 1.3587 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.01 6 41 0 113.00 9 36 1 23.41 6 20 46 1214.19 9 27 49 611.80 614.2 78.39 20.47 348.35 27.93 23.42 113.00 11.6 101.61 20.48 303.97 27.94 6 41 0 614.2 23.41 340.74 78.39 6 20 46 1214.19 20.47 348.35 27.93 113.01 6 41 0 113.00 9 38 1 122.86 8 37 9 103.46 13 53 19 113.01 23.42 296.37 101.61 9 27 49 611.80 20.48 303.97 27.94 11.8 214.1 14.27 306.98 110.00 8 23 34 814.09 10.01 313.49 22.20 4747.9 33.25 31.72 110.00 12 24 11 5347.94 244.09 32.05 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4406.0 SGR 359.6 SG3 193.3 RRT -.5356 RRF -.7113 RTF .9032 SGB 4420.7 R23 .2667 R13 -.9040 SG1 4410.3 SG2 303.4 THA 177.48 ST 1997.3 SR 353.2 SS 717.2 CRT -.9182 CRS ..9940 CST -.9549 TDE-1.4949 TRA-1.8369 TC3-3.2507 BAU .9474 ROE .2878 RRA -.0013 RC3 .0725 FAU .04801 FDE-1.0441 ERA -.3084 FC3-1.9072 BSP 13540 LSA 2138.1 MSA 238.1 SSA 9.8

FLIGHT TIME 142.00

BOE 1.5223 BRA 1.8369 BC3 3.2515 FSP -612

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ARRIVAL DATE DEC 19 1967
                                                                                  FLIGHT TIME 150.00
LAUNCH DATE JUL 22 1967
                                                                                  DISTANCE 443.401
   HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 26.482 GAL -4.69 AZL 95.65 MCA 216.09 SMA 126.87 ECC .21365 INC 5.6451 V1 29.312
RP 107.55 LAP 3.32 LOP 154.48 VP 37.712 GAP 8.72 AZP 85.43 TAL 197.80 TAP 53.89 RCA 99.76 APO 153.97 V2 35.240
RC 146.414 GL -35.22 GP 22.90 ZAL 116.75 ZAP 150.48 ETS 47.77 ZAE 126.82 ETE 161.93 ZAC 86.08 ETC 13.31 CLP-160.85
   PLANETOCENTRIC CONIC
    C3 20.231 VHL 4.498 DLA -30.09 RAL 160.17 RAD 6567.8 VEL 11.900 PTH 2.11 VHP 6.459 DPA 26.38 RAP 185.63 ECC 1.3329 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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112.31 9 41 43
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9 31 25 617.34
6 39 5 1172.88
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                                                                         241.51
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                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4501.4 SGR 353.7 SG3 193.7
RRT -.5090 RRF -.6657 RTF ..9008
SGB 4515.3 R23 .2383 R13 -.9015
SGI 4505.0 SG2 304.3 THA 177.70
                                                                                                                                       ST 2029.0 SR 351.0 SS 713.0
CRT - 9288 CRS .9964 CST - 9548
LSA 2166.5 MSA 232.9 SSA 11.1
    TOE-1.4777 TRA-1.7006 TC3-3.5937 BAU .9721
    RDE .2755 RRA .0019 RC3 .0492 FAU .04717
    FDE -.9991 FRA -.2236 FC3-2.0184 BSP 13902
BOE 1.5031 BRA 1.7006 BC3 3.5940 FSP -618
                                                                                                                                        EL1 2055.1 EL2 128.4 ALF 170.84
                                                                                  FLIGHT TIME 152.00
                                                                                                                                                     ARRIVAL DATE DEC 21 1967 ...
                                                                                  DISTANCE 449.232
  HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 26.400 GAL -4.32 AZL 95.30 HCA 219.32 SMA 126.47 ECC .21485 INC 5.3000 V1 29.312 RP 107.55 LAP 3.36 LOP 157.73 VP 37.664 GAP 8.97 AZP 85.90 TAL 196.20 TAP 55.52 RCA 99.30 APO 153.64 V2 35.234 RC 148.521 GL -33.97 GP 21.01 ZAL 115.15 ZAP 152.48 ETS 46.87 ZAE 127.36 ETE 163.32 ZAC 84.46 ETC 12.52 CLP-161.81
   PLANETOCENTRIC CONIC
    C3 18.939 VHL 4.352 DLA -29.96 RAL 163.03 RAD 6567.8 VEL 11.846 PTH
                                                                                                                2.10 VMP 6.504 DPA 23.74 RAP 186.79 ECC 1.3117
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.78 6 53 37 1147.33 21.04 343.61 31.15 111.84 7 12 44 547.3 23.82 335.91
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111.84 7 12 44
111.82 9 49 56
122.75 8 52 17
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                                        804.08
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                                                                         312.95
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       110.00
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                                     5290.89
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                     12 53 36
                                                          32.55
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                                                                                           34.96
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 4585.8 SGR 352.3 SG3 192.5
RRT -.4813 RRF -.6188 RTF .8984
SGB 4599.4 R23 .2104 R13 -.8990
SG1 4589.0 SG2 308.6 THA 177.87
                                                                                                                                       ST 2067.1 SR 351.4 S5 709.0

CRT -.9402 CRS .9982 CST -.9552

LSA 2201.7 MSA 226.5 SSA 12.3

EL1 2093.4 EL2 118.2 ALF 170.89
    TOE-1.4724 TRA-1.5577 TC3-3.9247 BAU .9937
     ROE .2669 RRA .0052 RC3 .0261 FAU .04588
    FDE -.9562 FRA -.1395 FC3-2.0975 BSP 14178
    BOE 1.4964 BRA 1.5577 BC3 3.9248 FSP -614
                                                                                                                                                    ARRIVAL DATE DEC 23 1967
                                                                                 FLIGHT TIME 154.00
LAUNCH DATE JUL 22 1967
                                                                                 DISTANCE 455.048
   RL 151.99 LAL .00 LOL 298.53 VL 26.339 GAL -3.94 AZL 95.00 MCA 222.56 SMA 126.08 ECC .21620 INC 4.9996 VI 29.312 RP 107.57 LAP 3.38 LOP 160.98 VP 37.615 GAP 9.23 AZP 86.31 TAL 194.58 TAP 57.14 RCA 98.82 APO 153.34 V2 35.228 RC 150.615 GL -32.81 GP 19.39 ZAL 113.28 ZAP 154.28 ETS 46.18 ZAE 127.78 ETE 164.54 ZAC 82.72 ETC 11.82 CLP-162.76
   PLANETOCENTRIC CONIC
   C3 17.863 VHL 4.226 DLA -29.99 RAL 166.02 RAD 6567.7 VEL 11.800 PTH 2.09 VHP 6.567 DPA 21.34 RAP 188.10 ECC 1.2940
                                                                                                          111.51 11 30 31
122.59 9 4 28
100.56 14 33 6
                                        788.79
                                                          10.94
                                                                         312.13
                                                                                          27.68
                     8 51 19 788.79
13 5 7 5278.79
       110.00
                                                                         238.94
                                                                                          36.87
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                                                                                                                                                              33.61
                                                        32.70
       110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ST 2115.7 SR 354.6 SS 707.2

CRT -.9520 CRS ..9990 CST -.9565

LSA 2248.0 MSA 219.1 SSA 13.5

EL1 2142.5 EL2 107.2 ALF 170.91
                                                                             RET -4572 RRF -.5752 RTF .8968
SGB 4683.7 R23 .1835 R13 -.8973
SGI 4673.0 SGZ 315.4 THA 178.00
    TOE-1.4800 TRA-1.4111 TC3-4.2502 BAU 1.0150
    RDE .2616 RRA .0089 RC3 .0051 FAU .04444
FDE -.9182 FRA -.0600 FC3-2.1539 BSP 14474
    BDE 1.5029 BRA 1.4111 BC3 4.2502 FSP -610
                                                                                                                                                    ARRIVAL DATE DEC 25 1967
                                                                                  FLIGHT TIME 156.00
LAUNCH DATE JUL 22 1967
                                                                                 DISTANCE 460.850
   HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 26.278 GAL -3.55 A7L 94.73 HCA 225.80 SHA 125.70 ECC .21772 INC 4.7341 V1 29.312 RP 107.59 LAP 3.39 LOP 164.22 VP 37.566 GAP 9.49 AZP 86.70 TAL 192.96 TAP 58.75 RCA 98.33 APO 153.07 V2 35.221 RC 152.696 GL -31.70 GP 17.99 ZAL 111.16 ZAP 155.91 ETS 45.69 ZAE 128.10 ETE 165.61 ZAC 80.89 ETC 11.21 CLP-163.70
   PLANETOCENTRIC CONIC
    C3 16.966 VHL 4.119 DLA -30.16 RAL 169.17 RAD 6567.7 VEL 11.762 PTH 2.08 VMP 6.646 DPA 19.13 RAP 189.54 ECC 1.2792
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.17 7 13 29 1136.41 21.81 343.13 35.61 111.35 7 32 26 536.4 24.52 335.35 100.83 10 8 50 5859.31 21.82 279.44 35.61 111.34 11 46 30 5259.3 24.53 271.67
                                                                             33.13 35.61 111.35 7 32 26

19.44 35.61 111.34 11 46 30

1.03 30.26 122.36 9 19 8

18.66 39.10 100.40 14 43 6

MID-COURSE EXECUTION ACCURACY

SGT 4740.8 SGR 359.8 SG3 187.8

RRT -.4343 RRF -.5340 RTF .8949

SGB 4754.4 R23 .1593 R13 -.8953

SGI 4743.4 SG2 323.9 THA 178.10 E
                                                                                                                                              536.4
                                                                                                                                                                              335.35
                     7 13 29 1136.41
                                                                         343.13
                                                                                           35.61
                                                                                                           111.35
                                                                                                                         7 32 26
                                                                                                                                                               24.52
                                                          21.81
        79.17
                     10 8 50 5859.31
9 6 19 768.64
                                                                         279.44
                                                                                                                                             5259.3
                                                                                                                                                             24.53
                                                                                                                                                                             271.67
                                                          21.82
       100.83
                                                                                                                                                               15.86
                                                                                                                                                                              304.43
                                                                         311.03
                                                                                                                                             168.6
                                                          11.68
       110.00
                                                                                                                                          4675.1
                                                                                                                                                               33.84
                                                                                                                                                                              229.59
                     13 15 11
                                      5275.08
                                                                         238.66
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 2166.9 SR 359.1 SS 703.6
CRT -.9632 CRS ..9987 CST -.9580
LSA 2296.7 MSA 210.6 SSA 14.8
    TOE-1.4935 TRA-1.2549 TC3-4.5555 BAU 1.0333
    ROE .2582 RRA .0123 RC3 -.0145 FAU .04271
FDE -.8802 FRA .0187 FC3-2.1794 BSP 14672
BOE 1.5156 BRA 1.2550 BC3 4.5555 FSP -597
                                                                                                                                        EL1 2194.3 EL2 95.4 ALF 170.91
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ARRIVAL DATE DEC 27 1967

EL1 2467.8 EL2 41.9 ALF 170.90

LAUNCH DATE JUL 22 1967

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HELIOCENTRIC CONIC
                                                                      DISTANCE 466.636
   RL 151.99 LAL .00 LOL 298.53 VL 26.218 GAL -3.14 AZL 94.50 MCA 229.03 SMA 125.33 ECC .21940 INC 4.4964 V1 29.312 RP 107.62 LAP 3.39 LOP 167.47 VP 37.517 GAP 9.76 AZP 87.05 TAL 191.32 TAP 60.35 RCA 97.83 APO 152.82 V2 35.214 RC 154.762 GL -30.63 GP 16.78 ZAL 108.80 ZAP 157.40 ETS 45.38 ZAE 128.38 ETE 166.55 ZAC 78.98 ETC 10.68 CLP-164.63
   PLANETOCENTRIC CONIC
    C3 16.225 VHL 4.028 DLA -30.42 RAL 172.47 RAD 6567.7 VEL 11.731 PTH 2.07 VMP 6.736 DPA 17.08 RAP 191.08 ECC 1.2670
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     7 20 51
                                 1144.71
                                                  22.25
                                                               343.93
                                                                              38.29
                                                                                            111.30
                                                                                                         7 39 55
                                                                                                                           544.7
                                                                                                                                         24.95
                                                                                                                                                     336.13
                                                                                                                          5230.5
                  10 27 51 5830.55
                                                                277.48
                                                                               38.29
                                                                                             111.29 12 5 1
                                                                                                                                          24.96
                                                                                                                                                       269.67
                                                  22.26
        78.39
                    7 20 51
                                 1144.71
                                                  22.25
                                                                343.93
                                                                               38.29
                                                                                             111.30
                                                                                                         7 39 55
                                                                                                                           544.7
                                                                                                                                          24.95
                                                                                                                                                       336.13
                                                                                            111.29 12 5 1
122.06 9 36 2
100.55 14 52 13
                                                                               38.29
                                                                                                                          5230.5
                                                                                                                                          24.96
                                                                                                                                                       269.67
                  10 27 51 5830.55
                                                  22.26
                                                                277.48
      101.61
                                   744.74
                                                                309.72
                                                                              33.19
                                                                                                                           144.7
                                                                                                                                          16.69
                                                                                                                                                       303.07
      110.00
                    9 23 37
                                                  12.54
                  13 24 15 5278.51
                                                                                                                         4678.5
                                                                                                                                         33.61
                                                                                                                                                       229.86
      110.00
                                                               238.92
                                                                              41.65
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4818.9 SGR 367.6 SG3 185.2
RRT -.4189 RRF -.5007 RTF .8944
                                                                                                                      ST 2230.4 SR 365.9 SS 703.7
CRT -.9735 CRS .9972 CST -.9603
    TOE-1.5187 TRA-1.0956 TC3-4.8537 BAU 1.0529
   RDE .2572 RRA .0158 RC3 -.0303 FAU .04107
FDE -.8486 FRA .0907 FC3-2.1915 BSP 14949
                                                                   SGB 4832.9 R23 .1368 R13 -.8947
SG1 4821.4 SG2 333.6 THA 178.16
                                                                                                                      LSA 2358.6 MSA 201.4 SSA 16.2
   BDE 1.5404 BRA 1.0957 BC3 4.8538 FSP -590
                                                                                                                      EL1 2258.7 EL2 82.7 ALF 170.91
                                                                                                                                 ARRIVAL DATE DEC 29 1967
LAUNCH DATE JUL 22 1967
                                                                       FLIGHT TIME 160.00
                                                                       DISTANCE 472.405
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 26.159 GAL -2.72 ATL 94.28 MCA 232.27 SMA 124.96 ECC .22126 INC 4.2811 V1 29.312 RP 107.64 LAP 3.38 LOP 170.71 VP 37.468 GAP 10.03 ATP 87.38 TAL 189.68 TAP 61.95 RCA 97.31 APO 152.61 V2 35.205 RC 156.813 GL -29.57 GP 15.72 TAL 106.23 ZAP 158.77 ETS 45.27 ZAE 128.56 ETE 167.37 ZAC 77.00 ETC 10.21 CLP-165.54
  PLANETOCENTRIC CONIC
   C3 15.625 VHL 3.953 DLA -30.76 RAL 175.95 RAD 6567.6 VEL 11.705 PTH
                                                                                                 2.06 VHP 6.838 OPA 15.16 RAP 192.71 ECC 1.2571
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZHTH LNCH TIME L-I TIME
                                                                                           111.34
                    7 27 47
                                 1158.09
                                                  22.70
                                                               345.12
                                                                             41.28
                                                                                                          7 47 5
                                                                                                                           558.1
                                                                                                                                         25.40
                                                                                                                                                       337.29
       77.44
                                                                                             111.33
                                                                                                         12 25 18
                                                                                                                           5200.0
                                                                                                                                          25.41
                                                                                                                                                        267.55
      102.56
                  10 48 38
                                 5800.05
                                                   22.71
                                                                275.39
                                                                               41.28
                                                                                            111.34 7 47 5
111.33 12 25 18
121.70 9 54 57
100.96 15 0 44
                                                                                                                            558.1
                                                                                                                                          25.40
                                                                                                                                                        337.29
                                 1158.09
                                                   22.70
                                                                345.12
                                                                               41.28
       77.44
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      102.56
                  10 48 38
                                 5800.05
                                                  22.71
                                                                275.39
                                                                               41.28
                                                                                                                           118.0
                                                                                                                                          17.60
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                    9 42 59
                                  717,99
                                                  13.51
                                                                308.25
                                                                               36.46
      110.00
                  13 32 35
                                 5288.15
                                                  32.58
                                                                239.64
                                                                               44.50
                                                                                                                          4688.1
                                                                                                                                          33.75
                                                                                                                                                        230.60
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                  SGT 4892.3 SGR 376.7 SG3 182.2

RRT -.4070 RRF -.4727 RTF .8943

SG8 4906.8 R23 .1171 R13 -.8946

SG1 4894.7 SG2 344.0 THA 178.20
                                                                                                                      ST 2298.2 SR 373.9 SS 703.3
CRT -.9822 CRS .9946 CST -.9627
    TOE-1.5498 TRA -.9286 TC3-5.1280 BAU 1.0712
    RDE .2579 RRA .0189 RC3 -.0435 FAU .03934
   FOE -.8186 FRA .1596 FC3-2.1796 BSP 15209
BOE 1.5711 BRA .9288 BC3 5.1282 FSP -582
                                                                                                                      LSA 2424.7 MSA 191.8 SSA 17.5
                                                                                                                      EL$ 2327.4 EL2 69.4 ALF 170.91
                                                                                                                                 ARRIVAL DATE DEC 31 1967
LAUNCH DATE JUL 22 1967
                                                                       FLIGHT TIME 162.00
                                                                       DISTANCE 478.155
  HELIOCENTRIC CONTC
   RL 151.99 LAL .00 LOL 298.53 VL 26.100 GAL -2.29 AZL 94.08 HCA 235.50 SMA 124.60 ECC .22330 INC 4.0839 VI 29.312 RP 107.67 LAP 3.36 LOP 173.96 VP 37.418 GAP 10.30 AZP 87.68 TAL 188.03 TAP 63.53 RCA 96.77 APO 152.42 VZ 35.197 RC 158.850 GL -28.49 GP 14.79 ZAL 103.46 ZAP 160.03 ETS 45.34 ZAE 128.73 ETE 168.10 ZAC 74.97 ETC 9.80 CLP-166.44
   PLANETOCENTRIC CONIC
    C3 15.155 VHL 3.893 DLA -31.16 RAL 179.59 RAD 6567.6 VEL 11.685 PTH 2.06 VHP 6.949 DPA 13.36 RAP 194.41 ECC 1.2494
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          111.46 7 54 40
111.44 12 46 35
111.44 7 54 40
111.44 12 46 35
111.44 12 46 35
121.29 10 15 42
101.60 15 8 51
                  7 35 6 1174.07
11 10 25 5770.34
                                                                            44.57
                                                                                                                          574.1
                                                                                                                                       25.86 338.66
       76.43
                                                  23.15
                                                               346.52
                                                                                                                          5170.3
                                                                                                                                          25.87
                                                                               44.57
      103.57
                                                  23.16
                                                                273.34
                                                                                                                           574.1
                                                                                                                                          25.86
                                                                               44.57
       76.43
                    7 35 6 1174.07
                                                  23:15
                                                                346.52
                                                                                                                          5170.3
                                                                                                                                          25.87
                                                                                                                                                       265.48
                                                                               44.57
      103.57
                  11 10 25 5770.34
                                                 23.16
                                                               273.34
                                                                                                                            89.3
                                                                                                                                          18.56
                                                                                                                                                       299.86
      110.00
                  10 4 13
                                 689.28
                                                  14.53
                                                                306.65
                                                                               40.06
                 13 40 28 5303.12
                                                                                                                          4703.1
                                                                                                                                          33.64
      110.00
                                                  32.38
                                                                240.76
                                                                               47.66
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4962.6 SGR 386.8 SG3 179.1
RRT - 3990 RRF - .4502 RTF .8948
SGB 4977.7 R23 .0997 R13 -.8951
SGI 4965.0 SG2 354.5 THA 178.21
                                                                                                                      ST 2367.9 SR 382.9 SS 702.0
CRT -.9891 CRS ..9907 CST -.9652
    TDE-1.5848 TRA -.7536 TC3-5.3740 BAU 1.0889
    ROE .2601 RRA .0213 RC3 -.0536 FAU .03759
                                                                                                                      LSA 2492.6 MSA 182.1 SSA 18.9
EL1 2398.1 EL2 55.6 ALF 170.91
   FOE -.7897 FRA .2253 FC3-2.1476 BSP 15461
BDE 1.6060 BRA .7539 BC3 5.3743 FSP -573
                                                                                                                                 ARRIVAL DATE JAN 2 1968
LAUNCH DATE JUL 22 1967
                                                                       FLIGHT TIME 164.00
                                                                      DISTANCE 483.887
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 26.041 GAL -1.85 AZL 93.90 HCA 238.73 SMA 124.24 ECC .22555 INC 3.9015 V1 29.312 RP 107.70 LAP 3.33 LOP 177.20 VP 37.369 GAP 10.58 AZP 87.97 TAL 186.37 TAP 65.10 RCA 96.22 APO 152.27 V2 35.187 RC 160.871 GL -27.40 GP 13.97 ZAL 100.50 ZAP 161.21 ETS 45.59 ZAE 128.87 ETE 168.73 ZAC 72.88 ETC 9.44 CLP-167.31
  PLANETOCENTRIC CONIC
    C3 14.813 VHL 3.849 DLA -31.57 RAL 183.41 RAD 6567.6 VEL 11.670 PTH 2.05 VHP 7.069 DPA 11.64 RAP 196.17 ECC 1.2438
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.64 8 3 9
111.62 13 8 25
                                                                                                                            591.1
                                                                                                                                          26.30
                  7 43 18 1191.09
11 32 42 5743.10
                                                                347.98
                                                  23.57
                                                                               48.15
       75.42
                                                                                                                                          26.31
                                                                271.46
                                                                                                                           5143.1
      104.58
                                                  23.58
                                                                               48.17
                                                                                             111.64 8 3 9
111.62 13 8 25
                                                                                                                                                        340.10
                                                                                                                            591.1
                                                                                                                                          26.30
       75.42
                    7 43 18
                                 1191.09
                                                  23.57
                                                                347.98
                                                                               48.16
                                                                                                                                          26.31
                                                                                                                                                        263.58
      104.58
                  11 32 42
                                 5743.10
                                                  23.58
                                                                271.46
                                                                               48.17
                                                                                                                           5143.1
                                                                                             120.82 10 38 1
                                                                                                                             59.6
                                                                                                                                          19.54
                                   659.60
                                                  15.57
      110.00
                  10 27 2
                                                                304.98
                                                                               43.99
                  13 48 8
                                                                242.22
                                                                                                         15 16 51
                                                                                                                           4722.6
                                                                                                                                          33.48
                                                                                             102.41
      110.00
                                 5322.59
                                                  32.11
                                                                               51.12
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 5028.6 SGR 397.3 SG3 175.8
RRT -.3941 RRF -.4328 RTF .8957
SGB 5044.3 R23 .0848 R13 -.8959
                                                                                                                    ST 2436.7 SR 392.7 SS 699.3
CRT -.9941 CRS .9857 CST -.9675
LSA 2559.4 MSA 172.9 SSA 20.2
    TOE-1.6222 TRA -.5697 TC3-5.5823 BAU 1.1056
   RDE .2636 RRA .0229 RC3 -.0605 FAU .03583
FOE -.7617 FRA .2886 FC3-2.0943 BSP 15704
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FLIGHT TIME 158.00

BOE 1.6435 BRA .5702 BC3 5.5827 FSP -564

SG1 5031.1 SG2 364.9 THA 178.21

ARRIVAL DATE JAN 4 1968

LAUNCH CATE JUL 22 1967

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DISTANCE 489.598
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 25.984 GAL -1.39 AZL 93.73 MCA 241.96 SMA 123.89 ECC .22801 INC 3.7313 V1 29.312 RP 107.73 LAP 3.29 LOP 180.44 VP 37.319 GAP 10.87 AZP 88.24 TAL 184.71 TAP 66.67 RCA 95.65 APO 152.14 V2 35.178 RC 162.878 GL -26.26 GP 13.24 ZAL 97.38 ZAP 162.32 ETS 46.04 ZAE 128.99 ETE 169.30 ZAC 70.75 ETC 9.13 CLP-168.18
  PLANETOCENTRIC CONTC
                                                                                                   2.05 VHP 7.198 DPA 10.02 RAP 197.99 ECC 1.2402
    C3 14,597 VHL 3.821 DLA -31.98 RAL 187.40 RAD 6567.6 VEL 11.661 PTH
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                              111.86 8 12 52
111.85 13 30 24
                                                                 349.44
                                                                                 52.05
                                                                                                                               608.1
                                                                                                                                             26.70
                                                                                                                                                           341.54
                   7 52 44 1208.07
11 55 4 5719.57
                                                   23.94
       74.47
                                  1208.07
                                                                                                                              5119.6
                                                                                                                                              26.71
                                                                                                                                                           261.95
                                                                                 52.06
                                                   23.96
      105.53
                                                                 269.84
                                                                                               111.86 8 12 52
111.85 13 30 24
120.32 11 1 36
103.36 15 24 58
                                                                                 52.05
                                                                                                                               608.1
                                                                                                                                              26.70
                                                                                                                                                           341.54
                                                                 349.44
        74.47
                    7 52 44
                                 1208.07
                                                   23.94
                                                                                                                                              26.71
                                                                                                                                                           261.95
                                                                                 52.06
                                                                                                                             5119.6
                                 5719.57
      105.53
                   11 55 4
                                                   23.96
                                                                 269.84
                                                                                                                                              20.50
                                                                                                                                                           296.35
                                                                 303.30
                                                                                 48.22
                                                                                                                               30.1
      110.00
                  10 51 6
                                   630.06
                                                   16.59
                                                                                                                             4745.6
                                                                                                                                             33.27
                                                                                                                                                           235.02
                                                                                 54.85
      110.00
                                 5345.58
                                                                 243.92
                   13 55 52
                                                   31.76
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    RIT - 3902 RRF - .4179 RTF .8962
SGB 5098.6 R23 .0719 R13 -.8964
SGI 5084.8 SG2 374.9 THA 178.20
                                                                                                                         ST 2495.4 SR 402.4 SS 691.9
CRT -.9972 CRS .9792 CST -.9694
    TOE-1.6564 TRA -.3737 TC3-5.7378 BAU 1.1198
   RDE .2682 RRA .0232 RC3 -.0652 FAU .03397
FDE -.7308 FRA .3517 FC3-2.0149 BSP 15847
BDE 1.6780 BRA .3745 BC3 5.7381 FSP -548
                                                                                                                         LSA 2615.4 MSA 164.7 SSA 21.6
                                                                                                                          EL1 2527.5 EL2 29.7 ALF 170.86
                                                                                                                                     ARRIVAL DATE JAN 6 1968
                                                                         FLIGHT TIME 168.00
LAUNCH DATE JUL 22 1967
                                                                        DISTANCE 495.287
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 25.927 GAL -.91 AZL 93.57 HCA 245.19 SHA 123.55 ECC .23070 INC 3.5711 V1 29.312 RP 107.76 LAP 3.24 LOP 183.67 VP 37.270 GAP 11.16 AZP 88.50 TAL 183.04 TAP 68.23 RCA 95.05 APO 152.06 VZ 35.167 RC 164.869 GL -25.08 GP 12.60 ZAL 94.12 ZAP 163.35 ETS 46.69 ZAE 129.10 ETE 169.79 ZAC 68.59 ETC 8.87 CLP-169.03
  PLANETOCENTRIC CONIC
                                                                                                   2.05 VHP 7.335 DPA
                                                                                                                                 8.46 RAP 199.86 ECC 1.2388
    C3 14.508 VHL 3.809 DLA -32.37 RAL 191.54 RAD 6567.6 VEL 11.657 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             8 24 0
                                                                                                                               624.3
                                                                                                                                             27.03
                                                                                                                                                           342.90
                                                                                 56.21
                                                                                               112.12
                                                                 350.81
       73.63
                    8 3 36
                                  1224.27
                                                   24.25
                                                                                                                              5100.7
                                                                                                                                              27.04
                                                                                                                                                            260.63
                                                                 268.54
                                                                                  56.22
                                                                                                112.10
                                                                                                           13 52 12
      106.37
                   12 17 12
                                  5700.68
                                                    24.26
                                                                                              112.12 8 24 0
112.10 13 52 12
119.82 11 25 58
104.39 15 33 32
                                                                                                                                              27.03
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                                                                                  56.21
                                                                                                                               624.3
                                                    24.25
                                                                 350.81
        73.63
                    8 3 36
                                  1224.27
                                                                                                                              5100.7
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                                                    24.26
                                                                 268.54
                                                                                  56.22
      106.37
                  12 17 12 5700.68
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                                                                                                                                              21.38
                                                                                                                                                            294.66
                                                   17.55
                                                                 301.70
                                                                                 52.72
                                  602.09
      110.00
                   11 15 56
                                                                                                                              4770.8
                                                                 245.77
                                                                                 58.86
                                                                                                                                              33.00
                                                                                                                                                            236.94
      110.00
                  14 4 2
                                 5370.85
                                                    31.35
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2552.2 SR 413.1 SS 684.9
CRT -.9984 CRS .9720 CST -.9713
                                                                     SGT 5147.5 SGR 417.9 SG3 168.7
RRT -.3917 RRF -.4093 RTF .8988
    TDE-1.6932 TRA -.1733 TC3-5,8579 BAU 1.1363
    RDE .2745 RRA .0229 RC3 -.0652 FAU .03236
                                                                     SGB 5164.5 R23 .0600 R13 -.8990
SGI 5150.1 SG2 384.3 THA 178.17
                                                                                                                          LSA 2669.9 MSA 157.5 55A 22.7
    FOE -.7030 FRA .4087 FC3-1.9311 BSP 16134
BDE 1.7153 BRA .1748 BC3 5.8583 FSP -544
                                                                                                                       EL1 2585.3 EL2 23.0 ALF 170.82
                                                                                                                                    ARRIVAL DATE JAN 8 1968
                                                                         FITCHT TIME 170.00
LAUNCH DATE JUL 22 1967
                                                                        DISTANCE 500.952
   RL 151.99 LAL .00 LOL 298.53 VL 25.870 GAL -.42 AZL 93.42 MCA 248.42 SMA 123.22 ECC .23363 INC 3.4192 V1 29.312 RP 107.79 LAP 3.18 LOP 186.91 VP 37.220 GAP 11.47 AZP 88.74 TAL 181.37 TAP 69.79 RCA 94.43 APO 152.01 V2 35.156 RC 166.846 GL -23.86 GP 12.02 ZAL 90.75 ZAP 164.33 ETS 47.55 ZAE 129.19 ETE 170.24 ZAC 66.39 ETC 8.65 CLP-169.86
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                6.96 RAP 201.76 ECC 1.2395
    C3 14.552 VHL 3.815 DLA -32.70 RAL 195.80 RAD 6567.6 VEL 11.659 PTH 2.05 VHP 7.482 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.93 8 15 59 1239.30 24.47 352.06 60.63 112.40 8 36 38 639.3 27.29 344.15
                                                                                             112.40 8 36 38
112.38 14 13 37
                                                                                                                              5087.0
                                                                                                                                              27.30
                                                                 267.59
                                                                                 60.64
                                                    24.48
       107.07
                   12 38 50
                                  5686.98
                                                                                              112.40 8 36 38
112.38 14 13 37
119.34 13 18 42
105.42 15 42 59
                                                                                                                                                           344.15
                                                                 352.06
                                                                                 60.63
                                                                                                                               639.3
                                                                                                                                              27.29
                                                   24.47
        72.93
                    8 15 59
                                  1239.30
                                                                                                                                              27.30
                                                                                                                                                           259.68
                                                                                 60.64
                                                                                                                              5087.0
                                                   24.48
                                                                 267.59
       107.07
                   12 38 50
                                  5686.98
                                                                                                                                                           271.06
                                                                                                                              5265.5
                                                                 278.17
                                                                                                                                              22.14
                                                   1A.3A
                                                                                 57.46
       110.00
                    11 40 57
                                  5865.48
                                                                                                                                              32.70
                                                                                                                                                           238.90
                                                                                                                             4796.R
                                                                 247.66
                                                                                 63.11
                    14 13 2 5396.84
                                                   30.89
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2591.3 SR 423.4 SS 672.9
CRT -.9978 CRS .9631 CST -.9727
                                                                     SGT 5197.8 SGR 427.7 SG3 164.8
RRT -.3929 RRF -.4025 RTF .9007
SGB 5215.3 R23 .0507 R13 -.9008
SG1 5200.5 SG2 393.1 THA 178.14
    TDE-1.7229 TRA .0395 TC3-5.9077 BAU 1.1494
    ROE .2818 RRA .0211 RC3 -.0637 FAU .03060
FDE -.6722 FRA .4658 FC3-1.8205 BSP 16282
BDE 1.7458 BRA .0448 BC3 5.9081 FSP -530
                                                                                                                        LSA 2706.1 MSA 152.6 SSA 23.7
                                                                                                                          EL1 2625.5 EL2 27.4 ALF 170.74
                                                                                                                                     APRIVAL DATE JAN 10 1958
                                                                          FLIGHT TIME 172.00
LAUNCH DATE JUL 22 1967
                                                                         DISTANCE 506.590
   HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.814 GAL .09 AZL 93.27 HCA 251.64 SHA 122.89 ECC .23683 INC 3.2740 VI 29.312 RP 107.83 LAP 3.11 LOP 190.14 VP 37.171 GAP 11.78 AZP 88.97 TAL 179.70 TAP 71.34 RCA 93.79 APO 151.99 VZ 35.145 RC 168.808 GL -22.59 GP 11.50 ZAL 87.30 ZAP 165.24 ETS 48.64 ZAE 129.27 ETE 170.63 ZAC 64.17 ETC 8.47 CLP-170.68
   PLANETOCENTRIC CONIC
                                                                                                    2.05 VHP 7.638 DPA
                                                                                                                                  5.53 RAP 203.71 ECC 1.2425
    C3 14.735 WHL 3.839 DLA -32.96 RAL 200.16 RAD 6567.6 VEL 11.667 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               652.7
                                                                                                                                              27.43
                    8 29 55 1252.75
12 59 40 5679.09
                                                    24.58
                                                                  353.14
                                                                                  65.27
                                                                                               112.68
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        72.39
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       107.61
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                                                    24.58
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                                  1252.75
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                    8 29 55
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       107.61
                    12 59 40
                                  5679.09
                                                   24.59
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106.38 15 53 51
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                   12 5 16 5846.48
14 23 29 5421.39
                                                                  277.06
                                                                                  62.36
                                                    19.01
       110.00
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                                                                                                                                              32.37
                                                                  249.43
                                                                                  67.60
                                                                                                                              4821.4
                                                    30.43
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2606.8 SR 431.5 SS 648.2

CRT -.9956 CRS .9509 CST -.9723

LSA 2716.3 MSA 151.9 SSA 24.2

ELI 2642.0 EL2 40.0 ALF 170.64
                                                                     SGT 5238.7 SGR 455.1 SG3 160.3
RRT -.3929 RRF -.3915 RTF .9005
SGB 5256.8 R23 .0387 R13 -.9006
     TOE-1.7415 TRA ,2662 TC3-5.8922 BAU 1.1608
    ROE .2890 RRA .0175 RC3 -.0608 FAU .02874
FOE -.6301 FRA .5264 FC3-1.6888 BSP 16410
     BOE 1.7653 BRA .2667 BC3 5.8925 FSP -509
                                                                      SG1 5241.5 SG2 399.9 THA 178.12
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FLIGHT TIME 166.00

ARRIVAL DATE JAN 12 1968

LAUNCH DATE JUL 22 1967

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DISTANCE 512.200
  HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.759 GAL .63 AZL 93.13 MCA 254.87 SMA 122.57 ECC .24031 INC 3.1342 VI 29.312 RP 107.66 LAP 3.03 LOP 193.37 VP 37.122 GAP 12.11 AZP 89.18 TAL 178.02 TAP 72.89 RCA 93.11 APO 152.02 VZ 35.134 RC 170.755 GL -21.27 GP 11.03 ZAL 83.79 ZAP 166.10 ETS 49.97 ZAE 129.35 ETE 170.98 ZAC 61.93 ETC 8.33 CLP-171.50
   PLANETOCENTRIC CONIC
    C3 15.066 VHL 3.882 DLA -33.13 RAL 204.58 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 7.804 OPA
                                                                                                                                         4.14 RAP 205.70 ECC 1.2479
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.04 8 45 21 1264.47 24.57 354.04 70.08 112.95 9 6 26 664.5 27.46 346.15
                                                                                                      112.94 14 54 6
112.95 9 6 26
                                                                                                                                      5077.3
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                    13 19 29 5677.29
                                                       24.58
                                                                     266.89
                                                                                       70.09
       107.96
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        72.04
                      8 45 21
                                    1264.47
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                                                                      354.04
                                                                                       70.08
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112.94 14 54 6
118.74 14 5 8
107.15 16 6 51
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                   13 19 29 5677.29
                                                       24.58
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       107.96
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                    12 27 52
                                   5835.91
                                                       19.35
                                                                     276.43
                                                                                       67.36
       110.00
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                   14 36 9 5441.89
                                                                                                                                      4841.9
                                                                      250.89
                                                                                      72.32
       110.00
                                                       30.03
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2616.3 SR 442.5 SS 636.9
CRT -.9916 CRS .9399 CST -.9739
                                                                         SCT 5287.1 SGR 445.1 SG3 156.8
RRT -.3981 RRF -.3954 RTF .9040
SGB 5305.8 R23 .0364 R13 -.9041
SGI 5290.1 SG2 408.1 THA 178.07
    TDE-1.7610 TRA .4989 TC3-5.8215 BAU 1.1726
RDE .2997 RRA .0135 RC3 -.0548 FAU .02708
                                                                                                                                LSA 2724.5 MSA 151.4 SSA $4.6
EL1 2652.9 EL2 56.3 ALF 170.48
    FDE -.6049 FRA .5783 FC3-1.5558 BSP 16578
BDE 1.7863 BRA .4991 BC3 5.8218 FSP -503
                                                                                                                                             ARRIVAL DATE JAN 14 1968
                                                                              FLIGHT TIME 176.00
LAUNCH DATE JUL 22 1967
                                                                              DISTANCE 517.779
  HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.705 GAL 1.18 AZL 93.00 HCA 258.09 SMA 122.25 ECC .24410 INC 2.9987 V1 29.312
RP 107.90 LAP 2.93 LOP 196.60 VP 37.073 GAP 12.45 AZP 89.38 TAL 176.35 TAP 74.43 RCA 92.41 APO 152.09 V2 35.122
RC 172.686 GL -19.93 GP 10.61 ZAL 80.26 ZAP 166.92 ETS 51.57 ZAE 129.41 ETE 171.29 ZAC 59.67 ETC 8.23 CLP-172.30
  PLANETOCENTRIC CONIC
    C3 15.557 VHL 3.944 DLA -33.20 RAL 209.02 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 7.980 DPA 2.81 RAP 207.71 ECC 1.2560 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   9 23 25
                                                                                                                                       674.4
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        71.90
                      9 2 11 1274.40
                                                       24.43
                                                                     354,74
                                                                                      75.04
                                                                                                    113.21
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                    13 38 4
                                     5681.77
                                                       24.44
                                                                      267.16
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                                                                                                      113.20
                                                                                                                   15 12 46
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       108.10
                                                                                                     113.21 9 23 25
113.20 15 12 46
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                      9 2 11 1274.40
                                                       24.43
                                                                      354.74
                                                                                       75.04
        71.90
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                    13 38 4
                                     5681.77
                                                       24.44
                                                                      267.16
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       108.10
                                                                                                     118.75 14 24 59
107.67 16 22 38
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                   12 47 43 5836.43
                                                       19.34
                                                                      276.46
                                                                                       72.37
                                                                                                                                                       23.02
                                                                                                                                                                      269.26
       110.00
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                                                                                                                                                                      243.30
       110.00
                    14 51 42 5455.79
                                                       29.75
                                                                      251.87
                                                                                       77.26
                                                                                                                                     4855.8
                                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                         SGT 5330.3 SGR 452.6 SG3 153.1
RRT -.4034 RRF -.3954 RTF .9068
SGB 5349.5 R23 .0300 R13 -.9068
SGI 5333.5 SG2 413.9 THA 178.03
                                                                                                                                ST 2599.9 SR 450.9 SS 614.8
CRT -.9860 CRS .9253 CST -.9740
LSA 2704.9 NSA 155.1 SSA 24.3
    TOE-1.7674 TRA .7431 TC3-5.6914 BAU 1.1837
    ROE .3104 RRA .0078 RC3 -.0471 FAU .02548
    FOE -.5701 FRA .6313 FC3-1.4180 BSP 16761
BOE 1.7945 BRA .7432 BC3 5.6916 FSP -494
                                                                                                                               EL1 2637.7 EL2 74.1 ALF 170.29
                                                                                                                                            ARRIVAL DATE. JAN 16 1968
                                                                             FLIGHT TIME 178.00
LAUNCH DATE JUL 22 1967
                                                                             DISTANCE 523.322
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 25.651 GAL 1.75 A7L 92.87 HCA 261.31 SMA 121.94 ECC .24822 INC 2.8664 VI 29.312 RP 107.94 LAP 2.83 LOP 199.82 VP 37.024 GAP 12.80 AZP 89.57 TAL 174.67 TAP 75.98 RCA 91.67 APO 152.21 V2 35.110 RC 174.603 GL -18.56 GP 10.23 ZAL 76.74 ZAP 167.68 ETS 53.46 ZAE 129.47 ETE 171.57 ZAC 57.39 ETC 8.18 CLP-173.10
  PLANETOCENTRIC CONIC
    C3 16.222 VHL 4.028 OLA -33.16 RAL 213.43 RAO 6567.7 VEL 11.731 PTH 2.07 VHP 8.168 OPA 1.52 RAP 209.76 ECC 1.2670
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 113.45 9 41 38
113.44 15 30 4
113.45 9 41 38
113.45 9 41 38
113.44 15 30 4
119.03 14 41 37
107.89 16 41 31
                                                                                  80.09
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                      9 20 16 1282.40
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                                                      24.15
                                                                     355.22
        71.9A
                                   5692.76
                                                                     267.88
                                                                                      80.10
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                                                       24.16
       108.02
                    13 55 11
                     9 20 16 1282.40
                                                                     355.22
                                                                                      80.09
                                                                                                                                      682.4
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                                                                                                                                                                     347.39
                                                       24.15
        71.98
                                                                                                                                      5092.8
                                                                                                                                                       27.11
                                                                                                                                                                     260.05
                                     5692.76
                                                                     267.88
                                                                                      80.10
                                                       24.16
       108.02
                    13 55 11
                                                                                                                                                                     270.08
                                                                                                                                      5249.6
                                                                                                                                                       22.62
                                     5849.62
                                                       18.90
                                                                     277.24
                                                                                      77.31
       110.00
                   13 4 8
                                                                                                                                      4861.6
                                                                                                                                                       31.78
                                                                                                                                                                     243.73
                   15 10 30 5461.58
                                                       29.63
                                                                     252.28
                                                                                      82.41
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SCT 5369.9 SGR 459.3 SG3 149.2
RRT -.4095 RRF -.3978 RTF .9099
SGB 5389.5 R23 .0250 R13 -.9100
SGI 5373.3 SG2 418.8 THA 177.98
                                                                                                                                 ST 2564.1 SR 458.3 SS 591.3
CRT -.9785 CRS .9085 CST -.9739
LSA 2666.0 MSA 161.7 SSA 23.7
    TDE-1.7641 TRA .9980 TC3-5.5048 BAU 1.1938
    RDE .3221 RRA .0008 RC3 -.0386 FAU .02393
FDE -.5353 FRA .6824 FC3-1.2770 BSP 16937
BDE 1.7933 BRA .9980 BC3 5.5049 FSP -485
                                                                                                                                 EL1 2603.0 EL2 93.2 ALF 170.07
                                                                                                                                             ARRIVAL DATE JAN 18 1968
                                                                              FLIGHT TIME 180.00
LAUNCH DATE JUL 22 1967
                                                                              DISTANCE 528.827
  HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.598 GAL 2.35 A7L 92.74 HCA 264.52 SMA 121.64 ECC .25270 INC 2.7365 V1 29.312 RP 107.97 LAP 2.72 LOP 203.04 VP 36.976 GAP 13.17 AZP 89.74 TAL 173.00 TAP 77.52 RCA 90.90 APO 152.38 V2 35.097 RC 176.504 GL -17.19 GP 9.88 ZAL 73.26 ZAP 168.39 ETS 55.67 ZAE 129.52 ETE 171.82 ZAC 55.10 ETC 8.16 CLP-173.88
  PLANETOCENTRIC CONIC
                                                                                                                                             .27 RAP 211.83 ECC 1.2811
    C3 17.077 VHL 4.132 DLA -33.01 RAL 217.77 RAD 6567.7 VEL 11.767 PTH
                                                                                                          2.08 VHP 8.369 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    113.66 10 0 56
113.64 15 45 50
113.66 10 0 56
113.66 10 0 56
113.64 15 45 50
119.53 14 55 0
107.82 17 3 12
                                                       23.72
                                                                      355.48
                                                                                      85.19
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        72.28
                      9 39 28
                                     1288.43
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                                                       23.74
                                                                      269.03
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       107.72
                    14 10 39
                                     5710.30
                                                                      355.48
                                                                                       85.19
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                                                                                                                                                                      347.70
        72.28
                      9 39 28
                                     1288.43
                                                       23.72
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                                                                      269.03
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                   14 10 39
                                     5710.30
                                                       23.74
                                                       18.05
                                                                      278.73
                                                                                       82,16
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       110.00
                    13 17 5
                                     5875.07
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                    15 32 12 5459.71
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                                                                                                                                                                      243.59
                                                                      252.15
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                         SGT 5398.4 SGR 464.6 SG3 145.3

RRT -.4151 RRF -.3998 RTF .9124

SGB 5418.3 R23 .0206 R13 -.9124

SGI 5401.8 SG2 422.4 THA 177.94
                                                                                                                              ST 2503.6 SR 463.7 SS 564.3

CRT -.9685 CRS .8872 CST -.9731

LSA 2602.2 MSA 172.1 SSA 22.8

EL1 2543.6 EL2 113.7 ALF 169.81
    TOE-1.7452 TRA 1.2693 TC3-5.2577 BAU 1.2004
    RDE .3345 RRA -.0080 RC3 -.0303 FAU .02232
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FLIGHT TIME 174.00

FOE -.4973 FRA .7355 FC3-1.1313 BSP 17010 BOE 1.7769 BRA 1.2693 BC3 5.2578 FSP -473

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ARRIVAL DATE JAN 20 1968
LAUNCH DATE JUL 22 1967
                                                                              FLIGHT TIME 182.00
                                                                             DISTANCE 534.288
  HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.546 GAL 2.98 AZL 92.61 MCA 267.74 SMA 121.34 ECC .25758 INC 2.6081 VI 29.312 RP 108.01 LAP 2.61 LOP 206.26 VP 36.927 GAP 13.56 AZP 89.90 TAL 171.33 TAP 79.07 RCA 90.09 APO 152.59 V2 35.084 RC 178.389 GL -15.81 GP 9.57 ZAL 69.85 ZAP 169.06 ETS 58.23 ZAE 129.57 ETE 172.04 ZAC 52.80 ETC 8.20 CLP-174.67
   PLANETOCENTRIC CONIC
                                                                                                                                         -. 43 RAP 213.93 ECC 1.2986
    C3 18.145 VHL .4.260 DLA -32.76 RAL 222.01 RAD 6567.7 VEL 11.812 PTH
                                                                                                         2.09 VHP 8.582 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     9 59 43 1292.16
14 24 13 5734.73
                                                       23.17
                                                                     355.50
                                                                                      90.30
                                                                                                   113.83
                                                                                                                  10 21 15
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        72.80
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                                                                     270.64
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       107.20
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113.82 15 59 47
120.19 13 37 29
107.54 17 26 52
                                                                     355.50
                                                                                       90.30
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                                   1292.16
                                                       23.17
        72.80
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                                                                                                                                      5134.7
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                                                                     270.64
                    14 24 13 5734.73
       107.20
                                                       23.18
                                                                                                                                       22.7
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                                                                      302.88
                                                                                      86.88
       110.00
                    13 27 6
15 56 0
                                     622.74
                                                       16.84
                                   5452.15
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                                                                                                                                                                     243.04
                                                                     251.61
                                                                                      93.11
       110.00
                                                       29.82
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SGT 5427.8 SGR 469.0 SG3 141.5
RRT -.4220 RRF -.4040 RTF ..9152
SGB 5448.0 R23 .0171 R13 -.9153
                                                                                                                                 ST 2431.6 SR 467.8 SS 538.3
CRT -.9561 CRS .8628 CST -.9722
    TOE-1.7186 TRA 1.5498 TC3-4.9763 BAU 1.2072
    RDE .3477 RRA -.0180 RC3 -.0217 FAU .02080
FOE -.4605 FRA .7868 FC3 -.9924 BSP 17146
                                                                                                                                 LSA 2527.1 MSA 184.9 55A 21.7
                                                                                                                                 EL1 2472.5 EL2 134.9 ALF 169.55
    BOE 1.7534 BRA 1.5499 BC3 4.9764 FSP -462
                                                                         SGI 5431.4 SGZ 424.9 THA 177.90
                                                                                                                                             ARRIVAL DATE JAN 22 1968
                                                                              FLIGHT TIME 184.00
LAUNCH DATE JUL 22 1967
                                                                              DISTANCE 539.700
  HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 25.494 GAE 3.64 AZL 92.48 HCA 270.95 SMA 121.05 ECC .26288 INC 2.4804 VI 29.312
RP 108.05 LAP 2.48 LOP 209.48 VP 36.879 GAP 13.97 AZP 90.04 TAL 169.67 TAP 80.62 RCA 89.23 APO 152.87 V2 35.071
RC 180.257 GL -14.46 GP 9.28 ZAL 66.53 ZAP 169.67 ETS 61.17 ZAE 129.50 ETE 172.25 ZAC 50.49 ETC 8.27 CLP-175.45
  PLANETOCENTRIC CONIC
    C3 19.449 VHL 4.410 DLA -32.41 RAL 226.11 RAD 6567.8 VEL 11.867 PTH
                                                                                                          2.11 VHP 8.811 DPA
                                                                                                                                       -2.09 RAP 216.05 ECC 1.3201
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    10 20 53 1293.46
14 35 42 5766.08
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        73.54
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120.93 13 45 57
107.13 17 51 36
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                                      666.18
                                                       15.34
                                                                      305.35
                                                                                       91.47
       110.00
                    16 20 55
                                   5441.36
                                                       30.04
                                                                      250.85
                                                                                       98.55
                                                                                                                                      4841.4
                                                                                                                                                       32.09
                                                                                                                                                                      242.74
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          SGT 5452.3 SGR 472.2 SG3 137.8
RRT -.4293 RRF -.4093 RTF .9183
                                                                                                                                 ST 2347.2 SR 470.1 SS 512.9
CRT -.9405 CRS .8343 CST -.9712
LSA 2439.9 MSA 200.0 SSA 20.6
    TOE-1.6811 TRA 1.8434 TC3-4.6623 BAU 1.2123
    ROE .3617 RRA -.0294 RC3 -.0136 FAU .01934
FDE -.4242 FRA .8377 FC3 -.8609 BSP 17274
BDE 1.7195 BRA 1.8437 BC3 4.6623 FSP -453
                                                                          SGB 5472.7 R23 .0140 R13 -.9184
                                                                                                                                  EL1 2388.7 EL2 156.9 ALF 169.29
                                                                          SG1 5456.1 SG2 426.2 THA 177.86
                                                                                                                                             ARRIVAL DATE JAN 24 1968
                                                                              FLIGHT TIME 186.00
LAUNCH DATE JUL 22 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 545.058
    RL 131.99 LAL .00 LOL 298.53 VL 25.444 GAL 4.33 AZL 92.35 MCA 274.16 SMA 120.76 ECC .26866 INC 2.3525 V1 29.312 RP 108.09 LAP 2.35 LOP 212.69 VP 36.832 GAP 14.40 AZP 90.17 TAL 168.02 TAP 82.18 RCA 88.32 APO 153.21 V2 35.058 RC 182.108 GL -13.13 GP 9.02 TAL 63.33 ZAP 170.22 ETS 64.54 ZAE 129.63 ETE 172.43 ZAC 48.18 ETC 8.41 CLP-176.23
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.50 10 42 56 1292.08 21.69 354.79 100.42 114.08 11 4 28 692.1 24.76 347.16 105.50 14 44 59 5804.47 21.71 275.26 100.43 114.07 16 21 43 5204.5 24.77 267.64 74.50 10 42 56 1292.08 21.69 354.79 100.42 114.08 11 4 28 692.1 24.76 347.16 105.50 14 44 59 5804.47 21.71 275.26 100.43 114.07 16 21 43 5204.5 24.77 267.64 105.50 14 44 59 5804.47 21.71 275.26 100.43 114.07 16 21 43 5204.5 24.77 267.64 100.50 14 44 59 5804.47 21.71 275.26 100.43 114.07 16 21 43 5204.5 24.77 267.64 100.50 14 44 59 5804.47 21.71 275.26 100.43 114.07 16 21 43 5204.5 24.77 267.64
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106.68 18 16 37
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                     16 46 7 5429.42
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        110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2254.8 SR 470.4 SS 488.9

CRT -.9212 CRS .8010 CST -.9700

LSA 2344.5 MSA 217.0 SSA 19.5
                                                                          SGT 5472.3 SGR 474.1 SG3 134.1
RRT -.4369 RRF -.4153 RTF .9215
SGB 5492.8 R23 .0114 R13 -.9215
     TDE-1.6331 TRA 2.1519 TC3-4.3255 BAU 1.2155
     RDE .3761 RRA -.0423 RC3 -.0064 FAU .01792
FDE -.3882 FRA .8893 FC3 -.7382 BSP 17381
                                                                                                                                 EL1 2296.3 EL2 179.7 ALF 169.05
     BOE 1.6758 BRA 2.1523 BC3 4.3255 FSP -443
                                                                          SG1 5476.3 SG2 426.2 THA 177.82
                                                                                                                                              APRIVAL DATE JAN 26 1968
                                                                               FLIGHT TIME 188.00
LAUNCH DATE JUL 22 1967
                                                                              DISTANCE 550.354
    HELIOCENTRIC CONIC
    RL 151.99 LAL .00 LOL 298.53 VL 25.394 GAL 5.05 AZL 92.22 MCA 277.37 SMA 120.48 ECC .27496 INC 2.2236 V1 29.312 RP 108.13 LAP 2.21 LOP 215.90 VP 36.785 GAP 14.86 AZP 90.29 TAL 166.38 TAP 83.74 RCA 87.36 APO 153.61 V2 35.045 RC 183.942 GL -11.84 GP 8.79 ZAL 60.25 ZAP 170.72 ETS 68.36 ZAE 129.65 ETE 172.60 ZAC 45.87 ETC 8.59 CLP-177.01
    PLANETOCENTRIC CONIC
     C3 22.889 VHL 4.784 DLA -31.46 RAL 233.76 RAD 6567.9 VEL 12.011 PTH 2.14 VHP 9.320 DPA -4.30 RAP 220.35 ECC 1.3767
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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17 11 0
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                                      5417.85
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        110.00
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                                                                          HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 5485.0 SGR 474.7 SG3 130.6
RRT -.4441 RRF -.4212 RTF .9244
SGB 5505.5 R23 .0091 R13 -.9244
                                                                                                                                 ST 2156.5 SR 468.6 SS 466.5
CRT -,8969 CRS .7614 CST -.9688
     TDE-1.5727 TRA 2.4789 TC3-3.9692 BAU 1.2146
     ROE .3907 RRA -.0567 RC3 -.0006 FAU .01647
FOE -.3519 FRA .9429 FC3 -.6230 BSP 17398
                                                                                                                               LSA 2243.2 MSA 235.9 SSA 18.4
EL1 2197.5 EL2 203.3 ALF 168.88
                                                                          SG1 5489.1 SG2 425.0 THA 177.79
     BUE 1.6205 BRA 2.4796 BC3 3.9692 FSP -430
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ARRIVAL DATE JAN 28 1968

FLIGHT TIME 190.00 LAUNCH DATE JUL 22 1967 DISTANCE 555.578 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 25.344 GAL 5.81 AZL 92.09 MCA 280.57 SMA 120.21 ECC .28184 INC 2.0930 V1 29.312 RP 108.18 LAP 2.06 LOP 219.10 VP 36.738 GAP 15.35 AZP 90.38 TAL 164.75 TAP 85.32 RCA 86.33 APO 154.09 V2 35.032 RC 185.758 GL -10.59 GP 8.57 ZAL 57.31 ZAP 171.15 ETS 72.64 ZAE 129.65 ETE 172.75 ZAC 43.56 ETC 8.84 CLP-177.79 PLANETOCENTRIC CONIC C3 25.101 VHL 5.010 OLA -30.89 RAL 237,29 RAO 6568.0 VEL 12.103 PTH 2.17 VHP 9.605 DPA -5.34 RAP 222.53 ECC 1.4131 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.19 11 51 21 114.19 15 6 4 114.19 15 15 21 114.19 15 5 4 114.19 15 6 4 122.95 14 3 35 105.84 19 5 16 110.23 678.2 22.92 77.10 11 30 3 1278.25 19.62 352.85 16.7 22.93 19.83 304.04 110.24 102.90 14 55 48 616.67 345.34 22.92 678.2 77.10 11 30 3 1278.25 19.82 352.85 110.23 296.53 14, 55, 48 616.67 19.83 304.04 110,24 16.7 22.93 102.90 307.50 13.94 313.99 104.53 223.3 110.00 13 49 52 823.31 9.67 239.72 248.44 32.56 114.60 4607.7 110.00 17 35 9 5407.65 30.69 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2062.8 SR 465.1 SS 447.8 CRT -.8683 CRS .7190 CST -.9683 LSA 2146.4 MSA 254.8 SSA 17.4 EL1 2102.5 EL2 226.4 ALF 168.79 SGT 5496.2 SGR 474.1 SG3 127.2 TOE-1.5079 TRA 2.8182 TC3-3.6160 BAU 1.2134 RRT -.4522 RRF -.4285 RTF .9278 SGB 5516.6 R23 .0073 R13 -.9278 SGI 5500.4 SGZ 422.6 THA 177.75 ROE .4039 RRA -.0722 RC3 .0044 FAU .01513 FOE -.3183 FRA .9958 FC3 -.5219 BSP 17498 BOE 1.5616 BRA 2.8192 BC3 3.6160 FSP -421 FLIGHT TIME 192.00 ARRIVAL DATE JAN 30 1968 LAUNCH DATE JUL 22 1967 DISTANCE 560.721 HELIOCENTRIC CONIC .OU LOL 298.53 VL 25.296 GAL 6.62 AZL 91.96 HCA 283.77 SMA 119.95 ECC .28936 INC 1.9597 V1 29.312 1.90 LOP 222.31 VP 36.692 GAP 15.88 AZP 90.47 TAL 163.14 TAP 86.91 RCA 85.24 APO 154.65 V2 35.019 -9.40 GP 8.37 ZAL 54.52 ZAP 171.51 ETS 77.39 ZAE 129.64 ETE 172.89 ZAC 41.26 ETC 9.15 CLP-178.57 RL 151.99 LAL RP 108.22 LAP -9.40 GP RC 187.557 GL PLANETOCENTRIC CONIC 2.19 VHP 9.912 DPA -6.34 RAP 224.73 ECC 1.4560 C3 27,705 VHL 5.264 OLA -30.28 RAL 240.61 RAD 6568.1 VEL 12.210 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAY INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 21.88 343.78 18.77 351.23 114.98 114.20 12 16 45 663.3 78.80 11 55 42 1263.31 114.19 15 7 56 114.20 12 16 45 114.19 15 7 56 123.44 14 7 52 105.53 19 28 16 300.88 114.99 80.5 21.90 14 56 35 680.53 18.79 308.32 101.20 343.78 18.77 114.98 663.3 21.88 11 55 42 1263.31 351.23 78.80 21.90 300.88 308.32 114.99 80.5 14 56 35 660.53 18.79 101.20 310.64 7.54 317.04 108.65 280.4 11.49 13 53 12 880.42 110.00 17 58 16 5399.46 247.85 119.78 4799.5 32.66 239.10 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5502.2 SGR 472.2 SG3 123.9 RRT -,4603 RRF -,4362 RTF .9313 SGB 5522.4 R23 .0057 R13 -,9313 SGI 5506.5 SG2 418.9 THA 177.72 ST 1973.8 SR 459.8 SS 432.3 CRT -.8344 CRS .6727 CST -.9684 TDE-1.4361 TRA 3.1753 TC3-3.2646 BAU 1.2092 RDE .4213 RRA -.0891 RC3 .0082 FAU .01382 FDE -.2860 FRA 1.0501 FC3 -.4318 BSP 17577 LSA 2054.1 MSA 273.6 SSA 16.5 EL1 2011.4 EL2 248.7 ALF 168.83 BOE 1.4966 BRA 3.1766 8C3 3.2646 FSP -412 ARRIVAL DATE FEB 1 1968 FLIGHT TIME 194.00 LAUNCH DATE JUL 22 1967 DISTANCE 565.769 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 25.248 GAL 7.47 AZL 91.82 MCA 286.97 SMA 119.68 ECC .29758 INC 1.8228 VI 29.312
RP 108.26 LAP 1.74 LOP 225.51 VP 36.646 GAP 16.45 AZP 90.53 TAL 161.55 TAP 88.53 RCA 84.07 APO 155.30 V2 35.005
RC 189.337 GL -8.25 GP 8.19 ZAL 51.89 ZAP 171.78 ETS 82.60 ZAE 129.62 ETE 173.02 ZAC 38.97 ETC 9.55 CLP-179.37 PLANETOCENTRIC CONIC C3 30.761 VHL 5.546 DLA -29.63 RAL 243.71 RAD 6568.2 VEL 12.334 PTH 2.22 VHP 10.245 DPA -7.30 RAP 226.93 ECC 1.5063 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.18 12 44 32 114.17 15 5 45 116.51 14 40 44 112.08 15 43 30 123.81 14 11 37 105.30 19 50 7 341.51 20.79 119.62 639.0 12 23 53 1239.01 17.67 348.90 157.2 20.80 306.12 14 53 8 757.19 17.69 313.51 119.63 241.7 18.15 311.20 118.18 14 26 42 841.73 14.73 318.33 100.00 29.7 23.49 297.73 120.98 15 33 0 629.71 20.66 305.40 100.00 338.6 9.75 313.80 112.67 13 55 58 938.63 5.34 320.12 4793.6 32.74 234.66 18 20 13 5393.62 30.95 247.43 124.63 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RET - .4683 RRF - .4442 RTF .9350 SGB 5523.4 R23 .0044 R13 - .9350 SG 5507.9 SG2 414.1 THA 177.70 ST 1892.1 SR 452.9 S5 420.1 CRT -.7951 CRS .6239 CST -.9694 TDE-1.3578 TRA 3.5512 TC3-2.9223 BAU 1.2018 RDE .4368 RRA -.1071 RC3 .0107 FAU .01255 FDE -.2554 FRA 1.1061 FC3 -.3531 BSP 17645 LSA 1968.9 MSA 291.4 SSA 15.7 EL1 1926.8 EL2 269.7 ALF 169.01 BDE 1.4263 BRA 3.5528 BC3 2.9223 FSP -402 ARRIVAL DATE FEB 3 1968 FLIGHT TIME 196,00 LAUNCH DATE JUL 22 1967 DISTANCE 570.708 HELIOCENTRIC CONIC RL 151.99 LAL .00 LOL 298.53 VL 25.201 GAL 8.38 AZL 91.68 MCA 290.17 SMA 119.43 ECC .30660 INC 1.6813 V1 29.312 RP 108.30 LAP 1.58 LOP 228.70 VP 36.602 GAP 17.06 AZP 90.58 TAL 159.99 TAP 90.16 RCA 82.81 APO 156.05 V2 34.992 RC 191.100 GL -7.17 GP 8.02 ZAL 49.42 ZAP 171.97 ETS 88.19 ZAE 129.58 ETE 173.15 ZAC 36.70 ETC 10.03 CLP 179.83 PLANETOCENTRIC CONIC 2.26 VHP 10.606 DPA -8.21 RAP 229.15 ECC 1.5652 C3 34.343 VHL 5.860 DLA -28.96 RAL 246.59 RAD 6568.4 VEL 12.479 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.65 12 57 17 1196.44 16.53 345.22 124.14 114.12 13 17 13 596.4 19.65 337.89 114.11 14 57 0 118.00 14 24 53 124.14 14 57 D 255.2 19.67 312.88 16.55 320.21 14 42 45 855.25 96.35 364.4 14.58 318.56 121.31 325.43 100.00 14 5 48 964.36 10.92 110.40 17 51 25 124.06 14 14 55 105.16 20 10 44 5250.6 24.91 271.15 126.65 279.00 5850.58 100.00 16 13 54 22.34 397.4 7.56 316.94 116.58 110.00 13 58 18 997.44 3.11 323.20 18 40 54 5590.28 4790.3 32.78 238.41 129.76 110.00 31.01 247.19 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5498.8 SGR 464.3 SG3 117.7 RRT - .4759 RRF - .4521 RTF .9387 ST 1817.9 SR 444.1 SS 411.0 CRT -.7496 CRS .5716 CST -.9709 LSA 1891.0 MSA 308.0 SSA 14.9 TOE-1.2704 TRA 3.9506 TC3-2.5887 BAU 1.1886 ROE .4522 RRA -.1264 RC3 .0120 FAU .01124 FDE -.2251 FRA 1.1654 FC3 -.2632 BSP 17602 BDE 1.3485 BRA 3.9527 BC3 2.5887 FSP -390 SGB 5518.4 R23 .0033 R13 -.9387 ELI 1849.0 EL2 289.0 ALF 169.36 SG1 5503.3 SG2 408.0 THA 177.69

ARRIVAL DATE FEB 5 1968

EL1 1650.2 EL2 330.9 ALF 172.22

LAUNCH DATE JUL 22 1967

FLIGHT TIME 198.00

BOE 1.0352 BRA 5.7952 BC3 1.4560 FSP -353

SG1 5449.2 SG2 372.8 THA 177.69

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ARRIVAL DATE FEB 13 1968
                                                                                                      FLIGHT TIME 206.00
LAUNCH DATE JUL 22 1967
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 592.927
     RL 151.99 LAL .00 LOL 298.53 VL 24.982 GAL 14.00 AZL 90.86 HCA 306.12 SMA 118.26 ECC .36759 INC .8555 V1 29.312 RP 108.50 LAP .69 LOP 244.65 VP 36.390 GAP 21.06 AZP 90.50 TAL 152.85 TAP 98.97 RCA 74.79 APO 161.73 V2 34.929 RC 199.655 GL -2.59 GP 7.37 ZAL 39.46 ZAP 171.37 ETS 118.19 ZAE 129.01 ETE 173.69 ZAC 25.72 ETC 14.30 CLP 175.51
    PLANETOCENTRIC CONIC
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 46 23 1540.52 .46 2.17 139.76 118.31 13 12 3 940.5 4.24 355.53
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109.15 16 38 1
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         110.00
                                                                                               MID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                                                RET -5119 RRF -.4939 RTF ..9602
SGB 5436.7 R23 .0002 R13 -.9602
SGI 5424.6 SGZ 361.4 THA 177.71
                                                                                                                                                                         ST 1612.6 SR 382.2 SS 411.6

CRT -.4870 CRS .3415 CST -.9868

LSA 1673.5 MSA 339.5 SSA 11.7
      TOE -.8006 TRA 6.3274 TC3-1.2245 BAU 1.0492
     ROE .5284 RRA -.2328 RC3 .0077 FAU .00509
FDE -.1032 FRA 1.5066 FC3 -.0688 BSP 17626
BOE .9592 BRA 6.3317 BC3 1.2246 FSP -346
                                                                                                                                                                          EL1 1623.8 EL2 331.5 ALF 173.13
                                                                                                                                                                                          ARRIVAL DATE FEB 15 1966
                                                                                                       FLIGHT TIME 208.00
LAUNCH DATE JUL 22 1967
                                                                                                     DISTANCE 596.618
   HELIOCENTRIC CONIC
                                 .00 LOL 298.53 VL 24.941 GAL 15.41 AZL 90.65 MCA 309.30 SMA 118.05 ECC .38405 INC .6532 VI 29.312 .51 LOP 247.83 VP 36.351 GAP 22.13 AZP 90.41 TAL 151.62 TAP 100.92 RCA 72.71 APO 163.38 VZ 34.917 -1.83 GP 7.27 ZAL 37.94 ZAP 170.92 ETS 123.71 ZAE 128.78 ETE 173.80 ZAC 23.66 ETC 15.70 CLP 174.54
     RL 151.99 LAL
           106.53 LAP
     RC 201.315 GL
    PLANETOCENTRIC CONIC
     C3 73.638 VHL 8.581 DLA -24.94 RAL 259.65 RAD 6569.4 VEL 13.964 PTH 2.55 VHP 13.653 DPA -12.79 RAP 242.35 ECC 2.2119 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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108.94 16 56 45
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16 43 11 813.78
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106.27 21 48 40
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                           14 5 3 1345.99
20 18 22 5418.67
                                                                                                                138.07
         110.00
                                                                     -10.10
                                                                                            341.54
                                                                                                                                                                                                    32.41
                                                                                            249.23
                                                                                                                156.36
                                                                                                                                                                              4818.7
                                                                                                                                                                                                                          240.54
         110.00
                                                                       30.49
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 1595.8 SR 366.9 SS 419.4
CRT -.4362 CRS .3056 CST -.9897
                                                                                                 $67 5391.9 $GR 408.3 $G3 101.5

RRT -.5174 RRF -.5012 RTF ..9647

$GB 5407.3 R23 -.0001 R13 -.9647
      TDE -. 7008 TRA 6.9023 TC3-1.0130 BAU .9973
     RDE .5431 RRA -.2546 RC3 .0056 FAU .00380
FDE -.0831 FRA 1.5897 FC3 -.0446 BSP 17617
                                                                                                                                                                         LSA 1656.7 MSA 334.9 SSA 11.2
                                                                                                 SG1 5396.1 SG2 349.1 THA 177.75
                                                                                                                                                                          EL1 1604.1 ELZ 328.5 ALF 174.02
      BOE .8866 BRA 6.9070 BC3 1.0130 FSP -338
                                                                                                                                                                                         ARRIVAL DATE FEB 17 1968
LAUNCH DATE JUL 22 1967
                                                                                                      FLIGHT TIME 210.00
                                                                                                     DISTANCE 599.923
    HELIOCENTRIC CONIC
     RL 151.99 LAL .00 LOL 298.53 VL 24.903 GAL 18.96 AZL 90.43 MCA 312.48 SMA 117.84 ECC .40243 INC .4315 V1 29.312 RP 108.57 LAP .32 LOP 251.01 VP 36.313 GAP 23.32 AZP 90.29 TAL 150.49 TAP 102.98 RCA 70.42 APO 165.27 V2 34.905 RC 202.957 GL -1.12 GP 7.18 ZAL 36.59 ZAP 170.35 ETS 128.87 ZAE 128.50 ETE 173.91 ZAC 21.67 ETC 17.37 CLP 173.53
    PLANETOCENTRIC CONIC
      C3 85.033 VHL 9.221 DLA -24.31 RAL 261.16 RAD 6569.7 VEL 14.366 PTH 2.61 VHP 14.373 DPA -13.39 RAP 244.48 ECC 2.3994
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 36 25 1684.76 -4.18 10.22 145.94 118.03 13 4 30 1084.8 -.40 3.58
                                                                                                                                   118.03 13 4 30
108.84 17 13 23
                                                                                                                                                                                                     23.91
                                                                                                                                                                                209.9
                           16 59 53
                                                  809.91
                                                                       21.54
                                                                                           318.98
                                                                                                               157.09
           90.00
                                                                                                                                      119.22 14 1 56
108.15 20 18 1
                                                                                                                                                                                 888.8
                                                                                                                                                                                                     -2.67
                                                                                                                                                                                                                         347.92
                          13 37 8
                                             1488,77
                                                                                           354.49
                                                                                                               144.61
         100.00
                                                                        -6.62
                                                                                                                                                                                                    26.42
                                                                                                                                                                                                                         265.57
                          18 41 51 5769.17
14 5 3 1401.19
20 30 25 5429.52
                                                                                                                                                                               5169.2
                                                                        24.17
                                                                                           273.65
                                                                                                               158.05
         100.00
                                                                                                                                      122.21 14 28 24
106.69 22 0 55
                                                                                                                                                                                801.2
                                                                                                                                                                                                                         338.13
                                                                                                                                                                                                     -7.78
                                                                                           344.54
                                                                                                               141.30
         110.00
                                                                      -12.12
                                                                                                                                                                                4829.5
                                                                                                                                                                                                      32.26
                                                                                                                                                                                                                         241.35
                                                                                           250.01
                                                                                                                160.20
         110.00
                                                                       30.28
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 1583.5 9R 350.9 9S 429.7

CRT - .3882 CRS .2732 CST -.9923

LSA 1645.6 MSA 327.3 55A 10.6
                                                                                                 SGT 5359.6 SGR 394.2 SG3 99.1
RRT -.5220 RRF -.5076 RTF .9690
SGB 5374.0 R23 -.0002 R13 -.9690
      TOE -.5990 TRA 7.5214 TC3 -.8203 BAU .9325
     RDE .5574 RRA -.2759 RC3 .0033 FAU .00241 FOE -.0640 FRA 1.6802 FC3 -.0245 BSP 17581
                                                                                                                                                                          EL1 1589.6 EL2 322.2 ALF 174.87
      BOE .8182 BRA 7.5265 BC3 .8203 FSP -330
                                                                                                 SG1 5363.5 SG2 336.0 THA 177.79
                                                                                                                                                                                         ARRIVAL DATE FEB 19 1968
                                                                                                       FLIGHT TIME 212.00
LAUNCH DATE JUL 22 1967
                                                                                                     DISTANCE 602.752
    HELIOCENTRIC CONIC
                                   .00 LOL 298.53 VL 24.865 GAL 18.67 AZL 90.19 HCA 315.66 SNA 117.65 ECC .42303 INC .1860 VI 29.312 .13 LOP 234.18 VP 36.276 GAP 24.66 AZP 90.13 TAL 149.49 TAP 105.15 RCA 67.88 APO 167.42 V2 34.894 -.44 GP 7.09 ZAL 35.40 ZAP 169.66 ETS 133.64 ZAE 128.15 ETE 174.03 ZAC 19.76 ETC 19.35 CLP 172.46
     RL 151.99 LAL
RP 108.60 LAP
      RC 204.581 GL
    PLANETOCENTRIC CONIC
      C3 98.714 VHL 9.935 DLA -23.71 RAL 262.49 RAD 6569.9 VEL 14.834 PTH 2.68 VHP 15.183 DPA -13.94 RAP 246.55 ECC 2.6246
     C3 98.714 VML 9.935 DLA -23.71 RAZ 262.99 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.88 VHP 13.183 DPA -13.94 RAZ 243.39 ECC 2.824 RAD 6369.9 VEL 14.834 PIH 2.834 RAD 6369.9 VIL 14.834 RAD 6369.9 V
                           13 34 27 1549.81
                                                                         -8.63
                                                                                           357.90
         100.00
                                                                                                                                      108.28 20 31 20
121.49 14 28 57
107.13 22 12 2
                                                                                                                                                                                                       26.34
                         18 55 6 5773.76
14 4 42 1454.97
20 41 21 5441.38
                                                                                                                                                                                5173.8
                                                                                                                                                                                                                          265.89
         100.00
                                                                       24.07
                                                                                           273.95
                                                                                                                161.69
                                                                                                                                                                                                       -9.79
                                                                                                                                                                                                                          341.01
                                                                                                                                                                                 855.0
         110.00
                                                                       -14.05
                                                                                            347.51
                                                                                                                144.40
                                                                                                                                                                                4841.4
                                                                                                                                                                                                       32.09
         110.00
                                                                       30.04
                                                                                           250.85
                                                                                                                163.83
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 1574.5 SR 334.3 SS 442.5

CRT - .3428 CRS .2432 CST - .9943

LSA 1638.9 MSA 317.2 SSA 10.0

EL1 1578.9 EL2 313.2 ALF 175.67
                                                                                                 SGT 5324.6 SGR 378.7 SG3 96.9
RRT -.5252 RRF -.5127 RTF .9733
      TOE -.4937 TRA 8.1933 TC3 -.6446 BAU .8507
      RDE .5715 RRA -.2961 RC3 .0011 FAU .00086
      FDE -.0453 FRA 1.7801 FC3 -.0075 8SP 17452
BDE .7552 BRA 8.1986 BC3 .6446 FSP -321
                                                                                                 SGB 5338.0 R23 -.0004 R13 -.9733
                                                                                                 SG1 5328.3 SG2 322.0 THA 177.85
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LAUNCH DATE JUL 22 1967

ARRIVAL DATE FEB 21 1968

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DISTANCE 604.986
   HELIOCENTRIC CONIC
   RL 151.99 LAL .00 LOL 298.53 VL 24.830 GAL 20.56 A7L 89.91 MCA 318.83 SMA 117.47 ECC .44618 INC .0868 VI 29.312 RP 108.64 LAP -.06 LOP 257.36 VP 36.242 GAP 26.17 A7P 89.93 TAL 148.64 TAP 107.47 RCA 65.06 APO 169.88 V2 34.883 RC 206.187 GL .19 GP 7.00 TAL 34.39 TAP 168.85 ETS 138.04 TAE 127.73 ETE 174.16 TAC 17.95 ETC 21.70 CLP 171.31
   PLANETOCENTRIC CONIC
    C3 115.252 VHL 10.736 DLA -23.12 RAL 263.62 RAD 6570.2 VEL 15.381 PTH 2.75 VHP 16.097 DPA -14.45 RAP 248.57 ECC 2.8968
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  INJ AZNTH INJ TIME

117.18 12 58 16

108.88 17 41 23

118.14 13 58 27

108.46 20 43 16

120.67 14 29 3

107.60 22 22 3
                                                                                                                                  1213.6
                                                                                151.66
        90.00
                     12 28 3 1813.61
                                                      -8.26
                                                                     17.50
                                                                                                                                                   -4.55
                                                                                                                                                                   10.78
                                                                                                                                                    23.89
        90.00
                   17 27 52
                                    811.37
                                                      21.51
                                                                    319.07
                                                                                   164.21
                                                                                                                                    211.4
                                                                                                                                                                   311.21
       100.00
                    13 31 39
                                    1608.29
                                                     -10.53
                                                                      1.21
                                                                                   150.46
                                                                                                                                   1008.3
                                                                                                                                                    -6.68
                                                                                                                                                                   354.53
                                  5779.95
                                                                                                                                                   26.23
                  19 6 56
                                                     23.94
                                                                    274.37
                                                                                   165.10
                                                                                                                                    5180.0
                                                                                                                                                                   266.32
                  14 3 56 1507.11
20 51 9 5453.92
                                   1507.11
                                                     -15.89
                                                                    350.44
                                                                                   147.36
                                                                                                                                    907.1
                                                                                                                                                   -11.70
                                                                                                                                                                   343.83
                                                                                                                                                   31.90
       110.00
                                                      29.79
                                                                    251.74
                                                                                   167.23
                                                                                                                                  4853.9
                                                                                                                                                                  243.17
  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 1566.8 SR 317.3 SS 457.9

CRT -.3028 CRS .2181 CST -.9959

LSA 1634.7 MSA 305.0 SSA 9.5

EL1 1569.9 EL2 301.8 ALF 176.36
                                                                        SGT 5283.8 SGR 361.9 SG3 94.7
RRT -.5268 RRF -.5162 RTF .9773
    TOE -.3932 TRA 8.9166 TC3 -.4883 BAU .7523
    ROE .5856 RRA -.3144 RC3 -.0010 FAU-.00083
   FDE -.0287 FRA 1.8892 FC3 .0062 BSP 17417
BDE .7054 BRA 8:9221 BC3 .4883 FSP -314
                                                                        SGB 5296.2 R23 -.0005 R13 -.9773
SGI 5287.3 SG2 307.4 THA 177.93
                                                                             FLIGHT TIME 216.00
                                                                                                                                           ARRIVAL DATE FEB 23 1968
LAUNCH DATE JUL 22 1967
  HELIOCENTRIC CONIC
                                                                             DISTANCE 606.472
                          .00 LOL 298.53 VL 24.797 GAL 22.67 AZL 89.60 MCA 322.00 SMA 117.30 ECC .47228 INC .3987 V1 29.312 -.25 LOP 260.53 VP 36.209 GAP 27.89 AZP 89.69 TAL 147.97 TAP 109.98 RCA 61.90 APO 172.70 VZ 34.872 .78 GP 6.92 ZAL 33.56 ZAP 167.91 ETS 142.07 ZAE 127.21 ETE 174.29 ZAC 16.26 ETC 24.48 CLP 170.06
   RL 151.99 LAL
RP 108.67 LAP
  PLANETOCENTRIC CONIC
   C3 135.400 VHL 11.636 DLA -22.56 RAL 264.55 RAD 6570.5 VEL 16.023 PTH 2.83 VHP 17.135 DPA -14.91 RAP 250.50 ECC 3.2283 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        2.83 VHP 17.135 DPA -14.91 RAP 250.50 ECC 3.2283
                                                                                                 116.60 12 55 9
108.97 17 53 0
                                                                               154.29
                                                                                                                                1273.0
                                                                                                                                                -6.43
                                 1873.03
        90.00 12 23 56
                                                     -10.09
                                                                     20.91
                                                                                                                                                                   14.13
        90.00
                    17 39 24
                                    815.13
                                                      21.42
                                                                    319.32
                                                                       4.40 153.13 117.46 13 56 23
74.85 166.23 108.67 20 53 50
133.31 150.14 119.78 14 28 40
12.65 170.36 108.08 22 30 55
MID-COURSE EXECUTION ACCURACY
SGT 5239.1 SGP 343 4 247
                                                                                    167.36
                                                                                                                                    215.1
                                                                                                                                                    23.82
                                                                                                                                                                   311.46
                  13 28 36
                                   1664.16
                                                    -12.30
                                                                      4.40
                                                                                                                                    1064.2
                                                                                                                                                    -8.53
                                                                                                                                                                   357.65
                    19 17 23
                                    5787.27
                                                      23.78
                                                                    274.85
                                                                                                                                    5187.3
                                                                                                                                                    26.11
                                                                                                                                                                   266.83
       100.00
                  14 2 42
                                   1557.36
                                                    -17.61
                                                                    353.31
                                                                                                                                    957.4
                                                                                                                                                  -13.52
                                                                                                                                                                   346.60
       110.00
                                                                    252.65
                   20 59 48
                                    5466.83
                                                      29.52
                                                                                                                                    4866.8
                                                                                                                                                    31.70
                                                                                                                                                                   244.12
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 5239.1 SGR 343.8 SG3 92.7
RRT -.5261 RRF -.5173 RTF .9810
                                                                                                                              ST 1559.1 SR 300.0 SS 476.2
CRT -.2665 CRS .1956 CST -.9972
LSA 1631.8 NSA 291.2 SSA 8.9
    TOE -.2937 TRA 9.7036 TC3 -.3481 BAU .6301
    RDE .5997 RRA -.3300 RC3 -.0029 FAU-.00278
FOE -.0130 FRA 2.0103 FC3 .0178 8SP 17355
BOE .6677 BRA 9.7093 BC3 .3481 FSP -307
                                                                        SG8 5250.4 R23 -.0005 R13 -.9810
                                                                                                                               ELI 1561.3 ELZ 288.7 ALF 176.96
                                                                         SG1 5242.2 SG2 292.2 THA 178.02
                                                                                                                                          ARRIVAL DATE FEB 25 1968
                                                                            FLIGHT TIME 218.00
LAUNCH DATE JUL 22 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 607.009
    RL 151.99 LAL .00 LOL 298.53 VL 24.767 GAL 25.04 AZL 89.24 HCA 325.17 SMA 117.14 ECC .50177 INC .7575 VI 29.312
RP 108.70 LAP -.43 LOP 263.70 VP 36.179 GAP 29.86 AZP 89.38 TAL 147.53 TAP 112.70 RCA 58.36 APO 175.92 V2 34.862
RC 209.341 GL 1.34 GP 6.84 ZAL 32.94 ZAP 166.82 ETS 145.76 ZAE 126.57 ETE 174.44 ZAC 14.73 ETC 27.72 CLP 168.71
   PLANETOCENTRIC CONIC
    C3 160.149 VML 12.655 OLA -22.03 RAL 265.27 RAO 6570.7 VEL 16.777 PTH 2.90 VMP 18.320 OPA -15.33 RAP 252.32 ECC 3.6356
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 115.94 12 51 47
109.10 18 3 4
116.71 13 53 55
108.90 21 3 1
118.83 14 27 42
108.55 22 38 36
                                                                                156.70
                                                                                                                                                   -8.19
                                                                                                                                                                   17.32
        90.00 12 19 38 1929.16
                                                    -11.78
                                                                    24.16
                                                                                                                                1329.2
                                                                                                                                                   23.72
                    17 49 24
                                                                                   170.21
                                                                                                                                    220.1
                                                                                                                                                                  311.80
                                    820.08
                                                      21.31
                                                                    319.64
        90.00
                                                                                                                                   1117.2
                  13 25 17
                                                                                                                                                 -10.25
                                                                                                                                                                      .65
                                                                      7.49
                                                                                   155.60
       100.00
                                   1717.25
                                                     -13.95
                                                                                                                                                                  267.38
                  19 26 26 5795.27
14 0 56 1605.51
21 7 16 5479.79
                                                                                  171.06
                                                                                                                                   5195.3
                                                                                                                                                  25.96
                                                     23.60
                                                                    275.38
       100.00
                                                                                                                                                                  349.28
                                                                                                                                   1005.5
                                                                                                                                                 -15.22
       110.00
                                                     -19.21
                                                                    356.12
                                                                                 152.71
                                                                                   173.20
                                                                                                                                   4879.8
                                                                                                                                                   31.49
                                                                                                                                                                  245.07
       110.00
                                                      29.24
                                                                    253.55
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                        SGT 5190.0 SGR 324.4 SG3 90.7
RRT -.5222 RRF -.5151 RTF .9845
                                                                                                                              ST 1550.2 SR 282.4 SS 497.6

CRT -.2539 CRS .1754 CST -.9981

LSA 1629.2 MSA 276.2 SSA 8.4
    TOE -.1981 TRAID.5617 TC3 -.2232 BAU .4779
    RDE .6139 RRA -.3417 RC3 -.0045 FAU-.00509
FDE .0013 FRA 2.1456 FC3 .0275 BSP 17271
BDE .6451 BRA10.5673 BC3 .2232 FSP -301
                                                                        SGB 5200.1 R23 -.0006 R13 -.9845
                                                                                                                              EL1 1551.7 EL2 274.3 ALF 177.48
                                                                        561 5192.8 SG2 276.5 THA 178.13
                                                                                                                                          ARRIVAL DATE FEB 27 1968
                                                                            FLIGHT TIME 220.00
LAUNCH DATE JUL 22 1967
                                                                            DISTANCE 606.333
  HELIOCENTRIC CONIC
                         .00 LOL 298.53 VL 24.741 GAL 27.72 AZL 88.82 MCA 328.34 SMA 117.01 ECC .53518 INC 1.1781 VI 29.312
-.62 LOP 266.87 VP 36.152 GAP 32.13 AZP 89.00 TAL 147.36 TAP 115.70 RCA 54.39 APO 179.63 VZ 34.853
1.87 GP 6.76 ZAL 32.53 ZAP 165.56 ETS 149.16 ZAE 125.80 ETE 174.61 ZAC 13.37 ETC 31.42 CLP 167.22
   RL 151.99 LAL
RP 108.73 LAP
    RC 210.889 GL
   PLANETOCENTRIC CONIC
    C3 190.825 VHL 13.814 DLA -21.32 RAL 265.75 RAD 6571.0 VEL 17.668 PTH 2.98 VHP 19.682 DPA -15.70 RAP 254.01 ECC 4.1405
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   -9.82
                                                     -13.33
                                                                     27.26
                                                                                 158.86
                                                                                                   115.22 12 48 2
                                                                                                                                  1382.0
                                                                                                                                                                   20.34
                   12 15 0
                                   1981.95
        90.00
                                                                                                    109.24
115.91
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                   17 57 51
                                                                    320.01
                                                                                   172.72
                                                                                                                 18 11 36
                                                                                                                                    225.7
                                                                                                                                                                   312.18
        90.00
                                     825.73
                                                     21.19
                                                                                   157.81
                                                                                                                 13 50 56
                                                                                                                                    1167.4
                                                                                                                                                   -11.85
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                   13 21 29
                                   1767.41
                                                    -15.46
                                                                     10.44
       100.00
                                                                                                    109.13 21 10 47
117.84 14 26 4
109.01 22 45 1
                   19 34 3
                                                                                                                                                                  267.95
                                    5803.55
                                                    23.42
                                                                    275.93
                                                                                   173.56
                                                                                                                                    5203.5
                                                                                                                                                   25.81
       100.00
                                                                                155.02
                  13 58 32
21 13 28
                                 1651.22
5492.50
                                                     -20.69
                                                                    358.85
                                                                                                                                   1051.2
                                                                                                                                                   -16.81
                                                                                                                                                                   351.88
       110.00
                                                                                                                                                   31.28
                                                                                   175.69
                                                                                                                                   4892.5
                                                                                                                                                                  246.00
                                                      28.96
                                                                    254.44
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 1539.0 SR 264.8 SS 522.9

CRT -.2036 CRS .1560 CST -.9987

LSA 1626.1 MSA 260.5 SSA 7.8

ELI 1540.0 EL2 259.1 ALF 177.94
    TOE -.1051 TRA11.5017 TC3 -.1121 BAU .2863
                                                                       SGT 5137.4 SGR 303.8 SG3 88.9
RRT -.5140 RRF -.5084 RTF ..9876
SGB 5146.4 R23 -.0006 R13 -.9876
    ROE .6284 RRA - .3481 RC3 - .0056 FAU- .00794
FDE .0149 FRA 2.2963 FC3 .0360 BSP 17078
BOE .6372 BRA11.5069 BC3 .1122 FSP -293
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FLIGHT TIME 214.00

SG1 5139.8 SG2 260.5 THA 178.25

ARRIVAL DATE OCT 1 1967

LAUNCH DATE JUL 23 1967

DISTANCE 195.615 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 27.893 GAL -12.91 ATL 92.58 HCA 87.44 SMA 137.04 ECC .24739 INC 2.5834 V1 29.315
RP 108.39 LAP -2.58 LOP 26.92 VP 38.477 GAP -7.77 AZP 90.12 TAL 231.65 TAP 319.10 RCA 103.14 APO 170.94 V2 34.964
RC 60.521 GL -10.75 GP -14.72 ZAL 157.84 ZAP 35.06 ETS 21.49 ZAE 154.49 ETE 346.70 ZAC 94.25 ETC 13.11 CLP -32.18 PLANETOCENTRIC CONTC 2.34 VHP 6.075 DPA -8.27 RAP 170.50 ECC 1.7104 C3 43.165 VHL 6.570 DLA 4.90 RAL 138.06 RAD 6568.6 VEL 12.827 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 14.57 101.27 24 36 17 1958.0 -24.33 56.25 90.00 23 53 39 2558.04 13 8 42 4897.15 64.44 -26.15 14 30 19 70.01 4297.1 17.58 205.42 11.11 20.48 212.89 90.00 1688.2 -25.51 36.04 1 21 14 2288.23 14 27 44 4642.19 102.26 1 59 22 100.00 -27.48 44.29 14.26 68.98 15 45 6 4042.2 18.70 186.17 100.00 21.75 193.63 10.60 -28.68 17.43 2 34 46 2058.09 15 30 41 4445.09 105.05 3 9 4 1458.1 -31.06 25.82 13.27 105.05 3 9 4 66.06 16 44.46 110.00 3845.1 21.71 110.00 25.16 177.14 9.07 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 489.6 SCR 455.7 SC3 168.3 RRT -.1843 RRF .4476 RTF -.3546 SCB 668.8 R23 -.1663 R13 .4993 SCI 517.5 SCZ 423.7 THA 145.65 ST 190.6 SR 383.2 S5 141.6 TOE .1922 TRA -.3432 TC3 .2651 BAU .1629 CRT -. 7846 CRS -. 0025 CST -. 5954 RDE -.4327 RRA -.2529 RC3 -.0970 FAU .06610 LSA 414.0 MSA 176.7 SSA 23.4 FDE .0525 FRA -.9932 FC3-1.3257 BSP 1114 BDE .4734 BRA .4264 BC3 .2823 FSP -451 EL1 413.7 EL2 109.4 ALF 113.02 ARRIVAL DATE OCT 3 1967 FLIGHT TIME 72.00 HELIOCENTRIC CONIC DISTANCE 202.365 RL 151.98 LAL .00 LOL 299.48 VL 27.967 GAL -12.78 AZL 92.45 MCA 90.64 SMA 137.63 ECC .24352 INC 2.4541 V1 29.315 RP 108.35 LAP -2.45 LOP 30.12 VP 38.542 GAP -6.97 AZP 89.97 TAL 232.53 TAP 323.17 RCA 104.11 APO 171.14 V2 34.977 RC 62.420 GL -10.37 GP -15.70 ZAL 158.56 ZAP 39.03 ETS 19.84 ZAE 155.65 ETE 342.61 ZAC 95.25 ETC 12.88 CLP -36.20 PLANETOCENTRIC CONIC -8.85 RAP 169.36 ECC 1.6933 C3 42.129 VHL 6.491 OLA 5.45 RAL 137.59 RAD 6568.6 VEL 12.787 PTH 2.33 VHP 5.717 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 47 38 2569.16 -26.30 65.23 13.90 100.90 24 30 28 1969.2 -24.53 57.00 23 47 38 2569.16 -26.30 14 32 13 4273.8 16.96 203.98 13 11 0 4873.78 19.93 211.40 10.10 69.46 90.00 1698.5 -25.70 36.74 1 15 29 2298.49 -27.62 45.02 13.60 101.90 100.00 68.42 15 46 45 104.72 3 4 4 4019.7 18.08 184.79 14 29 46 4619.68 21.20 192.19 9.58 100.00 1466.5 -28.87 18.01 2066.45 104.72 2 29 38 -31.20 26.43 12.62 110.00 65.46 16 45 51 3824.5 21.06 168.44 15 32 7 4424.49 24.58 175.82 8.02 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 189.8 SR 382.1 SS 154.2 CRT -.7596 CRS .0462 CST -.6638 SGT 484.3 SGR 471.6 SG3 189.3 RRT -.1727 RRF .5013 RTF -.3021 SGB 675.9 R23 -.1939 R13 .5114 TOE .1864 TRA -.3539 TC3 .2543 BAU .1588 RDE -.4252 RRA -.2679 RC3 -.1219 FAU .07315 LSA 411.7 MSA 189.0 SSA 23.6 EL1 410.9 EL2 114.8 ALF 112.53 FOE .0816 FRA-1.1204 FC3-1.5031 BSP 1128 BDE .4642 BRA .4439 BC3 .2820 FSP -520 SG1 518.0 SG2 434.2 THA 139.38 ARRIVAL DATE OCT 5 1967 FLIGHT TIME 74.00 LAUNCH DATE JUL 23 1967 DISTANCE 209.082 RL 151.98 LAL .00 LOL 299.48 VL 28.027 GAL -12.67 AZL 92.32 MCA 93.83 SMA 138.11 ECC .24016 INC 2.3245 V1 29.315
RP 108.31 LAP -2.32 LOP 33.31 VP 38.598 GAP -6.20 AZP 89.84 TAL 233.25 TAP 327.08 RCA 104.94 APO 171.28 V2 34.990
RC 64.367 GL -9.95 GP -16.75 ZAL 159.19 ZAP 43.22 ETS 18.29 ZAE 156.95 ETE 337.65 ZAC 96.46 ETC 12.56 CLP -40.44 PLANETOCENTRIC CONIC 5.99 RAL 137.24 RAD 6568.6 VEL 12.749 PTH 2.32 VHP 5.396 OPA -9.40 RAP 168.00 ECC 1.6777 C3 41.181 VHL 6.417 DLA LNCH ATMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 100.52 24 25 6 68.94 14 34 33 1980.5 -24.72 23 42 5 2580.52 13 13 42 4850.93 13.35 57.78 66.03 -26.44 90.00 202.59 19.38 209.95 9.23 4250.9 16.35 90.00 1 10 12 2309.00 14 32 12 4597.69 2 24 57 2075.06 15 33 57 4404.40 1709.0 37.47 13.06 101,53 1 48 41 -25.90 100.00 -27.77 45.77 15 48 50 183.45 20.64 190.80 8.70 67.89 3997.7 17.46 100.00 104.38 2 59 32 64.90 16 47 21 -29.06 18.60 -31.35 27.06 12.11 104.38 1475.1 110.00 167.23 3804.4 20.43 24.01 174.54 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 189.4 SR 379.3 55 167.3 CRT -.7236 CRS ..0963 CST -.7373 LSA 407.9 MSA 202.1 SSA 23.6 EL1 406.0 EL2 122.1 ALF 111.95 SCT 477.6 SCR 490.0 SC3 211.5 RRT -.1381 RRF .5546 RTF -.2247 SCB 684.3 R23 -.2034 R13 .5371 SCI 516.7 SCZ 448.6 THA 129.75 TOE .1797 TRA -.3721 TC3 .2347 BAU .1533 RDE -.4160 RRA -.2842 RC3 -.1499 FAU .08054 FOE -.4160 RRA -.2842 RC3 -.1997 FM0 1000-. FOE .1184 FRA-1.2504 FC3-1.6932 BSP 1118 FLIGHT TIME 76.00 ARRIVAL DATE OCT 7 1967 LAUNCH DATE JUL 23 1967 DISTANCE 215.765 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 28.075 GAL -12.55 A7L 92.19 MCA 97.03 SMA 138.49 ECC .23723 INC 2.1939 V1 29.315 RP 108.27 LAP -2.18 LOP 36.51 VP 38.644 GAP -5.47 AZP 89.73 TAL 233.82 TAP 330.85 RCA 105.64 APO 171.35 V2 35.003 RC 66.356 GL -9.51 GP -17.86 ZAL 159.75 ZAP 47.62 ETS 16.79 ZAE 158.30 ETE 331.58 ZAC 97.88 ETC 12.16 CLP -44.91 PLANETOCENTRIC CONIC 6.53 RAL 136.99 RAD 6568.6 VEL 12.715 PTH 2.31 VHP 5.111 OPA -9.92 RAP 166.42 ECC 1.6632 C3 40.298 VHL 6.346 DLA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1992.1 -24.91 23 36 58 2592.08 13 16 50 4828.43 12.93 100.14 24 20 10 68.45 14 37 18 58.57 66.84 -26.58 15.73 201.22 90.00 18.63 208.53 8.51 422A . 4 1 44 1 15 51 20 38.20 1 5 21 2319.69 46.53 101.16 1719.7 -26.09 -27.91 12.65 100.00 67.38 3976.1 16.84 182.14 14 35 3 4576.06 20.08 189.44 7.97 100.00 2 55 27 16 49 16 2 20 43 2083.84 -29.25 19.22 -31.50 27.70 104.02 1463.6 110.00 11.73 110.00 15 36 11 173.29 6.35 64.37 3784.7 19.79 166.05 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 190.8 SR 375.0 SS 181.0 CRT - 6783 CRS .1410 CST - 8054 LSA 403.3 MSA 215.9 SSA 23.7 9GT 473.1 SGR 511.7 SG3 234.8 RRT -.0775 RRF .6071 RTF -.1208 SGB 696.9 R23 -.1400 R13 .5953 TOE .1739 TRA -.3975 TC3 .2066 BAU .1480 RDE -.4053 RRA -.3017 RC3 -.1812 FAU .08623 FDE .1609 FRA-1.3812 FC3-1.8954 BSP 1123 BDE .4410 BRA .4991 BC3 .2748 FSP -663 SG1 519.2 SG2 464.9 THA 112.32 EL1 399.7 EL2 131.6 ALF 111.49

FLIGHT TIME 70.00

ARRIVAL DATE OCT 9 1967

LAUNCH DATE JUL 23 1967

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DISTANCE 222.412
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 28.111 GAL -12.45 A7L 92.06 HCA 100.23 SMA 138.78 ECC .23466 INC 2.0613 V1 29.315 RP 108.22 LAP -2.03 LOP 39.71 VP 38.682 GAP -4.77 AZP 89.63 TAL 234.25 TAP 334.47 RCA 106.22 APO 171.35 V2 35.016 RC 68.382 GL -9.04 GP -19.02 ZAL 160.23 ZAP 52.21 ETS 15.28 ZAE 159.61 ETE 324.14 ZAC 99.51 ETC 11.65 CLP -49.60
   PLANETOCENTRIC CONIC
     C3 39.462 VHL 6.282 DLA 7.07 RAL 136.84 RAD 6568.5 VEL 12.682 PTH 2.30 VHP 4.862 DPA -10.41 RAP 164.64 ECC 1.6494
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
         90.00 23 32 15 2603.82

90.00 13 20 22 4606.11

100.00 1 0 54 2350.55

100.00 14 38 19 4554.60
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67.98 14 40 28
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        110.00
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        110.00
                      15 38 50
                                       4365.13
                                                          22.85
                                                                                              5.71
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 474.9 SGR 537.5 SG3 259.0
RRT .0094 RRF .6582 RTF .0070
SGB 717.2 R23 .0211 R13 .6578
                                                                                                                                          ST 195.4 SR 369.4 SS 194.9
CRT -.6276 CRS .1749 CST -.8605
     TOE .1703 TRA -.4292 TC3 .1704 BAU .1451
     RDE -.3931 RRA -.3204 RC3 -.2159 FAU .09613
                                                             1179
-745
    FOE .2062 FRA-1.5113 FC3-2.1090 BSP
                                                                                                                                          LSA 398.7 MSA 230.4 SSA 23.7
    BDE .4284 BRA .5356 BC3 .2751 FSP
                                                                               SG1 537.5 SG2 474.9 THA 87.84
                                                                                                                                           ELI 392.6 EL2 143.1 ALF 111.33
                                                                                                                                                       ARRIVAL DATE OCT 11 1967
LAUNCH DATE JUL 23 1967
                                                                                    FLIGHT TIME 80.00
                                                                                   DISTANCE 229.025
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 28.136 GAL -12.34 AZL 91.93 MCA 103.43 SMA 138.99 ECC .23257 INC 1.9260 V1 29.315 RP 108.18 LAP -1.87 LOP 42.92 VP 38.712 GAP -4.10 AZP 89.55 TAL 234.53 TAP 337.95 RCA 106.69 APO 171.29 V2 35.029 RC 70.443 GL -8.54 GP -20.21 ZAL 160.63 ZAP 56.98 ETS 13.72 ZAE 160.72 ETE 315.15 ZAC 101.31 ETC 11.03 CLP -54.50
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 38.658 WHL 6,218 DLA 7.61 RAL 136.79 RAD 6568.5 VEL 12.650 PTH 2.30 VHP 4.649 DPA -10.86 RAP 162.66 ECC 1.6362
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 27 53 2615.75 -26.85 68.52 12.43 99.34 24 11 28 2015.8 -25.29 60.20
90.00 13 24 19 4783.77 17.69 205.75 7.42 67.52 14 44 3 4183.8 14.48 198.54
100.00 0 56 48 2341.60 -28.19 48.10 12.17 100.38 1 35 50 1741.6 -26.47 39.72
100.00 14 42 0 4933.15 18.93 186.76 6.86 66.43 15 57 34 3933.2 15.59 179.57
110.00 2 13 24 2101.90 -31.79 29.03 11.30 103.29 2 48 26 1501.9 -29.63 20.48
110.00 15 41 54 4345.62 22.26 170.87 5.19 63.36 16 54 20 3745.6 18.51 163.75
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                               SGT 487.7 SGR 566.1 SG3 282.7
RRT .1283 RRF .7045 RTF .1601
SGB 747.2 R23 .1375 R13 .6945
                                                                                                                                          ST 202.4 SR 361.8 SS 209.1
CRT -.5670 CRS .2095 CST -.9103
     TOE .1674 TRA -.4695 TC3 .1233 BAU .1456
     ROE -.3788 RRA -.3390 RC3 -.2533 FAU .10376
    FOE .2589 FRA-1.6302 FC3-2.3237 85P 1267
                                                                                                                                           LSA 393.8 MSA 244.9 SSA 23.7
                                                                               SG1 577.5 SG2 474.0 THA 69.70
                                                                                                                                           EL1 383.6 EL2 157.3 ALF 111.36
                                                                                                                                                      ARRIVAL DATE OCT 13 1967
                                                                                   FLIGHT TIME 82.00
LAUNCH DATE JUL 23 1967
                                                                                   DISTANCE 235.601
    RL 151.98 LAL .00 LOL 299.48 VL 28.151 GAL -12.23 AZL 91.79 MCA 106.63 SMA 139.12 ECC .23032 INC 1.7869 V1 29.315
RP 108.14 LAP -1.71 LOP 46.12 VP 38.736 GAP -3.47 AZP 89.49 TAL 234.67 TAP 341.30 RCA 107.07 APO 171.16 V2 35.042
RC 72.534 GL -8.01 GP -21.42 ZAL 160.96 ZAP 61.88 ETS 12.09 ZAE 161.46 ETE 304.63 ZAC 103.26 ETC 10.29 CLP -59.58
   PLANETOCENTRIC CONIC
     C3 37.875 VHL 6.154 DLA 8.15 RAL 136.83 RAD 6568.5 VEL 12.619 PTH 2.29 VHP 4.470 DPA -11.27 RAP 160.53 ECC 1.6233
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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        110.00
                                                          21.66
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 516.5 SGR 598.2 SG3 305.7
RRT .2622 RRF .7467 RTF .3189
SGB 790.4 R23 .1780 R13 .7363
SG1 636.6 SG2 468.4 THA 59.67
                                                                                                                                         ST 213.4 SR 352.8 SS 223.1

CRT -.5049 CRS .2349 CST -.9454

LSA 390.2 MSA 258.7 SSA 23.7
     TOE .1675 TRA -.5163 TC3 .0666 BAU .1525
    ROE -.3629 RRA -.3576 RC3 -.2937 FAU .11105
FOE .3127 FRA-1.7372 FC3-2.5384 BSP 1425
ROE .4947 RRA .6280 BC3 .3011 FSP -904
                                                                                                                                          EL1 373.9 EL2 173.8 ALF 111.97
     BOE .3997 BRA .6280 BC3 .3011 FSP
                                                                                   FLIGHT TIME 84.00
                                                                                                                                                       ARRIVAL DATE OCT 15 1967
LAUNCH DATE JUL 23 1967
                                                                                   DISTANCE 242.141
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 28.158 GAL -12.12 AZL 91.64 HCA 109.84 SMA 139.17 ECC .22847 INC 1.6429 VI 29.315
RP 108.10 LAP -1.55 LOP 49.33 VP 38.752 GAP -2.86 AZP 89.44 TAL 234.68 TAP 344.52 RCA 107.37 APO 170.97 V2 35.056
RC 74.652 GL -7.45 GP -22.63 ZAL 161.22 ZAP 66.87 ETS 10.37 ZAE 161.65 ETE 292.99 ZAC 105.32 ETC 9.44 CLP -64.82
   PLANETOCENTRIC CONIC
     C3 37.103 VHL 6.091 DLA 8.70 RAL 136.96 RAD 6568.4 VEL 12.589 PTH 2.28 VHP 4.326 DPA -11.65 RAP 158.28 ECC 1.6106
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 20 0 2640.57 -27.12 70.29 12.33 98.49 24 4 0 2040.6 -25.66 6f.93 90.00 13 33 37 4738.20 16.48 202.95 6.76 66.64 14 52 35 4138.2 13.18 195.83 100.00 0 49 30 2364.57 -28.46 49.75 12.09 99.55 1 28 55 1764.6 -26.85 41.32
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        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 566.0 SGR 631.5 SG3 326.2
RRT .3990 RRF .7827 RTF .4693
SGB 848.0 R23 .1920 R13 .7779
SGI 712.3 SG2 460.1 THA 52.69
                                                                                                                                         ST 227.9 SR 341,4 SS 237.3
CRT -.4400 CRS .2630 CST -.9715
     TOE .1695 TRA -.5707 TC3 -.0015 BAU .1663
     ROE -.3445 RRA -.3744 RC3 -.3353 FAU .11736
     FDE .3732 FRA-1.8199 FC3-2.7384 BSP 1639
BDE .3839 BRA .6825 BC3 .3353 FSP -972
                                                                                                                                         LSA 389.1 MSA 269.9 SSA 23.7
                                                                                                                                         EL1 362.4 EL2 192.8 ALF 113.33
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FLIGHT TIME 78.00

ARRIVAL DATE OCT- 17 1967

EL1 345.4 EL2 256.7 ALF 152.79

LAUNCH DATE JUL 23 1967

HELIOCENTRIC CONIC DISTANCE 248.645 RL 151.98 LAL .00 LOL 299.48 VL 28.156 GAL -12.01 AZL 91.49 MCA 113.05 SMA 139.16 ECC .22679 INC 1.4929 V1 29.315
RP 108.06 LAP -1.37 LOP 52.54 VP 38.763 GAP -2.28 AZP 89.42 TAL 234.57 TAP 347.62 RCA 107.60 APO 170.72 V2 35.069
RC 76.795 GL -6.84 GP -23.82 ZAL 161.40 ZAP 71.91 ETS 8.55 ZAE 161.17 ETE 281.06 ZAC 107.43 ETC 8.47 CLP -70.16 PLANETOCENTRIC CONIC 9.27 RAL 137.19 RAD 6568.4 VEL 12.558 PTH 2.28 VHP 4.215 DPA -12.00 RAP 155.97 ECC 1.5980 C3 36.336 VHL 6.028 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 16 22 2653.74 90.00 13 39 2 4714.48 100.00 0 46 11 2376.75 -25.65 -27.24 98.03 24 0 36 2053.7 62.84 71.23 12.42 14 57 36 4114.5 12.48 194.43 15.83 201.51 6.58 66.21 42.17 50.63 12.19 99.10 1 25 48 1776.7 -27.04 100.00 -28.60 14 55 50 182.71 5.99 65.09 16 10 17 3666.7 13.58 175.66 100.00 4466.70 17.08 -32.22 11.40 102.09 2 40 17 1530.9 -30.22 22.53 2 4 46 2130.86 31.18 110.00 61.94 17 5 10 110.00 15 53 45 4285.36 20.38 167.21 4.25 3685.4 16.47 160.27 ORBIT DETERMINATION ACCURACY ST 246.9 SR 328.7 SS 250.6 CRT - 3807 CRS .2819 CST - .9854 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 636.7 SCR 666.5 SC3 344.2 RRT .5183 RRF .8141 RTF .5931 SCB 921.7 R23 .1946 R13 .8154 SCI 803.5 SC2 451.7 TMA 47.52 TOE .1754 TRA -.6303 TC3 -.0793 BAU .1879 ROE -.3246 RRA -.3896 RC3 -.3785 FAU .12272 FDE .4310 FRA-1.8803 FC3-2.9239 BSP 1923 BOE .3690 BRA .7410 BC3 .3867 FSP -1039 LSA 393.1 MSA 277.1 SSA 23.7 EL1 351.2 EL2 213.7 ALF 116.34 FLIGHT TIME 88.00 ARRIVAL DATE OCT 19 1967 LAUNCH DATE JUL 23 1967 HELLOCENTRIC CONIC DISTANCE 255.115 RL 151.98 LAL .00 LOL 299.48 VL 28.147 GAL -11.90 AZL 91.34 MCA 116.26 SMA 139.08 ECC .22524 INC 1.3354 V1 29.315
RP 108.02 LAP -1.20 LOP 55.75 VP 38.768 GAP -1.72 AZP 89.41 TAL 234.34 TAP 350.60 RCA 107.76 APO 170.41 V2 35.082
RC 78.958 GL -6.18 GP -25.00 ZAL 161.51 ZAP 76.92 ETS 6.61 ZAE 160.02 ETE 269.79 ZAC 109.55 ETC 7.41 CLP -75.54 PLANETOCENTRIC CONIC C3 35.568 VHL 5.964 DLA 9.86 RAL 137.50 RAD 6568.4 VEL 12.527 PTH 2.27 VHP 4.136 DPA -12.33 RAP 153.64 ECC 1.5854 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 97.55 23 57 20 90.00 23 12 52 2667.66 -27.37 72.23 12.60 2067.7 63.82 2389.62 444* 90.00 13 45 2 15.15 200.02 6.48 65.79 15 3 12 4089.8 11.75 0 43 1 -28.73 51.57 12.38 98.63 1 22 50 1789.6 -27.24 100.00 15 1 30 16.39 5.89 64.65 16 15 33 3843.0 12.64 100.00 181.28 2 2 19 2141.46 15 58 42 4263.97 -32.37 31.97 101.64 2 36 0 1541.5 23.29 110.00 11.62 61.47 17 9 46 15 58 42 165.93 3664.0 15.73 110.00 19.69 4.13 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 728.5 SGR 699.9 SG3 358.0 RRT .6160 RRF .8398 RTF .6883 SGB 1010.2 R23 .1946 R13 .8453 ST 269.8 SR 313.4 SS 264.5 CRT -.3252 CRS .3034 CST -.9918 TOE .1846 TRA -.6950 TC3 -.1674 BAU .2156 ROE -.3021 RRA -.4012 RC3 -.4213 FAU .12646 FDE .4931 FRA-1.9065 FC3-3.0786 89P 2252 LSA 404.3 MSA 277.5 SSA 23.7 SG1 908.3 SG2 442.2 THA 43.14 ELI 340.4 ELZ 235.0 ALF 122.60 BOE .3540 BRA .8025 BC3 .4534 FSP -1086 ARRIVAL DATE OCT 21 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 23 1967 DISTANCE 261.550 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 28.131 GAL -11.78 AZL 91.17 MCA 119.47 SMA 138.95 ECC .22380 INC 1.1688 VI 29.315 RP 107.98 LAP -1.02 LOP 58.96 VP 38.768 GAP -1.19 AZP 89.42 TAL 234.01 TAP 353.48 RCA 107.86 APO 170.05 V2 35.094 RC 81.139 GL -5.47 GP -26.14 ZAL 161.55 ZAP 81.86 ETS 4.56 ZAE 158.27 ETE 259.86 ZAC 111.61 ETC 6.28 CLP -80.92 PLANETOCENTRIC CONIC C3 34.797 VHL 5.899 DLA 10.49 RAL 137.90 RAD 6568.4 VEL 12.497 PTH 2.26 VHP 4.088 DPA -12.66 RAP 151.35 ECC 1.5727 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 97.02 23 54 7 65.36 15 9 25 12.67 2082.7 -26.24 64.87 23 9 24 2682.66 13 51 42 4663.69 73.31 90.00 -27.50 4063.7 10.97 90.00 14.41 198.46 6.48 0 39 54 2403.48 15 7 49 4418.10 1 59 59 2152.87 16 4 13 4241.48 52.57 12.66 1 19 57 1803.5 -27.45 98.11 100.00 -28.67 64.21 16 21 27 3818.1 12.06 172.85 5.88 100.00 15.66 179.79 2 35 52 1552.9 -30.64 101.16 32.82 11.94 110.00 -32.52 61.00 17 14 55 14.94 110.00 164.60 3641.5 18.95 4.09 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET .6897 RRF .8618 RTF .7567 SGB 1112.7 R23 .1941 R13 .8691 SGI 1024.8 SG2 433.5 THA 39.51 ST 297.2 SR 296.9 SS 277.2 CRT +.2787 CRS .3164 CST -.9923 LSA 422.7 MSA 272.2 SSA 23.8 TOE .1987 TRA -.7622 TC3 -.2640 BAU .2484 ROE -.2784 RRA -.4098 RC3 -.4642 FAU .12866 FOE .5488 FRA-1.9050 FC3-3.2060 BSP .2634 BOE .3420 BRA .8654 BC3 .5340 FSP -1129 EL1 335.9 EL2 252.3 ALF 135.11 ARRIVAL DATE OCT 23 1967 FLIGHT TIME 92.00 LAUNCH DATE JUL 23 1967 DISTANCE 267.952 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 28.109 GAL -11.65 A7L 90.99 MCA 122.69 SMA 138.77 ECC .22246 INC .9912 V1 29.315
RP 107.94 LAP -.83 LOP 62.17 VP 38.764 GAP -.68 AZP 89.46 TAL 233.58 TAP 356.26 RCA 107.90 APO 169.64 V2 35.107
RC 83.336 GL -4.68 GP -27.25 ZAL 161.50 ZAP 86.65 ETS 2.40 ZAE 156.08 ETE 251.51 ZAC 113.57 ETC 5.09 CLP -86.23 PLANETOCENTRIC CONIC C3 34.020 VHL 5.833 DLA 11.16 RAL 138.39 RAD 6568.3 VEL 12.466 PTH 2.25 VHP 4.069 DPA -13.01 RAP 149.16 ECC 1.5599 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 5 53 2699.09 -27.63 74.50 13.24 96.44 23 50 52 2099.1 -26.45 66.03 90.00 23 5 53 2699.09 13 59 8 64.93 15 16 24 4035.9 10.13 189.86 4635.87 196.80 6.58 13.62 90.00 0 36 46 2418.66 53.66 97.55 1818.7 -27.66 45.14 13.05 1 17 4 100.00 -29.01 15 14 52 4391.53 1 57 42 2165.37 16 10 25 4217.58 16 28 4 63.76 3791.5 11.22 171.32 14.87 178.22 5.96 100.00 100.62 2 33 48 60.53 17 20 43 100.62 1565.4 25.01 -32.68 33.76 12.36 110.00 3617.6 14.09 163.21 4.15 110.00 18.16 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY \$67 960.6 \$6R 761.6 \$63 372.6 RRT .7450 RRF .8798 RTF .8049 \$68 1225.8 R23 .1950 R13 .8867 ST 328.8 SR 277.6 SS 290.4 CRT -.2378 CRS .3305 CST -.9893 LSA 448.0 MSA 261.2 SSA 23.9 TOE .2176 TRA -.8308 TC3 -.3688 BAU .2845 FOE -.2521 RRA -.4135 RC3 -.5051 FAU .12938 FOE .6062 FRA-1.8669 FC3-3.2925 BSP 3039 BOE .3330 BRA .9280 BC3 .6255 FSP -1146

FLIGHT TIME 86.00

SG1 1150.1 SG2 424.3 THA 36.27

ARRIVAL DATE OCT 25 1967

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FLIGHT TIME 94.00
LAUNCH DATE JUL 23 1967
                                                                                                                  DISTANCE 274.321
    HELIOCENTRIC CONIC
     RL 151.98 LAL .00 LOL 299.48 VL 28.082 GAL -11.52 A7L 90.80 HCA 125.91 SMA 138.55 ECC .22120 INC .8002 V1 29.315
RP 107.91 LAP -.65 LOP 65.39 VP 38.755 GAP -.19 A7P 89.53 TAL 233.05 TAP 358.95 RCA 107.90 APO 169.20 V2 35.119
RC 85.546 GL -3.82 GP -28.34 ZAL 161.37 ZAP 91.24 ETS .14 ZAE 153.58 ETE 244.70 ZAC 115.37 ETC 3.86 CLP -91.41
     PLANETOCENTRIC CONIC
      C3 33.239 VML 5.765 DLA 11.88 RAL 138.98 RAD 6568.5 VEL 12.434 PTH 2.25 VMP 4.077 DPA -13.40 RAP 147.09 ECC 1.5470
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 2 10 2717.45 -27.77 75.82 13.71 95.79 23 47 28 2117.4 -26.67 67.53
                           23 2 10 2717.45
14 7 29 4605.79
0 33 29 2435.63
15 22 48 4362.85
1 55 23 2179.36
16 17 23 4191.88
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64.50 15 24 15
96.91 1 14 5
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             90.00
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           100.00
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100.02 2 31 42
60.04 17 27 15
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          110.00
                                                                               -32.85
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                                                                                                       161.72
          110.00
                                                                                17.29
                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                            RET .7855 RRF .8954 RTF .8386
SGB 1348.7 RZ3 .1977 R13 .9002
SGI 1282.8 SGZ 416.2 THA 33.51
                                                                                                                                                                                             ST 364.8 SR 257.3 SS 302.8
CRT -.2020 CRS .3341 CST -.9852
LSA 478.7 MSA 247.5 SSA 24.0
      TDE .2421 TRA -.8984 TC3 -.4801 BAU .3229
      ROE -. 2249 RRA -. 4137 RC3 -. 5454 FAU . 12852
     FOE .6544 FRA-1.8043 FC3-3.3474 BSP 3485
BDE .3304 BRA .9891 BC3 .7267 FSP -1160
                                                                                                                                                                                             EL1 371.6 EL2 247.4 ALF 165.23
                                                                                                                                                                                                                 ARRIVAL DATE OCT 27 1967
                                                                                                                   FLICHT TIME 96.00
LAUNCH DATE JUL 23 1967
                                                                                                                   DISTANCE 280.658
    HELIOCENTRIC CONIC
     RL 151.98 LAL .00 LOL 299.48 VL 28.049 GAL -11.39 AZL 90.59 HCA 129.12 SMA 138.29 ECC .22001 INC .5926 V1 29.315
RP 107.87 LAP -.46 LOP 68.61 VP 38.742 GAP .28 AZP 89.63 TAL 232.43 TAP 1.55 RCA 107.86 APO 168.71 V2 35.131
RC 87.767 GL -2.86 GP -29.43 ZAL 161.15 ZAP 95.59 ETS 357.76 ZAE 150.90 ETE 239.21 ZAC 116.98 ETC 2.61 CLP -96.42
    PLANETOCENTRIC CONIC
      C3 32.455 VHL 5.697 DLA 12.68 RAL 139.66 RAD 6568.3 VEL 12.403 PTH 2.24 VHP 4.111 DPA -13.88 RAP 145.19 ECC 1.5341 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                           22 58 8 2738.37
14 16 57 4572.83
0 29 57 2454.95
15 31 45 4331.48
1 52 56 2195.30
16 25 16 4163.89
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64.06 15 33 10
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            90.00
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                                                                                11.77
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                                                                                                       193.09
            90.00
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13.03
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99.32 2 29 31
59.54 17 34 40
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           100.00
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           110.00
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                                                                                                       160.12
                                                                                                                                  4.55
                                                                                 16.33
           110.00
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SCT 1234.4 SCR 810.5 SC3 369.1
RRT .8155 RRF .9083 RTF .8621
SCB 1476.7 R23 .2026 R13 .9099
SCI 1419.2 SC2 408.0 THA 31.01
                                                                                                                                                                                               ST 405.8 SR 234.1 SS 316.6
CRT -.1666 CRS .3343 CST -.9801
       TDE .2732 TRA -.9633 TC3 -.5967 BAU .3619
      RDE -.1949 RRA -.4065 RC3 -.5829 FAU .12590
FDE .7043 FRA-1.7099 FC3-3.3584 BSP 3928
                                                                                                                                                                                              LSA 515.8 MSA 230.3 SSA 24.1
       BDE .3356 BRA 1.0463 BC3 .8342 FSP -1148
                                                                                                                                                                                                EL1 408.5 EL2 229.2 ALF 171.97
                                                                                                                                                                                                               ARRIVAL DATE OCT 29 1967
                                                                                                                   FLIGHT TIME 98.00
LAUNCH DATE JUL 23 1967
                                                                                                                  OISTANCE 286.966
    HELIOCENTRIC CONIC
      RL 151.98 LAL .00 LOL 299.48 VL 28.012 GAL -11.24 AZL 90.37 HCA 132.35 SMA 137.99 ECC .21889 INC .3653 V1 29.315 RP 107.83 LAP -.27 LOP 71.83 VP 38.726 GAP .73 AZP 89.75 TAL 231.73 TAP 4.08 RCA 107.78 APO 168.19 V2 35.143 RC 89.996 GL -1.78 GP -30.55 TAL 160.83 ZAP 99.65 ETS 355.28 ZAE 148.13 ETE 234.83 ZAC 118.36 ETC 1.36 CLP-101.22
     PLANETOCENTRIC CONIC
       C3 31.671 VHL 5.628 DLA 13.56 RAL 140.44 RAO 6568.3 VEL 12.371 PTH 2.23 VHP 4.170 DPA -14.45 RAP 143.47 ECC 1.5212
      CS 31.671 VHL 5.628 DLA 13.56 RAL 140.44 RAO 6568.3 VEL 12.371 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 ECC 17.21 PTH 2.25 VHP 4.170 DATE 18.45 RAF 143.47 PTH 2.25 VHP 4.170 DATE 18.45 PTH 2.25 VHP 4.170 DATE 18.45 PTH 2.25 VHP 4.170 DATE 18.45 PT
                                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                             ST 452.2 SR 209.9 S5 330.2

CRT -.1263 CRS .3180 CST -.9762

LSA 558.6 MSA 212.0 S9A 24.3

EL1 453.2 EL2 207.8 ALF 175.75
                                                                                                            SGT 1379.4 SGR 830.5 SG3 361.5
RRT .8376 RRF .9198 RTF .8787
SGB 1610.1 R23 .2098 R13 .9173
       TOE .3112 TRA-1.0238 TC3 -.7178 BAU .4015
       ROE -.1639 RRA -.3997 RC3 -.6198 FAU .12218
FDE .7450 FRA-1.5980 FC3-3.3397 BSP 4398
BOE .3518 BRA 1.0991 BC3 .9483 FSP -1133
                                                                                                             SG1 1559.3 SG2 401.4 THA 28.85
                                                                                                                                                                                                                ARRIVAL DATE OCT 31 1967
                                                                                                                    FLIGHT TIME 100.00
LAUNCH DATE JUL 23 1967
                                                                                                                   DISTANCE 293,244
     HELIOCENTRIC CONIC
      RL 151.98 LAL .00 LOL 299.48 VL 27.971 GAL -11.09 A7L 90.11 MCA 135.57 SMA 137.66 ECC .21782 INC .1123 VI 29.315 RP 107.80 LAP -.08 LOP 75.05 VP 38.707 GAP 1.17 A7P 89.92 TAL 230.96 TAP 6.53 RCA 107.67 APO 167.64 V2 35.154 RC 92.232 GL -.56 GP -51.73 ZAL 160.38 ZAP 103.39 ETS 352.67 ZAE 145.33 ETE 231.35 ZAC 119.51 ETC .11 CLP-105.80
     PLANETOCENTRIC CONIC
      PLANETOCEMERIC CONIC
C3 30.886 VHL 5.558 DLA 14.57 RAL 141.34 RAD 6568.2 VEL 12.340 PTH 2.23 VHP 4.252 DPA -15.17 RAP 141.93 ECC 1.5085
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 48 13 2791.65 -28.16 81.22 15.92 93.11 23 34 45 2191.7 -27.43 72.63
90.00 14 40 17 4594.78 9.40 188.58 8.08 63.17 15 55 12 3694.8 5.73 181.83
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61.92 17 4 46
97.53 2 24 18
58.51 17 52 53
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                                1 47 2 2235.91
16 44 35 4098.52
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           110.00
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                                                                                14.04
                                                                                                       156.44
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                            MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 1526.1 SGR 845.7 SG3 349.9
RRT .8541 RRF .9297 RTF .8903
SGB 1744.7 R23 .2190 R13 .9223
                                                                                                                                                                                            ST 505.6 SR 183.2 SS 346.7

CRT -.0683 CRS .2813 CST -.9724

LSA 609.9 MSA 191.7 SSA 24.5
       TOE .3581 TRA-1.0777 TC3 -.8415 BAU .4402
       RDE -.1298 RRA -.3657 RC3 -.6540 FAU .11710
FDE .7880 FRA-1.4639 FC3-3.2812 BSP 4852
BDE .3809 BRA 1.1447 BC3 1.0658 FSP -1097
                                                                                                                                                                                           EL1 505.7 EL2 182.7 ALF 178.37
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SG1 1699.4 SG2 395.0 THA 26.90

ARRIVAL DATE NOV 2 1967

LAUNCH DATE JUL 23 1967

HELIOCENTRIC CONIC **DISTANCE 299.493** .00 LOL 299.48 VL 27.927 GAL -10.94 AZL 89.83 MCA 138.79 SMA 137.30 ECC .21681 INC .1692 V1 29.315 .11 LOP 78.27 VP 38.684 GAP 1.58 AZP 90.13 TAL 230.11 TAP 8.90 RCA 107.53 APO 167.07 V2 35.165 .85 GP -33.01 ZAL 159.79 ZAP 106.78 ETS 349.93 ZAE 142.52 ETE 228.62 ZAC 120.41 ETC 358.85 CLP-110.13 RL 151.98 LAL 107.77 LAP RC 94.474 GL PLANETOCENTRIC CONIC C3 30.138 VHL 5.490 DLA 15.72 RAL 142.37 RAD 6568.2 VEL 12.309 PTH 2.22 VHP 4.359 DPA -16.06 RAP 140.57 ECC 1.4960 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 17.00 -28.26 91.83 23 28 49 -27.71 75.16 83.78 2226.8 90.00 22 41 42 2826.80 16 9 7 14 55 O 185.86 8.85 62.73 3847.2 4.21 179.15 90.00 4447.17 7.93 0 57 56 53.63 100.00 0 15 39 2536.49 -29.75 62.35 16.93 93.04 1936.5 -29.01 100.00 16 7 40 4212.71 9.25 167.92 8.14 61.45 17 17 53 3612.7 5.36 161.28 96.33 2 20 54 57.97 18 4 17 1 43 11 1662.6 -32.42 32.17 2262.61 -33.66 41.18 16.55 110.00 3459.4 8.31 147.84 110.00 16 56 37 4059.36 12.63 154.27 6.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 567.0 SR 156.5 SS 364.1 CRT .0236 CRS .2017 CST -.9705 SGT 1673.9 SGR 860.4 SG3 335.9 TDE .4141 TRA-1.1241 TC3 -.9580 BAU .4786 RRT .8662 RRF .9389 RTF .8987 \$GB 1882.1 R23 .2301 R13 .9262 ROE -.0941 RRA -.3683 RC3 -.6883 FAU .11131 FOE .8238 FRA-1.3213 FC3-3.1974 88P - 5326 BOE .4247 BRA 1.1829 BC3 1.1878 FSF -1060 LSA 669.8 MSA 171.4 SSA 24.7 SG1 1841.0 SG2 390.9 THA 25.22 EL1 567.1 ELZ 156.5 ALF .40 ARRIVAL DATE NOV 4 1967 LAUNCH DATE JUL 23 1967 FLIGHT TIME 104,00 **DISTANCE 305.716** HELIOCENTRIC CONIC .00 LOL 299.48 VL 27.879 GAL -10.77 AZL 89.51 HCA 142.02 SMA 136.92 ECC .21586 INC .4919 V1 29.315 .30 LOP 81.50 VP 38.659 GAP 1.99 AZP 90.39 TAL 229.20 TAP 11.22 RCA 107.37 APO 166.48 V2 35.175 2.49 GP -34.44 ZAL 159.02 ZAP 109.78 ETS 347.02 ZAE 139.71 ETE 226.52 ZAC 121.05 ETC 357.57 CLP-114.23 RL 151.98 LAL RP 107.73 LAP RC 96.719 GL PLANETOCENTRIC CONIC C3 29.414 VHL 5.423 DLA 17.07 RAL 143.55 RAD 6568.2 VEL 12.280 PTH 2.21 VHP 4.491 DPA -17.17 RAP 139.36 ECC 1.4841 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 33 28 2870.52 -28.32 86.98 18.31 90.23 23 21 19 2270.5 -27.98 78.33 16 25 51 3791.3 176.02 15 12 39 4391.26 6.17 182.69 9.87 62.31 2.42 90.00 56.57 0 8 32 2576.63 -29.86 65.33 18.29 91.48 0 51 29 1976.6 -29.33 100.00 16 24 12 60.99 17 33 33 158.39 100.00 4160.36 7.53 9.13 3560.4 3.60 164.98 34.65 1 38 22 2295.60 -33.88 43.73 18.03 94.84 2 16 37 1695.6 110.00 18 17 47 17 10 52 151.80 7.05 57.43 3414.2 6.62 145.44 110.00 4014.17 10.99 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY RRT .8749 RRF .9471 RTF .9045 SGB 2016.7 R23 .2429 R13 .9287 SG1 1981.1 SG2 388.0 THA 23.70 ST 639.7 SR 130.4 SS 385.7 CRT .1867 CRS .0446 CST -.9693 TOE .4826 TRA-1.1604 TC3-1.0949 BAU .5154 RDE -.0545 RRA -.3458 RC3 -.7205 FAUL .10459 LSA 742.7 MSA 151.0 SSA 24.8 EL1 640.2 EL2 128.0 ALF 2.27 FOE .8618 FRA-1.1655 FC3-3.0783 BSP 5781 BOE .4857 BRA 1.2108 BC3 1.3107 FSP -1008 ARRIVAL DATE NOV 6 1967 FLIGHT TIME 106.00 LAUNCH DATE JUL 23 1967 DISTANCE 311.912 HELIOCENTRIC CONIC .00 LOL 299.48 VL 27.828 GAL -10.60 AZL 89.14 MCA 145.24 SMA 136.53 ECC .21496 INC .8646 V1 29.315 .49 LOP 84.73 VP 38.631 GAP 2.37 AZP 90.71 TAL 228.23 TAP 13.47 RCA 107.18 APO 165.87 V2 35.185 4.42 GP -36.08 ZAL 158.02 ZAP 112.38 ETS 343.91 ZAE 136.88 ETE 224.95 ZAC 121.44 ETC 356.25 CLP-118.11 RL 151.98 LAL RP 107.70 LAP RC 98.967 GL PLANETOCENTRIC CONIC C3 28.748 VHL 5.362 DLA 18.67 RAL 144.91 RAD 6568.2 VEL 12.252 PTH 2.20 VHP 4.651 DPA -18.54 RAP 138.28 ECC 1.4731 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.22 2326.5 22 22 38 2926.49 15 34 23 4323.84 88.18 23 11 25 90.00 -28.26 91.07 19.92 172.26 61.95 16 46 27 3723.8 90.00 4.03 178.90 11.25 89.48 24 39 5 2027.7 -29.64 60.34 23 55 17 2627.72 16 44 25 4097.84 100.00 -29.89 69.13 19.96 60.56 17. 52 43 3497.8 1.49 100.00 16 44 25 5.45 161.50 10.46 2 11 0 1737.3 -33.29 37.82 110.00 92.93 1 32 3 2337.27 17 28 5 3961.05 -34.07 46.97 19.86 18 34 6 4.61 56.89 3361.1 110.00 9.03 148.94 A . 27 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1967.2 SCR 884.0 SC3 300.6 RRT .8808 RRF .9547 RTF .9088 SCB 2156.7 R23 .2566 R13 .9307 SCI 2121.5 SCZ 388.1 THA 22.38 ST 726.5 SR 111.6 55 410.2 TOE .5657 TRA-1.1855 TC3-1.2218 BAU .5515 CRT .4520 CRS -.2367 CST -.9698 ROE -.0119 RRA -.3196 RC3 -.7526 FAU .09741 LSA 831.0 MSA 132.1 SSA 24.6 Fil 728.3 EL2 99.3 ALF 4.05 FOE .8960 FRA-1.0073 FC3-2.9335 BSP 6253 BDE .5658 BRA 1.2278 BC3 1.4349 FSP -956 EL1 728.3 EL2 99.3 ALF ARRIVAL DATE NOV 8 1967 FLIGHT TIME 108.00 LAUNCH DATE JUL 23 1967 DISTANCE 318.083 HELTOCENTRIC CONTC. .00 LOL 299.48 VL 27.775 GAL -10.42 AZL 88.70 HCA 148.47 SMA 136.11 ECC .21412 INC 1.3032 V1 29.315 .68 LOP 87.96 VP 36.602 GAP 2.75 AZP 91.11 TAL 227.20 TAP 15.67 RCA.106.97 APO 165.26 V2 35.195 6.72 GP -37.98 ZAL 156.71 ZAP 114.52 ETS 340.56 ZAE 134.00 ETE 223.82 ZAC 121.60 ETC 354.87 CLP-121.78 RL 151.98 LAL RP 107.67 LAP RC 101.218 GL PLANETOCENTRIC CONIC C3 28.179 VHL 5.308 OLA 20.58 RAL 146.51 RAO 6568.1 VEL 12.229 PTH 2.20 VHP 4.846 DPA -20.23 RAP 137.26 ECC 1.4638 UNCH A7MTH LNCH TIME L-I TIME INJ LAT 90.00 22 7 38 3000.80 -27.98 INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.48 22 57 39 -28.32 87.84 22 7 38 3000.80 16 2 8 4239.55 21.89 2400.8 96.49 61.71 17 12 48 3639.5 -2.48 167.56 13.14 1.32 174.19 90.00 2094.8 86.86 24 27 26 -29.86 65.31 22.03 100.00 23 42 31 2694.84 -29.74 74.12 2.86 60.23 18 16 57 3420.7 -1.13 150.72 17 9 56 4020.73 157.25 12.26 100.00 90.44 2 3 21 1791.2 41.96 1 23 30 22.15 110.00 2391.21 -34.18 51.18 18 54 20 56.39 3297.1 139.29 6.64 110.00 17 49 22 3897.13 145.54 9.94 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 832.6 SR 109.7 SS 439.4 CRT .7655 CRS -.6059 CST -.9716 LSA 940.3 MSA 116.1 SSA 23.8 TDE .6681 TRA-1.1964 TC3-1.3451 BAU .5862 SGT 2112.4 SGR 895.6 SG3 280.2 RRT .8840 RRF .9616 RTF .9119 SGB 2294.4 R23 .2707 R13 .9321 RDE .0354 RRA -.2883 RC3 -.7825 FAU .08969 FDE .9302 FRA -.8457 FC3-2.7557 88P 6723 -898 SG1 2260.8 SG2 391.2 THA 21.21 EL1 836.8 EL2 70.2 ALF 5.80 BOE .6691 BRA 1.2307 BC3 1.5561 FSP

FLIGHT TIME 102.00

ARRIVAL DATE NOV 10 1967

LAUNCH DATE JUL 23 1967

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DISTANCE 324.230
   HELIOCENTRIC CONIC
                          .00 LOL 299.48 VL 27.719 GAL -10.23 AZL 88.17 MCA 151.70 SMA 135.68 ECC .21332 INC 1.8310 VI 29.315 .87 LOP 91.19 VP 38.570 GAP 3.11 AZP 91.61 TAL 226.12 TAP 17.82 RCA 106.74 APO 164.63 VZ 35.204 9.52 GP -40.24 ZAL 155.00 ZAP 116.16 ETS 336.93 ZAE 131.02 ETE 223.07 ZAC 121.51 ETC 353.37 CLP-125.28
    RL 151.98 LAL
RP 107.65 LAP
    RC 103.470 GL
   PLANETOCENTRIC CONIC
                                                C3 27.770 VHL 5.270 DLA 22.92 RAL 148.41 RAD 6568.1 VEL 12.212 PTH 2.19 VHP 5.086 DPA -22.29 RAP 136.24 ECC 1.4570 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              24.25
                                                                                               81.78 22 36 59
                  21 45 14 3105.32
16 39 43 4127.74
23 23 54 2787.18
        90.00
                                                                                                                              3527.7
                                                                                                                                              -6.05
                                                                                                                                                            161.28
                                                                  167.95
                                                                                  15.86
                                                                                                  61.77
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                                                   -2.29
        90.00
                                                                                                  83.32 24 10 21
                                                                                  24.55
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                                                                                                                                             -29.82
                                                                                                                                                             72.16
                                                                   80.93
       100.00
                                                  -29.20
                                                                                  14.87
                                                                                                  60.11 18 49 5
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                                                                                                                                                            145.25
                  17 43 44 3921.11
1 11 23 2463.20
                                                                  151.78
       100.00
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                                                                                  25.03
                                                                                                                                             -34.10
                                                                   56.80
                                                                                                  87.12
                                                   -34.08
       110.00
                                                                                                          19 20 18
                                                                                                  55.99
                                                                  141.37
                                                                                  12.26
                                                                                                                              3217.9
                                                                                                                                               -.86
                                                                                                                                                            135.16
       110.00
                   18 16 40 3817.85
                                                     3.63
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2255.2 SGR 904.6 SG3 257.6
RRT .8845 RRF .9674 RTF .9140
SGB 2429.9 R23 .2849 R13 .9329
SGI 2397.2 SG2 397.1 THA 20.11
                                                                                                                         ST 965.9 SR 134.4 55 476.2
CRT .9511 CRS -.8689 CST -.9740
    TOE .7984 TRA-1.1888 TC3-1.4585 BAU .6187
    RDE .0901 RRA -.2494 RC3 -.8062 FAU .08130
                                                                                                                         LSA 1079.9 MSA 105.2 SSA 21.8
Fill 974.3 EL2 41.2 ALF 7.55
    FDE .9690 FRA -,6782 FC3-2.5346 BSP 7158
BDF .8035 BRA 1.2146 BC3 1.6665 FSP -826
    BOE .8035 BRA 1.2146 BC3 1.6665 FSP
                                                                                                                                     ARRIVAL DATE NOV 12 1967
                                                                          FLIGHT TIME 112,00
LAUNCH DATE JUL 23 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 330.352
    RL 151.98 LAL .00 LOL 299.48 VL 27.662 GAL -10.03 A7L 87.52 MCA 154.92 SMA 135.24 ECC .21258 INC 2.4825 V1 29.315 RP 107.62 LAP 1.03 LOP 94.42 VP 38.536 GAP 3.45 A7P 92.25 TAL 224.99 TAP 19.91 RCA 106.49 APO 163.99 V2 35.212 RC 105.723 GL 12.97 GP -42.96 ZAL 152.72 ZAP 117.21 ETS 332.96 ZAE 127.84 ETE 222.63 ZAC 121.19 ETC 351.69 CLP-128.66
   PLANETOCENTRIC CONTC
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 2398.9 SGR 913.9 SG3 233.5
RRT .8819 RRF .9722 RTF .9159
SGB 2567.1 R23 .2974 R13 .9339
SGI 2534.5 SG2 407.7 THA 19.08
    TDE .9655 TRA-1.1594 TC3-1.5561 BAU .6502
                                                                                                                          ST 1134.6 SR 183.0 SS 518.2
    ROE .1518 RRA -.2030 RC3 -.8223 FAU .07259
FDE 1.0047 FRA -.5142 FC3-2.2742 BSP 7623
BOE .9774 BRA 1.1770 BC3 1.7600 FSP -756
                                                                                                                          CRT .9944 CRS -.9662 CST -.9775
                                                                                                                         LSA 1256.5 MSA 100.4 SSA 18.4
EL1 1149.1 EL2 19.1 ALF 9.11
                                                                                                                                    ARRIVAL DATE NOV 14 1967
                                                                         FLIGHT TIME 114.00
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 336.450
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.603 GAL -9.83 AZL 86.69 HCA 158.14 SMA 134.79 ECC .21190 INC 3.3128 VI 29.315
RP 107.60 LAP 1.23 LOP 97.66 VP 38.501 GAP 3.79 AZP 93.08 TAL 223.82 TAP 21.96 RCA 106.23 APO 163.36 V2 35.220
RC 107.975 GL 17.29 GP -46.25 ZAL 149.64 ZAP 117.57 ETS 328.59 ZAE 124.36 ETE 222.40 ZAC 120.65 ETC 349.76 CLP-132.01
   PLANETOCENTRIC CONIC
    C3 27.971 VML 5.289 DLA 29.44 RAL 153.66 RAD 6568.1 VEL 12.221 PTH. 2.20 VHP 5.780 DPA -27.86 RAP 133.78 ECC 1.4603
    20 10 58
                    0 21 47 2716.59
19 48 8 3568.06
                                                                                                  76.02
                                                                                                             1 7 4
                                                                                                                              2116.6
                                                                                                                                            -33.11
                                                                                                                                                             67.21
                                                                                  32.93
       110.00
                                                                   76.07
                                                  -31.52
                                                                                                  56.27 20 47 36
                                                                                                                                            -10.29
                                                                                                                              2968.1
                                                                                                                                                           121.97
                                                                  128.30
                                                   -5.90
                                                                                  21.11
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 2542.3 SCR 917.0 SC3 207.1
RRT .8753 RRF .9753 RTF .9179
SCB 2702.6 R23 .3079 R13 .9349
                                                                                                                          ST 1353.8 SR 249.9 SS 568.5
    TOE 1.1900 TRA-1.0984 TC3-1.6194 BAU .6786
    ROE .2240 RRA -.1436 RC3 -.8186 FAU .06321
FOE 1.0424 FRA -.3489 FC3-1.9565 BSP 8062
                                                                                                                          CRT .9937 CRS -.9936 CST -.9813
                                                                                                                        LSA 1485.8 MSA 102.4 SSA 14.1
EL1 1376.4 EL2 27.5 ALF 10.40
                                                                     SG1 2669.4 SGZ 422.4 THA 17.99
    BOE 1.2109 BRA 1.1078 BC3 1.8146 FSP -674
                                                                         FLIGHT TIME 116.00
                                                                                                                                     ARRIVAL DATE NOV 16 1967
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 342.522
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.542 GAL -9.61 A7L 85.59 HCA 161.36 SHA 134.34 ECC .21126 INC 4.4144 VI 29.315 RP 107.58 LAP 1.41 LOP 100.89 VP 38.464 GAP 4.11 A7P 94.18 TAL 222.59 TAP 23.96 RCA 105.96 APO 162.72 V2 35.227 RC 110.226 GL 22.76 GP -50.27 TAL 145.47 ZAP 117.11 ETS 323.75 ZAE 120.41 ETE 222.23 ZAC 119.89 ETC 347.42 CLP-135.48
   PLANETOCENTRIC CONIC
    C3 29.196 VHL 5.403 DLA 33.99 RAL 157.52 RAD 6568.2 VEL 12.271 PTH 2.21 VHP 6.315 DPA -31.57 RAP 131.96 ECC 1.4805
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.36 17 21 28 4098.20 -20.51 175.60 33.85 62.28 18 29 47 3498.2 -24.05 168.26 109.64 22 16 10 3159.87 -20.49 105.63 33.84 62.27 23 8 50 2559.9 -24.04 98.30
                                                                                                  62.28 18 29 47
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                                                                                  33.85
        70.36
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                                   4098.20
                                                   -20.51
                                                                  175.60
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                                                                                                  62.27
                                                                  105.63
       109.64
                    22 16 10
                                   3159.87
                                                  -20.49
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60.37 22 45 1
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                   22 45 44 3069.65
21 51 5 3236.41
                                   3069.65
       110.00
                                                  -23.18
                                                                  100.06
                                                                                                                              2636.4
                                                                                                                                             -21.68
                                                                                                                                                            103.03
                                                                  110.09
                                                  -17.87
                                                                                  32.32
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2688.7 SGR 910.0 SG3 178.8
RRT .8619 RRF .9753 RTF .9207
SGB 2838.5 R23 .3145 R13 .9366
                                                                                                                         ST 1639.3 SR 325.4 SS 623.7
     TOE 1.5028 TRA -.9932 TC3-1.6231 BAU .7034
                                                                                                                         CRT .9870 CRS -.9993 CST -.9853
LSA 1780.5 MSA 108.9 SSA 10.0
     ROE .3050 RRA -.0673 RC3 -.7830 FAU .05338
    FDE 1.0749 FRA -.1888 FC3-1.5828 BSP 8519
                                                                     SG1 2803.9 SG2 442.4 THA 16.69
                                                                                                                        EL1 1670.4 EL2 51.3 ALF 11.10
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FLIGHT TIME 110.00

BOE 1.5334 BRA .9955 BC3 1.8021 FSP

ARRIVAL DATE NOV 18 1967

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FLIGHT TIME 118.00
LAUNCH DATE JUL 23 1967
                                                                           DISTANCE 348.566
  HELIOCENTRIC CONIC
                          .00 LOL 299.48 VL 27.481 GAL -9.38 A7L 84.04 HCA 164.57 SMA 133.88 ECC .21067 INC 5.9569 VI 29.315 1.58 LOP 104.13 VP 38.426 GAP 4.42 AZP 95.74 TAL 221.33 TAP 25.90 RCA 105.68 APO 162.08 V2 35.233
   RL 151.98 LAL .00 LOL 299.48 VL 27.481 GAL -9.38 A7L 84.04 HCA 164.57 SMA 133.88 ECC .21067 INC 5.9569 VI 29.315
RP 107.56 LAP 1.58 LOP 104.13 VP 38.426 GAP 4.42 A7P 95.74 TAL 221.33 TAP 25.90 RCA 105.68 APO 162.08 V2 35.233
RC 112.475 GL 29.72 GP -55.23 ZAL 139.79 ZAP 115.66 ETS 318.25 ZAE 115.76 ETE 221.80 ZAC 118.91 ETC 344.38 CLP-139.40
  PLANETOCENTRIC CONIC
                                                                                                      2.24 VHP 7.093 OPA -36.02 RAP 129.30 ECC 1.5302
    C3 32.217 VHL 5.676 OLA 39.67 RAL 162.93 RAD 6568.3 VEL 12.393 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   56.53 18 4 18 56.52 24 18 17 56.53 18 4 18 56.52 24 18 17 56.53 18 4 18 56.52 24 18 17
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        60.98 16 53 8 4270.47
119.02 23 27 40 3037.03
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                                                                   190.86
                                                    -22.66
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                                                                                                                                 2437.0
                                                                                                                                                -26.88
                                                                                    42.72
                                                                    97.10
                                                    -22.64
       119.02
                                                                                    42.73
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                                   4270.47
                                                    -22.66
                                                                   190.86
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       119.02
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                                   3037.03
                                                    -22.64
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                    16 53 8
                                   4270.47
                                                    -22.66
                                                                   190.86
                    16 53 8 4270.47
23 27 40 3037.03
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                                                                                                                                 2437.0
                                                                                    42.72
                                                    -22.64
                                                                    97.10
       119.02
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 2840.7 SGR 876.4 SG3 148.5
RRT .8344 RRF .9678 RTF .9253
SGB 2972.8 R23 .3160 R13 .9394
SG1 2935.8 SG2 467.4 THA 14.82
                                                                                                                             ST 2009.4 SR 389.9 SS 680.6
    TOE 1.9644 TRA -.8158 TC3-1.5240 BAU
                                                         .7207
                                                                                                                             CRT .9802 CRS -.9985 CST -.9890
    RDE .3853 RRA .0359 RC3 -.6906 FAU .04301
                                                                                                                             LSA 2153.8 MSA 118.5 SSA
                                                                                                                                                                     6.A
    FOE 1.0993 FRA -.0340 FC3-1.1556 BSP 8966
                                                                                                                             ELI 2045.5 ELZ 75.9 ALF 10.78
    BDE 2.0018 BRA .8166 BC3 1.6732 FSP -497
                                                                                                                                         ARRIVAL DATE NOV 20 1967
                                                                            FLIGHT TIME 120,00
  HELIOCENTRIC CONIC
                                                                           DISTANCE 354.576
   RL 151.98 LAL .00 LOL 299.48 VL 27,418 GAL -9.15 AZL 81.71 MCA 167,77 SMA 133.42 ECC .21010 INC 8.2852 V1 29.315 RP 107.54 LAP 1.75 LOP 107.37 VP 38.386 GAP 4.72 AZP 98.10 TAL 220.02 TAP 27.79 RCA 105.38 APO 161.45 V2 35.239 RC 114.720 GL 38.45 GP -61.34 ZAL 132.18 ZAP 113.02 ETS 311.57 ZAE 110.10 ETE 220.39 ZAC 117.78 ETC 339.96 CLP-144.61
   PLANETOCENTRIC CONIC
                                                                                                      2.30 VHP 8.326 OPA -41.27 RAP 125.07 ECC 1.6476
    C3 39.347 VHL 6.273 DLA 46.40 RAL 171.08 RAD 6568.5 VEL 12.677 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
51.57 16 47 4 4425.00 -23.68 205.42 56.41 48.85 18 0 49 3825.0 -28.79 198.97
                   0 42 37 2983.46
16 47 4 4425.00
0 42 37 2983.46
16 47 4 4425.00
0 42 37 2983.46
                                                                                                                 1 32 21
                                                                                                                                  2383.5
                                                                                                                                                  -28.77
                                                     -23.66
                                                                     93.20
                                                                                    56.39
                                                                                                     48.84
                                                                                                     48.85 18 0 49
48.84 1 32 21
48.85 18 0 49
                                                                                                                                  3825.0
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                                                                                                                                                                 198.97
                                                     -23.68
                                                                    205.42
                                                                                     56.41
        51.57
                                                                                                                                                                   86.75
                                                                                                                                  2383.5
                                                                                                                                                 -28.77
                                                     -23.66
                                                                     93.20
                                                                                    56.39
                                                                                                                                  3825.0
                                                                                                                                                 -28.79
                                                                                                                                                                 198.97
                                                     -23.68
                                                                    205.42
                                                                                    56.41
        51.57
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                  2383.5
                                                                                                                                                  -28.77
                                                                                                                                                                   86.75
                                                     -23.66
                                                                     93.20
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RGT 3001.9 SGR 783.7 SG3 117.2
RRT .7619 RRF .9323 RTF .9333
SGB 3102.5 R23 .3103 R13 .9441
SG1 3062.3 SG2 497.6 THA 11.56
                                                                                                                             ST 2464.6 SR 383.9 SS 730.4
CRT .9637 CRS -.9897 CST -.9919
    TOE 2.6887 TRA -.5051 TC3-1.2684 BAU .7199
    RDE .4125 RRA .1794 RC3 - .5139 FAU .03217
                                                                                                                              LSA 2595.7 MSA 132.0 SSA
    FOE 1.1100 FRA .1159 FC3 -.7079 BSP 9361
BDE 2.7202 BRA .5360 BC3 1.3685 FSP -397
                                                                                                                              EL1 2492.2 EL2 101.3 ALF
                                                                                                                                         ARRIVAL DATE NOV 22 1967
                                                                            FLIGHT TIME 122.00
LAUNCH DATE JUL 23 1967
                                                                           DISTANCE 360.535
   HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 27.354 GAL -8.90 AZL 77.78 MCA 170.94 SMA 132.95 ECC .20954 INC12.2191 VI 29.315 RP 107.52 LAP 1.91 LOP 110.62 VP 38.345 GAP 5.00 AZP 102.07 TAL 218.66 TAP 29.60 RCA 105.09 APO 160.81 V2 35.244 RC 116.961 GL 48.79 GP -68.75 ZAL 122.48 ZAP 109.00 ETS 301.77 ZAE 102.86 ETE 215.69 ZAC 116.66 ETC 331.94 CLP-153.95
   PLANETOCENTRIC CONIC
    C3 57.808 VML 7.603 DLA 53.27 RAL 184.09 RAD 6569.1 VEL 13.385 PTH 2.45 VMP 10.523 DPA -47.09 RAP 117.75 ECC 1.9514
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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39.98 18 26 53
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39.98 18 26 53
39.97 2 53 20
                                                                                                                                               -27.47
                                                                                                                               3989.2
                                                                                  77.07
                                                                   219.54
        42.79
                  17 10 24
                                   4589.20
                                                     -21.44
                                                                                                                                                                  88.19
                                                                                                                                                 -27.46
                                                                                                                                  2411.5
                                                     -21.43
                                                                     93.55
                                                                                    77.05
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                                   3011.46
       137.21
                                                                                                                                                                 214.17
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       137.21
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       137.21
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 3167.7 SGR 594.0 SG3 87.6
RRT .4251 RRF .6777 RTF .9494
SGB 3222.9 R23 .2896 R13 .9535
SGI 3178.0 SG2 535.9 THA 4.69
    TOE 3.8493 TRA . .0963 TC3 -.8332 BAU . .6736

ROE .1160 RRA . .3494 RC3 -.2558 FAU .02134

FOE 1.0941 FRA .2646 FC3 -.3196 BSP 9727

BDE 3.8510 BRA .3624 BC3 .8716 FSP -300
                                                                                                                              ST 2901.2 SR 158.8 SS 755.3
                                                                                                                              CRT .5618 CRS -.6479 CST -.9941
                                                                                                                             LSA 2998.2 MSA 152.7 STA 2.6
EL1 2902.6 EL2 131.3 ALF 1.77
                                                                                                                                                                      2.6
                                                                                                                                         ARRIVAL DATE NOV 24 1967
                                                                            FLIGHT TIME 124.00
LAUNCH DATE JUL 23 1967
                                                                            DISTANCE 366.389
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.290 GAL -8.62 AZL 69.77 HCA 174.01 SHA 132.48 ECC .20884 INC20.2322 VI 29.315 RP 107.51 LAP 2.07 LOP 113.86 VP 38.304 GAP 5.25 AZP 110.13 TAL 217.22 TAP 31.24 RCA 104.82 APO 160.15 V2 35.248 RC 119.197 GL 58.97 GP -76.41 ZAL 111.22 ZAP 103.58 ETS 278.60 ZAE 92.82 ETE 197.04 ZAC 116.21 ETC 309.53 CLP 178.53
   PLANETOCENTRIC CONIC
    C3 118.588 VHL 10.890 OLA 57.10 RAL 203.61 RAD 6570.2 VEL 15.489 PTH 2.76 VHP 15.222 OPA -52.27 RAP 103.74 ECC 2.9517
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
38.09 18 15 3 4778.90 -13.47 230.18 104.70 33.95 19 34 42 4178.9 -20.06 225.85
        38.09 18 15 3 4778.90
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                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2767.8 SR 1014.1 SS 761.5
CRT -.9833 CRS .9654 CST -.9967
LSA 3038.6 MSA 189.0 SSA 1.4
                                                                        SGT 3152.1 SGR 1018.2 SG3 63.9
RRT -.8173 RRF -.6964 RTF .9818
     TOE 5.1965 TRA 1.4799 TC3 -.2923 BAU
    ROE-1.9268 RRA .0927 RC3 -.0144 FAU .01010
FDE 1.0696 FRA .4676 FC3 -.0738 BSP 10028
BOE 5.5422 BRA 1.4828 BC3 .2926 FSP -216
                                                                       SGB 3312.5 R23 -.2301 R13 -.9720
                                                                                                                              EL1 2942.6 EL2 173.4 ALF 160.11
                                                                         SG1 3263.6 SG2 566.7 THA 164.74
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LAUNCH DATE JUL 23 1967
                                                                                  FLIGHT TIME 126.00
                                                                                                                                                    ARRIVAL DATE NOV 26 1967
                                                                                  DISTANCE 371.877
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.225 GAL -8.26 AZL 46.95 MCA 176.75 SMA 132.02 ECC .20742 INC43.0547 VI 29.315 RP 107.50 LAP 2.22 LOP 117.11 VP 38.261 GAP 5.39 AZP 133.01 TAL 215.58 TAP 32.33 RCA 104.64 APO 159.40 V2 35.252 RC 121.426 GL 60.67 GP -71.06 ZAL 100.28 ZAP 97.30 ETS 211.97 ZAE 75.13 ETE 134.32 ZAC 119.31 ETC 240.21 CLP 113.03
   PLANETOCENTRIC CONIC
    C3 445.187 VHL 21.099 DLA 50.56 RAL 220.23 RAD 6572.2 VEL 23.801 PTH 3.30 VHP 28.764 DPA -50.32 RAP 76.12 ECC 8.3266 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 46.19 19 44 58 4917.06 -2.48 230.56 128.21 39.49 21 6 55 4317.1 -8.63 225.85
                                                                                      128.21
         46.19 19 44 58 4917.06
153.61 4 16 54 3366.61
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19 44 58 4917.06
4 16 54 3386.61
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                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 311.5 SR 2357.0 SS 940.0

CRT -.7675 CRS .9951 CST -.8268

LSA 2547.6 MSA 213.6 SSA 1.2
                                                                             SCT 871.5 SCR 3129.1 SC3 50.1
RRT -.7883 RRF -.9862 RTF .8775
SCB 3248.2 R23 -.1261 R13 -.9916
     TOE .6554 TRA 1.9940 TC3 -.0089 BAU
                                                              .8085
    ROE-8.3720 RRA-4.8486 RC3 -.1355 FAU-.01123
FOE 1.3009 FRA 1.0542 FC3 .0218 BSP 9787
BDE 8.3976 BRA 5.2426 BC3 .1358 FSP -162
                                                                             SG1 3205.7 SG2 523.4 THA 102.73
                                                                                                                                       EL1 2369.2 EL2 198.7 ALF 95.83
                                                                                  FLIGHT TIME 128.00
                                                                                                                                                    ARRIVAL DATE NOV 28 1967
                                                                                  DISTANCE 360.449
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.160 GAL -8.52 ATL 159.69 MCA 182.51 SMA 131.56 ECC .21336 INC69.6942 V1 29.315
RP 107.49 LAP 2.36 LOP 120.35 VP 38.217 GAP 6.41 AZP 20.32 TAL 215.46 TAP 37.97 RCA 103.49 APO 159.62 V2 35.255
RC 123.648 GL -51.05 GP 59.04 ZAL 96.87 ZAP 96.06 ETS 174.97 ZAE 60.92 ETE 248.83 ZAC 98.80 ETC 137.30 CLP 101.85
   PLANETOCENTRIC CONIC
    C31049.348 VHL 32.394 DLA -52.45 RAL 168.04 RAD 6573.0 VEL 34.215 PTH
                                                                                                               3.51 VHP 40.836 DPA
                                                                                                                                              64.50 RAP 356.36 ECC18.2696
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43.81 4 11 15 2345.41 -.45 65.54 78.37 142.45 4 50 20 1745.4 5.88 61.07 136.19 12 54 12 780.68 -.44 301.00 78.39 142.45 13 7 12 180.7 5.90 296.53
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142.45 4 50 20
                    4 11 15 2345.41
12 54 12 780.68
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                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 500.8 SR 2488.7 SS 1807.6

CRT -.9652 CRS -.9999 CST ..9613

LSA 3130.0 MSA 158.6 SSA 1.7

EL1 2555.6 EL2 152.9 ALF 103.16
                                                                            SGT 1030.0 SGR 2879.6 SG3 49.7
RRT -.8631 RRF .9983 RTF -.8360
SGB 3058.2 R23 -.1027 R13 .9943
    TOE 3.1838 TRA 2.3976 TC3 -.0786 BAU 2.9418
     RO-14.0113 RRA-2.5880 RC3 .1944 FAU-.04296
    FDE-2.8879 FRA -.4479 FC3 .0354 BSP 8964
BDE14.3684 BRA 3.5279 BC3 .2097 FSP -151
                                                                            SG1 3017.7 SG2 496.4 THA 107.65
                                                                                                                                                   ARRIVAL DATE NOV 30 1967
                                                                                 FLIGHT TIME 130.00
LAUNCH DATE JUL 23 1967
                                                                                DISTANCE 385.459
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.095 GAL -8.05 AZL 121.21 HCA 184.81 SMA 131.10 ECC .21098 INC31.2062 V1 29.315 RP 107.48 LAP 2.49 LOP 123.60 VP 38.173 GAP 6.41 AZP 58.88 TAL 213.56 TAP 38.38 RCA 103.44 APO 158.75 V2 35.257 RC 125.861 GL -62.16 GP 75.45 ZAL 103.43 ZAP 103.14 ETS 129.36 ZAE 86.09 ETE 206.08 ZAC 89.96 ETC 90.79 CLP 154.82
   PLANETOCENTRIC CONIC
     C3 247.085 VHL 15.719 DLA -54.11 RAL 142.81 RAD 6571.4 VEL 19.194 PTH 3.09 VHP 18.887 DPA 80.09 RAP 276.29 ECC 5.0664
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 41.75 2 24 32 2237.66 6.21 62.65 48.28 143.87 3 1 49 1637.7 12.64 58.24 138.25 11 19 38 646.18 6.23 295.17 48.30 143.87 11 30 24 46.2 12.66 290.77 41.75 2 24 32 2237.66 6.21 62.65 48.28 143.87 3 1 49 1637.7 12.64 58.24
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                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 1812.9 SGR 3079.2 SG3 63.5
RRT .9493 RRF .9721 RTF .9959
SGB 3573.2 R23 -.1536 R13 .9876
SGI 3538.7 SG2 495.8 THA 60.15
                                                                                                                                      ST 1524.7 SR 2020.3 SS 950.4
CRT .9862 CRS -.9921 CST -.9992
     TOE-4.0970 TRA-1.6499 TC3 -.0198 BAU .1614
    RDE-5.1686 RRA-3.9103 RC3 .0447 FAU .00293 FDE-1.5505 FRA -.7539 FC3 -.0103 BSP 10958
                                                                                                                                      LSA 2695.4 MSA 210.2 SSA 1.1
EL1 2523.0 EL2 202.0 ALF 53.06
    BDE 6.5954 BRA 4.2441 BC3 .0489 FSP
                                                             -201
                                                                                                                                                    ARRIVAL DATE DEC 2 1967
LAUNCH DATE JUL 23 1967
                                                                                  FLIGHT TIME 132.00
                                                                                 DISTANCE 391.174
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 27.029 GAL -7.73 AZL 109.63 MCA 187.82 SMA 130.64 ECC .21043 INC19.6272 V1 29.315 RP 107.48 LAP 2.62 LOP 126.85 VP 38.128 GAP 6.61 AZP 70.54 TAL 211.98 TAP 39.80 RCA 103.15 APO 158.13 V2 35.258 RC 128.066 GL -59.16 GP 68.22 ZAL 109.44 ZAP 111.32 ETS 82.49 ZAE 98.41 ETE 161.74 ZAC 89.31 ETC 44.13 CLP-168.43
   PLANETOCENTRIC CONIC
    C3 109.804 VHL 10.479 DLA -48.49 RAL 139.40 RAD 6570.1 VEL 15.203 PTH 2.73 VHP 12.128 DPA 73.94 RAP 216.03 ECC 2.8071
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
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                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 3612.8 SGR 878.0 SG3 87.3
RRT .8261 RRF .6936 RTF .9775
SGB 3717.9 R23 -.2283 R13 .9717
SG1 3686.2 SG2 485.0 THA 11.55
                                                                                                                                       ST 2300.7 SR 268.6 S5 782.4
CRT .5558 CRS -.4563 CST -.9933
     TOE-3.9109 TRA-3.4281 TC3 -.3312 BAU
                                                              .4867
     RDE -. 1032 RRA-1.0613 RC3 -. 0162 FAU .01764
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LSA 2433.0 MSA 240.4 SSA 1.8 EL1 2305.5 EL2 222.9 ALF 3.75

FOE-1.3189 FRA -.7819 FC3 -.1391 BSP 11374 BOE 3.9122 BRA 3.5886 BC3 .3316 FSP -278

ARRIVAL DATE DEC 4 1967

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LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 397.018
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.964 GAL -7.42 AZL 104.54 MCA 190.96 SMA 130.19 ECC .21031 INC14.5442 V1 29.315 RP 107.48 LAP 2.74 LOP 130.10 VP 38.082 GAP 6.85 AZP 75.71 TAL 210.46 TAP 41.42 RCA 102.81 APO 157.56 V2 35.259 RC 130.261 GL -54.52 GP 58.91 TAL 113.86 ZAP 118.96 ETS 68.59 ZAE 106.62 ETE 151.50 ZAC 90.03 ETC 30.45 CLP-159.66
   PLANETOCENTRIC CONIC
    C3 67.994 VHL 8.246 DLA -43.51 RAL 140.73 RAD 6569.3 VEL 13.760 PTH 2.51 VHP 9.392 DPA 65.18 RAP 197.97 ECC 2.1190
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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10 24 57 5800.99
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                   10 24 57
                                  5800.99
                                                    16.57
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2170.6 SR 356.8 S5 758.7
CRT -.7935 CRS .8901 CST -.9836
                                                                     SGT 3789.3 SGR 447.4 SG3 114.1
RRT .0048 RRF -.2776 RTF .9551
SGB 3815.6 R23 -.2823 R13 .9550
    TDE-2.8421 TRA-3.1311 TC3 -.7323 BAU .6675
    RDE .5004 RRA -.2789 RC3 .0537 FAU .02798
                                                                                                                          LSA 2313.8 MSA 246.5 SSA 2.6
   FOE-1.3047 FRA -.7935 FC3 -.3562 BSP 11675
BOE 2.8858 BRA 3.1435 BC3 .7343 FSP -365
                                                                                                                          EL1 2189.1 ELZ 215.3 ALF 172.49
                                                                                                           .03
                                                                     SG1 3789.3 SGZ 447.4 THA
                                                                                                                                      ARRIVAL DATE DEC 6 1967
                                                                          FLIGHT TIME 136.00
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 402.896
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.898 GAL -7.11 A7L 101.72 MCA 194.15 SMA 129.74 ECC .21040 INC11.7187 V1 29.315 RP 107.48 LAP 2.85 LOP 133.35 VP 38.035 GAP 7.10 A7P 78.63 TAL 208.93 TAP 43.08 RCA 102.44 APO 157.03 V2 35.259 RC 132.447 GL -50.31 GP 50.83 ZAL 116.86 ZAP 125.64 ETS 62.66 ZAE 112.55 ETE 149.97 ZAC 90.67 ETC 24.83 CLP-157.28
  PLANETOCENTRIC CONIC
                                                                                                                                 57.26 RAP 190.44 ECC 1.8168
    C3 49.631 VHL 7.045 OLA -39.63 RAL 143.02 RAD 6568.8 VEL 13.076 PTH
                                                                                                    2.39 VHP 8.054 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
61.03 3 35 44 1735.07 18.41 27.92 29.30 125.74 4 4 39 1135.1 22.95 21.29
                   3 35 44 1735.07
10 10 6 5790.14
3 35 44 1735.07
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3 35 44 1735.07
10 10 6 5790.14
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125.74 4 4 39
125.73 11 46 36
125.74 4 4 39
125.74 4 4 39
125.73 11 46 36
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       115.97
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2077.6 SR 419.5 SS 755.5
CRT -.8710 CRS .9573 CST -.9758
                                                                      SGT 3882.2 SGR 454.7 SG3 138.5
RRT -.4276 RRF -.6908 RTF .9398
    TDE-2.3013 TRA-2.8433 TC3-1.1340 BAU .7558
    ROE .5147 RRA -.0860 RC3 .1084 FAU .03597
FOE-1.3001 FRA -.7743 FC3 -.6274 BSP 12020
                                                                      SGB 3908.7 R23 .3146 R13 -.9415
SGI 3887.1 SGZ 410.5 THA 177.10
                                                                                                                          LSA 2236.4 MSA 248.8 SSA
                                                                                                                           EL1 2109.8 EL2 203.0 ALF 169.93
    BOE 2.3581 BRA 2.8446 BC3 1.1391 FSP
                                                                                                                                      ARRIVAL DATE DEC 8 1967
                                                                          FLIGHT TIME 138.00
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 408.783
    RL 151.98 LAL .00 LOL 299.48 VL 26.833 GAL -6.80 AZL 99.92 MCA 197.36 SMA 129.29 ECC .21065 INC 9.9189 V1 29.315 RP 107.48 LAP 2.95 LOP 136.60 VP 37.988 GAP 7.35 AZP 80.52 TAL 207.40 TAP 44.76 RCA 102.06 APO 156.53 V2 35.258 RC 134.624 GL -46.78 GP 44.13 ZAL 118.76 ZAP 131.29 ETS 59.00 ZAE 116.87 ETE 150.99 ZAC 90.91 ETC 21.54 CLP-156.83
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 39.661 VHL 6.298 DLA -36.68 RAL 145.50 RAD 6568.5 VEL 12.690 PTH 2.31 VHP 7.333 DPA 50.45 RAP 186.79 ECC 1.6927
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2019.7 SR 416.6 SS 750.7
CRT -.8857 CRS .9726 CST -.9694
LSA 2180.4 MSA 249.7 SSA 4.5
                                                                      SGT 3976.6 SGR 451.0 SG3 157.7
     TOE-1.9905 TRA-2.6226 TC3-1.5236 BAU .8110
    RDE .4577 RRA -.0302 RC3 .1347 FAU .04168
FDE-1.2733 FRA -.7242 FC3 -.9098 BSP 12356
BDE 2.0424 BRA 2.6228 BC3 1.5295 FSP -509
                                                                     RRT -.5453 RRF -.7883 RTF .9289
SGB 4002.1 R23 .3306 R13 -.9309
SG1 3984.3 SG2 377.3 THA 176.43
                                                                                                                           EL1 2053.5 EL2 190.2 ALF 169.56
                                                                                                                                      ARRIVAL DATE DEC 10 1967
                                                                          FLIGHT TIME 140.00
 LAUNCH DATE JUL 23 1967
                                                                          DISTANCE 414.667
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 26.768 GAL -6.48 AZL 98.67 MCA 200.59 SMA 128.86 ECC .21104 INC 8.6675 V1 29.315
RP 107.48 LAP 3.04 LOP 139.85 VP 37.941 GAP 7.60 AZP 81.88 TAL 205.85 TAP 46.44 RCA 101.66 APO 156.05 V2 35.256
RC 136.791 GL -43.86 GP 38.65 ZAL 119.80 ZAP 136.03 ETS 56.27 ZAE 120.02 ETE 152.86 ZAC 90.70 ETC 19.23 CLP-157.14
   PLANETOCENTRIC CONIC
     C3 33.457 VHL 5.784 DLA -34.46 RAL 148.01 RAD 6568.3 VEL 12.443 PTH 2.25 VHP 6.926 DPA 44.66 RAP 185.02 ECC 1.5506
                                                                INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT 69,48 4 40 5 1504.80 19.64
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                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1981.9 SR 398.0 SS 741.4
CRT -.8903 CRS .9792 CST -.9640
                                                                      SGT 4069.9 SGR 429.5 SG3 171.3
RRT -.5784 RRF -.8092 RTF .9208
SGB 4092.5 R23 .3342 R13 -.9226
     TOE-1.7917 TRA-2.4408 TC3-1.8969 BAU .8507
     ROE .4018 RRA -.0136 RC3 .1389 FAU .04531
F0E-1.2274 FRA -.6516 FC3-1.1725 BSP 12643
BOE 1.8362 BRA 2.4408 BC3 1.9019 FSP -554
                                                                                                                           LSA 2138.6 MSA 249.7 SSA 5.5
                                                                                                                           EL1 2013.6 EL2 178.4 ALF 169.78
                                                                       SG1 4077.5 SG2 349.7 THA 176.48
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FLIGHT TIME 134.00

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LAUNCH DATE JUL 23 1967
                                                                                  FLIGHT TIME 142.00
                                                                                                                                                    ARRIVAL DATE DEC 12 1967
   HELIOCENTRIC CONIC
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     RL 151.98 LAL .00 LOL 299.48 VL 26.703 GAL -6.15 A7L 97.74 MCA 203.81 SMA 128.42 ECC .21155 INC 7.7427 V1 29.315 RP 107.49 LAP 3.12 LOP 143.10 VP 37.893 GAP 7.86 A7P 82.91 TAL 204.29 TAP 48.11 RCA 101.26 APO 155.59 V2 35.254 RC 138.949 GL -41.44 GP 34.16 7AL 120.17 7AP 140.00 ETS 54.05 7AE L22.31 ETE 154.95 7AC 90.11 ETC 17.43 CLP-157.79
    PLANETOCENTRIC CONIC
     C3 29.214 VHL 5.405 DLA -32.82 RAL 150.53 RAD 6568.2 VEL 12.271 PTH 2.21 VHP 6.697 DPA 39.73 RAP 184.32 ECC 1.4808 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       26.50
                       5 9 49 1410.41
9 35 56 5847.95
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9 35 56 5847.95
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MID-COURSE EXECUTION ACCURACY OF
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                                        733.37
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       110.00
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                                                                                                                                            4973.0
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                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 4164.1 SCR 404.4 SC3 180.3

RRT -.5801 RRF -.8003 RTF ..9144

SCB 4183.7 R23 .3272 R13 -.9158.

SCI 4170.7 SC2 328.8 THA 176.76
                                                                                                                                       ST 1961.3 SR 379.4 $5 730.4

CRT -.8936 CRS .9837 CST -.9596

LSA 2112.4 MSA 248.8 SSA 6.6
     TOE-1.6598 TRA-2.2818 TC3-2.2583 BAU .8834
     ROE .3579 RRA -.0086 RC3 .1290 FAU .04733
     FOE-1.1727 FRA -.5667 FC3-1.4028 BSP 12941
     BOE 1.6979 BRA 2.2818 BC3 2.2619 FSP -584
                                                                                                                                       EL1 1990.6 EL2 167.8 ALF 170.12
LAUNCH DATE JUL 23 1967
                                                                                  FLIGHT TIME 144.00
                                                                                                                                                    ARRIVAL DATE DEC 14 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 426.411
    RL 151.38 LAL .00 LOL 299.48 VL 26.639 GAL -5.82 AZL 97.03 MCA 207.05 SMA 128.00 ECC .21220 INC 7.0277 V1 29.315 RP 107.50 LAP 3.19 LOP 146.35 VP 37.845 GAP 8.11 AZP 83.73 TAL 202.72 TAP 49.77 RCA 100.84 APO 155.16 V2 35.251 RC 141.095 GL -39.39 GP 30.46 ZAL 119.99 ZAP 143.38 ETS 52.20 ZAE 123.99 ETE 157.00 ZAC 89.21 ETC 15.98 CLP-158.60
    C3 26.110 VML 5.110 DLA -31.63 RAL 153.07 RAD 6568.1 VEL 12.144 PTH 2.18 VMP 6.573 DPA 35.50 RAP 184.30 ECC 1.4297 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.28 5 37 21 1328.26 19.98 356.70 26.87 115.04 5 59 30 728.3 23.19 349.23 104.72 9 28 41 5874.19 20.00 279.72 26.87 115.03 11 6 35 5274.2 23.20 272.25 75.28 5 37 21 1328.26 19.98 356.70 26.87 115.04 5 59 30 728.3 23.19 349.23 104.72 9 28 41 5874.19 20.00 279.72 26.87 115.03 11 6 35 5274.2 23.20 272.25 110.00 8 23 12 790.04 10.89 312.19 21.69 122.60 8 36 22 100.0
   PLANETOCENTRIC CONIC
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122.60 8 36 22
107.84 13 13 2
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                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             SCT 4308.9 SCR 389.7 SC3 190.1

RRT -.5858 RRF -.7855 RTF .9128

SCB 4326.5 R23 .3059 R13 -.9140

SCI 4315.0 SC2 315.4 THA 176.95
                                                                                                                                      ST 1981.0 SR 370.4 SS 734.1
CRT -.9015 CRS .9876 CST -.9578
LSA 2130.6 MSA 247.1 SSA 7.8
     TOE-1.5932 TRA-2.1576 TC3-2.6442 BAU .9239
     ROE .3303 RRA -.0015 RC3 .1186 FAU .04919
     FOE-1.1383 FRA -.4994 FC3-1.6310 BSP 13774
     BOF 1.6271 BRA 2.1576 BC3 2.6469 FSP -646
                                                                                                                                       EL1 2009.1 EL2 158.1 ALF 170.37
                                                                                 FLIGHT TIME 146.00
                                                                                                                                                   ARRIVAL DATE DEC 16 1967
LAUNCH DATE JUL 23 1967
                                                                                 DISTANCE 432.274
   HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.575 GAL -5.47 AZL 96.46 MCA 210.28 SMA 127.58 ECC .21296 INC 6.4554 V1 29.315 RP 107.51 LAP 3.25 LOP 149.60 VP 37.796 GAP 8.36 AZP 84.42 TAL 201.14 TAP 51.42 RCA 100.41 APO 154.75 V2 35.247 RC 143.232 GL -37.64 GP 27.40 ZAL 119.37 ZAP 146.26 ETS 50.64 ZAE 125.23 ETE 158.89 ZAC 88.04 ETC 14.77 CLP-159.49
   PLANETOCENTRIC CONIC
    C3 23.722 VHL 4.871 DLA -30.81 RAL 155.67 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.518 DPA 31.83 RAP 184.75 ECC 1.3904
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.80 9 34 44
122.86 8 32 26
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   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            SGT 4316.9 SGR 362.3 SG3 186.1
RRT -.5325 RRF -.7306 RTF .9025
SGB 4332.0 R23 .2925 R13 -.9034
SG1 4321.2 SG2 306.4 THA 177.43
                                                                                                                                      ST 1944.5 SR 352.6 95 700.9
CRT -.9040 CRS .9908 CST -.9528
    TOE-1.4995 TRA-1.9806 TC3-2.9335 BAU .9307
    ROE .2997 RRA -.0069 RC3 .0850 FAU .04754
FDE-1.0491 FRA -.3731 FC3-1.7351 BSP 13201
BDE 1.5291 BRA 1.9806 BC3 2.9347 FSP -584
                                                                                                                                      LSA 2082.6 MSA 243.8 SSA
                                                                                                                                                                                 8.9
                                                                                                                                      ELI 1970.6 EL2 148.7 ALF 170.64
LAUNCH DATE JUL 23 1967
                                                                                 FLIGHT TIME 148.00
                                                                                                                                                   ARRIVAL DATE DEC 18 1967
                                                                                 DISTANCE 438.119
    RL 151.98 LAL .00 LOL 299.48 VL 26.511 GAL -5.12 AZL 95.98 HCA 213.52 SMA 127.16 ECC .21387 INC 5.9841 V1 29.315 RP 107.53 LAP 3.30 LOP 152.85 VP 37.747 GAP 8.61 AZP 85.01 TAL 199.54 TAP 53.06 RCA 99.97 APO 154.36 VZ 35.243 RC 145.356 GL -36.11 GP 24.83 ZAL 118.36 ZAP 148.77 ETS 49.34 ZAE 126.16 ETE 160.60 ZAC 86.67 ETC 13.74 CLP-160.42
   PLANETOCENTRIC CONIC
    C3 21.823 VHL 4.671 DLA -30.27 RAL 158.34 RAD 6567.9 VEL 11.967 PTH 2.13 VHP 6.508 DPA 28.60 RAP 185.52 ECC 1.3591
    LNCH AZMTH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
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                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 4421.1 SGR 354.2 SG3 188.4

RRT -.5124 RRF -.6905 RTF .9002

SGB 4435.2 R23 .2644 R13 -.9009

SG1 4424.8 SG2 303.9 THA 177.64
                                                                                                                                      ST 1969.5 SR 349.1 SS 697.5
CRT -.9144 CRS .9939 CST -.9520
LSA 2104.7 MSA 239.7 SSA 10.1
    TOE-1.4701 TRA-1.8472 TC3-3.2838 BAU
                                                             .9582
    ROE .2846 RRA -.0028 RC3 .0639 FAU .04723
    FOE-1.0054 FRA -.2912 FC3-1.8738 BSP 13640
BOE 1.4974 BRA 1.8472 BC3 3.2845 FSP -601
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ELI 1995.4 EL2 139.5 ALF 170.75

ARRIVAL DATE DEC 20 1967

LAUNCH DATE JUL 23 1967

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HELIOCENTRIC CONIC
                                                                        DISTANCE 443.953
    RL 151.98 LAL .00 LOL 299.48 VL 26.448 GAL -4.75 A7L 95.59 MCA 216.75 SMA 126.76 ECC .21492 INC 5.5872 V1 29.315 RP 107.54 LAP 3.34 LOP 156.10 VP 37.698 GAP 8.87 A7P 85.52 TAL 197.93 TAP 54.69 RCA 99.52 APO 154.00 V2 35.237 RC 147.469 GL -34.75 GP 22.67 TAL 117.03 TAP 150.97 ETS 48.28 TAE 126.85 ETE 162.12 TAC 85.14 ETC 12.85 CLP-161.37
   PLANETOCENTRIC CONIC
    C3 20.273 VHL 4.503 DLA -29.97 RAL 161.10 RAD 6567.8 VEL 11.902 PTH 2.11 VHP 6.530 DPA 25.72 RAP 186.53 ECC 1.3336
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       79.75
                     6 41 44 1164.32
                                                   20.63
                                                                344.70
                                                                               30.32
                                                                                             112.23
                                                                                                           7 1 9
                                                                                                                             564.3
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                                                                                              112.22 9 38 50
112.23 7 1 9
112.22 9 38 50
122.91 8 41 6
                     9 28 24
                                                                 305.17
                                                                                30.33
                                                                                                                              26.9
                                                                                                                                            23.48
                                                                                                                                                         297.52
       100.25
                                   626.89
                                                   20.64
                   6 41 44 1164.32
9 28 24 626.89
        79.75
                                                   20.63
                                                                 344.70
                                                                                30.32
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                                                                                                                                            23.47
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                                                                305.17
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                     8 27 26
                                   819.67
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                                                                                                                                           14.07
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       110.00
                                                    9.80
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                                                                                             101.78 14 10 20
                  12 41 52 5307.5<del>0</del>
                                                                                34.31
                                                                                                                          4707.6
                                                                                                                                           33.61
                                                                                                                                                        232.10
      110.00
                                                   32.32
                                                                241.10
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 4507.0 SGR 349.7 SG3 188.1
RRT -.4854 RRF -.6441 RTF .8972
SGB 4520.5 R23 .2363 R13 -.8978
SGI 4510.2 SG2 305.5 THA 177.83
                                                                                                                       ST 1997.4 SR 347.7 SS 691.7
CRT -.9257 CRS .9965 CST -.9517
    TOE-1.4522 TRA-1.7058 TC3-3.6188 BAU .9808
    RDE .2733 RRA .0007 RC3 .0409 FAU .04621
FOE -.9598 FRA -.2055 FC3-1.9734 89P 13919
                                                                                                                       LSA 2129.3 MSA 234.3 SSA 11.4
                                                                                                                       EL1 2023.3 EL2 129.9 ALF 170.81
    BOE 1.4777 BRA 1.7058 BC3 3.6190 FSP -599
                                                                                                                                   ARRIVAL DATE DEC 22 1967
LAUNCH DATE JUL 23 1967
                                                                        FLIGHT TIME 152.00
                                                                        DISTANCE 449.774
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.385 GAL -4.38 AZL 95.25 MCA 219.99 SMA 126.36 ECC .21611 INC 5.2462 V1 29.315 RP 107.56 LAP 3.37 LOP 159.35 VP 37.649 GAP 9.12 AZP 85.98 TAL 196.31 TAP 56.30 RCA 99.05 APO 153.67 V2 35.231 RC 149.570 GL -33.51 GP 20.84 ZAL 115.39 ZAP 152.92 ETS 47.43 ZAE 127.38 ETE 163.47 ZAC 83.48 ETC 12.09 CLP-162.31
  PLANETOCENTRIC CONIC
    C3 18.988 VHL 4.358 DLA -29.87 RAL 163.99 RAD 6567.8 VEL 11.848 PTH
                                                                                                  2.10 VHP 6.576 DPA 23.12 RAP 187.73 ECC 1.3125
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                         23,73
                  6 55 48 1140.64
                                                   20.96
                                                                343.08
                                                                                32.13
                                                                                             111.78 7 14 49
                                                                                                                            540.6
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       80.09
                    9 37 20
                                                                 304,77
                                                                                                            9 47 40
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                                                                                                                                            23.74
                                                                                                                                                         297.07
        99.91
                                   619.52
                                                   20.97
                                                                                32.13
                                                                                               111.76
                                                                                              111.76 9 47 40
112.59 9 38 11
110.95 11 26 22
122.81 8 50 54
100.91 14 23 1
                                                                                                                                            23.00
                                                                                                                                                          299.16
                    9 27 19
                                   651.51
                                                   20.11
                                                                 306.77
                                                                                31.76
                                                                                                                               51.5
                    9 48 30
                                                                                                                            5271.9
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                                                                                                                                                         272.59
       100.00
                                5871.93
                                                   21.82
                                                                280.38
                                                                                32.49
                   8 37 25
                                  809.28
                                                   10.19
                                                                                26.37
                                                                                                                            209.3
                                                                                                                                            14.44
                                                                                                                                                          306.72
      110.00
                  0 07 25
12 54 54
                                                                 313.24
                                                                239.55
      110.00
                                  5286.92
                                                   32.60
                                                                                35.94
                                                                                                                            4686.9
                                                                                                                                            33.76
                                                                                                                                                         230.51
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 4592.2 SGR 349.9 SG3 187.1
RRT -.4608 RRF -.5990 RTF .8950
                                                                                                                      ST 2036.3 SR 349.5 SS 688.4
CRT -,9380 CRS .9983 CST -.9524
    TOE-1.4493 TRA-1.5616 TC3-3.9500 BAU 1.0027
    ROE .2658 RRA .0046 RC3 .0193 FAU .04495
    FOE -.9195 FRA -.1241 FC3-2.0495 BSP 14208
BDE 1.4735 BRA 1.5616 BC3 3.9501 FSP -596
                                                                    SGB 4605.5 R23 .2082 R13 -.8955
SGI 4595.1 SGZ 310.4 THA 177.98
                                                                                                                       LSA 2165.8 MSA 227.6 SSA 12.6
                                                                                                                       EL1 2062.6 EL2 119.6 ALF 170.82
                                                                        FLIGHT TIME 154.00
                                                                                                                                  ARRIVAL DATE DEC 24 1967
LAUNCH DATE JUL 23 1967
                                                                       DISTANCE 455.581
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.323 GAL -3.99 AZL 94.95 MCA 223.23 SMA 125.97 ECC .21746 INC 4.9484 VI 29.315 RP 107.58 LAP 3.39 LOP 162.60 VP 37.599 GAP 9.38 AZP 86.39 TAL 194.68 TAP 57.91 RCA 98.57 APO 153.36 V2 35.225 RC 151.657 GL -32.35 GP 19.26 ZAL 113.48 ZAP 154.68 ETS 46.79 ZAE 127.79 ETE 164.64 ZAC 81.70 ETC 11.42 CLP-163.25
  PLANETOCENTRIC CONIC
    C3 17.915 VHL 4.233 OLA -29.92 RAL 167.01 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 6.640 OPA 20.75 RAP 189.08 ECC 1.2948
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG BOTH RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            111.49 7 25 21
111.47 10 0 46
                                                                            34.24
                   7 6 30 1131.32
                                                                342.55
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        79.91
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                                                                                34.24
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                    9 50 44
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                                                                303.59
      100.09
                                   601.58
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                    7 6 30
                                                   21.34
                                                                342.55
                                                                                34.24
       79.91
                                  1131.32
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122.63 9 3 28
100.44 14 34 5
                                                   21.35
                                                                                                                                           24.08
                                                                                                                                                         295.86
                   9 50 44
                                                                303.59
                                                                                34.24
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                                   601.58
      100.09
                                                   10.79
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                                                                                                                                                         305.80
                    8 50 15
                                                                312.35
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      110.00
                                   792.98
                                                                                                                           4676.0
                                                                                                                                            33.83
                                                                                                                                                         229.66
                                                                                37.89
      110.00
                  13 6 9
                                 5275.96
                                                   32.74
                                                                238.72
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SCT 4673.3 SCR 353.7 SC3 185.3
RRT -.4392 RRF -.5572 RTF .8933
SCB 4686.7 R23 .1814 R13 -.8938
SCI 4675.9 SCZ 317.6 THA 178.09
                                                                                                                      ST 2083.6 SR 353.5 SS 686.4

CRT - .9504 CRS .9990 CST - .9538

LSA 2211.1 MSA 219.8 SSA 13.9
    TOE-1.4573 TRA-1.4122 TC3-4.2729 BAU 1.0234
   RDE .2611 RRA .0088 RC3 -.0005 FAU .04350
FDE -.8828 FRA -.0464 FC3-2.1020 85P 14482
BDE 1.4806 BRA 1.4122 BC3 4.2729 FSP -591
                                                                                                                       EL1 2110.6 EL2 108.5 ALF 170.82
                                                                                                                                  ARRIVAL DATE DEC 26 1967
                                                                        FLIGHT TIME 156.00
LAUNCH DATE JUL 23 1967
                                                                        DISTANCE 461.372
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 26.262 GAL -3.60 A7L 94.68 HCA 226.46 SMA 125.58 ECC .21897 INC 4.6844 VI 29.315 RP 107.60 LAP 3.39 LOP 165.85 VP 37.549 GAP 9.64 A7P 86.77 TAL 193.05 TAP 59.51 RCA 98.08 APO 153.08 V2 35.217 RC 153.730 GL -31.26 GP 17.90 ZAL 111.32 ZAP 156.28 ETS 46.35 ZAE 128.11 ETE 165.68 ZAC 79.84 ETC 10.84 CLP-164.17
  PLANETOCENTRIC CONIC
   C3 17.020 VHL 4.126 DLA -30.10 RAL 170.18 RAO 6567.7 VEL 11.764 PTH 2.08 VHP 6.719 DPA 18.57 RAP 190.55 ECC 1.2801
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             111.33 7 33 42
111.32 11 45 28
                                  1133.26
                                                                                                            7 33 42
                   7 14 49
10 7 44
                                                   21.76
                                                                 342.87
                                                                                36.65
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                                                                                                                                                         335.10
       79.33
                                                   21.77
                                                                279.76
                                                                                36.66
                                                                                                                            5263.9
                                                                                                                                                         271.99
      100.67
                                  5863.92
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                     7 14 49
                                  1133.26
                                                   21.76
                                                                 342.87
                                                                                              111.33
                                                                                                                             533.3
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        79.33
                                                                                36.65
                                                                                              111.32 11 45 28
122.40 9 18 29
100.31 14 43 59
                   10 7 44
                                                   21.77
                                                                279.76
                                                                                36.66
                                                                                                                            5263.9
                                                                                                                                            24.47
                                                                                                                                                         271.99
      100.67
                                  5863.92
                    9 5 37
                                                                                                                                                         304.62
      110.00
                                   772.04
                                                   11.55
                                                                 311.22
                                                                                31.27
                                                                                                                             172.0
                                                                                                                                            15.75
                   13 16 6
                                                                238.51
                                                                                                                          4673.1
      110.00
                                  5273.14
                                                   32.77
                                                                                40.16
                                                                                                                                                         229.44
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                   SGT 4744.1 SGR 359.8 SG3 182.6
RRT -.4197 RRF -.5187 RTF .8916
SGB 4757.7 R23 .1573 R13 -.8919
                                                                                                                  ST 2135.6 SR 358.9 SS 683.9
CRT -.9622 CRS .9985 CST -.9556
LSA 2261.1 MSA 211.1 SSA 15.2
   TOE-1.4727 TRA-1.2542 TC3-4.5782 BAU 1.0417
   ROE .2584 RRA .0125 RC3 -.0186 FAU .04181
FDE -.8474 FRA .0298 FC3-2.1268 BSP 14684
                                                                                                                 ' ELI 2163.4 EL2 96.4 ALF 170.80
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FLIGHT TIME 150.00

BOE 1.4952 BRA 1.2543 BC3 4.5782 FSP -580

SG1 4746.5 SG2 326.4 THA 178.17

ARRIVAL DATE DEC 28 1967

LAUNCH DATE JUL 23 1967

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DISTANCE 467.148
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 26.201 GAL -3.18 AZL 94.45 MCA 229.70 SMA 125.20 ECC .22065 INC 4.4475 VI 29.315
RP 107.65 LAP 3.39 LOP 169.09 VP 37.499 GAP 9.90 AZP 87.12 TAL 191.40 TAP 61.10 RCA 97.58 APO 152.83 VZ 35.210
RC 155.789 GL -30.19 GP 16.72 ZAL 108.93 ZAP 157.73 ETS 46.10 ZAE 128.37 ETE 166.59 ZAC 77.90 ETC 10.33 CLP-165.08
    PLANETOCENTRIC CONIC
     C3 16.279 VHL 4.035 DLA -30.38 RAL 173.52 RAD 6567.7 VEL 11.733 PTH 2.07 VHP 6.809 DPA 16.54 RAP 192.11 ECC 1.2679
    C5 16.279 VML 4.030 DLA -301.38 RAL 173.32 RAU 0307.7 VEL 11.733 PIM 2.07 VMP 6.809 DPA 18.74 RAP 192.11 ECC 1.2879 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.50 7 21 54 1142.86 22.21 343.77 39.37 111.29 7 40 57 542.9 24.90 335.97 101.50 10 27 15 5833.92 22.22 277.71 39.38 111.28 12 4 29 5233.9 24.91 269.91 78.50 7 21 54 1142.86 22.21 343.77 39.37 111.29 7 40 57 542.9 24.90 335.97 101.50 10 27 15 5833.92 22.22 277.71 39.38 111.28 12 4 29 5233.9 24.91 269.91 10.00 9 23 14 74.751 12 44 309.87 34.94 122 10 9 35.42 147.5 16.64 303.23
                                                                                                                   111.28 12 4 29
122.10 9 35 42
100.49 14 53 3
                                                                                                                                                                                             303.23
                                                                                309.67
                                                                                                   34.24
                                                                                                                                                         147.5
                                                                                                                                                                            16.59
                        9 23 14
                                            747.51
                                                              12.44
        110.00
                                       5277.26
                                                                                                 42.74
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                       13 25 5
                                                               32.72
                                                                                                                                                       4677.3
                                                                                                                                                                            33.82
                                                                               238.82
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    SCH 4820.4 SCR 368.2 SC3 180.1
RRT - 4065 RRF - 4875 RTF .8911
SCB 4834.4 R23 .1351 R13 - .8914
SCI 4822.7 SC2 336.2 THA 178.21
                                                                                                                                                    ST 2198.6 SR 366.3 SS 683.9
CRT -.9729 CRS .9968 CST -.9581
     TDE-1.4986 TRA-1.0924 TC3-4.8747 BAU 1.0609
    RDE .2579 RRA .0162 RC3 -.0333 FAU .04018
FDE -.8171 FRA .1001 FC3-2.1366 BSP 14959
                                                                                                                                                    LSA 2322.7 MSA 201.6 SSA
                                                                                                                                                                                                 16.5
                                                                                                                                                    EL1 2227.4 EL2 83.5 ALF 170.78
     BDE 1.5207 BRA 1.0925 BC3 4.8748 FSP -574
                                                                                                                                                                  ARRIVAL DATE DEC 30 1967
                                                                                          FLIGHT TIME 160.00
LAUNCH DATE JUL 23 1967
                                                                                         DISTANCE 472.907
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 26.141 GAL -2.76 A7L 94.23 MCA 232.93 SMA 124.83 ECC .22251 INC 4.2324 VI 29.315
RP 107.65 LAP 3.38 LOP 172.34 VP 37.449 GAP 10.17 A7P 87.45 TAL 189.74 TAP 62.67 RCA 97.06 APO 152.61 V2 35.201
RC 157.834 GL -29.12 GP 15.68 ZAL 106.32 ZAP 159.08 ETS 46.03 ZAE 128.58 ETE 167.39 ZAC 75.89 ETC 9.88 CLP-165.97
   PLANETOCENTRIC CONIC
    C3 15.679 VHL 3.960 DLA -30.74 RAL 177.02 RAD 6567.6 VEL 11.707 PTH 2.06 VHP 6.910 DPA 14.64 RAP 193.76 ECC 1.2580 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.52 7 28 42 1157.15 22.66 345.04 42.40 111.35 12 25 10 5202.6 25.37 267.73 102.48 10 48 27 5802.56 22.67 275.56 42.41 111.35 12 25 10 5202.6 25.37 267.73 110.00 9 42 54 720.30 13.42 308.38 37.56 121.74 9 54 54 120.3 17.52 301.66
     C3 15.679 VHL 3.960 DLA -30.74 RAL 177.02 RAD 6567.6 VEL 11.707 PTH 2.06 VHP 6.910 DPA 14.64 RAP 193.76 ECC 1.2580
                                                                                 308.38 37.56 121.74 9 54 54 239.59 45.64 100.93 15 1 33 MID-COURSE EXECUTION ACCURACY SGT 4893.0 SGR 377.8 SG3 177.4 SRRT -.3973 RRF -.4618 RTF .8912 SGB 4907.6 R23 .1155 R13 -.8915 L SG1 4895.3 SG2 346.5 THA 178.23 E
                                                            13.42
                                        5287.41
                        13 33 25
                                                              32.59
                                                                                239.59
                                                                                                                                                         4687.4
                                                                                                                                                                             33.76
        110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 2266.0 SR 374.8 SS 683.7

CRT -.9820 CRS .9939 CST -.9607

LSA 2388.7 MSA 191.7 SSA 17.9
     TOE-1.5302 TRA -.9230 TC3-5.1486 BAU 1.0793
     ROE .2589 RRA .0193 RC3 -.0451 FAU .03850
FDE -.7885 FRA .1672 FC3-2.1258 89P 15214
BDE 1.5520 BRA .9232 BC3 5.1488 FSP -566
                                                                                                                                                   EL1 2295.8 EL2 69.9 ALF 170.77
                                                                                                                                                                 ARRIVAL DATE JAN 1 1968
                                                                                         FLIGHT TIME 162.00
LAUNCH DATE JUL 23 1967
                                                                                         DISTANCE 478.648
    HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 26.081 GAL -2.32 AZL 94.04 MCA 236.16 SMA 124.47 ECC .22456 INC 4.0350 VI 29.315 RP 107.68 LAP 3.35 LOP 175.58 VP 37.399 GAP 10.44 AZP 87.75 TAL 188.08 TAP 64.24 RCA 96.52 APO 152.42 VZ 35.192 RC 159.863 GL -28.04 GP 14.77 ZAL 103.51 ZAP 160.32 ETS 46.16 ZAE 128.76 ETE 168.09 ZAC 73.83 ETC 9.49 CLP-166.85
    PLANETOCENTRIC CONIC
     C3 15.211 VHL 3.900 CLA -31.14 RAL 180.71 RAD 6567.6 VEL 11.687 PTH 2.06 VHP 7.021 DPA 12.85 RAP 195.48 ECC 1.2503
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       25.82
                                                                                              45.74
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                       7 35 59 1173.72
11 10 34 5772.34
7 35 59 1173.72
11 10 34 5772.34
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          76.48
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        103.52
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          76.48
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        103.52
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                                                                                306.76
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                                            691.32
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        110.00
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                       13 41 22 5302.74
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                                                             32.39
                                                                                240.74
                                                                                                  48.84
        110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    RRT - .3913 RRF - .4413 RTF - .8918
SGB 4977.4 R23 .0984 R13 - .8920
SGI 4964.6 SGZ 357.0 THA 178.24
                                                                                                                                                   ST 2335.5 SR 384.2 SS 682.7

CRT -.9891 CRS ..9898 CST -.9634

LSA 2456.6 MSA 181.8 SSA 19.3
     TDE-1.5658 TRA -.7454 TC3-5.3929 BAU 1.0968
     RDE .2614 RRA .0216 RC3 - .0540 FAU .03679
     FOE -.7610 FRA .2315 FC3-2.0937 BSP 15467
BOE 1.5875 BRA .7458 BC3 5.3932 FSP -558
                                                                                                                                                    EL1 2366.2 EL2 55.9 ALF 170.75
                                                                                                                                                                  ARRIVAL DATE JAN 3 1968
                                                                                          FLIGHT TIME 164.00
LAUNCH DATE JUL 23 1967
                                                                                         DISTANCE 484.369
    HELIOCENTRIC CONIC
     RL 151.98 LAL .00 LOL 299.48 VL 26.022 GAL -1.87 AZL 93.85 HCA 239.39 SMA 124.11 ECC .22682 INC 3.8520 V1 29.315 RP 107.71 LAP 3.31 LOP 178.82 VP 37.349 GAP 10.72 AZP 88.04 TAL 186.41 TAP 65.81 RCA 95.96 APO 152.26 V2 35.183 RC 161.876 GL -26.94 GP 13.97 ZAL 100.52 ZAP 161.48 ETS 46.47 ZAE 128.90 ETE 168.71 ZAC 71.72 ETC 9.15 CLP-167.72
    PLANETOCENTRIC CONIC
                                                                                                                          2.05 VHP 7.141 OPA 11.15 RAP 197.26 ECC 1.2448
     C3 14.872 VHL 3.856 DLA -31.55 RAL 184.57 RAD 6567.6 VEL 11.673 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75,46 7 44 16 1191,07 23.54 347.97 49.38 111.65 8 4 7 591.1 26.26 340.09
                       7 44 16 1191.07
11 33 5 5744.88
7 44 16 1191.07
11 33 5 5744.88
10 27 22 661.56
13 49 9 5322.39
          75.46
                                                                23.54
                                                                                                                                                                                              263.71
                                                                                                                     111.63 13 8 50
                                                                                                                                                          5144.9
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                                                                                271.58
                                                                                                   49.38
                                                                23.55
         104.54
                                                                                                                                    8 4 7
                                                                                                                                                           591.1
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                                                                                                                                                                                              340.09
                                                                                 347.97
                                                                                                    49.38
                                                                                                                     111.65
                                                                23.54
                                                                                                                     111.63 13 8-50
120.85 10 38 24
102.41 15 17 51
                                                                                                                                                                                            263.71
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                                                                                271.58
                                                                                                    49.38
                                                                23.55
         104.54
                                                                                                                                                           61.6
                                                                                                                                                                             19.48
                                                                                                                                                                                              298.23
                                                               15.50
                                                                                 305.09
                                                                                                    45.18
        110.00
                                            661.56
                                                                                                                                                        4722.4
                                                                                                                                                                                             233.24
                                                                                                                                                                             33.48
                                                                                242.20
                                                                                                  52.34
        110.00
                                                               32.11
    DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5027.2 SGR 398.8 SG3 171.3

RRT - .3881 RRF - .4254 RTF .8928

SGB 5043.0 R23 .0836 R13 -.8930

SG1 5029.6 SG2 367.3 THA 178.23
                                                                                                                                                   ST 2403.0 SR 394.2 SS 679.5
CRT -.9942 CRS .9844 CST -.9659
      TDE-1.6030 TRA -.5587 TC3-5.5995 BAU 1.1134
     ROE .2652 RRA .0230 RC3 -.0599 FAU .03507
FOE -.7337 FRA .2938 FC3-2.0416 BSP 15691
BDE 1.6248 BRA .5591 BC3 5.5998 FSP -548
                                                                                                                                                   LSA 2522.3 MSA 172.4 SSA 20.7
                                                                                                                                                   EL1 2434.8 EL2 42.0 ALF 170.73
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FLIGHT TIME 158.00

ARRIVAL CATE JAN 5 1968

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FLIGHT TIME 166.00
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 490.070
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                 9.53 RAP 199.10 ECC 1.2413
    C3 14.660 VHL 3.829 OLA -31.96 RAL 188.60 RAD 6567.6 VEL 11.664 PTH 2.05 VHP 7.270 CPA
    C3 14.660 VHL 3.829 DLA -31.96 RAL 188.60 RAD 6567.6 VEL 11.664 PTH 2.05 VHP 7.270 DPA 9.53 RAP 199.10 ECC 1.2413 LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.51 7 53 52 1208.13 23.91 349.42 53.31 111.87 8 14 0 608.1 26.66 341.53 105.49 11 55 37 5721.42 23.92 269.97 53.31 111.87 8 14 0 608.1 26.66 341.53 105.49 11 55 37 5721.42 23.92 269.97 53.31 111.87 8 14 0 608.1 26.66 341.53 105.49 11 55 37 5721.42 23.92 269.97 53.31 111.86 13 30 59 5121.4 26.67 262.07 110.00 10 51 34 632.20 16.52 303.43 49.45 120.36 11 2 6 32.2 20.43 296.48 110.00 13 57 5 5345.35 31.76 243.90 56.13 103.35 15 26 11 4745.3 33.27 235.00 DISSEPTITAL COMPRETITION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2461.3 SR 404.4 S5 673.2
CRT -.9972 CRS .9777 CST -.9679
                                                                     SGT 5081.7 SGR 409.2 SG3 167.7
RRT -.3861 RRF -.4124 RTF .8938
SGB 5098.2 R23 .0709 R13 -.8939
SGI 5084.2 SG2 377.3 THA 178.21
    TDE-1.6374 TRA -.3611 TC3-5.7540 BAU 1.1278
    RDE .2701 RRA .0232 RC3 -.0634 FAU .03328
FDE -.7046 FRA .3546 FC3-1.9651 BSP 15875
BDE 1.6595 BRA .3619 BC3 5.7543 FSP -537
                                                                                                                          LSA 2578.2 MSA 164.0 SSA 22.0
                                                                                                                          EL1 2494.1 EL2 29.7 ALF 170.69
                                                                                                                                     ARRIVAL DATE JAN 7 1968
                                                                          FLIGHT TIME 168.00
LAUNCH DATE JUL 23 1967
                                                                          DISTANCE 495.749
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 25.906 GAL -.92 AZL 93.52 MCA 245.85 SMA 123.41 ECC .23200 INC 3.5198 VI 29.315 RP 107.78 LAP 3.21 LOP 185.29 VP 37.249 GAP 11.30 AZP 88.56 TAL 183.06 TAP 68.91 RCA 94.78 APO 152.05 V2 35.162 RC 165.860 GL -24.61 GP 12.62 ZAL 94.07 ZAP 163.57 ETS 47.70 ZAE 129.14 ETE 169.74 ZAC 67.39 ETC 8.61 CLP-169.40
   PLANETOCENTRIC CONIC
    C3 14.578 VML 3.818 DLA -32.34 RAL 192.77 RAD 6567.6 VEL 11.660 PTH 2.05 VMP 7.407 DPA 7.98 RAP 200.98 ECC 1.2399 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            26.99
                                                                  350.79
                                                                                  57.52
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                     8 4 55
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        73.68
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                                  5702.71
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104.37 15 35 2
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                   11 16 27
14 5 32
                                    604.75
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       110.00
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                                 5370.31
                                                                  245.73
                                                                                   60.18
                                                     31.36
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2516.4 SR 415.3 SS 666.5
CRT -.9984 CRS .9701 CST -.9700
                                                                      SGT 5142.1 SGR 419.8 SG3 164.5
RRT -.3881 RRF -.4052 RTF .8962
     TOE-1.6735 TRA -.1570 TC3-5.8648 BAU 1.1431
     RDE .2766 RRA .0226 RC3 -.0631 FAU .03162
FDE -.6778 FRA .4111 FC3-1.8778 BSP 16091
                                                                     SGB 5159.2 R23 .0601 R13 -.8963
SG1 5144.7 SG2 386.7 THA 178.17
                                                                                                                           LSA 2631.3 MSA 156.9 SSA
                                                                                                                                                                23.2
                                                                                                                           EL1 2550.3 EL2 23.4 ALF 170.64
     BOE 1.6962 BRA .1587 BC3 5.8651 FSP -528
                                                                                                                                     ARRIVAL DATE JAN 9 1968
                                                                          FLIGHT TIME 170.00
 LAUNCH DATE JUL 23 1967
                                                                        DISTANCE 501.403
    HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 25.849 GAL -.42 A7L 93.37 HCA 249.08 SMA 123.08 ECC .23495 INC 3.3667 VI 29.315 RP 107.81 LAP 3.14 LOP 188.52 VP 37.199 GAP 11.60 A7P 88.80 TAL 181.38 TAP 70.46 RCA 94.16 APO 151.99 V2 35.151 RC 167.829 GL -23.38 GP 12.05 TAL 90.67 TAP 164.53 ETS 48.63 TAE 129.24 ETE 170.17 TAC 65.18 ETC 8.40 CLP-170.22
    PLANETOCENTRIC CONIC
     C3 14.630 VHL 3.825 CLA -32.67 RAL 197.08 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 7.554 OPA 6.50 RAP 202.90 ECC 1.2408
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              112.41 8 38 12
112.39 14 14 24
112.39 14 14 24
112.41 8 38 12
112.39 14 14 24
119.41 13 19 10
105.38 15 44 53
                                                                                                                                           27.24
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                                                                                                                               639.2
                      8 17 33 1239.23
                                                    24.42
                                                                  352.03
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                    12 39 35
                                   5689.43
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                                                                  352.03
                      8 17 33 1239.23
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         72.99
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                                  5689.43
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        107.01
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                    f1 41 21 5869.06
14 14 57 5395.64
                                                                  278.38
                                                                                   58.77
                                                     18.26
                                                                                                                              4795.6
                                                                                                                                              32.71
                                                                                                                                                            238.81
                                                                  247.57
                                                                                   64.49
                                                     30.91
        110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2550.5 SR 425.2 SS 652.2
CRT -.9977 CRS .9605 CST -.9712
                                                                      SGT 5189.4 SGR 429.2 SG3 160.6
RRT - 3892 RRF - 3977 RTF .8977
SGB 5207.1 R23 .0502 R13 - .8978
     TOE-1.7001 TRA .0600 TC3-5.9089 BAU 1.1558
     RDE .2838 RRA .0204 RC3 -.0612 FAU .02986 FDE -.6454 FRA .4684 FC3-1.7667 BSP 16261
                                                                                                                           LSA 2662.2 MSA 152.3 SSA 24.2
                                                                      SGI 5192.1 SGZ 395.1 THA 178.15 ELI 2585.6 ELZ 28.6 ALF 170.56
     BDE 1.7237 BRA .0634 BC3 5.9093 FSP -517
                                                                           FLIGHT TIME 172,00
                                                                                                                                      ARRIVAL CATE JAN II 1968
 LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 507.031
     PLANETOCENTRIC CONIC
                                                                                                                                  5.07 RAP 204.87 ECC 1.2440
                                                                                                     2.05 VHP 7.710 OPA
     C3 14.825 VHL 3.850 DLA -32.92 RAL 201.47 RAD 6567.6 VEL 11.671 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           345.19
                                                                               66.66
                                                                                               112.68 8 52 39
                                                                  353.08
                                                     24.52
                      8 31 47 1252.40
         72.47
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                                                                                   66.66
                                                                                                  112.67
                                                                                                             14 35 8
                                                                                                                                5082.1
                                                                                                                                               27.38
                                                                   267.24
                                  5682.14
1252.40
                                                     24.53
        107.53
                     13 0 26
                                                                                                 652.4
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                                                                   353.08
         72.47
                     8 31 47
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                     13 0 26 5682.14
12 5 25 5851.49
14 25 58 5419.09
                                                                   267.24
                                                                                   66.66
                                                     24.53
        107.53
                                                                                                                                                             270.20
                                                                                                                                               22.57
                                                                                                                               5251.5
                                                                                   63.70
                                                                   277.35
        110.00
                                                     18.84
                                                                                                                                                             240.57
                                                                                                                                               32.40
                                                                                   69.04
                                                                                                                               4819.1
                                                                   249.26
        110.00
                                                     30.48
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2563.7 SR 434.2 SS 632.3
CRT -.9952 CRS .9479 CST -.9711
LSA 2671.5 MSA 151.9 SSA 24.8
                                                                       SCT 5221.8 SCR 437.4 SC3 156.2
RRT -.3886 RRF -.3907 RTF .8965
SCB 5240.1 R23 .0437 R13 -.8966
      TDE-1.7172 TRA .2922 TC3-5.8753 BAU 1.1645
     ROE .2917 RRA .0163 RC3 -.0593 FAU .02782
FOE -.6086 FRA .5295 FC3-1.6246 BSP 16439
BOE 1.7418 BRA .2926 BC3 5.8756 FSP -507
                                                                                                                          EL1 2599.9 EL2 42.0 ALF 170.43
                                                                       SG1 5224.6 SG2 402.8 THA 178.12
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LAUNCH DATE JUL 23 1967

ARRIVAL DATE JAN 13 1968

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HELIOCENTRIC CONIC
                                                                    DISTANCE 512.630
    PLANETOCENTRIC CONIC
    C3 15.170 VHL 3.895 DLA -33.07 RAL 205.93 RAD 6567.6 VEL 11.686 PTH 2.06 VHP 7.876 DPA
                                                                                                                         3.69 RAP 206.86 ECC 1.2497
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         71.52
                                                                                                                                 27.38
                                                                                        112.95 9 8 35
                                                                                                                       663.8
                    8 47 31 1263.81
                                                24.49
                                                             353.95
                                                                                          112.94
                                                                                                     14 54 54
                                                                                                                       5081.0
      107.84
                  13 20 13
                                5681.04
                                                 24.50
                                                              267.14
                                                                             71.52
                                                                                                                                     27.39
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                                                                                                    9 A 35
                               1263.81
       72.16
                   8 47 31
                                                 24.49
                                                              353.95
                                                                             71.52
                                                                                         112.95
                                                                                                                       663.8
                                                                                                                                     27.38
      107.84
                  13 20 13
                                5681.04
                                                 24.50
                                                             267.14
                                                                             71.52
                                                                                          112.94
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                                                                                                                                      27.39
                                                                                         118.89 14 5 0
107.01 16 9 56
                               5842.75
                                                                                                                  5242
4838.1
                 12 27 37
                                                19.13
                                                              276.84
                                                                             68.71
      110,00
                 14 39 18
                                5438.14
                                              30.11
                                                             250.62
                                                                             73.82
                                                                                                                                     32.14
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 5282.1 SGR 446.7 SG3 153.4

RRT -.3975 RRF -.3936 RTF ..9023

SGB 5301.0 R23 .0358 R13 -.9024

SGI 5285.1 SG2 409.7 THA 178.06
                                                                                                                  ST 2572.8 SR 444.5 SS 618.3
CRT -.9911 CRS .9364 CST -.9726
    TDE-1.7365 TRA .5226 TC3-5.8171 BAU 1.1798
   RCE .3021 RRA .0122 RC3 -.0504 FAU .02653
FDE -.5815 FRA .5775 FC3-1.5142 BSP 16592
BDE 1.7626 BRA .5228 BC3 5.8173 FSP -496
                                                                                                                  LSA 2678.8 MSA 151.5 SSA 24.9
                                                                                                                  EL1 2610.3 EL2 58.5 ALF 170.28
LAUNCH DATE JUL 23 1967
                                                                     ELICHT TIME 176,00
  HELTOCENTRIC CONTC.
                                                                     DISTANCE 518.196
   RL 151.98 LAL .00 LOL 299.48 VL 25.682 GAL .1.19 AZL 92.94 MCA 258.74 SMA 122.10 ECC .24551 INC 2.9415 V1 29.315 RP 107.92 LAP 2.88 LOP 198.21 VP 37.050 GAP 12.58 AZP 89.43 TAL 176.32 TAP 75.07 RCA 92.13 APO 152.08 V2 35.116 RC 173.647 GL -19.44 GP 10.67 ZAL 80.09 ZAP 167.06 ETS 52.87 ZAE 129.48 ETE 171.20 ZAC 58.42 ETC 8.04 CLP-172.63
  PLANETOCENTRIC CONIC
    C3 15.680 VHL 3.960 DLA -33.12 RAL 210.39 RAD 6567.6 VEL 11.707 PTH
                                                                                              2.06 VHP 8.053 DPA
                                                                                                                          2.37 RAP 208.89 ECC 1.2580
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                              _-1 TIME
1273.30
5695
                                                                                         113.20
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       72.05
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                  12 46 59
                                5845.35
                                                19.04
                                                             276.99
                                                                             73.73
                                                                                                                                     22.75
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                                                                                                                                    31.95
                                                                           78.82
                                                                                                                    4850.4
                                              29.86
                  14 55 34
      110.00
                                                             251.49
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 5323.4 SGR 453.9 SG3 149.6

RRT - .4029 RRF - .3936 RTF .9052

SGB 5342.7 R23 .0291 R13 - .9053

SGI 5326.5 SG2 415.2 THA 178.02
   TDE-1.7397 TRA .7691 TC3-5.6801 BAU 1.1907
ROE .3127 RRA .0062 RC3 -.0425 FAU .02496
                                                                                                                  ST 2552.3 SR 452.5 SS 595.5
CRT -.9851 CRS .9209 CST -.9726
   FOE -.5464 FRA .6295 FC3-1.3782 BSP 16749
BDE 1.7676 BRA .7692 BC3 5.6803 FSP -484
                                                                                                                  LSA 2654.9 MSA 155.8 SSA 24.6
                                                                                                                  EL1 2590.9 EL2 76.8 ALF 170.08
                                                                                                                            ARRIVAL DATE JAN 17 1968
                                                                     FLIGHT TIME 178.00
LAUNCH DATE JUL 23 1967
                                                                    DISTANCE 523.728
  HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 25.628 GAL 1.78 AZL 92.81 MCA 261.96 SMA 121.79 ECC .24967 INC 2.8074 V1 29.315
RP 107.96 LAP 2.78 LOP 201.43 VP 37.000 GAP 12.93 AZP 89.61 TAL 174.64 TAP 76.60 RCA 91.38 APO 152.20 V2 35.103
RC 175.555 GL -18.07 GP 10.29 ZAL -76.54 ZAP 167.80 ETS 54.84 ZAE 129.54 ETE 171.47 ZAC 56.13 ETC 8.00 CLP-173.42
  PLANETOCENTRIC CONIC
    C3 16.367 VHL 4.046 DLA -33.07 RAL 214.83 RAD 6567.7 VEL 11.737 PTH 2.07 VHP 8.242 DPA 1.09 RAP 210.95 ECC 1.2694
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       113.43 9 44 28
113.42 15 30 38
9 44 28
                                                                          81.60
                                                                                                                      680.7
                  9 23 7 1280.75
13 55 39 5698.47
                                                24.03
                                                             355.04
       72.17
                                                                                                                      5098.5
                                                                                                                                                  260.44
                                                24.04
                                                             268.26
                                                                            81.61
      107.63
                                                                                         113.43 9 44 28
113.42 15 30 38
119.25 14 40 37
107.63 16 45 54
                  9 23 7 1280.75
13 55 39 5698.47
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       72.17
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                                                             268.26
                                                                            81.61
      107.63
                 13 2 57 5860.51
15 15 0 5454.75
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                                                             277.88
                                                                            78.69
      110.00
                                                18.54
                                                                                                                      4854.8
                                                             251.80
                                                                            84.01
      110.00
                                               29.77
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 5360.6 3GR 460.4 SG3 146.0
RRT -.4092 RRF -.3962 RTF ..9083
SGB 5380.4 R23 ..0244 R13 -.9083
SGI 5364.0 SG2 419.8 THA 177.97
                                                                                                                  ST 2512.8 SR 459.6 SS 572.2
CRT -.9770 CRS .9028 CST -.9724
    TOE-1.7331 TRA 1.0277 TC3-5.4850 BAU 1.2002
   ROE .3245 RRA -.0013 RC3 -.0340 FAU .02342
FOE -.5119 FRA .6809 FC3-1.2387 BSP 16920
                                                                                                                 LSA 2612.6 MSA 163.3 SSA 23.9
                                                                                                                  EL1 2552.7 EL2 96.4 ALF 169.85
    BOE 1.7633 BRA 1.0277 BC3 5.4851 FSP -476
                                                                    FLIGHT TIME 180.00
                                                                                                                             ARRIVAL DATE JAN 19 1968
LAUNCH DATE JUL 23 1967
                                                                    DISTANCE 529.220
  HELTOCENTRIC CONIC
   RL 151.9R LAL .00 LOL 299.48 VL 25.575 GAL 2.39 AZL 92.68 HCA 265.18 SMA 121.49 ECC .25420 INC 2.6756 VI 29.315
RP 107.99 LAP 2.67 LOP 204.65 VP 36.951 GAP 13.30 AZP 89.77 TAL 172.96 TAP 78.14 RCA 90.61 APO 152.37 V2 35.091
RC 177.448 GL -16.69 GP 9.95 ZAL 73.04 ZAP 168.49 ETS 57.14 ZAE 129.60 ETE 171.72 ZAC 53.83 ETC 8.00 CLP-174.20
  PLANETOCENTRIC CONIC
    C3 17.250 VHL 4.153 DLA -32.90 RAL 219.19 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 8.443 DPA
                                                                                                                         -.15 RAP 213.03 ECC 1.2839
    LNCH AZMTH LNCH TIME L-1 TIME IN LAT IN LONG IN RT ASC IN AZMTH IN TIME PO CST TIM IN 2 LAT IN 2 LONG
72.51 9 42 43 1286.05 23.58 355.23 86.73 113.63 10 4 9 686.0 26.57 347.45
                                                                                          113.62 15 46 9
113.63 10 4 9
                                                                            86.74
                                                                                                                      5117.3
                                                                                                                                     26.58
                                                                                                                                                  261.72
                                                 23.60
                                                             269.50
                  14 10 51
                               5717.32
      107.49
                                                                            86.73
                                                                                                                       686.0
                                                             355.23
       72.51
                  9 42 43
                               1286.05
                                                23.58
                                                                                          113.62 15 46 9
119.77 14 53 42
107.53 17 8 2
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17.63
                                                             269.50
      107.49
                  14 10 51
                               5717.32
                                                             279.45
                                                                            83.54
                                                                                                                      5287.5
      110.00
                  13 15 35
                               5887.52
                  15 37 10 5451.88
                                                             251.59
                                                                            89.35
                                                                                                                      4851.9
                                                                                                                                     31.93
                                                                                                                                                  243.02
                                              29.83
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 5388.2 SGR 465.5 SG3 142.2
RRT -.4150 RRF -.3987 RTF .9107
                                                                                                                ST 2450.0 SR 464.7 SS 545.5
CRT -.9664 CRS .8799 CST -.9714
LSA 2546.7 MSA 174.6 SSA 22.9
    TDE-1.7113 TRA 1.3020 TC3-5.2313 BAU 1.2064
    ROE .3368 RRA -.0106 RC3 -.0258 FAU .02182
    FOE -.4744 FRA .7340 FC3-1.0953 BSP 16981
BOE 1.7442 BRA 1.3021 BC3 5.2314 FSP -462
                                                                 SGB 5408.3 R23 .0202 R13 -.9108
                                                                                                             EL1 2490.9 EL2 117.5 ALF 169.59
                                                                 SG1 5391.7 SG2 423.2 THA 177.93
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FLIGHT TIME 174.00

ARRIVAL DATE JAN 21 1968

LAUNCH DATE JUL 23 1967 HELIOCENTRIC CONIC DISTANCE 534.667 RL 151.98 LAL .00 LOL 299.48 VL 25.522 GAL 3.02 A7L 92.55 MCA 268.39 SMA 121.19 ECC .25913 INC 2.5450 VI 29.315
RP 108.03 LAP 2.54 LOP 207.87 VP 36.903 GAP 13.69 A7P 89.93 TAL 171.28 TAP 79.67 RCA 89.79 APO 152.59 V2 35.07A
RC 179.325 GL -15.32 GP 9.64 7AL 69.62 7AP 169.14 ETS 59.79 7AE 129.65 ETE 171.94 7AC 51.52 ETC 8.05 CLP-174.97 PLANETOCENTRIC CONIC C3 18.350 VHL 4.284 OLA -32.62 RAL 223.44 RAD 6567.7 VEL 11.821 PTH 2.09 VHP 8.659 OPA -1.34 RAP 215.14 ECC 1.3020 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 26.02 91.87 113.79 10 24 49 113.78 15 59 50 73.08 10 3 20 1289.01 106.92 14 24 7 5743.12 73.08 10 3 20 1289.01 347.46 689.7 23.01 355.18 263.48 5143.1 26.03 23.02 271.21 91.87 106.92 113.79 10 24 49 113.78 15 59 50 120.43 13 35 59 107.23 17 31 58 347.46 23.01 355.18 91.87 689.0 26.02 14 24 7 5743.12 23.02 91.67 5143.1 26.03 263.48 271.21 106.92 36.3 20.29 296.73 88.26 16.38 303.66 13 25 23 110.00 636.32 5443.81 4843.8 32.05 242.42 29.99 251.02 94.78 110.00 16 1 14 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5416.9 SCR 469.6 SC3 138.6 RRT - 4220 RRF - -4031 RTF .9138 SCB 5437.2 R23 .0166 R13 - .9139 SCI 5420.6 SC2 425.5 THA 177.89 ST 2375.4 SR 468.3 SS 520.4 CRT -.9531 CRS .8538 CST -.9703 TOE-1.6811 TRA 1.5853 TC3-4.9451 BAU 1.2131 ROE .3501 RRA -.0210 RC3 -.0174 FAU .02035 FOE -.4382 FRA .7847 FC3 -.9603 BSP 17122 BOE 1.7172 BRA 1.5854 BC3 4.9451 FSP -453 LSA 2469.2 MSA 188.1 SSA 21.8 EL1 2417.2 EL2 139.3 ALF 169.32 ARRIVAL DATE JAN 23 1968 FLIGHT TIME 184,00 LAUNCH DATE JUL 23 1967 DISTANCE 540.066 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 25.470 GAL 3.69 A7L 92.42 MCA 271.60 SMA 120.90 ECC .26450 INC 2.4150 V1 29.315
RP 108.07 LAP 2.41 LOP 211.08 VP 36.855 GAP 14.10 AZP 90.07 TAL 169.62 TAP 81.22 RCA 88.92 APO 152.88 V2 35.065
RC 181.185 GL -13.97 GP 9.36 ZAL 66.29 ZAP 169.72 ETS 62.83 ZAE 129.68 ETE 172.14 ZAC 49.21 ETC 8.15 CLP-175.75 RC 181.185 GL -13.97 GP PLANETOCENTRIC CONIC C3 19.692 VHL 4.438 DLA -32.25 RAL 227.54 RAD 6567.8 VEL 11.877 PTH 2.11 VHP 8.889 DPA C3 19.692 VHL 4.438 DLA -32.25 RAL 227.54 RAD 6567.8 VEL 11.877 PTH 2.11 VHP 8.889 DPA -2.49 RAP 217.28 ECC 1.3241 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 106.12 14 35 14 5776.04 22.32 273.39 96.98 113.91 16 11 30 5176.0 25.35 265.71 73.88 10 24 55 1289.38 22.30 354.88 96.97 113.92 10 46 25 689.4 25.34 347.20 106.12 14 35 14 5776.04 22.32 273.39 96.98 113.91 16 11 30 5176.0 25.35 265.71 110.00 13 33 2 680.55 14.84 306.16 92.87 121.15 13 44 23 80.5 14.85 299.35 110.00 16 26 17 5432.88 30.21 250.25 100.24 106.81 17 56 50 4832.9 32.21 32.21 347.60 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5440.4 SGR 472.6 SG3 135.0 RRT -.4294 RRF -.4084 RTF .9170 ST 22A9.3 SR 470.0 SS 495.7 CRT -.9363 CRS .8229 CST -.9691 TOF-1.6397 TRA 1.8827 TC3-4.6256 BAU 1.2178 ROE .3639 RRA -.0328 RC3 -.0096 FAU .01891 FOE -.4021 FRA .8359 FC3 -.8315 BSP 17245 BOE 1.6796 BRA 1.8830 BC3 4.6257 FSP -444 SGB 5460.9 R23 .0135 R13 -.9170 LSA 2380.2 MSA 204.2 SSA 20.6 SG1 5444.2 SG2 426.5 THA 177.85 EL1 2331.4 ELZ 162.1 ALF 169.06 ARRIVAL DATE JAN 25 1968 FLIGHT TIME 186.00 LAUNCH DATE JUL 23 1967 DISTANCE 545.408 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 25.419 GAL 4.39 A7L 92.28 HCA 274.81 SMA 120.61 ECC .27036 INC 2.2847 V1 29.315
RP 108.11 LAP 2.28 LOP 214.29 VP 36.807 GAP 14.94 AZP 90.19 TAL 167.96 TAP 82.76 RCA 88.00 APO 153.22 V2 35.052 RC 183.028 GL -12.64 GP 9.11 7AL 63.08 7AP 170.26 ETS 66.28 7AE 129.71 ETE 172.32 7AC 46.89 ETC 8.30 CLP-176.52 PLANETOCENTRIC CONIC C3 21.307 VHL 4.616 CLA -31.79 RAL 231.46 RAD 6567.9 VEL 11.945 PTH 2.13 VHP 9.137 CPA -3.60 RAP 219.43 ECC 1.3507 C3 21.307 VHL 4.616 CLA -31.79 RAL 231.46 RAD 6567.9 VEL 11.945 PTH 2.13 VMP 9.137 CPA -3.60 RAP 219.43 EUC 13.377 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.90 IN 47 28 1286.70 21.49 354.28 102.02 114.01 11 8 55 686.7 24.55 346.67 105.10 14 43 59 5816.41 21.50 276.07 102.02 114.01 11 8 55 5216.4 24.56 268.46 105.10 14 43 59 5816.41 21.50 276.07 102.02 114.01 11 8 55 686.7 24.55 346.67 105.10 14 43 59 5816.41 21.50 276.07 102.02 114.00 16 20 55 5216.4 24.56 268.46 110.00 13 39 6 730.05 13.07 308.91 97.35 121.87 13 51 16 130.1 17.19 302.23 110.00 16 51 31 5421.06 30.44 249.40 105.67 106.36 18 21 52 4821.1 32.38 240.72 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS SGT 5459.2 SGR 474.3 SG3 131.6 RRT -.4370 RRF -.4145 RTF .9203 SGB 5479.8 R23 .0110 R13 -.9203 ST 2196.5 SR 469.9 SS 472.8 TOE-1.5883 TRA 2.1941 TC3-4.2849 BAU 1.2206 CRT -.9155 CRS .7872 CST -.9680 RDE .3782 RRA -.0461 RC3 -.0027 FAU .01752 FDE -.3668 FRA .8873 FC3 -.7120 BSP 17354 LSA 2284.6 MSA 222.0 SSA 19.4 EL1 2238.6 EL2 185.5 ALF 168.84 SG1 5463.2 SG2 426.3 THA 177.81 BDE 1.6327 BRA 2.1946 BC3 4.2849 FSP -435 ARRIVAL DATE JAN 27 1968 FLIGHT TIME 188.00 LAUNCH DATE JUL 23 1967 DISTANCE 550.686 HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 25.369 GAL 5.12 AZL 92.15 MCA 278.02 SMA 120.33 ECC .27674 INC 2.1532 VI 29.315 RP 108.16 LAP 2.13 LOP 217.50 VP 36.759 GAP 15.01 AZP 90.30 TAL 166.31 TAP 84.32 RCA 87.03 APO 153.63 VZ 35.039 RC 184.853 GL -11.36 GP 8.87 ZAL 59.99 ZAP 170.73 ETS 70.17 ZAE 129.73 ETE 172.49 ZAC 44.58 ETC 8.51 CLP-177.29 PLANETOCENTRIC CONIC C3 23.231 VHL 4.820 DLA -31.27 RAL 235.19 RAD 6567.9 VEL 12.025 PTH 2.15 VHP 9.403 CPA -4.67 RAP 221.60 ECC 1.3823 C3 23.231 VHL 4.820 DLA -31.27 RAL 235.19 RAD 6567.9 VEL 12.025 PTH 2.15 VHP 9.415 DPA -4.67 RAP 221.61 ECC 1.3825 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.16 11 11 0 1280.42 20.58 353.37 106.98 114.08 11 32 21 680.4 23.65 345.81 103.84 14 50 10 5864.59 20.59 279.28 106.99 114.06 16 27 55 5264.6 23.66 271.73 76.16 11 11 0 1280.42 20.58 353.37 106.98 114.08 11 32 21 680.4 23.65 345.81 103.84 14 50 10 5864.59 20.59 279.28 106.99 114.06 16 27 55 5264.6 23.66 271.73 110.00 13 44 0 783.24 11.14 311.83 101.71 122.53 13 57 3 183.2 15.36 375.25 110.00 17 16 21 5409.77 30.65 248.59 111.04 105.93 18 46 31 4809.8 32.53 239.88 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS ST 2098.6 SR 467.5 SS 451.7 CRT -.8893 CRS .7447 CST -.9667 LSA 2183.6 MSA 241.7 SSA 18.4 SGT 5470.8 SGR 474.5 SG3 128.2 RRT -.4441 RRF -.4204 RTF .9233 TOF-1.5240 TRA 2.5246 TC3-3.9256 BAU 1.2192 RCE .3927 RRA -.0609 RC3 .0026 FAU .01609 FCE -.3308 FRA .9410 FC3 -.5997 BSP 17364 BCE 1.5738 BRA 2.5253 BC3 3.9256 FSP -422 SGB 5491.3 R23 .0088 R13 -.9234 SG1 5474,8 SG2 424.8 THA 177.78 ELI 2139.8 EL2 209.7 ALF 168.68

FLIGHT TIME 182.00

ARRIVAL CATE JAN 29 1968

LAUNCH DATE JUL 23 1967

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HELIOCENTRIC CONIC
                                                                         DISTANCE 555.892
    RL 151.98 LAL .00 LOL 299.48 VL 25.319 GAL 5.89 AZL 92.02 HCA 281.22 SMA 120.06 ECC .28371 INC 2.0198 VI 29.315 RP 108.20 LAP 1.98 LOP 220.71 VP 36.713 GAP 15.50 AZP 90.39 TAL 164.68 TAP 85.89 RCA 86.00 APO 154.12 V2 35.025 RC 186.660 GL -10.12 GP 8.66 ZAL 57.06 ZAP 171.13 ETS 74.52 ZAE 129.74 ETE 172.64 ZAC 42.27 ETC 8.79 CLP-178.07
   PLANETOCENTRIC CONIC
    C3 25.507 VHL 5.050 OLA -30.68 RAL 238.70 RAD 6568.0 VEL 12.120 PTH 2.17 VMP 9.690 DPA -5.70 RAP 223.79 ECC 1.4198
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH - INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             114.10 11 57 0

114.10 15 3 57

114.10 15 3 57

114.09 15 3 57

114.09 15 3 57

123.10 14 2 0

105.54 19 10 23
                                                                             111.84
                                                                                                                                                         344.56
        77.67 11 35 50 1269.24
                                                   19.58
                                                                352.06
                                                                                                                               669.2
                                                                                                                                              22.67
                                                                  305.20
                                                                                111.85
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                                                                                                                                              22.68
                                                                                                                                                            297.70
                   14 53 23
                                    633.61
                                                    19.60
       77.67
                  11 35 50
                                 1269.24
                                                   19.58
                                                                 352.06
                                                                              111.84
                                                                                                                                669.2
                                                                                                                                              22.67
                                                                                                                                                            344.56
                                 633.61
      102.33
                   14 53 23
                                                   19.60
                                                                  305.20
                                                                                111.85
                                                                                                                                33.6
                                                                                                                                              22.68
                                                                                                                                                            297,70
                                                                                                                               238.9
                                                                                                                                              13.38
                                                                                                                                                            308.36
      110.00
                   13 48 1
                                    838.93
                                                     9.09
                                                                  314.83
                                                                               105.95
                                5399.96
                                                                 247.89
                                                                                116.32
                                                                                                                              4800.0
                                                                                                                                              32.66
                                                                                                                                                            239.14
      110.00
                   17 40 23
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5480.6 SGR 473.6 SG3 124.9

RRT -.4521 RRF -.4277 RTF .9269

SGB 5501.1 R23 .0069 R13 -.9269

SGI 5484.8 SG2 422.1 THA 177.75
                                                                                                                          ST 2006.5 SR 463.6 SS 434.2
CRT -.8583 CRS .6996 CST -.9663
    TOE-1.4556 TRA 2.8673 TC3-3.5703 BAU 1.2175
    ROE .4078 RRA -.0769 RC3 .0072 FAU .01478
FOE -.2977 FRA .9940 FC3 -.5016 BSP 17457
BOE 1.5116 BRA 2.8683 BC3 3.5703 FSP -413
                                                                                                                          LSA 2088.3 MSA 261.1 SSA 17.4
                                                                                                                          EL1 2046.1 EL2 233.3 ALF 168.63
                                                                                                                                     ARRIVAL DATE JAN 31 1968
LAUNCH DATE JUL 23 1967
                                                                          FLIGHT TIME 192.00
                                                                         DISTANCE 561.014
  HELIOCENTRIC CONIC
                        .00 LOL 299.48 VL 25.270 GAL 6.71 AZL 94.88 MCA 284.42 SMA 119.79 ECC .29134 INC 1.8834 V1 29.315 1.82 LOP 223.91 VP 36.666 GAP 16.03 AZP 90.47 TAL 163.06 TAP 87.48 RCA 84.89 APO 154.69 V2 35.012 -8.94 GP 8.46 ZAL 54.28 ZAP 171.46 ETS 79.31 ZAE 129.74 ETE 172.78 ZAC 39.96 ETC 9.14 CLP-178.85
    RL 151.98 LAL
         108.24 LAP
    RC 188.449 GL
   PLANETOCENTRIC CONIC
    C3 28.187 VHL 5.309 DLA -30.05 RAL 242.00 RAD 6568.1 VEL 12.230 PTH
                                                                                                    2.20 VHP 10.001 DPA -6.69 RAP 226.00 ECC 1.4639
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
79.50 12 2 32 1251.07 18.52 350.20 116.60 114.10 12 23 23 651.1 21.62 342.76
                                                                              116.60
116.61
                                                                    309.76
                                                                                                                                101.4
                                                                                                                                               21.63
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                                    701.38
                                                    18.53
                                1251.07
                                                                  350.20
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                   12 2 32
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800
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                  14 53 2
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                                                                  309.76
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                   13 51 21
                                    896.28
                                                     6.94
                                                                  317.88
                                                                                                                                296.3
                                                                                                                                              11.31
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                                                                  247.32
                                                                                                                             4792.2
                                                                                                                                             32.75
                                                                                                                                                            238.56
                  18 3 22
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 5485.7 SGR 471.4 SG3 121.7

RRT -.4599 RRF -.4353 RTF .9306

SGB 5505.9 R23 .0054 R13 -.9306

SGI 5490.0 SG2 418.3 THA 177.72
                                                                                                                          ST 1919.7 SR 457.8 SS 420.0
CRT -.8217 CRS .6505 CST -.9667
    TOE-1.3797 TRA 3.2282 TC3-3.2181 BAU 1.2127
    ROE .4230 RRA -.0940 RC3 .0104 FAU .01349
FOE -.2659 FRA 1.0486 FC3 -.4142 BSP 17528
                                                                                                                          LSA 1998.1 MSA 280.4 SSA 16.4
    BOE 1.4431 BRA 3.2295 BC3 3.2181 FSP -404
                                                                                                                          ELI 1956.9 ELZ 256.0 ALF 168.72
                                                                         FLIGHT TIME 194.00
                                                                                                                                     ARRIVAL DATE FEB 2 1968
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 566.039
   HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 25.222 GAL 7.58 AZL 91.74 HCA 287.62 SMA 119.53 ECC .29969 INC 1.7432 VI 29.315
RP 108.28 LAP 1.66 LOP 227.11 VP 36.621 GAP 16.61 AZP 90.53 TAL 161.47 TAP 89.09 RCA 83.71 APO 155.35 VZ 34.999
RC 190.221 GL -7.81 GP 8.28 ZAL 51.65 ZAP 171.71 ETS 84.51 ZAE 129.72 ETE 172.91 ZAC 37.67 ETC 9.56 CLP-179.64
   PLANETOCENTRIC CONIC
    C3 31.333 VHL 5.598 DLA -29.39 RAL 245.08 RAD 6568.2 VEL 12.357 PTH 2.23 VHP 10.338 DPA -7.63 RAP 228.21 ECC 1.5157
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             114.06 12 52 48

114.05 15 0 46

117.00 14 30 14

111.18 17 25 24

123.89 14 10 3

105.03 19 54 57
                                                                              121.24
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        81.78
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                   12 32 26 1221.22
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                                 784.24
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                   14 47 42
                                                                 315.39
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        98.22
                                                                 321.01
                                                                               119.22
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                                                                                                                                                            313.99
       100.00
                   14 15 26
                                    887.62
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                  15 47 23
                                                                              123.09
                                                                                                                                                            273.20
       100.00
                                5881.12
                                                   21.60
                                                                 280.97
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                                                                                                                                              24.28
       110.00
                   13 54 9
                                    954.66
                                                     4.74
                                                                  320.96
                                                                              114.11
126.54
                                                                                                                               354.7
                                                                                                                                               9.15
                                                                                                                                                            314.66
                                5386.84
                                                                                                                           4786.8
                   18 25 10
                                                                                                                                              32.82
                                                                                                                                                           238.15
                                                    31.07
                                                                 246.94
       110,00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RET -.4677 RRF -.4433 RTF .9345
SGB 5505.6 R23 .0042 R13 -.9345
SGI 5490.0 SG2 413.2 THA 177.70
                                                                                                                         ST 1841.2 SR 450.4 55 409.2
CRT -.7792 CRS .5990 CST -.9679
LSA 1916.0 MSA 298.4 SSA 15.6
    TOE-1.2974 TRA 3.6082 TC3-2.8752 BAU 1.2044
    ROE .4383 RRA -.1123 RC3 .0126 FAU .01223
FOE -.2356 FRA 1.1049 FC3 -.3379 BSP 17601
                                                                                                                          ELI 1875.1 ELZ 277.2 ALF 168.96
    BOE 1.3694 BRA 3.6100 BC3 2.8752 FSP -395
                                                                          FLIGHT TIME 196.00
                                                                                                                                     ARRIVAL DATE FEB 4 1968
LAUNCH DATE JUL 23 1967
                                                                         DISTANCE 570.952
   HELIOCENTRIC CONIC
   RL 151.98 LAL .00 LOL 299.48 VL 25.175 GAL 8.50 AZL 91.60 HCA 290.81 SMA 119.28 ECC .30885 INC 1.5981 V1 29.315
RP 108.32 LAP 1.49 LOP 230.30 VP 36.576 GAP 17.23 AZP 90.57 TAL 159.91 TAP 90.72 RCA 82.44 APO 156.11 V2 34.986
RC 191.975 GL -6.74 GP 8.12 ZAL 49.19 ZAP 171.87 ETS 90.05 ZAE 129.68 ETE 173.03 ZAC 35.40 ETC 10.09 CLP 179.55
   PLANETOCENTRIC CONIC
    C3 35.022 VHL 5.918 DLA -28.71 RAL 247.95 RAD 6568.4 VEL 12.506 PTH 2.26 VHP 10.704 DPA -8.53 RAP 230.44 ECC 1.5764
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.05 13 10 8 1164.71 16.26 342.76 125.75 113.99 13 29 32 564.7 19.37 335.43
                                                                                              113.99 13 29 32
113.98 14 47 48
                                  896.86
995.15
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        94.95
                    14 32 52
                                                    16.28
                                                                  323.15
                                                                                125.76
                                                                                                                                              19.3A
                                                                                                                                                            315.82
                                                                                                118.34 14 18 57
109.84 18 0 28
124.10 14 13 23
104.92 20 15 24
                  14 2 22
                                                                  327.18
                                                                                122.56
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                                                     9.93
       100.00
                                                                  277.64
                                                                                128.55
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                    16 23 19
                                  5829.69
                                                    22.82
       100.00
                                                                  324.05
                                                                                118.03
                                                                                                                               413.6
                                                                                                                                               6.95
                                                                                                                                                            317.80
                   13 56 29
                                 1013.61
                                                     2.49
       110.00
                   18 45 40 5384.00
                                                                 246.73
                                                                                131.46
                                                                                                                              4784.0
                                                                                                                                              32.85
                                                                                                                                                            237.93
       110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 5483.9 SCR 462.9 SC3 115.8
RRT -.4752 RRF -.4511 RTF .9384
SCB 5503.4 R23 .0031 R13 -.9384
                                                                                                                          ST 1772.7 SR 441.3 SS 401.6
CRT -.7306 CRS .5447 CST -.9699
    TDE-1,2077 TRA 4.0142 TC3-2.5445 BAU 1.1914
    ROE .4555 RRA -.1319 RC3 .0134 FAU .01095
FDE -.2059 FRA 1.1645 FC3 -.2707 BSP 17556
                                                                                                                         LSA 1843.7 MSA 314.7 SSA 14.8
    BDE 1.2901 BRA 4.0163 BC3 2.5446 FSP -384
                                                                      SG1 5488.3 SG2 406.9 THA 177.69
                                                                                                                         ELI 1802.6 ELZ 296.3 ALF 169.40
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FL16HT TIME 190.00

ARRIVAL CATE FEB 6 1968

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FLIGHT TIME 198.00
                                                                                DISTANCE 575.732
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 39.345 VHL 6.273 CLA -28.02 RAL 250.60 RAD 6568.5 VEL 12.677 PTH 2.30 VHP 11.104 CPA -9.39 RAP 232.66 ECC 1.6475
    ENCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        115.89 13 45 48
111.94 14 53 41
                                                                                                                                            576.7
                                                                                     128.61
        90.00 13 26 11 1176.73
90.00 14 37 57 943.66
                                                         11.89
                                                                       341.54
                                                                                                                                                             21.18
                                                                                                                                            343,7
                                                                        327.50
                                                                                        131.58
                                                         18.36
                                                                                                         119.13 14 12 53
109.02 18 28 40
124.18 14 16 19
104.90 20 34 36
                                                                                                                                                             10.84
                                                                                                                                            484.1
                                                           7.01
                                                                        332.18
                                                                                        126.04
                    13 54 49
                                      1084.14
       100.00
                                                                                                                                                             25.89
                                      5799.53
                                                         23.51
                                                                        275.66
                                                                                        133.64
                                                                                                                                           5199.5
                     16 52 1
       100.00
                                                                                                                                                               4.71
                                                                                                                                                                            320.92
                     13 58 27 1072.74
                                                                                                                                            472.7
                                                            .23
                                                                        327.14
                                                                                       121.85
       110.00
                                                                                                                                           4783.7
                                                                                                                                                             32.86
                                                         31.13
                                                                                        136.25
                                     5383.69
                                                                        246.71
       110.00
                     19 4 52
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 1715.5 SR 430.9 SS 397.3
CRT -.6789 CRS .4928 CST -.9728
LSA 1782.9 MSA 327.5 SSA 14.1
                                                                           SGT 5472.8 SGR 456.6 SG3 112.9

RRT -.4828 RRF -.4594 RTF .9426

SGB 5491.8 R23 .0021 R13 -.9426

SGI 5477.2 SG2 399.5 THA 177.68
    TOE-1.1165 TRA 4.4353 TC3-2.2332 BAU 1.1747
    RDE .4689 RRA -.1521 RC3 .0135 FAU .00974
FOE -.1789 FRA 1.2256 FC3 -.2144 BSP 17604
BOE 1.2110 BRA 4.4379 BC3 2.2332 FSP -376
                                                                                                                                      ELI 1741.1 EL2 311.7 ALF 170.00
                                                                                                                                                   ARRIVAL DATE FEB 8 1968
                                                                                 FLIGHT TIME 200.00
LAUNCH DATE JUL 23 1967
                                                                                 DISTANCE 580.356
  HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 25.084 GAL 10.54 A7L 91.29 MCA 297.20 SMA 118.79 ECC .33002 INC 1.2878 V1 29.315 RP 108.40 LAP 1.15 LOP 236.68 VP 36.488 GAP 18.63 A7P 90.59 TAL 156.89 TAP 94.09 RCA 79.58 APO 157.99 V2 34.960 RC 195.431 GL -4.77 GP 7.83 ZAL 44.75 ZAP 171.90 ETS 101.86 ZAE 129.54 ETE 173.26 ZAC 30.91 ETC 11.48 CLP 177.90
   PLANETOCENTRIC CONIC
                                                                                                               2.35 VHP 11.543 OPA -10.20 RAP 234.89 ECC 1.7310
    C3 44.418 VHL 6.665 OLA -27.33 RAL 253.04 RAD 6568.7 VEL 12.876 PTH
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        117.26 13 28 1
110.47 15 31 59
119.61 14 9 0
108.47 18 53 5
124.13 14 18 55
104.99 20 52 32
                   13 6 17
                                                                                                                                                                           342.07
                                                                                       131.52
                                                                                                                                             704.5
                                                                                                                                                              11.58
                                     1304.54
                                                           7.99
                                                                         348.91
        90.00
                                                                                                                                             277.0
                                                                                                                                                                             315.60
                                                                                                                                                              22.61
                                       877.01
                                                          20.00
                                                                         323.30
                                                                                       136.98
                     15 17 22
         90.00
                                                                                                                                             564.6
                                                                                                                                                               8.23
                                                           4.32
                                                                        336.64
                                                                                         129:52
       100.00
                    13 49 35
17 16 45
                                     1164.61
                                                                                                                                                              26.23
                                                                                                                                                                             266.34
                                                                                      138.48
                                                                                                                                           5180.2
                                                          23.93
                                                                        274.38
                                     5780.21
       100.00
                                                                                                                                                                             324.01
                     14 0 3 1131.76
19 22 46 5385.83
                                                                                                                                                              2.47
                                                                                                                                            531.6
                                                          -2.03
                                                                         330.21
                                                                                        125.58
       110.00
                                                                                                                                          4785.8
                                                                                                                                                                             238.07
                                                                        246.86
                                                                                       140.90
                                                                                                                                                              32.83
                                                         31.09
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5460.1 SGR 449.0 SG3 110.1
RRT -.4901 RRF -.4678 RTF .9469
SGB 5478.5 R23 .0015 R13 -.9469
SGI 5464.5 SG2 391.0 THA 177.68
                                                                                                                                      ST 1669.9 SR 419.2 SS 396.1
CRT -.6242 CRS .4429 CST -.9763
     TDE-1.0221 TRA 4.8839 TC3-1.9423 BAU 1.1534
     RDE .4841 RRA -.1730 RC3 .0129 FAU .00855
FDE -.1535 FRA 1.2900 FC3 -.1666 BSP 17636
                                                                                                                                      LSA 1734.2 MSA 336.8 SSA 13.5
EL1 1691.0 EL2 323.4 ALF 170.75
     BOE 1.1309 BRA 4.8870 BC3 1.9423 FSP -367
                                                                                                                                                   ARRIVAL DATE FEB 10 1968
                                                                                 FLIGHT TIME 202.00
LAUNCH DATE JUL 23 1967
                                                                                DISTANCE 584.794
   HELIOCENTRIC CONIC
    RL 151.98 LAL .ON LOL 299.48 VL 25.040 GAL 11.67 AZL 91.12 MCA 300.39 SMA 118.55 ECC .34228 INC 1.1195 V1 29.315 RP 108.44 LAP .97 LOP 239.87 VP 36.446 GAP 19.43 AZP 90.57 TAL 155.45 TAP 95.84 RCA 77.97 APO 159.13 V2 34.947 RC 197.134 GL -3.87 GP 7.70 ZAL 42.77 ZAP 171.75 ETS 107.84 ZAE 129.43 ETE 173.37 ZAC 28.71 ETC 12.38 CLP 177.04
   PLANETOCENTRIC CONIC
     C3 50.379 VHL 7.098 DLA -26.65 RAL 255.29 RAD 6568.9 VEL 13.105 PTH 2.39 VHP 12.025 DPA -10.97 RAP 237.11 ECC 1.8291
    C3 50,379 VHL 7.098 DLA -26.65 RAL 255.29 RAD 6568.9 VEL 13.105 PTH 2.39 VMP 12.025 DPA -10.97 RAP 237.11 ECC 13.29.

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 55 29 1401.64 4.92 354.40 134.71 117.92 13 18 51 801.6 8.62 347.67 90.00 15 46 4 842.99 20.80 321.12 141.85 109.66 16 0 6 243.0 23.29 313.33 100.00 13 45 35 1239.81 1.78 340.78 132.97 119.84 14 6 15 639.8 5.74 334.23 100.00 17 38 38 5768.09 24.19 273.58 143.11 108.12 19 14 46 5168.1 26.44 265.50 110.00 14 1 20 1190.41 -4.26 3333.28 129.21 123.95 14 21 10 590.4 .23 327.07 110.00 19 39 23 5390.26 31.01 247.18 145.41 105.16 21 9 14 4790.3 32.78 238.41
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5443.0 SGR 439.9 SG3 107.5

RRT -.4970 RRF -.4760 RTF .9514

SGB 5460.8 R23 .0009 R13 -.9514

SGI 5447.5 SGZ 381.4 THA 177.69
                                                                                                                                      ST 1634.2 SR 406.4 SS 397.5
CRT -.5676 CRS .3953 CST -.9801
     TOE -.9234 TRA 5.3613 TC3-1.6709 BAU 1.1254
     RDE .4992 RRA -.1945 RC3 .0116 FAU .00735
FDE -.1293 FRA 1.3583 FC3 -.1263 BSP 17643
BDE 1.0497 BRA 5.3648 BC3 1.6709 FSP -359
                                                                                                                                      LSA 1696.0 MSA 342.4 SSA
                                                                                                                                                                                 12.8
                                                                                                                                       EL1 1651.1 EL2 331.2 ALF 171.63
                                                                                                                                                    ARRIVAL DATE FEB 12 1968
                                                                                  FLIGHT TIME 204,00
LAUNCH DATE JUL 23 1967
                                                                                 DISTANCE 589.011
     RL 151.98 LAL .00 LOL 299.48 VL 24.997 CAL 12.89 AZL 90.94 HCA 303.57 SMA 118.32 ECC .35586 INC .9401 VI 29.315 RP 108.48 LAP .78 LOP 243.06 VP 36.404 CAP 20.32 AZP 90.52 TAL 154.07 TAP 97.65 RCA 76.22 APO 160.43 V2 34.935 RC 198.819 GL -3.02 CP 7.58 ZAL 40.95 ZAP 171.50 ETS 113.70 ZAE 129.28 ETE 173.48 ZAC 26.55 ETC 13.47 CLP 176.16
    PLANETOCENTRIC CONIC
     C3 57.407 VHL 7.577 DLA -25.97 RAL 257.34 RAD 6569.0 VEL 13.370 PTH 2.44 VHP 12.557 DPA -11.69 RAP 239.32 ECC 1.9448
     UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 47 57 1486.73 2.20 359.16 137.94 118.24 13 12 44 886.7 5.95 352.50
                                                                                                         INJ AZMTH INJ TIME
118.24 13 12 44
109.16 16 23 39
119.89 14 4 10
107.92 19 34 17
123.64 14 23 6
105.42 21 24 43
                                                                                          146.43
                                                                                                                                              222.5
                                                                                                                                                              23.68
                                                                                                                                                                              311.96
                       16 9 57
                                                                         319.79
                                       822.47
                                                           21.26
          90.00
                                                                                                                                             711.2
                                                                                                                                                                3.34
                                                                                                                                                                              338.17
                                                                         344.70
                                                                                        136.36
                      13 42 19
                                      1311.17
                                                           - . 64
        100.00
                                                                                                                                            5161.3
                                                                                                                                                              26.55
                                                                                                                                                                              265.03
                                                                                          147.55
                                                          24.33
                                                                         273.12
        100.00
                       17 58 16
                                      5761.30
                                                                                                                                                                              330.10
                                                                                                                                             648.5
                                                                                                                                                              -1.99
                                                                                         132.75
        110.00
                     14 2 18 1248.47
19 54 46 5396.77
                                                           -6.46
                                                                         336.34
                                                                                                                                                                              238.90
                                                                                          149.76
                                                                                                                                            4796.8
                                                                                                                                                              32.70
                                                                         247.65
        110.00
                                                          30.49
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 1607.6 SR 392.5 SS 401.6
CRT -.5100 CRS .3498 CST -.9837
                                                                             SGT 5422.9 SGR 429.5 SG3 105.0
RRT -.5033 RRF -.4837 RTF .9559
     TDE -.8194 TRA 5.8729 TC3-1.4186 BAU 1.0888
     ROE .5140 RRA -.2165 RC3 .0098 FAU .00610
FOE -.1057 FRA 1.4321 FC3 -.0920 BSP 17570
BOE .9673 BRA 5.8768 BC3 1.4186 FSP -349
                                                                                                                                        LSA 1667.7 MSA 344.1 SSA 12.2
                                                                             SGB 5439.8 R23 .0004 R13 -.9559
                                                                              SG1 5427.2 SG2 370.8 THA 177.71
                                                                                                                                        EL1 1620.6 EL2 334.9 ALF 172.58
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LAUNCH CATE JUL 23 1967
                                                                             FLIGHT TIME 206.00
                                                                                                                                          ARRIVAL DATE FEB 14 1968
                                                                             OISTANCE 592.959
   HELIOCENTRIC CONIC
    RL 151.98 LAL .00 LOL 299.48 VL 24.955 GAL 14.21 AZL 90.75 MCA 306.76 SMA 118.10 ECC .37094 INC .7470 V1 29.315 RP 108.51 LAP .60 LOP 246.24 VP 36.364 GAP 21.29 AZP 90.45 TAL 152.77 TAP 99.52 RCA 74.30 APO 161.91 V2 34.923 RC 200.487 GL -2.23 GP 7.48 ZAL 39.30 ZAP 171.14 ETS 119.35 ZAE 129.09 ETE 173.59 ZAC 24.44 ETC 14.76 CLP 175.23
   PLANETOCENTRIC CONIC
     C3 65.720 VHL 8.107 DLA -25.31 RAL 259.19 RAD 6569.2 VEL 13.678 PTH 2.50 VHP 13.147 DPA -12.37 RAP 241.51 ECC 2.0816 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 118.32 13 8 10
108.85 16 44 8
119.76 14 2 27
107.84 19 51 55
123.21 14 24 43
105.75 21 39 1
        90.00
                                                                                 141.14
                                                                                                                                                               356.88
                    12 42 5 1564.66
16 30 38 810.12
                                                      - . 32
                                                                      3.51
                                                                                                                                    964.7
                                                                                                                                                     3.47
        90.00
                                                      21.53
                                                                     318.99
                                                                                    150.76
                                                                                                                                     210.1
                                                                                                                                                    23.91
                                                                                                                                                                   311.13
                                                                                  139.68
                    13 39 28 1379.40
       100.00
                                                      -2.95
                                                                    348.44
                                                                                                                                    779.4
                                                                                                                                                     1.04
                                                                                                                                                                   341.92
       100.00
                    18 15 56
                                   5758.65
                                                      24.39
                                                                    272.95
                                                                                   151.79
                                                                                                                                   5158.7
                                                                                                                                                    26.60
                                                                                                                                                                 264.84
       110.00
                    14 2 57
                                   1305.70
                                                      -8.61
                                                                     339.38
                                                                                  136.20
                                                                                                                                    705.7
                                                                                                                                                     -4.18
                                                                                                                                                                   333.09
       110.00
                    20 8 56
                                   5405.12
                                                      30.74
                                                                    248.26
                                                                                    153.95
                                                                                                                                   4805.1
                                                                                                                                                    32.59
                                                                                                                                                                   239.53
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 5397.5 SGR 417.7 SG3 102.5
RRT -.5090 RRF -.4912 RTF .9605
SGB 5413.6 R23 .0002 R13 -.9605
SGI 5401.7 SG2 359.3 THA 177.73
                                                                                                                               ST 1588.7 SR 377.8 SS 408.0
CRT -.4554 CRS .3100 CST -.9872
LSA 1648.1 MSA 341.8 SSA 11.6
     TDE -.7167 TRA 6.4155 TC3-1.1896 BAU 1.0452
    ROE .5287 RRA -.2382 RC3 .0077 FAU .00486 FOE -.0844 FRA 1.5102 FC3 -.0640 BSP 17567
     BOE .8906 BRA 6.4199 BC3 1.1896 FSP -341
                                                                                                                               ELI 1598.4 ELZ 334.3 ALF 173.53
                                                                             FLIGHT TIME 208.00
                                                                                                                                           ARRIVAL CATE FEB 16 1968
LAUNCH DATE JUL 23 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 596.580
    RL 151.98 LAL .00 LOL 299.48 VL 24.915 GAL 15.66 A7L 90.54 MCA 309.94 SMA 117.89 ECC .38773 INC .5374 V1 29.315 RP 108.55 LAP .41 LOP 249.42 VP 36.325 GAP 22.38 A7P 90.35 TAL 151.55 TAP 101.49 RCA 72.18 APO 163.60 V2 34.911 RC 202.138 GL -1.48 GP 7.37 ZAL 37.80 ZAP 170.67 ETS 124.69 ZAE 128.86 ETE 173.70 ZAC 22.40 ETC 16.30 CLP 174.26
   PLANETOCENTRIC CONIC
    C3 75.601 VHL 8.695 DLA -24.66 RAL 260.87 RAD 6569.5 VEL 14.034 PTH
                                                                                                        2.56 VHP 13.804 OPA -13.00 RAP 243.68 ECC 2.2442
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 144.28
        90.00
                  12 37 10 1637.48
                                                      -2.67
                                                                      7.58
                                                                                                   118.20 13 4 28
                                                                                                                                   1037.5
                                                                                                                                                     1.12
                                                                                                                                                                        .95
                                                                                                    108.67 17 2 16
119.49 14 0 55
107.86 20 7 53
122.66 14 25 59
106.13 21 52 11
        90.00
                    16 48 52
                                    603.41
                                                      21.68
                                                                    318.55
                                                                                   154.87
                                                                                                                                     203.4
                                                                                                                                                    24.03
                                                                                                                                                                   310 67
                   16 48 52 803.41
13 36 50 1444.89
18 31 54 5759.27
14 3 17 1361.90
20 21 56 5415.02
       100.00
                                                      -5.15
                                                                    352.05
                                                                                   142.91
                                                                                                                                     844.9
                                                                                                                                                     -1.19
                                                                                                                                                                   345.51
       100.00
                                                     24.37
                                                                    272.99
                                                                                 155.83
                                                                                                                                   5159.3
                                                                                                                                                    26.59
                                                                                                                                                                   264.89
       110.00
                                                    -10.69
                                                                    342.40
                                                                                   139.54
                                                                                                                                    761.9
                                                                                                                                                    -6.31
                                                                                                                                                                   336.05
                                                30.55
                                                                                                                                                  32.46
       110.00
                                                                    248.97
                                                                                   157.96
                                                                                                                                   4815.0
                                                                                                                                                                   240.27
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SCT 5368.3 SCR 404.6 SC3 100.2

RRT -.5139 RRF -.4980 RTF .9650

SCB 5383.5 R23 -.0000 R13 -.9650

SCI 5372.3 SC2 346.8 THA 177.77
                                                                                                                               ST 1575.7 SR 362.4 SS 416.8
CRT -.4035 CRS .2743 CST -.9902
    TDE -.6121 TRA 6.9980 TC3 -.9805 BAU .9910
    RDE .5432 RRA -.2597 RC3 .0055 FAU .00357
    FDE -.0642 FRA 1.5948 FC3 -.0408 BSP 17550
                                                                                                                               LSA 1635.4 MSA 336.1 SSA 11.1
    BOE .8184 BRA 7.0028 BC3 .9805 FSP -333
                                                                                                                               EL1 1582.7 EL2 330.1 ALF 174.46
                                                                                                                                          ARRIVAL DATE FEB 18 1968
LAUNCH DATE JUL 23 1967
                                                                            FLIGHT TIME 210,00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 599.800
    RL 151.98 LAL .00 LOL 299.48 VL 24.876 GAL 17.24 AZL 90.31 MCA 313.12 SMA 117.69 ECC .40650 INC .3072 V1 29.315 RP 108.59 LAP .22 LOP 252.60 VP 36.287 GAP 23.60 AZP 90.21 TAL 150.44 TAP 103.55 RCA 69.85 APO 165.53 V2 34.899
                           -.78 GP 7.28 ZAL 36.47 ZAP 170.08 ETS 129.69 ZAE 128.57 ETE 173.81 ZAC 20.42 ETC 18.15 CLP 173.25
    RC 203.771 GL
   PLANETOCENTRIC CONIC
    C3 87,406 VHL 9.349 DLA -24.04 RAL 262.35 RAD 6569.7 VEL 14.448 PTH 2.62 VHP 14.540 DPA -13.58 RAP 245.80 ECC 2.4385
   LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC ÎNJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 32 50 1706.18 -4.87 11.42 147.32 117.93 13 1 16 1106.2 -1.09 4.78 90.00 17 5 4 800.83 21.74 318.39 158.75 108.61 17 18 25 200.8 24.08 310.50 100.00 13 34 17 1507.79 -7.25 355.55 146.02 119.08 13 59 25 907.8 -3.32 348.97 100.00 18 46 17 5762.49 24.31 273.20 159.67 107.96 20 22 20 5162.5 26.53 265.11 110.00 14 3 17 1416.85 -12.69 345.40 142.77 122.01 14 26 54 816.8 -8.37 338.97 110.00 20 33 47 5426.20 30.34 249.77 161.78 106.56 ,22 4 13 4826.2 32.31 241.11
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 5335.1 SGR 390.0 SG3 97.9
RRT -.5177 RRF -.5037 RTF .9695
SGB 5349.4 R23 -.0002 R13 -.9695
                                                                                                                              ST 1566.7 SR 346.2 SS 428.0
    TOE -.5056 TRA 7.6252 TC3 -.7905 BAU .9237
    RDE .5574 RRA -.2804 RC3 .0032 FAU .00217
FDE -.0448 FRA 1.6869 FC3 -.0215 BSP 17514
                                                                                                                              CRT -.3549 CRS .2420 CST -.9927
                                                                                                                              LSA 1628.0 MSA 327.4 SSA 10.5
                                                                                                                              ELI 1571.7 ELZ 322.7 ALF 175.32
    BOE .7526 BRA 7.6304 BC3 .7905 FSP -326
                                                                        SG1 5339.0 SG2 333.5 THA 177.82
LAUNCH DATE JUL 23 1967
                                                                            FLIGHT TIME 212.00
                                                                                                                                          ARRIVAL CATE FEB 20 1968
  HELIOCENTRIC CONIC
                                                                            DISTANCE 602.524
   RL 151.98 LAL
RP 108.62 LAP
                          .00 LOL 299.48 VL 24.839 GAL 18.98 AZL 90.05 MCA 316.29 SMA 117.50 ECC .42755 INC .0509 V1 29.315 .04 LOP 255.77 VP 36.251 GAP 24.96 AZP 90.04 TAL 149.45 TAP 105.74 RCA 67.26 APO 167.74 V2 34.888 -.12 GP 7.19 ZAL 35.31 ZAP 169.38 ETS 134.33 ZAE 128.21 ETE 173.93 ZAC 18.53 ETC 20.37 CLP 172.16
         108.62 LAP
                          -.12 GP
    RC 205.386 GL
   PLANETOCENTRIC CONIC
    C3 101.599 VHL 10.080 0LA -23.44 RAL 263.65 RAD 6570.0 VEL 14.931 PTH 2.69 VHP 15.367 0PA -14.12 RAP 247.87 ECC 2.6721
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 28 47 1771.28 -6.93 15.10 150.25 117.52 12 58 18 1171.3 -3.19 8.41
                                                                                                                                                                  310.53
                   17 19 27
                                    801.34
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                                                                                   162.39
                                                                                                    108.62
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121.26 14 27 25
107.02 22 15 8
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       100.00
                    18 59 12
                                   5767.72
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                                 1470.31
5438.34
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4838.3
                                                    -14.60
                                                                    348.36
                                                                                   145,86
                                                                                                                                                  -10.35
                   14 2 55
                                                                                                                                                                  341.84
       110.00
                    20 44 29
                                                     30.10
                                                                    250.63
                                                                                   165.38
                                                                                                                                                  32.13
                                                                                                                                                                 242.01
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 5299.3 SGR 374.2 SG3 95.8
RRT -.5200 RRF -.5079 RTF .9737
                                                                                                                              ST 1560.5 SR 329.5 SS 441.5
CRT -.3092 CRS .2123 CST -.9947
    TOE -.3953 TRA 8.3062 TC3 -.6176 BAU
    ROE .5714 RRA -.2998 RC5 .0008 FAU .00060
                                                                        SGB 5312.5 R23 -.0003 R13 -.9737
                                                                                                                              LSA 1624.5 MSA 316.4 SSA 9.9
    FOE -.0257 FRA 1.7888 FC3 -.0051 BSP 17386
    BDE .6948 BRA 8.3116 BC3 .6176 FSP -317
                                                                        SG1 5302.9 SG2 319.4 THA 177.89
                                                                                                                            EL1 1564.0 EL2 312.7 ALF 176.11
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FLIGHT TIME 214,00 ARRIVAL CATE FEB 22 1968 LAUNCH DATE JUL 23 1967 DISTANCE 604.627 HELIOCENTRIC CONIC .OU LOL 299.48 VL 24.804 GAL 20.91 AZL 89.77 HCA 319.46 SMA 117.32 ECC .45122 INC .2329 VI 29.315 -15 LOP 258.94 VP 36.217 GAP 26.51 AZP 89.82 TAL 148.62 TAP 108.09 RCA 64.38 APO 170.25 V2 34.878 .50 GP 7.11 ZAL 34.32 ZAP 168.55 ETS 138.60 ZAE 127.77 ETE 174.06 ZAC 16.76 ETC 23.01 CLP 171.00 RL 151.98 LAL 108.65 LAP RC 206.983 GL PLANETOCENTRIC CONIC C3 11A.782 VHL 10.899 DLA -22.86 RAL 264.75 RAD 6570.2 VEL 15.496 PTH 2.76 VHP 16.302 DPA -14.61 RAP 249.88 ECC 2.9549 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.01 12 55 24 108.69 17 45 34 117.94 13 56 5 108.30 20 46 57 120.42 14 27 30 107.50 22 24 55 153.04 1233.0 90.00 12 24 51 1833.01 -8.86 18.61 24.02 204.1 90.00 17 32 10 804.13 21.66 318.60 165.77 1026.0 -7.27 355.51 100.00 151.86 13 28 59 1625.96 -11.09 2.21 26.33 265.94 100.00 5174.5 19 10 42 5774.45 24.05 274.00 166.64 14 2 8 1522.06 20 54 3 5451.12 922.1 -12.24 344.65 110.00 -16.40 351.29 148.80 110.00 4851.1 31.94 29.84 251.54 168.74 MID-COURSE EXECUTION ACCURACY ORBIT OFTERMINATION ACCURACY CIFFERENTIAL CORRECTIONS ST 1555.0 SR 312.5 SS 458.1 CRT -.2692 CRS .1873 CST -.9962 LSA 1622.8 MSA 303.4 SSA 9.4 SGT 5257.8 SGR 357.0 SG3 93.7 RRT -.5205 RRF -.5103 RTF .9778 SGB 5269.9 R23 -.0004 R13 -.9778 TOE -.2895 TRA 9.0400 TC3 -.4637 BAU .7364 RCE .5854 RRA -.3170 RC3 -.0012 FAU-.00111 FCE -.0086 FRA 1.9001 FC3 .0081 BSP 17348 EL1 1557.4 EL2 300.5 ALF 176.78 BCE .6531 BRA 9:0456 BC3 .4637 FSP -310 SG1 5261.1 SG2 304.6 THA 177.97 FLIGHT TIME 216.00 ARRIVAL DATE FEB 24 1968 DISTANCE 605.947 HELIOCENTRIC CONIC .00 LOL 299.48 VL 24.772 GAL 23.07 AZL 89.44 HCA 322.64 SMA 117.15 ECC .47792 INC .5591 VI 29.315 -.34 LOP 262.12 VP 36.185 GAP 28.27 AZP 89.56 TAL 147.98 TAP 110.62 RCA 61.16 APO 173.14 VZ 34.867 1.08 GP 7.03 ZAL 33.53 ZAP 167.59 ETS 142.54 ZAE 127.24 ETE 174.20 ZAC 15.11 ETC 26.15 CLP 169.74 RL 151.98 LAL RP 108.59 LAP RC 208.560 GL 1.08 GP PLANETOCENTRIC CONIC C3 139.750 VHL 11.822 DLA -22.30 RAL 265.64 RAD 6570.5 VEL 16.158 PTH 2.84 VHP 17.366 DPA -15.05 RAP 251.79 ECC 3.2999 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 116.39 12 52 22 1291.5 -7.02 90,00 12 20 51 1891.46 -10.65 21.97 155.64 15.17 108.81 17 56 48 117.23 13 54 3 108.53 20 57 11 119.51 14 27 4 107.98 22 33 32 23.94 311.02 90.00 17 43 19 808.58 21.57 318.89 168.88 208.6 100.00 1081.1 -9.0A 358.60 13 26 2 1681.08 -12.83 5.38 154.51 19 20 49 5782.23 5182.2 26.19 266.48 100.00 23.89 274.52 169.72 -14.03 14 0 52 1571.84 21 2 28 5464.24 971.8 347,40 110.00 -18.10 354.15 151.56 243.93 110.00 29.57 252.46 171.82 4864.2 31.74 ORBIT OFTERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1549.0 SR 295.2 SS 477.3 CRT -.2329 CRS .1650 CST -.9974 SGT 5212.2 SGR 338.5 SG5 91.7 RRT -.5184 RRF -.5101 RTF .9815 TDE -.1847 TRA 9.8386 TC3 -.3261 BAU .6092 RDE .5995 RRA -.3312 RC3 -.0031 FAU-.00311 LSA 1622.0 MSA 289.0 SSA 8.8 EL1 1550.6 EL2 286.8 ALF 177.37 SGB 5223.2 R23 -.0004 R13 -.9815 SG1 5215.2 SG2 289.3 THA 178.07 FOE .0076 FRA 2.0239 FC3 .0193 BSP 17282 BDE .6273 BRA 9.8442 BC3 .3261 FSP -304 ARRIVAL DATE FEB 26 1968 FLIGHT TIME 218,00 LAUNCH DATE JUL 23 1967 DISTANCE 606.274 HELIOCENTRIC CONIC RL 151.9R LAL .00 LOL 299.48 VL 24.742 GAL 25.50 AZL 89.06 HCA 325.80 SMA 117.00 ECC .50812 INC .9354 V1 29.315
RP 108.72 LAP -.53 LOP 265.29 VP 36.155 GAP 30.29 AZP 89.23 TAL 147.58 TAP 113.38 RCA 57.55 APO 176.45 V2 34.858
RC 210.118 GL 1.62 GP 6.94 ZAL 32.94 ZAP 166.47 ETS 146.16 ZAE 126.58 ETE 174.36 ZAC 13.63 ETC 29.83 CLP 168.37 PLANETOCENTRIC CONIC C3 165.552 VML 12.867 DLA -21.78 RAL 266.32 RAD 6570.8 VEL 16.937 PTH 2.92 VMP 18.583 DPA -15.45 RAP 253.60 ECC 3.7246 C3 165.552 WHL 12.867 OLA -21.78 RAL 266.32 RAD 6570.8 VEL 16.937 PTH 2.92 VMP 18.83 GPA -15.45 RAP 255.67 ECC 5.7246 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 16 38 1946.61 -12.30 25.18 158.03 115.71 12 49 5 1346.6 -8.74 18.31 97.00 17 52 55 814.12 21.45 319.25 171.66 108.95 18 6 29 214.1 23.84 311.40 100.00 13 22 42 1733.37 -14.44 8.43 156.95 116.46 13 51 36 1133.4 -10.77 1.56 100.00 19 29 32 5790.63 23.70 275.08 172.50 108.77 21 6 2 5190.6 26.05 267.06 110.00 13 59 4 1619.39 -19.67 356.95 154.10 118.54 14 26 3 1019.4 -15.71 350.07 110.00 21 9 39 5477.37 29.29 253.39 174.60 108.46 22 40 57 4877.4 31.53 244.89 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1541.2 SR 277.7 SS 499.7 CRT -. 2003 CRS .1447 CST 19983 LSA 1620.8 MSA 273.5 SSA 8.3 EL1 1542.2 EL2 271.9 ALF 177.87 SCT 5162.2 SCR 318.8 SC3 89.8 RRT -.5128 RRF -.5061 RTF .9849 SCB 5172.1 R23 -.0004 R13 -.9849 TOE -.0831 TRAID.7095 TC3 -.2036 BAU .4507 ROE .6138 RRA -.3411 RC3 -.0047 FAU-.00550 FOE .0227 FRA 2.1623 FC3 .0287 BSP 17195 BOE .6194 BRA10.7150 BC3 .2037 FSP -298 SG1 5164.8 SG2 273.5 THA 178.18 LAUNCH DATE JUL 23 1967 FLIGHT TIME 220.00 ARRIVAL DATE FEB 28 1968 **DISTANCE 605.329** HELIOCENTRIC CONIC RL 151.98 LAL .00 LOL 299.48 VL 24.716 GAL 28.25 AZL 88.62 MCA 328.97 SMA 116.87 ECC .54233 INC 1.3784 V1 29.315
RP 108.74 LAP -.71 LOP 268.45 VP 36.128 GAP 32.63 AZP 88.82 TAL 147.46 TAP 116.43 RCA 53.49 APO 180.25 V2 34.848
RC 211.656 GL 2.14 GP 6.86 ZAL 32.57 ZAP 165.19 ETS 149.50 ZAE 125.78 ETE 174.53 ZAC 12.34 ETC 34.04 CLP 166.85 PLANETOCENTRIC CONIC C3 197.591 VHL 14.057 OLA -21.27 RAL 266.75 RAD 6571.1 VEL 17.858 PTH 3.00 VHP 19.982 DPA -15.80 RAP 255.27 ECC 4.2519 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 160.15 114.97 12 45 22 109.10 18 14 37 -10.32 90.00 12 12 4 90.00 18 0 56 1398.4 21.29 1998.38 -13.80 28.24 220.3 23.72 311.81 820.27 21.31 319.65 174.10 115.64 13 48 37 109.01 21 13 26 117.53 14 24 21 108.93 22 47 4 13 18 54 1782.66 -15.91 11.35 159.12 1182.7 -12.334.39 5799.26 23.51 275.65 174.93 5199.3 25.89 267.65 100.00 19 36 47 -17.26 352.64 13 56 37 1664.46 -21.11 359.65 156.38 1064.5 110.00 245.83 4890.2 31.31 110.00 21 15 34 5490.21 29.01 254.28 177.03 MID-COURSE EXECUTION ACCURACY CRRIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1530.5 SR 260.2 SS 525.9 CRT -.1701 CRS .1252 CST -.9989 LSA 1618.7 MSA 257.5 SSA 7.7 TOE .0151 TRA11.6629 TC3 -.0950 BAU .2513 SGT 5108.5 SGR 297.8 SG3 88.1 RRT -.5022 RRF -.4970 RTF .9880 ROE .6286 RRA -.3450 RC3 -.0059 FAU-.00844 FOE .0369 FRA 2.3184 FC3 .0370 BSP 17007 BOE .6288 BRA11.6680 BC3 .0951 FSP -290 SGB 5117.2 R23 -.0004 R13 -.9880 EL1 1531.1 EL2 256.3 ALF 178.30

SG1 5110.7 SG2 257.4 THA 178.32

ARRIVAL DATE OCT 2 1967

LAUNCH DATE JUL 24 1967

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DISTANCE 196.772
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.027 GAL -13.23 AZL 92.52 HCA 88.09 SHA 138.09 ECC .24887 INC 2.5198 VI 29.317 RP 108.37 LAP -2.52 LOP 28.52 VP 38.578 GAP -7.35 AZP 90.08 TAL 233.62 TAP 321.70 RCA 103.72 APO 172.45 V2 34.970 RC 61.464 GL -10.32 GP -15.39 ZAL 159.15 ZAP 37.57 ETS 20.52 ZAE 155.51 ETE 343.95 ZAC 95.27 ETC 12.88 CLP -34.71
   PLANETOCENTRIC CONIC
    C3 44.855 VHL 6.697 DLA 5.41 RAL 137.89 RAD 6568.7 VEL 12.893 PTH 2.35 VHP 5.936 DPA -8.52 RAP 169.39 ECC 1.7382 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 45 12 2583.65 -26.48 66.25 15.35 100.42 24 28 15 1983.6 -24.77 57.99 90.00 13 7 55 4890.87 20.34 212.49 11.48 69.86 14 29 26 4290.9 17.41 205.04 100.00 1 13 1 2313.04 -27.82 46.05 15.06 101.39 1 51 34 1713.0 -25.97 37.74 100.00 14 26 42 4636.70 21.62 193.28 10.96 68.84 15 43 59 4036.7 18.55 185.83 110.00 2 27 7 2081.15 -31.45 27.50 14.11 104.13 3 1 48 1481.1 -29.19 19.03 110.00 15 29 6 4441.36 25.06 176.90 9.40 65.95 16 43 7 3841.4 21.59 169.46
    C3 44.855 VHL 6.697 DLA 5.41 RAL 137.89 RAD 6568.7 VEL 12.893 PTH 2.35 VHP 5.936 DPA -8.52 RAP 169.39 ECC 1.7382
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 187.2 SR 380.5 SS 146.8
CRT -.7627 CRS .0777 CST -.6830
LSA 409.8 MSA 181.3 SSA 23.0
EL1 408.8 EL2 112.7 ALF 112.36
                                                                               SGT 476.5 SGR 460.8 SG3 173.2
RRT'-.1615 RRF .4684 RTF -.2977
    TOE .1895 TRA -.3613 TC3 .2412 BAU .1579
    ROE -.4374 RRA -.2660 RC3 -.1057 FAU .06910
    FDE .0853 FRA-1.0536 FC3-1.3337 BSP
                                                                               SGB 662.9 R23 -.1819 R13 .4868
                                                             1063
-469
                                                                               SG1 505.9 SG2 428.3 THA 140.88
    BOE .4767 BRA .4486 BC3 .2634 FSP
                                                                                                                                                       ARRIVAL DATE OCT 4 1967
                                                                                   FLIGHT TIME 72.00
LAUNCH DATE JUL 24 1967
                                                                                   DISTANCE 203.511
  HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.092 GAL -13.10 A7L 92.39 MCA 91.28 SMA 138.61° ECC .24527 INC 2.3882 V1 29.317
RP 108.33 LAP -2.39 LOP 31.72 VP 38.637 GAP -6.56 AZP 89.95 TAL 234.40 TAP 325.68 RCA 104.61 APO 172.61 V2 34.983
RC 63.388 GL -9.92 GP -16.40 ZAL 159.81 ZAP 41.68 ETS 18.92 ZAE 156.75 ETE 339.30 ZAC 96.41 ETC 12.60 CLP -38.87
   PLANETOCENTRIC CONIC
    LO 43.787 VML 6.618 DLA 5.95 RAL 137.50 RAD 6568.7 VEL 12.852 PTH 2.34 VMP 5.596 DPA -9.06 RAP 168.11 ECC 1.7208

LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG (NJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 23 39 33 2594.57 -26.61 67.02 14.75, 100.06 24 22 48 1994.6 -24.95 58.74

90.00 13 10 27 4867.93 19.79 211.03 10.55 69.33 14 31 35 4267.9 16 80 201 67
                     1 7 39 2323.12
14 28 59 4614.62
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                                       4421.16
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 471.4 SCR 477.4 SC3 194.0
RRT -.1334 RRF .5206 RTF -.2281
SCB 671.0 R23 -.1988 R13 .5070
                                                                                                                                         ST 186.9 SR 378.6 SS 159.9
CRT -.7301 CRS .1274 CST -.7512
    TOE .1830 TRA -.3775 TC3 .2256 BAU .1527
    ROE -.4289 RRA -.2815 RC3 -.1308 FAU .07620
                                                                                                                                         LSA 407.1 MSA 193.8 SSA 23.2
EL1 404.9 EL2 119.4 ALF 111.81
    FOE .1210 FRA-1.1793 FC3-1.5063 BSP 1052
BDE .4663 BRA .4709 BC3 .2608 FSP -533
                                                                               SG1 505.2 SG2 441.5 THA 132.31
                                                                                                                                                      ARRIVAL DATE OCT 5 1967
                                                                                   FLIGHT TIME 74.00
LAUNCH DATE JUL 24 1967
                                                                                  DISTANCE 210.215
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.143 GAL -12.97 AZL 92.26 HCA 94.48 SMA 139.03 ECC .24213 INC 2.2561 V1 29.317 RP 108.29 LAP -2.25 LOP 34.91 VP 38.686 GAP -5.80 AZP 89.82 TAL 235.03 TAP 329.51 RCA 105.37 APO 172.69 V2 34.996 RC 65.357 GL -9.50 GP -17.47 ZAL 160.39 ZAP 46.00 ETS 17.38 ZAE 158.08 ETE 333.62 ZAC 97.76 ETC 12.22 CLP -43.26
   PLANETOCENTRIC CONIC
    C3 42.820 VHL 6.544 DLA 6.48 RAL 137.21 RAD 6568.6 VEL 12.813 PTH 2.33 VHP 5.292 DPA -9.58 RAP 166.62 ECC 1.7047
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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90.00 13 13 23 4845.44
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64.82 16 46 12
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15 32 50 4401.40
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        110.00
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                                                                          174.35
        110.00
                                                          23.92
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 188.8 SR 375.5 SS 173.4

CRT -.6924 CRS .1644 CST -.8077

LSA 404.1 MSA 207.1 SSA 23.2
                                                                              SGT 468.1 SGR 497.5 SG3 216.3
RRT -.0868 RRF .5741 RTF -.1381
SGB 683.0 R23 -.1628 R13 .5576
     TOE .1785 TRA -.3993 TC3 .2034 BAU .1479
    RDE -.4192 RRA -.2987 RC3 -.1593 FAU .08377
     FOE .1593 FRA-1.3102 FC3-1.6936 BSP 1076
                                                                                                                                          EL1 400.4 EL2 127.7 ALF 111.49
                                                                               SG1 507.9 SG2 456.7 THA 117.47
    BOE .4556 BRA .4987 BC3 .2583 FSP
                                                              -608
                                                                                   FLIGHT TIME 76.00
                                                                                                                                                      ARRIVAL DATE OCT 8 1967
LAUNCH DATE JUL 24 1967
                                                                                   DISTANCE 216.884
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.183 GAL -12.86 A7L 92.12 HCA 97.67 SMA 139.35 ECC .23936 INC 2.1228 VI 29.317 RP 108.25 LAP -2.10 LOP 38.11 VP 38.727 GAP -5.08 A7P 89.72 TAL 235.51 TAP 333.18 RCA 106.00 APO 172.71 V2 35.009 RC 67.365 GL -9.05 GP -18.59 ZAL 160.89 ZAP 50.52 ETS 15.85 ZAE 159.41 ETE 326.67 ZAC 99.30 ETC 11.75 CLP -47.87
   PLANETOCENTRIC CONIC
    C3 41.902 VHL 6.473 OLA 7.01 RAL 137.03 RAD 6568.6 VEL 12.778 PTH 2.32 VHP 5.025 DPA -10.07 RAP 164.92 ECC 1.6896
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 29 34 2616.97 -26.87 68.61 13.94 99.30 24 13 11 2017.0 -25.31 60.29
                     13 16 43
                      13 16 43 4823.25
0 58 12 2343.81
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                                      4571.64
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        100.00
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64.30 16 48 20
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                                                                            29.35
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                                                          -31.66
        110.00
                        2 14 6 2106.28
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        110.00
                      15 35 18 4381.94
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 468.9 SGR 520.2 SG3 239.0
RRT -.0089 RRF .6248 RTF -.0188
SGB 700.3 R23 -.0107 R13 .6248
                                                                                                                                         ST 192.2 SR 370.5 SS 187.4

CRT -.6434 CRS .2037 CST -.8645

LSA 400.0 MSA 220.9 SSA 23.3
     TDE .1739 TRA -.4296 TC3 .1717 BAU .1437
     RDE -.4074 RRA -.3166 RC3 -.1905 FAU .09141
     FOE .2058 FRA-1.4369 FC3-1.8885 BSP 1103
                                                                                                                                          EL1 393.8 EL2 138.4 ALF 111.20
                                                                              SG1 520.3 SG2 468.8 THA 92.44
     BDE .4430 BRA .5336 BC3 .2564 FSP
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FLIGHT TIME 70.00

ARRIVAL DATE OCT 10 1967

LAUNCH DATE JUL 24 1967

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OISTANCE 223.516
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.211 GAL -12.74 AZL 91.99 HCA 100.87 SMA 139.59 ECC .23691 INC 1.9874 V1 29.317
RP 108.20 LAP -1.95 LOP 41.32 VP 38.759 GAP -4.40 AZP 89.62 TAL 235.84 TAP 336.71 RCA 106.52 APO 172.66 V2 35.023
RC 69.409 GL -8.57 GP -19.75 ZAL 161.31 ZAP 55.22 ETS 14.30 ZAE 160.59 ETE 318.21 ZAC 101.03 ETC 11.17 CLP -52.69
   PLANETOCENTRIC CONIC
     C3 41.027 VHL 6.405 DLA 7.53 RAL 136.95 RAD 6568.6 VEL 12.743 PTH 2.32 VHP 4.794 DPA -10.51 RAP 163.03 ECC 1.6752
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    98.91 24 8 58
67.87 14 40 29
                                                                                                                                                                                              -25.4R
                                                                                                             13.69
                                                                                                                                                                       2028.4
                                                                                                                                                                                                                     61.08
                       23 25 10 2628.42
13 20 27 4801.15
                                                                                         69.42
                                                                     -26.99
          90.00
                                                                                                                                                                           4201.2
                                                                                                                                                                                               14.97
                                                                                                                                                                                                                    199.58
                                                                                                               8.59
          90.00
                                                                     18.13
                                                                                        206.83
                                                                                                               13.44
                                                                                                                                    99.91
                                                                                                                                                     1 33 18
                                                                                                                                                                           1754.4
                                                                                                                                                                                                -26.68
                                                                                                                                                                                                                     40.61
                                                                                          49.02
         100.00
                            0 54 3 2354.39
                                                                     -28.34
                                                                                                                                                15 54 1
                                                                                                                                                                                                                    180.60
                                                                                                                                                                           3950.4
                                                                                                                                                                                               16.10
                                                                                                                8.03
                                                                                                                                    66.80
         100.00
                          14 38 11
                                              4550.41
                                                                      19.40
                                                                                        187.83
                         2 10 34 2114.96
15 38 10 4362.61
                                                                                                                                                   2 45 49
                                                                                                                                                                           1515.0
                                                                                                                                                                                               -29.90
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                                                                                                               12.59
                                                                                                                                  102.75
        110.00
                                                                    -31.99
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                                                                                                                                    102.75 2 45 49
63.79 16 50 52
                                                                                                                                                                        3762.6
                                                                                                                                                                                               19.07
                                                                                                                                                                                                                    164.74
                                                                                                                6.36
                                                                      22.78
                                                                                        171.92
         110.00
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 198.5 SR 363.9 SS 201.7
CRT -.5875 CRS .2381 CST -.9116
                                                                                              SCT 478.7 SQR 546.0 SG3 261.8
RRT .0971 RRF .6725 RTF .1239
SGB 726.1 R23 .1240 R13 .6636
     TDE .1709 TRA - .4673 TC3 .1307 BAU
                                                                           .1425
     RDE -.3939 RRA -.3348 RC3 -.2245 FAU .09896
                                                                                                                                                                     LSA 395.9 MSA 234.9 SSA 23.3
    FOE .2572 FRA-1.5570 FC3-2.0883 BSP 1173
BDE .4293 BRA .5749 BC3 .2598 FSP -754
                                                                                                                                                                     EL1 385.8 EL2 151.5 ALF 111.18
                                                                                              SG1 553.6 SGZ 469.9 THA 71.81
                                                                                                                                                                                     ARRIVAL DATE OCT 12 1967
                                                                                                   FLIGHT TIME 80.00
                                                                                                   DISTANCE 230.111
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.229 GAL -12.63 AZL 91.85 HCA 104.08 SMA 139.73 ECC .23472 INC 1.8489 V1 29.317 RP 108.16 LAP -1.79 LOP 44.52 VP 38.784 GAP -3.74 AZP 89.55 TAL 236.03 TAP 340.11 RCA 106.94 APO 172.53 V2 35.036 RC 71.485 GL -8.06 GP -20.92 TAL 161.66 TAP 60.07 ETS 12.69 TAE 161.47 ETE 308.17 TAC 102.92 ETC 10.47 CLP -57.71
   PLANETOCENTRIC CONIC
                                                                                                                                       2.31 VHP 4.599 OPA -10.92 RAP 160.97 ECC 1.6613
     C3 40.181 VHL 6.339 DLA
                                                      8.06 RAL 136.96 RAD 6568.5 VEL 12.710 PTH
     UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 21 5 2640.07 -27.11 70.26 13.55 98.51 24 5 5 2040.1 -25.65 61.89
                        23 21 5 2640.07
                                                                                                                                    67.42 14 44 16
99.52 1 29 40
66.34 15 57 33
102.38 2 42 46
63.31 16 53 49
                        13 24 37 4778.97

0 50 15 2365.16

14 42 4 4529.12

2 7 23 2123.80

15 41 26 4343.24
                                                                                                                                                                            4179.0
                                                                                                                                                                                                  14.35
                                                                                                                                                                                                                     198.25
          90.00
                                                                      17.56
                                                                                         205.46
                                                                                                                8.16
                                                                                                                                                                                                                      41.36
                                                                                                                                                                            1765.2
                                                                                                                                                                                                 -26.86
         100.00
                                                                     -28.47
                                                                                          49.79
                                                                                                                13.31
                                                                                                                                                                                                                     179.34
                                                                                                                 7.59
                                                                                                                                                                            3929.1
                                                                                                                                                                                                 15.47
         100.00
                                                                      18.82
                                                                                         186.52
                                                                                                                                                                                              -30.08
                                                                                                                                                                                                                     22.03
                                                                                                                                   102.38
                                                                                                                                                                            1523.8
                                                                                                               12.49
         110.00
                                                                     -32.12
                                                                                          30.65
                                                                                                                                                                            3743.2
                                                                                                                                                                                                 18.43
                                                                                                                                                                                                                     163.61
                                                                                                                 5.90
         110.00
                                                                      22.19
                                                                                         170.72
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              RIT .2205 RRF .7169 RTF .2757
SGB 763.8 R23 .1720 R13 .7063
SGI 605.4 SG2 465.6 THA 60.83
                                                                                                                                                                      ST 208.4 SR 355.9 SS 215.7

CRT -.5297 CRS .2631 CST -.9452

LSA 392.7 MSA 248.8 SSA 23.3
     TDE .1706 TRA -.5115 TC3 .0810 BAU .1470
     RDE -.3788 RRA -.3532 RC3 -.2613 FAU .10633
     FOE .3099 FRA-1.6682 FC3-2.2911 BSP 1310
BDE .4155 BRA .6216 BC3 .2736 FSP -832
                                                                                                                                                                      EL1 377.2 EL2 166.8 ALF 111.67
                                                                                                                                                                                    ARRIVAL DATE OCT 14 1967
                                                                                                    FLIGHT TIME 82.00
LAUNCH DATE JUL 24 1967
                                                                                                   DISTANCE 236.669
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 39.352 VML 6.273 DLA 8.60 RAL 137.06 RAD 6568.5 VEL 12.678 PTH 2.30 VMP 4.439 DPA -11.29 RAP 158.78 ECC 1.6476
     C3 39.352 VHL 6.273 DLA 8.60 RAL 137.06 RAD 6568.5 VEL 12.678 PTH 2.30 VHP 4.439 DPA -11.29 RAP 158.78 ECC 1.6476 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ R ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 17 17 2652.02 -27.23 71.11 13.50 98.09 24 1 29 2052.0 -25.83 62.72 90.00 13 29 14 4756.50 16.97 204.07 7.84 66.98 14 48 30 4156.5 13.71 196.91 100.00 0 46 44 2376.20 -28.59 50.59 13.27 99.12 1 26 20 1776.2 -27.03 42.14 100.00 14 46 24 4507.55 18.23 185.19 7.26 65.89 16 1 31 3907.5 14.82 178.06 110.00 2 4 30 2132.85 -32.25 31.32 12.48 102.00 2 40 2 1532.9 -30.26 22.67 110.00 15 45 7 4323.66 21.59 169.52 5.55 62.83 16 57 11 3723.7 17.77 162.47
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 544.4 SGR 606.0 SG3 305.0
RRT .3529 RRF .7554 RTF .4255
SGB 814.6 R23 .1885 R13 .7510
SG1 673.4 SG2 458.4 THA 53.46
                                                                                                                                                                      ST 221.6 SR 345.8 SS 229.9
CRT - .4680 CRS .2896 CST - .9705
LSA 391.1 MSA 260.8 SSA 23.3
     TOE .1721 TRA -.5636 TC3 .0206 BAU .1580
     RDE -.3613 RRA -.3703 RC3 -.2997 FAU .11290
     FOE .3686 FRA-1.7583 FC3-2.4837 BSP 1499
BDE .4002 BRA .6743 BC3 .3004 FSP -900
                                                                                                                                                                      EL1 366.9 EL2 184.6 ALF 112.75
     BDE .4002 BRA .6743 BC3 .3004 FSP
                                                                                                                                                                                      ARRIVAL DATE OCT 16 1967
LAUNCH DATE JUL 24 1967
                                                                                                    FLIGHT TIME 84.00
                                                                                                    DISTANCE 243.191
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.237 GAL -12.40 AZL 91.56 HCA 110.49 SMA 139.81 ECC .23092 INC 1.5588 VI 29.317 RP 108.08 LAP -1.46 LOP 50.93 VP 38.814 GAP -2.52 AZP 89.45 TAL 236.01 TAP 346.50 RCA 107.52 APO 172.09 V2 35.062 RC 75.721 GL -6.94 GP -23.27 ZAL 162.15 ZAP 70.04 ETS 9.22 ZAE 161.63 ETE 284.86 ZAC 107.02 ETC 8.75 CLP -68.18
    PLANETOCENTRIC CONIC
     C3 38.533 VHL 6.207 DLA 9.14 RAL 137.25 RAD 6568.5 VEL 12.645 PTH 2.30 VHP 4.312 DPA -11.62 RAP 156.50 ECC 1.6342
     C3 38.353 WE 6.207 DEA 9.14 REL 137.25 RED 6368.3 VEL 12.605 PE 12
                          13 34 19
                                                                                                                                                                                                                       42.94
                                                                                                                                                      1 23 15
                                                                                                                                                                             1787.6
                                                                                                                                                                                                 -27.21
                                                                                                                                      98.70
                             0 43 27 2387.63
                                                                      -28.71
                                                                                            51.42
                                                                                                                13.32
          100.00
                                                                                                                                      65.45 16 5 57
                                                                                                                                                                                                                      176.76
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                          14 51 11
                                                4485.49
                                                                       17.61
                                                                                          183.84
                                                                                                                 7.03
          100.00
                                                                                                                                                                                                -30.44
                                             2142.23
                                                                                                                                                      2 37 34
                                                                                                                                                                             1542.2
                                                                                                                                                                                                                      23.34
         110.00
                                                                                            32.02
                                                                                                                12.56
                                                                                                                                    101.61
                             2 1 52
                                                                      -32.38
                                                                                                                                      62.36 17 0 59
                                                                                                                                                                       3703.7
                                                                                                                                                                                                17.09
         110.00
                          15 49 16
                                                                                                                 5.29
                                               4303.65
                                                                       20.96
                                                                                          168.31
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 239.0 SR 334.2 SS 243.5
CRT -.4107 CRS .3086 CST -.9846
                                                                                              SGT 606.5 SGR 638.6 SG3 323.6
RRT .4738 RRF .7894 RTF .5540
SGB 880.7 R23 .1918 R13 .7925
      TOE .1772 TRA -.6213 TC3 -.0490 BAU .1768
      ROE -.3423 RRA -.3859 RC3 -.3397 FAU .11864
                                                                                                                                                                    LSA 393.3 MSA 270.0 SSA 23.3
     FOE .4257 FRA-1.8283 FC3-2.6655 BSP 1757
BDE .3855 BRA .7313 BC3 .3432 FSP -969
                                                                                                                                                                      EL1 356.5 EL2 204.3 ALF 115.12
                                                                                               SG1 756.5 SG2 450.8 THA 48.11
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FLIGHT TIME 78.00

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CY 257.2 --.9914 23.4 119.82 20 1967 29.317 35.088 --78.92 1.6073 2 LONG 65.47 92.71 44.69 74.04 24.80 58.91 CY 269.9 --.9923 23.4 129.07 2 1967 9.317 5.101 84.24
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LAUNCH DATE JUL 24 1967
                                                                            FLIGHT TIME 86.00
                                                                                                                                         ARRIVAL CATE OCT 18 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 249.677
    RL 151.97 LAL .00 LOL 300.43 VL 28.230 GAL -12.28 AZL 91.40 HCA 113.70 SMA 139.74 ECC .22925 INC 1.4746 V1 29.317
RP 108.04 LAP -1.29 LOP 54.14 VP 38.820 GAP -1.95 AZP 89.44 TAL 235.82 TAP 349.52 RCA 107.71 APO 171.78 V2 35.075
RC 77.874 GL -6.32 GP -24.42 ZAL 162.29 ZAP 75.05 ETS 7.33 ZAE 160.71 ETE 273.24 ZAC 109.12 ETC 7.74 CLP -73.54
    PLANETOCENTRIC CONIC
     C3 37.716 VHL 6.141 DLA
                                           9.71 RAL 137.53 RAD 6568.5 VEL 12.613 PTH 2.29 VMP 4.219 DPA -11.93 RAP 154.20 ECC 1.6207
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    23 10 18 2677.37
13 39 56 4709.69
0 40 21 2399.61
14 56 30 4462.68
                                                     -27.46
                                                                                 13.68
                                                                                                    97.21
                                                                                                               23 54 55
                                                                                                                                 2077.4
                                                                                                                                               -26.17
         90.00
                                                                     72.93
                                                                                                                                                                 64.50
                                                                                                               14 58 26
                                                                                                                                  4109.7
         90.00
                                                     15.70
                                                                    201.22
                                                                                                     66.13
                                                                                      7.48
                                                                                                                                                  12.34
                                                                                                                                                                194.16
       100.00
                                                                     52.29
                                                                                    13.47
                                                                                                                1 20 21
                                                                                                                                  1799.6
                                                    -28.83
                                                                                                    98.26
                                                                                                                                                                 43.78
                                                                                                                                                -27.39
                                                                                                   65.01 16 10 53
101.19 2 35 20
61.89 17 5 16
       100.00
                                                     16.96
                                                                    182.46
                                                                                     6.88
                                                                                                                                  3862.7
                                                                                                                                                 13.45
                                                                                                                                                               175.43
                     1 59 28
       110.00
                                  2152.05
                                                    - 32 . 51
                                                                     32.76
                                                                                   12.73
                                                                                                                                  1552.0
                                                                                                                                                -30.63
                                                                                                                                                                 24.05
       110.00
                    15 53 53
                                                                    167.07
                                                                                                                                                 16.38
                                    4263.01
                                                    20.30
                                                                                     5.12
                                                                                                                                 3643.0
                                                                                                                                                                160.13
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SCT 689.0 SGR 670.1 SG3 33A.4
RRT .5764 RRF .8176 RTF .6563
SGB 961.1 R23 .1916 R13 .8265
SGI 853.4 SG2 442.1 THA 43.62
    TOE .1855 TRA -.6846 TC3 -.1286 BAU .2021
RDE -.3208 RRA -.3983 RC3 -.3795 FAU .12295
FOE .4866 FRA-1.8669 FC3-2.8222 BSP 2062
                                                                                                                             ST 260.3 SR 320.3 SS 257.2
CRT -.3567 CRS .3295 CST -.9914
LSA 401.3 MSA 273.7 SSA 23.4
    BOE .3706 BRA .7920 BC3 .4008 FSP -1019
                                                                                                                             EL1 345.9 EL2 225.2 ALF 119.82
LAUNCH DATE JUL 24 1967
                                                                            FLIGHT TIME 88.00
                                                                                                                                         ARRIVAL DATE OCT 20 1967
   HELIOCENTRIC CONIC
                                                                           OISTANCE 256.127
        151.97 LAL .00 LOL 300.43 VL 28.215 GAL -12.16 AZL 91.24 HCA 116.91 SMA 139.62 ECC .22769 INC 1.2426 V1 29.317 108.00 LAP -1.11 LOP 57.35 VP 38.821 GAP -1.40 AZP 89.44 TAL 235.52 TAP 352.43 RCA 107.83 APO 171.41 VZ 35.088 80.046 GL -5.65 GP -25.53 ZAL 162.35 ZAP 80.01 ETS 5.34 ZAE 159.17 ETE 262.77 ZAC 111.19 ETC 6.64 CLP -78.92
    RL 151.97 LAL
   PLANETOCENTRIC CONTC
    C3 36.899 VHL 6.074 DLA 10.30 RAL 137.89 RAD 6568.4 VEL 12.580 PTH
                                                                                                       2.28 VHP 4.157 OPA -12.23 RAP 151.92 ECC 1.6073
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 6 58 2691.20 -27.57 73.93 13.90 96.72 23 51 49 2091.2 -26.35 65.47
                                                                                                                                  2091.2
                                                                                                                                               -26.35
                                                                                                    96.72 23 51 49
        90.00
                    13 46 9
                                   4684.79
                                                     15.01
                                                                                      7.43
                                                                                                     65.70
                                                                                                               15 4 14
                                                                                                                                  4084.8
                                                                                                                                                                192.71
                                                                    199.72
                                                                                                                                                 11.60
                    0 37 21 2412.37
15 2 23 4438.85
1 57 12 2162.51
14 50 2 4261.48
                                                                                                     97.78
                                                                                                                 1 17 34
       100.00
                                                     -28.95
                                                                     53.22
                                                                                    13.70
                                                                                                                                  1812.4
                                                                                                                                                 -27.57
                                                                                                                                                                 44.69
       100.00
                                                     16.27
                                                                    181.03
                                                                                     6.82
                                                                                                     64.57
                                                                                                               16 16 22
                                                                                                                                  3838.9
                                                                                                                                                 12.71
                                                                                                                                                               174.04
       110.00
                                                    -32.65
                                                                     33.55
                                                                                                   100.74
                                                                                                               2 33 14
                                                                                                                                  1562.5
                                                                                    13.00
                                                                                                                                                 -30.82
                                                                                                                                                                 24.80
                                                                                                    61.42 17 10 3
       110.00
                    15 59 2
                                   4261.48
                                                                    165.79
                                                                                      5.04
                                                     19.61
                                                                                                                                  3661.5
                                                                                                                                                  15.64
                                                                                                                                                                158.91
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 285.8 SR 305.0 SS 269.9
CRT -.3110 CRS .3430 CST -.9923
    TOE .1982 TRA -.7509 TC3 -.2166 BAU .2330
                                                                        SGT 788.9 SGR 701.4 SG3 349.9
RRT .6562 RRF .8420 RTF .7315
    ROE -.2981 RRA -.4080 RC3 -.4197 FAU .12597
FOE .5418 FRA-1.8792 FC3-2.9556 BSP 2419
BOE .3580 BRA .8546 BC3 .4723 FSP -1065
                                                                       SGB 1055.7 R23 .1907 R13 .8537
SG1 962.4 SG2 433.9 THA 39.91
                                                                                                                             LSA 416.0 MSA 272.0 SSA 23.4
                                                                                                                             EL1 339.2 EL2 244.2 ALF 129.07
                                                                           FLIGHT TIME 90.00
                                                                                                                                       ARRIVAL DATE OCT 22 1967
LAUNCH DATE JUL 24 1967
                                                                           DISTANCE 262.543
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 28.193 GAL -12.03 AZL 91.07 HCA 120.13 SMA 139.44 ECC .22624 INC 1.0709 V1 29.317
RP 107.96 LAP -.93 LOP 60.56 VP 38.817 GAP -.88 AZP 89.46 TAL 235.12 TAP 355.24 RCA 107.89 APO 170.99 V2 35.101
RC 82.236 GL -4.92 GP -26.61 ZAL 162.34 ZAP 84.85 ETS 3.23 ZAE 157.14 ETE 253.85 ZAC 113.18 ETC 5.49 CLP -84.24
   PLANETOCENTRIC CONTC
    C3 36.078 VHL 6.007 DLA 10.92 RAL 138.34 RAD 6568.4 VEL 12.548 PTH 2.27 VHP 4.124 DPA -12.54 RAP 149.72 ECC 1.5938
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 3 39 2706.18 -27.69 75.01 14.21 96.19 23 48 45 2106.2 -26.54 66.53
                                                                                                 96.19 23 48 45
65.28 15 10 42
                                                                                 14.21
        90.00 23 3 39 2706.18
                  13 53 4
                                                                                    7.48
                                                                                                                                 4058.4
                                                                                                                                                 10.81
                                                                                                                                                               191.17
                                   465A.44
        90.00
                                                                  198.14
                                                     14.26
                                                                                   14.02
                                                                                                    97.27
                                                                                                               1 14 49
                                                                                                                                1826.2
                                                                                                                                                -27.77
                     0 34 23 2426.20
       100.00
                                                    -29.08
                                                                    54.23
                                                                                                   64.13 16 22 30
100.26 2 31 16
60.95 17 15 26
                                                                                                                                 3813.7
                                                                                                                                                11.92
                                                                                                                                                               172.59
       100.00
                                                    15.53
                                                                  179.53
                                                                                     6.86
                   15 8 56
                                   4413.66
                                 2173.85
                                                                                   13.35
                                                                                                  100.26
                                                                                                                                1573.8
                                                                                                                                                -31.03
                                                                                                                                                                25.62
                     1 55 2
                                                    -32.79
                                                                    34.40
       110.00
                   16 4 47
                                                                                                                                363A.A
                                                                                                                                                 14,84
                                                                   164.45
                                                                                     5.05
       110.00
                                   4238.77
                                                    18.86
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 903.8 SGR 730.6 SG3 357.1
RRT .7168 RRF .8625 RTF .7854
SGB 1162.1 R23 .1911 R13 .8746
SGI 1081.3 SG2 425.8 THA 36.68
                                                                                                                            ST 315.3 SR 288.0 S5 282.1
CRT -.2718 CRS .3552 CST -.9900
LSA 437.2 MSA 265.1 SSA 23.5
EL1 342.4 EL2 255.3 ALF 144.23
    TOE .2156 TRA -.8194 TC3 -.3124 BAU .2678
    RDE -.2737 RRA -.4138 RC3 -.4590 FAU .12744
    FDE .5935 FRA-1.8610 FC3-3.0581 BSP 2813
BDE .3484 BRA .9180 BC3 .5552 FSP -1099
                                                                           FLIGHT TIME 92.00
                                                                                                                                        ARRIVAL DATE OCT 24 1967
LAUNCH DATE JUL 24 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 268.925
                        .00 LOL 300.43 VL 28.166 GAL -11.90 AZL 90.89 MCA 123.34 SMA 139.22 ECC .22487 INC .8875 V1 29.317 -.74 LOP 63.78 VP 38.809 GAP -.38 AZP 89.51 TAL 234.61 TAP 357.96 RCA 107.91 APO 170.52 V2 35.113 -4.12 GP -27.66 ZAL 162.25 ZAP 89.51 ETS 1.03 ZAE 154.76 ETE 246.51 ZAC 115.03 ETC 4.30 CLP -89.45
    RL 151.97 LAL
RP 107.92 LAP
    RC 84.440 GL
  PLANETOCENTRIC CONIC
    C3 35.253 VHL 5.937 OLA 11.60 RAL 138.87 RAD 6568.4 VEL 12.515 PTH 2.27 VHP 4.119 DPA -12.88 RAP 147.63 ECC 1.5802
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90,00 23 0 13 2722.72 -27.80 76.20 14.61 95.60 23 45 36 2122.7 -26.74 67.70 90,00 14 0 46 4630.20 13.45 196.47 7.61 64.85 15 17 56 4030.2 9.95 189.54
                                                    -29.20
                                                                                                                1 12 3
                                                                                                                                 1841.5
                                                                                                                                                -27.97
                                                                                                                                                                 46.76
                                  2441.45
                                                                    55.35
                                                                                                    96.69
       100.00
                     0 31 22
                                                                                   14.44
                                                                                                             16 29 21
                                                                                                                                 3786.7
                                                                                                                                                 11.07
       100.00
                   15 16 15
                                   4386.70
                                                    14.72
                                                                  177.93
                                                                                     6.98
                                                                                                    63.69
                                  2186.37
                                                    -32.94
                                                                    35.35
                                                                                                    99.71
                                                                                                               2 29 19
                                                                                                                                 1586.4
                                                                                                                                                -31.25
                                                                                                                                                                26.53
       110.00
                     1 52 53
                                                                                   13.81
                                                                                                            17 21 27
                                                                                                                               3614.6
                   16 11 13
                                                                   163.03
                                                                                     5.14
                                                                                                    60.47
                                                                                                                                                13.99
                                   4214.55
                                                    18.05
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 1030.1 SGR 755.3 SG3 359.3
RRT .7622 RRF .8792 RTF .8236
SGB 1277.3 R23 .1932 R13 .8899
                                                                                                                            ST 349.1 SR 268.4 SS 295.0
CRT -.2376 CRS .3644 CST -.9856
    TOE .2380 TRA -.8881 TC3 -.4151 BAU .3048
    RDE -.2467 RRA -.4147 RC3 -.4960 FAU .12709
FDE .6463 FRA-1.8080 FC3-3.1212 BSP 3224
                                                                                                                            LSA 465.0 MSA 253.2 SSA 23.5
    BOE .3428 BRA .9801 BC3 .6468 FSP -1109
                                                                      SG1 1207.3 SG2 417.1 THA 33.76
                                                                                                                            EL1 361.0 EL2 252.1 ALF 159.11
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ARRIVAL DATE OCT 26 1967
                                                                       FLIGHT TIME 94.00
LAUNCH DATE JUL 24 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 275.274
   RL 151.97 LAL .00 LOL 307.43 VL 28.134 GAL -11.77 AZL 97.69 MCA 126.56 SMA 138.95 ECC .22357 INC .6899 VI 29.317
RP 107.89 LAP -.55 LOP 67.07 VP 38.796 GAP .11 AZP 89.59 TAL 234.02 TAP .58 RCA 107.89 APO 177.02 V2 35.125
RC 86.655 GL -3.24 GP -28.70 ZAL 162.07 ZAP 93.96 ETS 358.73 ZAE 152.17 ETE 247.57 ZAC 116.69 ETC 3.10 CLP -94.51
   PLANETOCENTRIC CONIC
    C3 34.423 VHL 5.867 OLA 12.33 RAL 139.50 RAD 6568.4 VEL 12.482 PTH 2.26 VHP 4.140 OPA -13.28 RAP 145.70 ECC 1.5665
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  22 56 34 2741.34
14 9 26 4599.56
0 28 10 2458.63
15 24 27 4357.50
1 50 40 2200.48
16 18 26 4188.42
                                                                                                                                       -26.94
        90.00
                                                 -27.92
                                                                77.55
                                                                              15.13
                                                                                             94.94 23 42 16
                                                                                                                         2141.3
                                                                                                                                                        69.02
                                                               194.66
                                                                               7.85
                                                                                               64.41
                                                                                                        15 26 5
                                                                                                                          3999.6
                                                                                                                                          9.01
                                                                                                                                                       187.78
                                                 12.56
                                                                                              96.04 1 9 9 63.23 16 37 5 99.10 2 27 20 59.98 17 28 15
       100.00
                                                 -29.33
                                                                 56.61
                                                                               14.97
                                                                                                                          1858.6
                                                                                                                                         -28.19
                                                                                                                                                        47.99
                                                                               7.21
                                                                                                                          3757.5
                                                                                                                                         10.13
                                                                                                                                                       169.39
                                                 13.83
                                                               176.22
                                                -33.09
                                                                 36.42
                                                                              14.39
                                                                                                                          1600.5
                                                                                                                                        -31.48
                                                                                                                                                       27.56
                                                               161.52
                                                                                                                         3588.4
                                                                                                                                        13.05
                                                                                                                                                      154.83
                                                                                5.33
                                                                  MID-COURSE EXECUTION ACCORACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 1164.3 SGR 775.9 SG3 357.1
RRT .7960 RRF .8934 RTF .8503
SGB 1399.2 R23 .1974 R13 .9012
                                                                                                                      ST 387.3 SR 246.6 SS 308.2
CRT -. 2066 CRS .3707 CST -. 9803
   TDE .2664 TRA -.9548 TC3 -.5233 BAU .3431
    RDE -.2179 RRA -.4109 RC3 -.5309 FAU .12516
    FDE .6961 FRA-1.7267 FC3-3.1478 BSP 3648
                                                                                                                      LSA 498.5 MSA 238.2 SSA 23.7
                                                                   SG1 1338.2 SG2 408.6 THA 31.17
                                                                                                                      EL1 392.6 EL2 238.0 ALF 168.07
    BOE .3441 BRA 1.0395 BC3 .7454 FSP -1101
                                                                                                                                 ARRIVAL DATE OCT 28 1967
AUNCH DATE JUL 24 1967
                                                                       FLIGHT TIME 96.00
                                                                       DISTANCE 281.592
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 28.097 GAL -11.62 A7L 90.48 MCA 129.78 SMA 138.65 ECC .22234 INC .4750 VI 29.317 RP 107.85 LAP -.37 LOP 70.22 VP 38.780 GAP .57 A7P 89.70 TAL 233.34 TAP 3.12 RCA 107.82 APO 169.48 V2 35.137 RC 88.880 GL -2.26 GP -29.75 ZAL 161.79 ZAP 98.13 ETS 356.33 ZAE 149.46 ETE 235.80 ZAC 118.15 ETC 1.88 CLP -99.38
  PLANETOCENTRIC CONIC
   C3 33.594 VHL 5.796 DLA 13.13 RAL 140.23 RAD 6568.3 VEL 12.448 PTH 2.25 VHP 4.186 DPA -13.77 RAP 143.95 ECC 1.5529
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 22 52 32 2762.73
90.00 14 19 14 4565.85
100.00 0 24 39 2478.36
100.00 15 33 45 4325.46
                                                                                                                        2162.7
                                                                79.11
                                                                             15.76
                                                                                            94.16 23 38 35
                                                                                                                                         -27.16
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                                                 -28.03
                                                                                                        15 35 20
                                                                                                                          3965.9
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                                                                                                                                                        185.85
                                                  11.56
                                                               192.69
                                                                                8.20
                                                                                               63.97
                                                                                               95.29
                                                                                                        1 5 57
                                                                                                                          1878.4
                                                                                                                                         -28.42
                                                                                                                                                         49.41
                                                 -29.46
                                                                 58.06
                                                                               15.63
                                                                                                        16 45 50
                                                  12.84
                                                               174.36
                                                                                7.54
                                                                                               62.77
                                                                                                                          3725.5
                                                                                                                                          9.09
                                                                                                                                                       167.57
      100.00
                  1 48 16 2216.71
16 26 37 4159.87
                                                                                               98.38 2 25 13
59.48 17 35 57
                                                -33.26
                                                                                                                          1616.7
                                                                                                                                         -31.75
                                                                                                                                                        28.76
                                                                37.66
                                                                              15.09
                                                  16.19
                                                               159.89
                                                                                5.63
                                                                                                                          3559.9
                                                                                                                                         12.02
                                                                                                                                                        153.26
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1304.0 SGR 795.9 SG3 352.1
RRT .8211 RRF .9064 RTF .8693
                                                                                                                      ST 430.4 SR 224.3 SS 320.4
CRT -.1752 CRS .3625 CST -.9765
    TOE .3011 TRA-1.0182 TC3 -.6361 BAU .3824
    RDE -.1887 RRA -.4041 RC3 -.5660 FAU .12227
   FOE .7338 FRA-1.6303 FC3-3.1510 BSP 4107
BDE .3553 BRA 1.0954 BC3 .8514 FSP -1098
                                                                                                                      LSA 537.0 MSA 222.0 SSA 23.8
                                                                   SGB 1527.7 R23 .2039 R13 .9100
                                                                   SGI 1473.9 SG2 401.9 THA 28.98
                                                                                                                      EL1 432.8 EL2 219.6 ALF 172.96
                                                                                                                                ARRIVAL DATE OCT 30 1967
LAUNCH DATE JUL 24 1967
                                                                       FLIGHT TIME 98.00
                                                                      DISTANCE 287.880
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 28.055 GAL -11.47 AZL 90.24 HCA 133.00 SMA 138.31 ECC .22117 INC .2384 VI 29.317 RP 107.82 LAP -.17 LOP 73.44 VP 38.760 GAP 1.01 AZP 89.84 TAL 232.59 TAP 5.59 RCA 107.72 APO 168.90 V2 35.149 RC 91.113 GL -1.15 GP -30.84 ZAL 161.40 ZAP 102.00 ETS 353.82 ZAE 146.70 ETE 232.01 ZAC 119.38 ETC .68 CLP-104.02
  PLANETOCENTRIC CONTC.
    C3 32.768 VHL 5.724 DLA 14.04 RAL 141.06 RAD 6568.3 VEL 12.415 PTH 2.24 VHP 4.255 OPA -14.38 RAP 142.38 ECC 1.5393
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -27.40
                                                                                                                                                       72.35
       90.00 22 47 55 2787.81
90.00 14 30 29 4528.23
100.00 0 20 38 2501.48
                                                                           16.53
                                                                                            93.25 23 34 23
                                                                                                                       2187.8
                                                               80.94
                                                -28.14
                                                                                8.67
                                                                                              63.52
                                                                                                        15 45 57
                                                                                                                          3928.2
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                                                               190.51
                                                 10.43
                                                                                              94.40
                                                                                                          1 2 19
                                                                                                                          1901.5
                                                                                                                                        -28.67
                                                                                                                                                        51.08
                                                                              16.42
                                                                59.76
      100.00
                                                -29.60
                                                                                                                                                       165.57
                                                                                8.00
                                                                                              62.30
                                                                                                        16 55 53
                                                                                                                          3689.8
                                                                                                                                           7.92
                  15 44 23 4289.79
1 45 33 2235.75
16 35 57 4128.28
                                                 11.72
                                                               172.30
      100.00
                                                -33.44
                                                                                              97.54
                                                                                                         2 22 49
                                                                                                                          1635.8
                                                                                                                                                        30.16
                                                                              15.95
      110.00
                                                                 39.11
                                                                                               58.96
                                                                                                        17 44 45
                                                                                                                          3528.3
                                                                                                                                        10.87
                                                                                                                                                       151.54
                                                                                6.05
      110.00
                                                15.09
                                                               158.10
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   RRT .8399 RRF .9178 RTF .8828
SGB 1659.2 R23 .2126 R13 .9163
SGI 1611.3 SGZ 395.8 THA 27.01
                                                                                                                     ST 479.2 SR 200.0 SS 333.9

CRT -.1358 CRS .3421 CST -.9732

LSA 582.2 MSA 203.8 SSA 24.0
    TOE .3431 TRA-1.0763 TC3 -.7524 BAU .4214
    RDE -.1572 RRA -.3929 RC3 -.5993 FAU .11812
   FOE .7699 FRA-1.5135 FC3-3.1207 BSP 4570
BDE .3774 BRA 1.1458 BC3 .9619 FSP -1079
                                                                                                                      EL1 480.1 EL2 197.7 ALF 176.09
                                                                                                                                 ARRIVAL DATE NOV 1 1967
                                                                       FLIGHT TIME 100.00
LAUNCH DATE JUL 24 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 294.138
                           .00 LOL 300.43 VL 28.010 GAL -11.31 A7L 89.98 HCA 136.23 SMA 137.95 ECC .22005 INC .0171 VI 29.317 .02 LOP 76.66 VP 38.738 GAP 1.44 A7P 90.02 TAL 231.76 TAP 7.99 RCA 107.59 APO 168.30 VZ 35.160 .11 GP -32.01 ZAL 160.89 ZAP 105.55 ETS 351.19 ZAE 143.94 ETE 229.01 ZAC 120.36 ETC 359.47 CLP-108.43
   RL 151.97 LAL
   RP 107.78 LAP
   RC 93.352 GL
  PLANETOCENTRIC CONIC
   C3 31.953 VHL 5.653 DLA 15.07 RAL 142.00 RAD 6568.3 VEL 12.382 PTH 2.24 VHP 4.348 DPA -15.14 RAP 140.99 ECC 1.5259 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              92.16 23 29 22
63.08 15 58 17
                   22 42 25 2817.82
14 43 32 4485.54
                                                                             17,47
                                                                                                                          2217.8
                                                                                                                                         -27.64
                                                                                                                                                         74.51
                                                 -28.24
                                                                83.13
       90.00
                                                                                                                           3885.5
                                                                                                                                          5.44
                                                                                                                                                        181.31
                                                               188.05
                                                                                9.31
       90.00
                                                  9.12
                   0 15 52 2529.12
15 56 42 4249.46
                                                                                                                          1929.1
                                                                                                                                                         53.09
                                                                 61.81
                                                                               17.39
                                                                                               93.33
                                                                                                          0 58 1
                                                                                                                                         -28.95
                                                 -29.72
      100.00
                                                                                                        17 7 31
                                                                                                                                                        163.32
                                                               170.00
                                                                                               61.83
                                                                                                                          3649.5
                                                                                                                                          6.59
      100.00
                                                 10.44
                                                                                8.61
                               2258.51
                                                                                                          2 19 59
                                                                                                                                                        31.86
                                                -33.63
                                                                              16.99
                                                                                               96.52
                                                                                                                          1658.5
                                                                                                                                        -32.36
      110.00
                    1 42 21
                                                                 40.86
                                                                                               58.43 17 54 55
                   16 46 42
                                                               156.12
                                                                                6.62
                                                                                                                          3492.8
                                                                                                                                         9.56
                                                                                                                                                       149.63
      110.00
                                 4092.84
                                                 13.84
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1590.3 SGR 824.3 SG3 331.2
RRT .8540 RRF .9276 RTF .8922
SGB 1791.2 R23 .2234 R13 .9206
                                                                                                                     ST 535.3 SR 173.2 SS 350.2
CRT -.0756 CRS .2987 CST -.9702
    TOE .3943 TRA-1.1272 TC3 -.8709 BAU .4592
   ROE -.1228 RRA -.3766 RC3 -.6303 FAU .11277
FOE .8078 FRA-1.3773 FC3-3.0553 BSP 5013
                                                                                                                    LSA 636.2 MSA 184.1 55A 24.2
                                                                   SG1 1748.2 SG2 390.1 THA 25.22
                                                                                                                      EL1 535.5 EL2 172.7 ALF 178.44
    BOE .4130 BRA 1.1884 BC3 1.0750 FSP -1040
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ARRIVAL DATE NOV 3 1967

LAUNCH DATE JUL 24 1967

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DISTANCE 300.369
  HELIOCENTRIC CONIC
                        .00 LOL 300.43 VL 27.962 GAL -11.15 AZL 89.68 HCA 139.45 SMA 137.56 ECC. 21899 INC .3188 V1 29.317 .21 LOP 79.88 VP 38.712 GAP 1.85 AZP 90.24 TAL 230.87 TAP 10.32 RCA 107.44 APO 167.68 V2 35.170 1.57 GP -33.29 ZAL 160.22 ZAP 108.73 ETS 348.41 ZAE 141.18 ETE 226.67 ZAC 121.10 ETC 358.26 CLP-112.60
   RL 151.97 LAL
RP 107.75 LAP
   RC 95.596 GL
   PLANETOCENTRIC CONIC
    C3 31.163 VHL 5.582 DLA 16.25 RAL 143.08 RAD 6568.2 VEL 12.351 PTH 2.23 VHP 4.464 DPA -16.09 RAP 139.78 ECC 1.5129
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                        2254.6
                                                                                                                                                      77.17
                  22 35 37 2854.55
14 58 56 4436.22
                                                 -28.31
                                                               85.81
                                                                             18.60
                                                                                             90.82
                                                                                                      23 23 12
                                                                                                                                     -27.89
       90.00
                                                                                                                                                     178.54
                                                  7.59
                                                                                                     16 12 52
                                                                                                                        3836.2
                                                                                                                                        3.66
                                                               185.24
                                                                              10.15
                                                                                             62.64
       90.00
                                                                                                                                                      55.56
                  0 10 0 2562.89
16 11 10 4203.12
                                                                64:31
                                                                              18.56
                                                                                             92.01
                                                                                                        0 52 43
                                                                                                                        1962.9
                                                                                                                                      -29.23
                                                -29.83
      100.00
                                                                                                                                                     160.75
                                                                                                     17 21 13
                                                                                                                        3603.1
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                                                                               9.43
                                                                                             61.36
                                                               167.38
      100.00
                                                  8.93
                                                                                                                                                     33.94
                                                                                             95.26
                                                                                                       2 16 30
                                                                                                                        1686.3
                                                                                                                                      -32.73
                               2286.28
                                                -33.82
                                                                43.01
                                                                             18.26
      110.00
                   1 38 24
                                                                                             57.88 18 6 48
                                                                                                                        3452.5
                                                                                                                                        8.06
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                                                                               7.37
      110.00
                                                               153.89
                  16 59 15
                                 4052.49
                                                12.39
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 1734.6 SGR 836.4 SG3 317.1
RRT .8645 RRF .9369 RTF .8991
SGB 1925.8 R23 .2359 R13 .9239
                                                                                                                    ST 600.0 SR 146.8 SS 367.6
CRT .0245 CRS .2077 CST -.9690
    TOE .4550 TRA-1.1702 TC3 -.9917 BAU .4967
   RDE -.0868 RRA -.3574 RC3 -.6616 FAU .10686
FDE .8391 FRA-1.2357 FC3-2.9685 BSP 5479
                                                                                                                    LSA 699.4 MSA 164.4 SSA
                                                                                                                                                        24.3
                                                                  SGI 1886.6 SG2 386.5 THA 23.68
                                                                                                                    EL1 600.0 EL2 146.8 ALF
                                                                                                                                                          .37
    BOE .4632 BRA 1.2235 BC3 1.1921 FSP -1003
                                                                                                                               ARRIVAL DATE NOV 5 1967
                                                                      FLIGHT TIME 104.00
LAUNCH DATE JUL 24 1967
                                                                      DISTANCE 306.573 -
  HELIOCENTRIC CONIC
                        .00 LOL 300.43 VL 27.910 GAL -10.98 AZL 89.34 MCA 142.68 SMA 137.15 ECC .21798 INC .6564 V1 29.317 .40 LOP 83.11 VP 38.684 GAP 2.24 AZP 90.52 TAL 229.91 TAP 12.58 RCA 107.25 APO 167.05 V2 35.180 3.26 GP -34.75 ZAL 159.35 ZAP 111.53 ETS 345.46 ZAE 138.43 ETE 224.89 ZAC 121.59 ETC 357.02 CLP-116.53
   RL 151.97 LAL
RP 107.72 LAP
  PLANETOCENTRIC CONIC
   C3 30.415 VHL 5.515 DLA 17.64 RAL 144.32 RAD 6560.2 VEL 12.320 PTH
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT AS6 INJ
                                                                                               2.22 VHP 4.605 DPA -.7.27 RAP 138.70 ECC 1.5006
                                              INJ LAT INJ LONG INJ RT ASE INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                      80.52
                                                                                             89.13 23 15 16
                                                                                                                        2300.6
                                                                                                                                      -28.13
                                                                            19.99
                                                 -28.30
                                                               89.18
       90.00
                  22 26 55 2900.62
                 15 17 30 4377.95
0 2 30 2605.07
16 28 32 4148.73
1 33 21 2320.81
17 14 10 4004.76
                                                                                                                                                     175.28
                                                                                                       16 30 28
                                                                                                                         3777.9
                                                                                                                                         1.99
                                                  5.75
                                                               181.94
                                                                              11.27
                                                                                              62.23
       90.00
                                                                                                         0 45 55
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                                                                              19.99
                                                                                              90.37
                                                 -29.89
                                                                67.45
      100.00
                                                                                                                                                     157.75
                                                                                              60.90
                                                                                                       17 37 41
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                                                                                                                                         3.21
                                                  7.15
                                                               164.33
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      100.00
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                                                 -34.01
                                                                45.69
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      110.00
                                                                                              57.33 18 20 56
                                                               151.35
                                                                               8.36
                                                                                                                         3405.6
                                                                                                                                         6.30
                                                                                                                                                     144.99
      110.00
                                                 10.68
                  17 14 10
                                4005.76
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 1877.3 SGR 845.4 SG3 300.5
RRT .8719 RRF .9452 RTF .9038
SGB 2058.9 R23 .2499 R13 .9260
                                                                                                                    ST 676.7 SR 121.. 55 389.5
CRT .2069 CRS .0280 CST -.9684
LSA 776.4 MSA 144.8 SSA 24.4
    TDE .5290 TRA-1.2022 TC3-1.1121 BAU .5323
    ROE -.0467 RRA -.3330 RC3 -.6908 FAU .10009
FOE .8738 FRA-1.0827 FC3-2.8491 BSP 5919
BDE .5310 BRA 1.2475 BC3 1.3092 FSP -951
                                                                  561 2022.7 562 384.3 THA 22.28
                                                                                                                    EL1 677.2 EL2 118.7 ALF
                                                                                                                                                       2.19
                                                                                                                               ARRIVAL DATE NOV 7 1967
                                                                      FLIGHT TIME 106.00
LAUNCH DATE JUL 24 1967
                                                                      DISTANCE 312.751
   HELIOCENTRIC CONIC
                         .00 LOL 300.43 VL 27.856 GAL -10.80 AZL 88.95 HCA 145.90 SMA 136.72 ECC .21702 INC 1.0478 VI 29.317 .59 LOP 86.34 VP 38.654 GAP 2.62 AZP 90.87 TAL 228.89 TAP 14.79 RCA 107.05 APO 166.40 V2 35.190 5.27 GP -36.42 ZAL 158.24 ZAP 113.92 ETS 342.31 ZAE 135.67 ETE 223.58 ZAC 121.84 ETC 355.74 CLP-120.25
    RL 151.97 LAL
    RP 107.69 LAP
    RC 100.092 GL
   PLANETOCENTRIC CONIC
    C3 29.738 VHL 5.453 DLA 19.29 RAL 145.75 RAD 6568.2 VEL 12.293 PTH 2.21 VHP 4.776 DPA -18.73 RAP 137.73 ECC 1.4894
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           86.95 23 4 39
61.88 16 52 18
                                                                           21.67
                                                                                                                     2360.1
                                                                                                                                    -28.29
                                                                                                                                                      84.85
                  22 15 19 2960.11
15 40 31 4307.16
                                                               93.53
                                                 -28.17
        90.00
                                                                                                                                                     171.33
                                                                              12.75
                                                                                                                        3707.2
                                                                                                                                        -.30
                                                               177.96
        90.00
                                                  3.49
                                                                              21.75
                                                                                             88.25 24 32 57
                                                                                                                        2059.2
                                                                                                                                      -29.77
                                                                                                                                                      62.67
                                                                71.47
                   23 48 38
                                2659.19
                                                 -29.85
       100.00
                                                                                                     17 57 56
                                                                                                                        3483.3
                                                                                                                                        1.00
                                                                                                                                                     154.16
                                                                                             60.49
                                                                              11.95
                                                               160.70
                  16 49 53
                                4083.31
                                                  4.96
                                                                                                                        1764.7
                                                                                                                                       -33.54
                                                                                                                                                      39.92
                  1 26 41 2364.70
17 32 14 3950.56
                                                                              21.75
                                                                                             91.67
       110.00
                                                 -34.15
                                                                49.11
                                                                                                                                                     142.09
                                                                                                     18 38 5
                                                                                                                        3350.6
                                                                                                                                        4.21
                                                                                              56.80
                                                                               9.70
                                                   8 . 64
                                                               148.38
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  RET .8765 RRF .9531 RTF .9073
SGB 219344 R23 .2648 R13 .9276
SGI 2159.3 SGZ 385.2 THA 21.07
                                                                                                                    ST 768.4 SR 104.6 SS 414.2
CRT .4980 CRS -.2859 CST -.9695
    TOE .6184 TRA-1.2225 TC3-1.2318 BAU .5672
    ROE -. 0037 RRA -. 3050 RC3 -. 7200 FAU . 09298
                                                                                                                    LSA 869.5 MSA 127.1 SSA 24.1
    FOE .9046 FRA -.9287 FC3-2.7068 BSP 6376
BOE .6184 BRA 1.2600 BC3 1.4268 FSP -899
                                                                                                                    EL1 770.2 EL2 -90.5 ALF
                                                                                                                                                         3.93
                                                                                                                               ARRIVAL DATE NOV 9 1967
                                                                     OFLIGHT TIME 108,00
LAUNCH DATE JUL 24 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 318.903
                        .00 LOL 300.43 VL 27.799 GAL -10.61 AZL 88.49 MCA 149.13 SMA 136.28 ECC .21612 INC 1.5107 V1 29.317 .78 LOP 89.57 VP 38.622 GAP 2.99 AZP 91.30 TAL 227.82 TAP 16.95 RCA 106.83 APO 165.73 V2 35.199 7.66 GP -38.39 ZAL 156.80 ZAP 115.84 ETS 338.90 ZAE 132.83 ETE 222.68 ZAC 121.85 ETC 354.38 CLP-123.78
    RL 151.97 LAL
RP 107.66 LAP
    RC 102.344 GL
   PLANETOCENTRIC CONIC
                                                                                               2.21 VHP 4.983 DPA -20.51 RAP 136.80 ECC 1.4802
    C3 29.175 VHL 5.401 DLA 21.28 RAL 147.42 RAD 6568.2 VEL 12.270 PTH
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CET TIM INJ 2 LAT INJ 2 LONG
    LNCH AZNTH LNCH TIME L-I TIME
                                                                                             84.07 22 49 37
                                                                                                                         2440.1
                                                                                                                                      -28.27
                                                                                                                                                       90.71
                                                                              23.71
        90.00 21 58 57 3040.11
90.00 16 10 14 4217.60
                                                                99.34
                                                 -27.74
                                                                                              61.69 17 20 32
                                                                                                                         3617.6
                                                                                                                                        -3.18
                                                                                                                                                     166.33
                                                                              14.84
                                                               172.96
                                                   . 61
                                                                                                      24 20 19
                                                                                                                         2131.0
                                                                                                                                       -29.89
                                                                                                                                                       68.00
                                                                                              85.46
                                                 -29.58
                                                                76.79
                                                                              23.91
                                 2731.03
                  23 34 48
                                                                                              60.18 18 23 46
                                                                                                                         3401.9
                                                                                                                                       -1.76
                                                                                                                                                     149.59
                  17 17 4
                                 4001.91
                                                  2.22
                                                               156.21
                                                                              13.94
       100.00
                                                                                                         1 57 54
                                                                                                                         1821.9
                                                                                                                                       -33.93
                                                                                                                                                       44.34
                                                                              24.17.
                                                                                              89.02
                    1 17 32
                                                 -34.17
                                                                53.58
                                 2421.93
                                                                                                                                                     138.60
                                                                                                       18 59 29
                                                                                                                         3283.8
                                                                                                                                         1.66
                                                               144.83
                                                                              11.52
                                                                                              56.31
       110.00
                   17 54 45
                                 3883.78
                                                   6.13
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 2161.5 SGR 865.6 SG3 262.9
RRT .8787 RRF .9601 RTF .9099
SGB 2328.4 R23 .2797 R13 .9289
                                                                                                                     ST 880.2 SR 106.7 SS 443.4
CRT .8099 CRS -.6625 CST -.9716
     TDE .7283 TRA-1.2283 TC3-1.3478 BAU
                                                     .6011
    ROE .0440 RRA -.2720 RC3 -.7470 FAU .08542
                                                                                                                    LSA 984.7 MSA 112.6 S5A 23.1
EL1 884.5 EL2 62.3 ALF 5.64
    FOE .9353 FRA -.7730 FC3-2.5346 BSP 6844
BDE .7297 BRA 1.2581 BC3 1.5410 FSP -844
                                                                   SG1 2295.7 SG2 389.1 THA 19.98
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FLIGHT TIME 192,90

ARRIVAL DATE NOV 11 1967

EL1 1760.4 EL2 56.2 ALF 10.39

AUNCH DATE JUL 24 1967

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DISTANCE 325.032.
   HELIOCENTRIC CONIC
                         .00 LOL 300.43 VL 27.741 GAL -10.42 AZL 87.93 MCA 152.35 SMA 135.83 ECC .21527 INC 2.0703 VI 29.317 .96 LOP 92.80 VP 38.587 GAP 3.34 AZP 91.83 TAL 226.70 TAP 19.06 RCA 106.59 APO 165.07 V2 35.208 10.58 GP -40.74 ZAL 154.91 ZAP 117.24 ETS 335.19 ZAE 129.88 ETE 222.12 ZAC 121.64 ETC 352.90 CLP-127.17
    RL 151.97 LAL
    RP 107.63 LAP
    RC 104.596 GL
   PLANETOCENTRIC CONIC
                                                                                                     2.20 VMP 5.237 DPA -22.69 RAP 135.85 ECC 1.4740
    C3 28.802 VHL 5.367 DLA 23.71 RAL 149.42 RAD 6568.2 VEL 12.255 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 33 46 3155.19 -26.66 107.54 26.13 80.07 22 26 21 2555.2 -27.76 99.09 90.00 16 51 22 4096.08 -3.31 166.18 17.86 61.86 17 59 39 3496.1 -7.05 159.49 100.00 23 14 10 2831.47 -28.81 84.16 26.52 81.66 24 1 22 2231.5 -29.66 75.46
                                                                                                   60.14 18 58 34
85.48 1 46 1
55.93 19 27 13
                                                                                                                                 3295.0
                                                                                                                                                 -5.37
                                                                                                                                                               143.60
       100.00
                   17 53 39
                                   3895.04
                                                     -1.40
                                                                   150.35
                                                                                   16.81
                                                                                                                                               -34.17
                                                                                                                                                                50.35
                      1 4 22
                                   2499.02
                                                    -33.92
                                                                    59.58
                                                                                   27.19
                                                                                                                                 1899.0
       110.00
                   18 23 53 3800.26
                                                                   140.45
                                                                                   14.08
                                                                                                                                 3200.3
                                                                                                                                                 -1.53
                                                                                                                                                               134.24
       110.00
                                                     2.96
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 2301.0 SGR 872.9 SG3 241.1
RRT .8779 RRF .9660 RTF .9117
SG8 2461.0 R23 .2944 R13 .9296
SG1 2428.9 SG2 396.0 THA 18.94
    TOE .8686 TRA-1.2142 TC3-1.4523 BAU .6325
ROE .0992 RRA -.2309 RC3 -.7672 FAU .07720
                                                                                                                            ST 1021.1 SR 135.5 SS 480.3
CRT .9665 CRS -.8969 CST -.9744
                                                                                                                            LSA 1131.6 MSA 103.5 SSA 20.7
EL1 1029.4 EL2 34.5 ALF 7.32
    FOE .9713 FRA -.6120 FC3-2.3204 BSP 7271
BDE .8743 BRA 1.2360 BC3 1.6425 FSP -775
                                                                           FLIGHT TIME 112.00
                                                                                                                                        ARRIVAL DATE NOV 13 1967
LAUNCH DATE JUL 24 1967
                                                                           DISTANCE 331.136
  HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 27.680 GAL -10.21 AZL 87.23 HCA 155.58 SMA 135.36 ECC .21447 INC 2.7650 V1 29.317 RP 107.61 LAP 1.14 LOP 96.04 VP 38.551 GAP 3.68 AZP 92.52 TAL 225.54 TAP 21.12 RCA 106.33 APO 164.40 V2 35.216 RC 106.849 GL 14.19 GP -43.57 ZAL 152.42 ZAP 118.04 ETS 331.14 ZAE 126.70 ETE 221.82 ZAC 121.21 ETC 351.22 CLP-130.46
   PLANETOCENTRIC CONIC
                                                                                                     2.20 VHP 5.559 OPA -25.33 RAP 134.77 ECC 1.4732
    C3 28.751 VHL 5.362 DLA 26.73 RAL 151.87 RAD 6568.2 VEL 12.253 PTH
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
        90.00
                    20 45 33
                                   3352.84
                                                    -23.61
                                                                   121.24
                                                                                   28.53
                                                                                                    73.89 21 41 26
                                                                                                                                2752.8
                                                                                                                                               -25.59
                                                                                                                                                                113.14
        90.00
                    17 59 9
                                   3697.54
                                                     -9.57
                                                                   154.95
                                                                                    22.79
                                                                                                    63.22
                                                                                                               19 4 7
                                                                                                                                 3297.5
                                                                                                                                                 -13.09
                                                                                                                                                                148.03
                                                                                                    76.14 23 28 34
60.80 19 50 55
                    22 38 46
                                   2987.86
                                                    -26.75
                                                                    95.32
                                                                                    29.46
                                                                                                                                 2387.9
                                                                                                                                                -28.39
                                                                                                                                                                 86.90
       100.00
       100.00
                    18 48 37
                                   3737.75
                                                     -6.69
                                                                   141.67
                                                                                    21.25
                                                                                                                                 3137.8
                                                                                                                                                -10.54
                                                                                                                                                                134.99
                                                                                                    80.59 1 27 29
55.84 20 5 18
                     0 44 1
                                                    -33.01
                                                                                    30.94
                                                                                                                                 2008.2
                                                                                                                                                -33.96
                                                                                                                                                                 58.87
       110.00
                                   2608.24
                                                                     67.98
       110.00
                    19 3 48
                                   3690.13
                                                     -1.25
                                                                   134.70
                                                                                   17.88
                                                                                                                                 3090.1
                                                                                                                                                 -5.72
                                                                                                                                                                128.47
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 2441.4 SGR 879.7 SG3 218.0
RRT .8737 RRF .9707 RTF .9136
SGB 2595.1 R23 .3070 R13 .930F
SGI 2562.8 SG2 407.6 TMA 17.95
                                                                                                                             ST 1199.5 SR 186.0 SS 522.4
CRT .9956 CRS -.9753 CST -.9780
    TOE 1.0496 TRA-1.1767 TC3-1.5381 BAU .6626
    ROE .1613 RRA -.1819 RC3 -.7784 FAU .06866
    FOE 1.0046 FRA -.4547 FC3-2.0674 BSP 7725
BOE 1.0620 BRA 1.1907 BC3 1.7238 FSP -708
                                                                                                                             LSA 1317.6 MSA 100.2 SSA 17.2
                                                                                                                             EL1 1213.7 EL2 17.2 ALF 8.78
                                                                                                                                       ARRIVAL DATE NOV 15 1967
                                                                           FLIGHT TIME 114.00
LAUNCH DATE JUL 24 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 337.216
    RL 151.97 LAL .00 LOL 300.43 VL 27.618 GAL -10.00 AZL 86.34 MCA 158.80 SMA 134.89 ECC .21372 INC 3.6570 VI 29.317 RP 107.59 LAP 1.32 LOP 99.28 VP 38.514 GAP 4.01 AZP 93.41 TAL 224.32 TAP 23.13 RCA 106.06 APO 163.72 V2 35.223 RC 109.101 GL 18.71 GP -47.00 ZAL 149.07 ZAP 118.14 ETS 326.67 ZAE 123.18 ETE 221.69 ZAC 120.57 ETC 349.26 CLP-133.75
   PLANETOCENTRIC CONIC
    C3 29.265 VHL 5.410 DLA 30.50 RAL 154.99 RAD 6568.2 VEL 12.273 PTH 2.21 VHP 5.981 DPA -28.5. RAP 133.39 ECC 1.4816
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                65.33 19 5 25
65.32 22 5 8
65.33 19 5 25
                                                                                                                                                           154.75
                 17 59 50 3935.33
                                                   -18.53
                                                                  162.16
                                                                                 30.33
                                                                                                                                3335.3 -21.70
        78.17
                                                                   117.10
                                                                                   30.32
                                                                                                                                2723.9
                                                                                                                                                -21.69
                                                                                                                                                               109.69
                   21 9 44
       101.83
                                   3323.91
                                                    -18.51
                   17 59 50
                                                                                   30.33
                                                                                                                                3335.3
                                                                                                                                                -21.70
                                                                                                                                                               154.75
        78.17
                                   3935.33
                                                   -18.53
                                                                   162.16
                                                                                                    65.32 22
                                                                                                                                                               109.69
                   21 9 44
0 7 24
                                                                   117.10
                                                                                   30.32
                                                                                                                    5 8
                                                                                                                                2723.9
                                                                                                                                                -21.69
       101.83
                                   3323.91
                                                   -18.51
                                                                                                               0 53 45
                                                                                                                                                                72.03
                                  2780.48
                                                    -30.37
                                                                    80.69
                                                                                   35.20
                                                                                                    73.51
                                                                                                                                                -32.33
       .10.00
                                                                                                    56.54 21 4 2
                   20 5 16
                                                                   126.12
                                                                                   24.03
                                                                                                                                2926.8
                                                                                                                                               -11.80
                                                                                                                                                               119.72
                                   3526.76
                                                     -7.45
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 2581.5 SCR 879.1 SC3 192.5
RRT .8645 RRF .9731 RTF .9156
SCB 2727.1 R23 .3174 R13 .9317
SCI 2694.0 SG2 423.4 THA 16.83
                                                                                                                            ST 1431.2 SR 252.2 SS 572.6

CRT .9916 CRS .9960 CST .9819

LSA 1558.5 MSA 103.5 SSA 13.0
    TDE 1.2945 TRA-1.1044 TC3-1.5851 BAU .6891
    RDE .2333 RRA -.1187 RC3 -.7681 FAU .05945
    FDE 1.0399 FRA -.2959 FC3-1.7589 BSP 8143
                                                                                                                            EL1 1452.9 EL2 32.1 ALF 9.91
                                                                                                                                        ARRIVAL DATE NOV 17 1967
                                                                           FLIGHT TIME 116.00
LAUNCH DATE JUL 24 1967
                                                                           DISTANCE 343.270
  HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 27.555 GAL -9.78 AZL 85.15 MCA 162.02 SMA 134.42 ECC .21303 INC 4.6520 V1 29.317 RP 107.57 LAP 1.50 LOP 102.51 VP 38.474 GAP 4.33 AZP 94.62 TAL 223.07 TAP 25.09 RCA 105.78 APO 163.05 V2 35.230 RC 111.351 GL 24.43 GP -51.21 ZAL 144.55 ZAP 117.38 ETS 321.70 ZAE 119.15 ETE 221.55 ZAC 119.73 ETC 346.83 CLP-137.23
   PLANETOCENTRIC CONIC
    C3 30.844 VHL 5.554 DLA 35.23 RAL 159.14 RAD 6568.2 VEL 12.338 PTH
                                                                                                     2.22 VHP 6.564 DPA -32.42 RAP 131.47 ECC 1.5076
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CBT TIM INJ 2 LAT INJ 2 LONG
68.10 17 10 44 4152.19 -20.74 179.97 36.74 60.86 18 19 56 3552.2 -24.46 172.71
                                                                                                    60.85 23 24 11
                   22 31 58
                                                    -20.73
                                                                   103.69
                                                                                    36.73
                                                                                                                                 2533.4
                                                                                                                                                -24.45
       111.90
                                  3133.40
                                                                                                    60.86 18 19 56
60.85 23 24 11
60.86 18 19 56
60.85 23 24 11
                                                    -20.74
                                                                   179.97
                                                                                    36.74
                                                                                                                                 3552.2
                                                                                                                                                -24.46
                                                                                                                                                                172.71
                    17 10 44
                                   4152.19
        68.10
                                                                   103.69
                    22 31 58
                                                    -20.73
                                                                                    36.73
                                                                                                                                                -24.45
       111.90
                                  3133.40
                                                                                                                                                                172.71
                    17 10 44
                                   4152.19
                                                    -20.74
                                                                   179.97
                                                                                   36.74
                                                                                                                                 3552.2
                                                                                                                                                -24.46
        68.10
                   22 31 58
                                3133.40
                                                                   103.69
       111.90
                                                    -20.73
                                                                                   36.73
                                                                                                                                 2533.4
                                                                                                                                               -24.45
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 2725.9 SGR 866.4 SG3 165.4
RRT .8468 RRF .9714 RTF .9189
SGB 2860.2 R23 .3231 R13 .9338
    TOE 1.6384 TRA -.9832 TC3-1.5674 BAU .7118
                                                                                                                             ST_1731.6 SR 322.1 SS 626.6
    RDE .3111 RRA -.0375 RC3 -.7233 FAU .04984
                                                                                                                                   .9842 CRS - .9995 CST - .9859
    FOE 1.0690 FRA -.1432 FC3-1.3989 BSP 8587
BDF-1.6676 BRA .9840 BC3 1.7262 FSP -547
                                                                                                                           LSA 1866.2 MSA 110.5 SSA 9.2
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FLIGHT TIME 110.00

SG1 2825.5 SG2 444.6 THA 15.46

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ST 2471.9 SR 1463.8 SS 771.3 CRT -.9899 CRS .9788 CST -.9979

LSA 2968.2 MSA 193.7 SSA 1.2 EL1 2867.3 EL2 178.6 ALF 149.49

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FLIGHT TIME 118.00
                                                                                                                      ARRIVAL DATE NOV 19 1967
LAUNCH CATE JUL 24 1967
                                                                 DISTANCE 349.295
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 27.491 CAL -9.54 AZL 83.45 MCA 165.23 SMA 133.94 ECC .21237 INC 6.5476 V1 29.317 RP 107.55 LAP 1.67 LOP 105.75 VP 38.434 GAP 4.64 AZP 96.33 TAL 221.77 TAP 27.00 RCA 105.49 APO 162.38 VZ 35.236
                     31.70 GP -56.40 ZAL 138.44 ZAP 115.59 ETS 316.00 ZAE 114.36 ETE 221.03 ZAC 118.70 ETC 343.60 CLP-141.30
   RC 113.598 GL
  PLANETOCENTRIC CONIC
                                                                                         2.26 VHP 7.426 DPA -37.05 RAP 128.57 ECC 1.5698
    C3 34.621 VHL 5.884 OLA 41.08 RAL 165.03 RAD 6568.4 VEL 12.490 PTH
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM. INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                           187.73
                                             -22.65
                                                                        46.44
                                                                                       54,77
                                                                                                18 0
                                                                                                                3714.9
                                                                                                                              -27.10
                                                          194.65
       58.90
                  16 48 11
                               4314.94
                                                                                        54.76 24 31 58
                                                                                                                                            89.48
                                                                                                                 2428.8
                                                                                                                              -27.08
                                                           96.40
                                                                         46.43
      121.10
                  23 41 29
                              3028.85
                                             -22.64
                                                                                       54.77 18 0 6
54.76 24 31 58
54.77 18 0 6
54.76 24 31 58
                                                                                                                 3714.9
                                                                                                                              -27.10
                                                                                                                                           187.73
                                                                         46.44
                                                          194.65
       58.90
                  16 48 11
                               4314.94
                                             -22.65
                                                                                                                2428.8
                                                                                                                              -27.08
                                                                                                                                            89.48
      121.10
                  23 41 29
                              3028.85
                                             -22.64
                                                            96.40
                                                                         46.43
                                                                                                                                           187.73
                                                                                                                3714.9
                                                                                                                             -27.10
                  16 48 11
                              4314.94
                                             -22.65
                                                          194.65
                                                                         46.44
       58.90
                                                                                                                2428.8
                                                                                                                             -27.08
                                                                                                                                             89.48
                                                            96.40
                                                                         46.43
                 23 41 29
                              3028.85
                                             -22.64
      121.10
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 2875.6 SGR 821.5 SG3 136.3
RRT .8088 RRF .9583 RTF .9242
SGB 2990.6 R23 .3233 R13 .9371
                                                                                                             ST 2118.1 SR 372.0 SS 682.4
CRT .9753 CRS -.9969 CST -.9894
    TOE 2.1524 TRA -.7785 TC3-1.4383 BAU
                                                 .7245
   ROE .3803 RRA .0740 RC3 -.6179 FAU .03963
   FOE 1.0917 FRA .0063 FC3 -.9910 BSP 8992
BOE 2.1857 BRA .7820 BC3 1.5654 FSP -455
                                                                                                             LSA 2253.0 MSA 121.1 55A
                                                                                                                                               6.1
                                                              SG1 2953.4 SG2 470.4 THA 13.36
                                                                                                             EL1 2149.0 EL2 81.0 ALF
                                                                                                                                              9.73
                                                                                                                       ARRIVAL DATE NOV 21 1967
                                                                  FLIGHT TIME 120.00
LAUNCH DATE JUL 24 1967
                                                                  DISTANCE 355.284
  HELIOCENTRIC CONIC
                     .00 LOL 300.43 VL 27.426 GAL -9.30 AZL 80.84 HCA 168.42 SMA 133.46 ECC .21175 INC 9.1560 VI 29.317 1.83 LOP 109.00 VP 38.393 GAP 4.93 AZP 98.97 TAL 220.43 TAP 28.83 RCA 105.20 APO 161.72 VZ 35.241 40.72 GP -62.77 ZAL 130.38 ZAP 112.57 ETS 308.89 ZAE 108.46 ETE 219.18 ZAC 117.55 ETC 338.69 CLP-147.03
   RL 151.97 LAL
RP 107.53 LAP
   RC 115.842 GL
  PLANETOCENTRIC CONIC
   C3 43.376 VHL 6.601 DLA 47.86 RAL 174.00 RAD 6568.7 VEL 12.843 PTH 2.34 VHP 8.821 DPA -42.44 RAP 123.85 ECC 1.7171
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PC CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         2.34 VHP 8.821 OPA -42.44 RAP 123.85 ECC 1.7171
                                                                                                18 2 28
                                                                                                                 3867.7
                                                                         61.32
                                                                                      46.83
                                                                                                                                            202.72
                                                          208.93
       49.65
                 16 48 1
0 57 7
                              4467.73
                                             -23.09
                                                            93.46
                                                                         61.31
                                                                                        46.82
                                                                                                  1 46 59
                                                                                                                 2392.2
                                                                                                                               -28.41
                                                                                                                                             87.25
      130.35
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16 48 1 4467...
0 57 7 2992.23
4 1 4467.73
                              2992.23
                                              -23.08
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                                                           208.93
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                                             -23.09
                                                                                                                                             87.25
                                                                                                                 2392.2
                                             -23.08
                                                            93.46
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      130.35
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0 57 7
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                                             -23.09
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                                                            93.46
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      130.35
                              2992.23
                                              -23.08
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 3035.1 SGR 711.9 SG3 106.8
RRT .6991 RRF .8961 RTF .9342
                                                                                                             ST 2573.6 SR 323.2 S5 726.6
    TOE 2.9587 TRA -.4214 TC3-1.1536 BAU .7178
                                                                                                             CRT .9435 CRS -.9772 CST -.9923
    RDE .3581 RRA .2238 RC3 -.4327 FAU .02921
                                                              SGB 3117.4 R23 .3140 R13 .9432
SG1 3076.7 SG2 502.1 THA 9.57
    FOE 1.0961 FRA .1478 FC3 -.5803 BSP 9451
BOE 2.9803 BRA .4771 BC3 1.2321 FSP -365
                                                                                                             LSA 2690.3 MSA 134.9 SSA 3.9
                                                                                                             ELI 2591.6 EL2 106.3 ALF
                                                                                                                      ARRIVAL DATE NOV 23 1967
                                                                 FLIGHT TIME 122.00
LAUNCH DATE JUL 24 1967
                                                                 DISTANCE 361.213
  HELIOCENTRIC CONIC
   RL 151.97 LAL .QO LOL 300.43 VL 27.360 GAL -9.04 AZL 76.30 MCA 171.57 SMA 132.98 ECC .21110 INC13.6958 V1 29.317 RP 107.52 LAP 1.99 LOP 112.24 VP 38.350 GAP 5.20 AZP 103.55 TAL 219.04 TAP 30.61 RCA 104.90 APO 161.05 V2 35.246 RC 118.080 GL 51.15 GP -70.39 ZAL 120.29 ZAP 108.17 ETS 297.62 ZAE 100.80 ETE 212.93 ZAC 116.54 ETC 329.06 CLP-158.34
  PLANETOCENTRIC CONIC
    C3 67.482 VML 8.215 DLA 54.32 RAL 188.31 RAD 6569.3 VEL 13.742 PTH 2.51 VHP 11.382 OPA -48.25 RAP 115.50 ECC 2.1106
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC ITAJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        217.31
                                                                                                                          -25.95
                                                                                     38.29 18 36 46
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                              4634.80
                                             -19.76
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                 17 19 31
                               4634.80
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                                                            94.58
                                                                         83.36
      138.51
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SCT 3184.3 SCR 545.6 SC3 79.6
RRT .1138 RRF .3961 RTF .9540
SCB 3230.7 R23 .2862 R13 .9550
SCI 3184.9 SC2 541.9 THA 1.15
                                                                                                             ST 2951.4 SR 168.6 SS 747.9
CRT - 5712 CRS .4822 CST - 9945
    TOE 4.2285 TRA .2975 TC3 -.6980 BAU
                                                 .6501
    ROE - .1453 RRA .3748 RC3 - .1789 FAU .01869
                                                                                                             LSA 3045.2 MSA 158.3 SSA
                                                                                                                                               2.4
    FDE 1.0795 FRA .2978 FC3 -.2397 BSP 9811
BDE 4.2310 BRA .4785 BC3 .7206 FSP -275
                                                                                                             EL1 2952.9 EL2 138.3 ALF 178.13
    BDE 4.2310 BRA .4785 BC3 .7206 FSP
                                                                                                                       ARRIVAL DATE NOV 25 1967
                                                                  FLIGHT TIME 124.00
LAUNCH DATE JUL 24 1967
  HELIOCENTRIC CONIC
                                                                  DISTANCE 367.012
   RL 151.97 LAL .00 LOL 300.43 VL 27.294 GAL -8.74 AZL 66.57 HCA 174.61 SMA 132.49 ECC .21025 INC23.4326 VI 29.317
RP 107.50 LAP 2.14 LOP 115.48 VP 38.306 GAP 5.43 AZP 113.34 TAL 217.56 TAP 32.16 RCA 104.64 APO 160.35 V2 35.250
                     60.52 GP -77.14 ZAL 108.91 ZAP 102.43 ETS 267.30 ZAE 89.83 ETE 186.96 ZAC 116.58 ETC 299.13 CLP 165.30
  PLANETOCENTRIC CONIC
    C3 151.881 VHL 12.324 DLA 56.63 RAL 208.46 RAD 6570.7 VEL 16.529 PTH 2.88 VHP 17.131 DPA -52.71 RAP 99.29 ECC 3.4996
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                19 52 23
                                                                                                                4222.8
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                                                                                                                                           227.07
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                              4822.79
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                                             -10.74
                                                            99.71
      141.34
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                              3195.74
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                                             -10.74
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
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- 3541

TOE 5.2113 TRA 1.9332 TC3 -.1743 BAU

RDE-3.1434 RRA -.3329 RC3 .0034 FAU .00707 FDE 1.0820 FRA .5357 FC3 -.0403 BSP 9932

BDE 6.0859 BRA 1.9616 BC3 .1744 FSP -197

SGT 2953.8 SGR 1488.3 SG3 59.1 RRT -.9108 RRF -.8480 RTF ..9905 SGB 3307.5 R23 -.2109 R13 -.9766

SG1 3260.4 SG2 556.5 THA 154.55

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LAUNCH DATE JUL 24 1967
                                                                      FLIGHT TIME 126.00
                                                                                                                               ARRIVAL DATE NOV 27 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 372.282
                       .00 LOL 300.43 VL 27.227 GAL -8.34 AZL 36.68 MCA 177.15 SNA 132.02 ECC .20831 INC53.3238 V1 29.317 2.29 LOP 118.73 VP 38.262 GAP 5.51 AZP 143.29 TAL 215.78 TAP 32.93 RCA 104.52 APO 159.52 V2 .35.253 57.51 GP -65.53 ZAL 98.52 ZAP 96.17 ETS 201.14 ZAE 68.90 ETE 124.87 ZAC 121.61 ETC 228.35 CLP 105.05
    RL 151.97 LAL
        107.49 LAP
    RC 122.538 GL
   PLANETOCENTRIC CONIC
     C3 656.155 VHL 25.616 DLA 46.11 RAL 221.38 RAO 6572.6 VEL 27.883 PTH 3.41 VHP 34.609 DPA -46.59 RAP 69.01 ECC11.7986
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        51.96
                 20 5 14 4898.89
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                                                              226.95
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                  3 57 57 3464.59
20 5 14 4898.89
3 57 57 3464.59
20 5 14 4898.89
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       128.04
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       128.04
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        51.96
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       128.04
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                                                               115.41
                                                                                             43.90
                                                                                                                        2864.6
                                                                                                                                       -6.58
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 532.3 SGR 3101.7 SG3 48.5
RRT -.1119 RRF -.9929 RTF .2271
                                                                                                                    ST 310.5 SR 2168.3 SS 1048.7
CRT .7504 CRS .9970 CST .6966
LSA 2418.5 MSA 220.3 SSA 1.2
    TDE-1.2658 TRA 1.3160 TC3 -.0296 BAU 1.5367
    RDE-9.2616 RRA-6.6094 RC3 -.1727 FAU-.02227
    FOE 1.4575 FRA 1.3354 FC3 .0294 BSP 9018
                                                                  SGB 3147.1 R23 -.1134 R13 -.9932
    BOE 9.3477 BRA 6.7392 BC3 .1752 FSP -149
                                                                  SGI 3102.3 SG2 528.9 THA 91.13
                                                                                                                    ELI 2180.9 ELZ 204.1 ALF 83.81
LAUNCH DATE JUL 24 1967
                                                                      FLIGHT TIME 128.00
                                                                                                                               ARRIVAL DATE NOV 29 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 380.804
    RL: 151.97 LAL .00 LOL 300.43 VL 27.160 GAL -8.59 AZL 147.58 MCA 182.87 SMA 131.54 ECC .21417 INC57.5763 VI 29.317
RP 107.49 LAP 2.43 LOP 121.98 VP 38.217 GAP 6.51 AZP 32.46 TAL 215.61 TAP 38.48 RCA 103.37 APO 159.71 V2 35.256
RC 124.755 GL -55.78 GP 65.42 ZAL 98.18 ZAP 97.33 ETS 170.55 ZAE 68.04 ETE 244.99 ZAC 96.01 ETC 131.36 CLP 107.86
   PLANETOCENTRIC CONIC
    C3 751.643 VHL 27.416 DLA -55.03 RAL 160.78 RAD 6572.7 VEL 29.545 PTH
                                                                                               3.44 VHP 34.273 DPA 70.79 RAP 346.35 ECC13.3701
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       40.62
                    3 29 6 2348.70
                                                   .48
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   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                    ST 382.5 SR 2652.7 SS 1555.6
CRT -.9067 CRS -.9997 CST .8964
    TOE 1.5256 TRA 1.9300 TC3 -.0600 BAU 1.9864
                                                                  SGT 839.8 SGR 3112.2 SG3 51.0
RRT -.8052 RRF .9969 RTF -.7598
    RD-12.5501 RRA-3.6176 RC3 .1883 FAU-.02692
FOE-2.4936 FRA -.6031 FC3 .0310 BSP 9154
BOE12.6425 BRA 4.1002 BC3 .1977 FSP -150
                                                                  SGB 3223.5 R23 -.1062 R13 .9939
                                                                                                                    LSA 3094.4 MSA 165.5 SSA
                                                                                                                                                          1.5
                                                                  SG1 3186.6 SG2 486.4 THA 102.56
                                                                                                                    EL1 2675.3 EL2 159.9 ALF 97.48
LAUNCH DATE JUL 24 1967
                                                                     FLIGHT TIME 130.00
                                                                                                                              ARRIVAL DATE DEC 1 1967
                                                                    DISTANCE 386.061
   RL 151.97 LAL .00 LOL 300.43 VL 27.093 GAL -8.17 AZL 118.13 MCA 185.43 SMA 131.07 ECC .21236 INC28.1336 V1 29.317 RP 107.48 LAP 2.56 LOP 125.22 VP 38.171 GAP 6.58 AZP 61.97 TAL 213.82 TAP 39.25 RCA 103.23 APO 158.90 V2 35.258 RC 126.964 GL -61.86 GP 74.62 ZAL 104.93 ZAP 104.90 ETS 116.59 ZAE 88.99 ETE 193.37 ZAC 89.71 ETC 77.05 CLP 165.76
  PLANETOCENTRIC CONIC
   C3 205.675 VHL 14.341 DLA -53.15 RAL 141.79 RAD 6571.2 VEL 18.083 PTH 3.01 VHP 17.112 DPA 79.85 RAP 257.06 ECC 4.3849
   LNCH A7MTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 42.94 2 20 0 2203.66 7.57 60.72 46.06 142.78 2 56.43 1603.7 13.90 56.16 137.06 11 8 10 627.33 7.58 294.92 46.08 142.77 11 18 37 27.3 13.92 290.37
       42.94
                 2 20 0 2203.66
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                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SCT 2475.3 SCR 2608.3 SC3 66.6

RRT .9610 RRF .9534 RTF .9991

SCB 3595.9 R23 -.1709 R13 .9846

SCI 3560.7 SC2 501.6 THA 46.56
                                                                                                                  ST 1898.6 SR 1543.4 SS 880.6

CRT .9842 CRS -.9829 CST-1.0000

LSA 2590.9 MSA 222.2 SSA 1.2

EL1 2437.5 EL2 212.6 ALF 39.02
   TDE-4.5864 TRA-2.4875 TC3 -.0532 BAU .1480
   RDE-3.4908 RRA-3.3082 RC3 .0083 FAU .00652
   FDE-1.4447 FRA -.7593 FC3 -.0275 BSP 11009
   BOE 5.7637 BRA 4.1391 BC3 .0538 FSP
                                                    -211
                                                                     FLIGHT TIME 132.00
                                                                                                                              ARRIVAL DATE DEC 3 1967
                                                                     DISTANCE 391.804
   RL 151.97 LAL .00 LOL 300.43 VL 27.026 GAL -7.84 AZL 108.50 HCA 188.47 SMA 130.60 ECC .21186 INC18.4997 V1 29.317
RP 107.48 LAP 2.68 LOP 128.47 VP 38.124 GAP 6.79 AZP 71.69 TAL 212.24 TAP 40.71 RCA 102.93 APO 158.27 V2 35.259
RC 129.165 GL -58.13 GP 66.28 ZAL 110.68 ZAP 113.02 ETS 79.20 ZAE 100.15 ETE 158.73 ZAC 89.38 ETC 39.85 CLP-166.44
  PLANETOCENTRIC CONIC
   C3 100.067 VHL 10.003 DLA -47.49 RAL 139.95 RAD 6569.9 VEL 14.880 PTH 2.69 VHP 11.554 DPA 72.10 RAP 210.78 ECC 2.6468
   ENCH AZMTH LNCH TIME L-I TIME INLLAT INLLONG INLAT ASC INLAZMTH INLTIME PO CST TIM INL 2 LAT INL 2 LONG
       50.14
                   2 35 47
                                2016.85
                                                 13.52
                                                                                          135.97
                                                               48.69
                                                                             37.21
                                                                                                        3 9 24
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                                                                                           135.97 12 15 2
                 10 37 45
      129.86
                                5837.33
                                                 13.53
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                                5837.33
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                                2016.85
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                 10 37 45
     129.86
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                                                                                                                                       19.21
                                                                                                                                                    266.46
 DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                SGT 3657.2 SGR 725.7 SG3 90.5
RRT .7481 RRF .5783 RTF .9722
SGB 3728.5 R23 -.2433 R13 .9676
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CRT .1245 CRS .0090 CST -.9911
LSA 2373.7 MSA 243.6 SSA 2.0
   TDE-3.6224 TRA-3.4251 TC3 -.4009 BAU .5364
   RDE .1059 RRA -.8530 RC3 -.0077 FAU .01969
   FDE-1.2850 FRA -.7814 FC3 -.1704 BSP 11459
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SG1 3698.0 SG2 476.3 THA 8.59

EL1 2250.5 EL2 223.5 ALF

.72

BDE 3.6239 BRA 3.5297 BC3 .4009 FSP -290

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ARRIVAL DATE DEC 5 1967
                                                                         FLIGHT TIME 134.00
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 397:647
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 26.959 GAL -7.53 AZL 103.99 HCA 191.63 SNA 130.13 ECC .21173 INC13.9933 VI 29.317 RP 107.48 LAP 2.79 LOP 131.72 VP 38.077 GAP 7.03 AZP 76.28 TAL 210.70 TAP 42.33 RCA 102.58 APO 157.69 V2 35.259 RC 151.355 GL -53.51 GP 57.23 ZAL 114.85 ZAP 120.48 ETS 67.79 ZAE 107.81 ETE 151.12 ZAC 90.00 ETC 28.69 CLP-159.56
   PLANETOCENTRIC CONIC
                                                                                                    2.49 VHP. 9.180 OPA 63.42 RAP 196.31 ECC 2.0635
    C3 64.823 VHL 8.039 DLA -42.71 RAL 141.58 RAD 6569.2 VEL 13.637 PTH
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
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      123.41
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2123.4 SR 361.7 55 742.2
CRT -.8009 CRS .9014 CST -.9812
                                                                     SGT 3799.9 SGR 439.2 SG3 115.9
RRT - .0449 RRF - .3566 RTF .9507
SG6 3825.2 R23 .2937 R13 - .9509
    TOE-2.6944 TRA-3.1109 TC3 -.7983 BAU
                                                       .6916
    RDE .4972 RRA - .2488 RC3 .0593 FAU .02932
                                                                                                                          LSA 2264.6 MSA 248.8 SSA
                                                                                                                                                                 2.8
   FOE-1.2731 FRA -. 7838 FC3 -. 3928 BSP 11762
                                                                                                                          EL1 2143.2 EL2 214.6 ALF 172.15
                                                                      $61 3800.0 $62 438.8 THA 179.70
    BOE 2.7399 BRA 3.1209 BC3 .8005 FSP -372
                                                                                                                                      ARRIVAL DATE DEC 7 1967
                                                                          FLIGHT TIME 136,00
   RL 151.97 LAL .00 LOL 300.43 VL 26.892 GAL -7.22 AZL 101.40 MCA 194.82 SMA 129.68 ECC .21181 INC11.3996 VI 29.317 RP 107.48 LAP 2.90 LOP 134.97 VP 38.029 GAP 7.27 AZP 78.97 TAL 209.16 TAP 43.98 RCA 102.21 APO 157.14 V2 35.259 RC 133.537 GL -49.42 GP 49.48 ZAL 117.67 ZAP 126.93 ETS 62.48 ZAE 113.36 ETE 150.24 ZAC 90.46 ETC 23.69 CLP-157.65
                                                                          DISTANCE 403.517
  HELIOCENTRIC CONIC
   L5 48.209 VHL 6.943 DLA -39.00 RAL 143.92 RAD 6568.8 VEL 13.022 PTH 2.38 VHP 7.986 DPA 55.71 RAP 189.98 ECC 1.7934 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.98 3 39 53 1715.01 18.44 26.26 29.58 124.99 4 4 20
  PLANETOCENTRIC CONIC
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                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2037.1 SR 406.8 SS 737.0
CRT -.8634 CRS .9563 CST -.9731
LSA 2189.9 MSA 251.0 SSA 3.7
                                                                      SGT 3892.0 SGR 442.0 SG3 138.3
RRT -.4094 RRF -.6821 RTF .9358
    TOE-2.2115 TRA-2.8374 TC3-1.1920 BAU .7713
    RDE .4918 RRA -.0880 RC3 .1066 FAU .03666 FDE-1.2607 FRA -.7558 FC3 -.6583 88P 12068
                                                                      SCB 3917.0 R23 .3232 R13 -.9374
SCI 3896.2 SC2 402.8 THA 177.31
                                                                                                                           EL1 2067.5 EL2 202.3 ALF 170.12
    BDE 2.2655 BRA 2.8388 BC3 1.1967 FSP -445
                                                                                                                                     ARRIVAL DATE DEC 9 1967
                                                                          FLIGHT TIME 138.00
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 409.393
    RL 151.97 LAL .00 LOL 300.43 VL 26.826 GAL -6.90 AZL 99.71 MCA 198.03 SMA 129.22 ECC .21203 INC 9.7115 VI 29.317 RP 107.48 LAP 2.99 LOP 138.22 VP 37.981 GAP 7.52 AZP 80.76 TAL 207.61 TAP 45.64 RCA 101.82 APO 156.62 V2 35.257 RC 135:709 GL -46.00 GP 43.08 ZAL 119.42 ZAP 132.39 ETS 59.04 ZAE 117.42 ETE 151.43 ZAC 90.53 ETC 20.65 CLP-157.35
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 39.001 VHL 6.245 OLA -36.19 RAL 146.40 RAD 6568.5 VEL 12.664 PTH 2.30 VHP 7.331 OPA 49.12 RAP 186.87 ECC 1.6419
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 66.46 4 12 40 1594.93 19.18 16.96 28.00 121.29 4 39 15 994.9 23.18 9.95
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                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 3983.9 SGR 433.9 SG3 155.6

RRT -.5164 RRF -.7705 RTF ..9250

SGB 4007.5 R23 .3371 R13 -.9268

SGI 3990.3 SG2 371.0 THA 176.75
                                                                                                                           ST 1981.2 SR 401.5 S5 729.6
CRT -.8769 CRS .9709 CST -.9664
LSA 2134.2 MSA 251.9 SSA 4.7
     TDE-1.9256 TRA-2.6236 TC3-1.5723 BAU .8225
    ROE .4373 RRA -.0381 RC3 .1275 FAU .04179
FOE-1.2278 FRA -.6996 FC3 -.9276 BSP 12365
                                                                                                                           EL1 2012.5 EL2 189.9 ALF 169.83
     BOE 1.9746 BRA 2.6238 BC3 1.5775 FSP
                                                      - 502
                                                                                                                                      ARRIVAL DATE DEC 11 1967
                                                                          FLIGHT TIME 140.00
 LAUNCH DATE JUL 24 1967
                                                                          DISTANCE 415.267
    RL 151.97 LAL .00 LOL 300.43 VL 26.759 GAL -6.58 AZL 98.52 MCA 201.26 SMA 128.78 ECC .21239 INC 8.5208 V1 29.317
RP 107.49 LAP 3.08 LOP 141.48 VP 37.932 GAP 7.77 AZP 82.05 TAL 206.05 TAP 47.30 RCA 101.43 APO 156.13 V2 35.255
RC 137.871 GL -43.17 GP 37.82 ZAL 120.36 ZAP.136.96 ETS 56.43 ZAE 120.38 ETE 153.32 ZAC 90.18 ETC 18.47 CLP-157.70
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                     2.25 WHP 6.958 DPA 43.52 RAP 185.40 ECC 1.5454
     C3 33.142 VHL 5.757 DLA -34.08 RAL 148.91 RAD 6568.3 VEL 12.430 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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117.18 11 38 41
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                    10 2 34
                                    5766.46
                                                     21.57
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                      MID-COURSE EXECUTION ACCUMAL-

SCT 4078.8 SGR 413.2 SG3 167.9 ST 1946.5 SR 384.8 S5

RRT - .5483 RRF - .7894 RTF .9169 CRT - .8820 CRS .9779 CST -

SGB 4099.7 R23 .3384 R13 - .9186 LSA 2095.5 MSA 251.8 SSA

EL1 1976.1 EL2 178.6 ALF 1
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1946.5 SR 384.8 SS 719.5
CRT -.8820 CRS .9779 CST -.9608
     TOE-1.7422 TRA-2.4466 TC3-1.9397 BAU .8613
     ROE .3666 RRA -.0212 RC3 .1290 FAU .04503
                                                                                                                                                                   5.8
     FOE-1.1803 FRA -.6252 FC3-1.1761 BSP 12669
BOE 1.7846 BRA 2.4467 BC3 1.9439 FSP -543
                                                                                                                           EL1 1976.1 EL2 178.6 ALF 170.03
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ARRIVAL DATE DEC 13 1967

LAUNCH DATE JUL 24 1967

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DISTANCE 421.134
  HELIOCENTRIC CONTC
   RL 151.97 LAL .00 LOL 300.43 VL 26.693 GAL -6.24 AZL 97.63 HCA 204.48 SHA 128.34 ECC .21289 INC 7.6316 V1 29.317 RP 107.50 LAP 3.16 LOP 144.73 VP 37.883 GAP 8.02 AZP 83.05 TAL 204.47 TAP 48.96 RCA 101.02 APO 155.66 VZ 35.253 RC 140.023 GL -40.81 GP 33.52 ZAL 120.64 ZAP 140.80 ETS 54.30 ZAE 122.55 ETE 155.37 ZAC 89.46 ETC 16.77 CLP-158.36
  PLANETOCENTRIC CONIC
                                                                                           2.21 VHP 6.747 OPA 38.74 RAP 184.89 ECC 1.4785
   C3 29.072 VHL 5.392 DLA -32.52 RAL 151.44 RAD 6568.2 VEL 12.266 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      116.40
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                                756.44
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      110.00
                   8 31 38
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                              5547.49
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      110.00
                 11 12 41
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1931.7 SR 369.8 SS 710.6
CRT -.8868 CRS .9828 CST -.9565
                                                               SGT 4181.5 SGR 391.9 SG3 176.7
RRT -.5537 RRF -.7811 RTF .9112
SGB 4199.8 R23 .3284 R13 -.9125
   TOE-1.6229 TRA-2.2936 TC3-2.3009 BAU .8955
   ROE .3480 RRA -.0136 RC3 .1193 FAU .04694
                                                                                                                LSA 2076.1 MSA 250.9 SSA 6.9
   FOE-1.1296 FRA -.5445 FC3-1.3979 BSP 13062
BDE 1.6596 BRA 2.2937 BC3 2.3040 FSP -577
                                                                                                                EL1 1959.6 EL2 168.5 ALF 170.29
                                                                SG1 4187.1 SG2 325.9 THA 177:01
                                                                                                                          ARRIVAL DATE DEC 15 1967
                                                                    FLIGHT TIME 144.00
                                                                   DISTANCE 426.989
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 26.628 GAL -5.90 AZL 96.94 HCA 207.72 SMA 127.91 ECC .21352 INC 6.9386 V1 29.317 RP 107.51 LAP 3.22 LOØ 147.98 VP 37.833 GAP 8.27 AZP 83.85 TAL 202.89 TAP 50.61 RCA 100.60 APO 155.22 V2 35.249 RC 142.165 GL -38.81 GP 29.96 ZAL 120.41 ZAP 144.07 ETS 52.52 ZAE 124.14 ETE 157.36 ZAC 88.46 ETC 15.39 CLP-159.16
  PLANETOCENTRIC CONIC
                                                                                            2.18 VHP 6.634 DPA 34.63 RAP 184.99 ECC 1.4289
   C3 26.061 VHL 5.105 DLA -31.39 RAL 153.98 RAD 6568.1 VEL 12.142 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      110.00
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                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1965.9 SR 365.7 SS 721.7
CRT -.8973 CRS .9873 CST -.9556
                                                               SGT 4352.4 SGR 363.3 SG3 186.0

ERT -.5706 RRF -.7716 RTF .9116

SGB 4369.2 R23 .3028 R13 -.9127

SG1 4357.9 SG2 314.4 THA 177.11
   TOE-1.5733 TRA-2.1809 TC3-2.7007 BAU .9418
    RDE .3258 RRA -.0027 RC3 .1124 FAU .04911
                                                                                                                LSA 2111.2 MSA 249.3 SSA
   FDE-1.1077 FRA -.4893 FC3-1.6315 BSP 14175
                                                                                                                EL1 1993.3 EL2 159.2 ALF 170.46
    BOE 1.6067 BRA 2.1809 BC3 2.7030 FSP
                                                                                                                          ARRIVAL DATE DEC 17 1967
                                                                   FLIGHT TIME 146.00
LAUNCH DATE JUL 24 1967
                                                                  DISTANCE 432.842
  HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 26.562 GAL -5.55 AZL 96.38 HCA 210.95 SMA 127.48 ECC .21426 INC 6.3803 V1 29.317 RP 107.52 LAP 3.28 LOP 151.23 VP 37.784 GAP 8.52 AZP 84.52 TAL 201.29 TAP 52.24 RCA 100.17 APO 154.79 V2 35.245
   RC 144.295 GL -37.10 GP 27.01 ZAL 119.73 ZAP 146.87 ETS 51.02 ZAE 125.33 ETE 159.19 ZAC 87.21 ETC 14.23 CLP-160.04
   PLANETOCENTRIC CONIC
    C3 23.721 VML 4.870 DLA -30.61 RAL 156.59 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.584 DPA 31.04 RAP 185.53 ECC 1.3904
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                                 23.06
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      110.00
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                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 1910.7 SR 346.6 SS 678.6
CRT -.8986 CRS .9906 CST -.9492
LSA 2042.3 MSA 245.6 SSA 9.2
                                                                RRT -.5034 RRF -.7067 RTF .8985
SGB 4336.3 R23 .2918 R13 -.8993
SGI 4325.5 SGZ 305.9 THA 177.62
    TDE-1.4673 TRA-1.9869 TC3-2.9616 BAU .9395
   ROE .2946 RRA -.0100 RC3 .0747 FAU .04666
FOE-1.0057 FRA -.3499 FC3-1.7030 BSP 13201
                                                                                                                ELI 1936.1 EL2 150.1 ALF 170.69
    BOE 1.4966 BRA 1.9869 BC3 2.9626 FSP -566
                                                                                                                           ARRIVAL DATE DEC 19 1967
                                                                    FLIGHT TIME 148.00
LAUNCH DATE JUL 24 1967
                                                                   DISTANCE 438.678
   HELIOCENTRIC CONIC
   RL 151.97 LAE .00 LOL 300.43 VL 26.498 GAL -5.19 AZL 95.92 MCA 214.19 SMA 127.06 ECC .21516 INC 5.9183 VI 29.317 RP 107.53 LAP 3.32 LOP 154.48 VP 37.734 GAP 8.77 AZP 85.10 TAL 199.68 TAP 53.86 RCA 99.72 APO 154.40 V2 35.240 RC 146.414 GL -35.60 GP 24.54 ZAL 118.68 ZAP 149.30 ETS 49.78 ZAE 126.22 ETE 160.84 ZAC 85.78 ETC 13.24 CLP-160.95
   PLANETOCENTRIC CONIC
    C3 21.848 VHL 4.674 DLA -30.12 RAL 159.27 RAD 6567.9 VEL 11.968 PTH 2.13 VHP 6.578 DPA 27.88 RAP 186.37 ECC 1.3596
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.29 6 27 3 1193.31 20.26 346.69 29.74 112.77 6 46 57 593.3 23.17 339.09
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9 31 11
                                                                                                                       33.9
                                                                                                                                    23.18
                    9 20 37
                                  633.86
                                                20.27
                                                             305.53
                                                                            29.75
                                                                                         112.76
      100.71
                                                                                                                                    23.17
                                                                                                                      593.3
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                                                                                         112.77
                                                                                                    6 46 57
9 31 11
                  6 27 3 1193.31
                                                20.26
                                                             346.69
       79.29
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                                                                                         112.76
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                    9 20 37
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      100.71
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                                  830.35
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                                                             314.37
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      110.00
                    8 18 24
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                                                31.96
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                                                                            33.92
                                                                                         102.84
                  12 28 27
                                5332.85
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1938.0 SR 345.0 SS 676.5
CRT -.9102 CRS .9940 CST -.9487
LSA 2067.4 MSA 241.3 SSA 10.4
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RRT -.4868 RRF -.6680 RTF .8965
SGB 4442.3 R23 .2627 R13 -.8972
    TOE-1.4425 TRA-1.8536 TC3-3.3120 BAU .9675
    RDE .2815 RRA -.0046 RC3 .0550 FAU .04635
    FOE -.9657 FRA -.2713 FC3-1.8364 BSP 13675
BDE 1.4697 BRA 1.8536 BC3 3.3124 FSP -584
                                                                                                                 EL1 1963.4 EL2 141.0 ALF 170.75
                                                                SG1 4431.8 SG2 304.5 THA 177.79
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FLIGHT TIME 142.00

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FLIGHT TIME 150.00
                                                                                                                                     ARRIVAL DATE DEC 21 1967
 LAUNCH DATE JUL 24 1967
                                                                          DISTANCE 444.502
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 26.434 GAL -4.82 A7L 95.53 HCA 217.42 SMA 126.65 ECC .21619 INC 5.5274 V1 29.317 RP 107.55 LAP 3.36 LOP 157.73 VP 37.683 GAP 9.02 A7P 85.61 TAL 198.05 TAP 55.47 RCA 99.27 APO 154.03 V2 35.234 RC 148.521 GL -34.26 GP 22.45 ZAL 117.30 ZAP 151.45 ETS 48.77 ZAE 126.89 ETE 162.31 ZAC 84.19 ETC 12.40 CLP-161.88
   PLANETOCENTRIC CONIC
    C3 20.313 VHL 4.507 DLA -29.85 RAL 162.06 RAD 6567.8 VEL 11.983 PTH 2.12 VHP 6.602 DPA 25.05 RAP 187.43 ECC 1.3343 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              112.15
                                                                  345.99
                                                                                  31.27
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        60.14
                     6 44 35 1155.33
                                                    20.54
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                                                                                                                                               23.37
                                                                                                                                                             336.34
                                                                                                             9 35 55
        99.86
                     9 25 18
                                   636.82
                                                     20.55
                                                                  305.87
                                                                                  31.28
                                                                                                112.14
                                                                                                                                 36.8
                                                                                                                                               23.38
                                                                                                                                                             298.22
       100.00
                     9 12 55
                                   676,37
                                                    19.46
                                                                  308.32
                                                                                  30.79
                                                                                                113.15
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                                                                                                                                 76.4
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                                                                                                113.15 9 24 11
114.13 11 17 38
122.97 8 39 19
101.55 14 11 52
                                                                                  31.74
       100.00
                     9 39 39
                                 5879.06
                                                    21.65
                                                                  280.84
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       110.00
                    8 25 33
                                   826.05
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                   12 43 30 5302.14
       110.00
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                                                                                                                                               33.65
                                                                                                                                                            231.68
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 4510.6 SGR 346.1 SG3 182.7

RRT -.4617 RRF -.6222 RTF .8933

SGB 4523.9 R23 .2343 R13 -.8939

SGI 4513.5 SG2 306.8 THA 177.96
                                                                                                                         ST 1964.4 SR 344.8 SS 670.4
CRT -.9224 CRS .9966 CST -.9484
     TOE-1.4255 TRA-1.7096 TC3-3.6430 BAU .9893
    ROE .2713 RRA -.0004 RC3 .0329 FAU .04526
                                                                                                                          LSA 2090.8 MSA 235.6 SSA 11.7
    FOE -.9214 FRA -,1872 FC3-1.9291 BSF 13923
BOE 1.4511 BRA 1.7096 BC3 3.6431 FSP -581
                                                                                                                         ELI 1990.1 ELZ 131.4 ALF 170.76
                                                                          FLIGHT TIME 152.00
                                                                                                                                      ARRIVAL DATE DEC 23 1967.
LAUNCH DATE JUL 24 1967
                                                                          DISTANCE 450.312
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 26.370 GAL -4.44 AZL 95.19 MCA 220.66 SMA 126.25 ECC .21738 INC 5.1905 V1 29.317 RP 107.57 LAP 3.38 LOP 160.98 VP 37.633 GAP 9.27 AZP 86.06 TAL 196.42 TAP 57.08 RCA 98.80 APO 153.69 V2 35.228 RC 150.615 GL -33.04 GP 20.66 ZAL 115.62 ZAP 153.36 ETS 47.98 ZAE 127.41 ETE 163.61 ZAC 82.48 ETC 11.66 CLP-162.80
   PLANETOCENTRIC CONIC
                                                                                                    2.10 VHP 6.649 OPA 22.50 RAP 188.68 ECC 1.3133
    C3 19.035 VHL 4.363 DLA -29.77 RAL 164.96 RAD 6567.8 VEL 11.850 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     6 58 10 1133.54
9 34 54 627.79
        80.40
                                                    20.88
                                                                  342.52
                                                                                  33.12
                                                                                                111.72
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        99.60
                                                     20.89
                                                                  3/14.35
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       100.00
                     9 15 20
                                    690.28
                                                    19.08
                                                                  309.19
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122.86 8 49 35
100.74 14 24 17
                  10 0 24 5834.32
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                                                                  277.95
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       100.00
                    8 36 0
                                                    10.00
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       110.00
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       110.00
                   12 56 14
                                                     32.65
                                                                  239.25
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                                                                                                                              4682.9
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4595.9 SGR 348.0 SG3 181.8
RRT -.4405 RRF -.5794 RTF .8913
SGB 4609.0 R23 .2060 R13 -.8918
SG1 4598.5 SG2 312.2 THA 178.08
                                                                                                                         ST 2004.0 SR 347.8 SS 668.0 CRT -.9357 CRS ..9983 CST -.9493 LSA 2128.6 MSA 228.7 SSA 12.9 EL1 2030.4 EL2 121.1 ALF 170.74
    TDE-1.4249 TRA-1.5638 TC3-3.9738 BAU 1.0113
    ROE .2648 RRA .0042 RC3 .0128 FAU .04402
    FOE -.8837 FRA -.1086 FC3-2.0022 BSP 14219
BOE 1.4493 BRA 1.5638 BC3 3.9738 FSP -579
                                                                                                                                     ARRIVAL DATE DEC 25 1967
                                                                         FI 16HT TIME 154.00
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 456.108
   HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 26.307 GAL -4.05 A7L 94.90 HCA 223.89 SMA 125.85 ECC .21872 INC 4.8952 V1 29.317
RP 107.59 LAP 3.39 LOP 164.22 VP 37.582 GAP 9.52 AZP 86.47 TAL 194.78 TAP 58.67 RCA 98.32 APO 153.37 V2 35.221
RC 152.696 GL -31.89 GP 19.13 ZAL 113.68 ZAP 155.08 ETS 47.40 ZAE 127.81 ETE 164.74 ZAC 80.67 ETC 11.03 CLP-163.72
   PLANETOCENTRIC CONIC
    C3 17.966 VHL 4.239 DLA -29.85 RAL 168.01 RAD 6567.7 VEL 11.805 PTH 2.09 VHP 6.713 DPA 20.16 RAP 190.06 ECC 1.2957
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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9 49 0 607.99
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112.52 9 47 7
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       100.00
                    9 36 19
                                    648.48
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110.36 11 41 12
122.66 9 2 32
100.31 14 35 9
       100.00
                   10 3 43 5849.00
                                                    22.37
                                                                  278.90
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      110.00
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                                    797.18
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                  13 7 16 5273.07
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                                                                  238.51
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 4678.2 SCR 352.9 SC3 180.1
RRT -.4219 RRF -.5398 RTF .8897
SCB 4689.5 R23 .1794 R13 -.8901
SCI 4678.5 SC2 319.8 THA 178.17
                                                                                                                         ST 2051.5 SR 352.7 SS 666.4
CRT -.9489 CRS ..9989 CST -.9510
    TOE-1.4346 TRA-1.4123 TC3-4.2958 BAU 1.0318
    RDE .2609 RRA .0087 RC3 -.0056 FAU .04258
FDE -.8491 FRA -.0329 FC3-2.0519 BSP 14487
                                                                                                                         LSA 2174.5 MSA 220.6 SSA 14.2
EL1 2078.7 EL2 109.8 ALF 170.71
    BOE 1.4582 BRA 1.4123 BC3 4.2958 FSP -574
LAUNCH DATE JUL 24 1967
                                                                         FLIGHT TIME 156.00
                                                                                                                                     ARRIVAL DATE DEC 27 1967
                                                                         DISTANCE 461.890
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 26.245 GAL -3.64 AZL 94.63 HCA 227.13 SMA 125.46 ECC .22022 INC 4.6328 VI 29.317 RP 107.62 LAP 3.39 LOP 167.47 VP 37.532 GAP 9.78 AZP 86.84 TAL 193.13 TAP 60.25 RCA 97.83 APO 153.09 V2 35.214 RC 154.762 GL -30.80 GP 17.81 ZAL 111.48 ZAP 156.64 ETS 47.01 ZAE 128.14 ETE 165.75 ZAC 78.77 ETC 10.47 CLP-164.62
   PLANETOCENTRIC CONIC
    C3 17.071 VHL 4.132 OLA -30.05 RAL 171.21 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 6.791 DPA 18.00 RAP 191.56 ECC 1.2810
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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100.23 14 44 57
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       110.00
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       110.00
                   13 17 6
                                   5271.08
                                                    32.80
                                                                  238.36
                                                                                 41.23
                                                                                                                                              33.86
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4745.5 SGR 359.8 SG3 177.5
RRT -.4052 RRF -.5035 RTF .8881
SGB 4759.1 R23 .1552 R13 -.8884
                                                                                                                         ST 2103.0 SR 358.8 SS 664.0
CRT -.9613 CRS ..9983 CST -.9530
LSA 2224.2 MSA 211.5 SSA 15.6
    TOE-1.4508 TRA-1.2519 TC3-4.6001 BAU 1.0499
    ROE .2587 RRA .0127 RC3 -.0225 FAU .04092
FOE -.8151 FRA .0413 FC3-2.0753 BSP 14688
BOE 1.4737 BRA 1.2520 BC3 4.6001 FSP -564
                                                                                                                         ELI 2131.1 EL2 97.5 ALF 170.67
                                                                      SG1 4747.7 SG2 328.8 THA 178.23
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ARRIVAL DATE DEC 29 1967
                                                                         FLIGHT TIME 158.00
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 467.656
   RL 151.97 LAL .00 LOL 300.43 VL 26.183 GAL -3.23 A7L 94.40 MCA 230.36 SMA 125.08 ECC .22190 INC 4.3967 V1 29.317 RP 107.64 LAP 3.38 LOP 170.71 VP 37.481 GAP 10.04 A7P 87.19 TAL 191.47 TAP 61.83 RCA 97.32 APO 152.83 V2 35.205 RC 156.813 GL -29.73 CP 16.65 ZAL 109.05 ZAP 158.06 ETS 46.81 ZAE 128.40 ETE 166.62 ZAC 76.80 ETC 9.98 CLP-165.52
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.331 VHL 4.041 DLA ~30.34 RAL 174.58 RAD 6567.7 VEL 11.735 PTH 2.07 VHP 6.882 DPA 15.99 RAP 193.15 ECC 1.2688
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             24.85
                                                                                                                               540.8
                                                                  543.60
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                   7 23 4 1140.80
10 26 41 5837.43
                                                    22.16
       78.62
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                   7 23 4 1140.80
10 26 41 5837.43
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                                                                                  43.85
       110.00
                                                    32.74
                   13 26 2
                                  5275.84
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
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CRT -.9724 CRS .9964 CST -.9557
                                                                     SGT 4821.2 SGR 368.9 SG3 175.3
RRT -.3950 RRF -.4748 RTF .8878
SGB 4835.3 R23 .1333 R13 -.8881
    TOE-1.4779 TRA-1.0879 TC3-4.8960 BAU 1.0690
    ROE .2587 RRA .0165 RC3 -.0358 FAU .03933
FDE -.7866 FRA .1096 FC3-2.0848 BSP 14958
                                                                                                                          LSA 2286.4 MSA 201.7 SSA
                                                                                                                                                                 16.9
                                                                      SG1 4823.4 SG2 338.7 THA 178.26
                                                                                                                           ELI 2195.4 EL2 84.4 ALF 170.64
    BOE 1.5004 BRA 1.0881 BC3 4.8961 FSP -557
                                                                                                                                      ARRIVAL DATE DEC 31 1967
                                                                          FLIGHT TIME 160.00
LAUNCH DATE JUL 24 1967
                                                                          DISTANCE 473.405
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 26.122 GAL -2.80 AZL 94.18 HCA 233.60 SHA 124.70 ECC .22377 INC 4.1818 V1 29.317 RP 107.67 LAP 3.36 LOP 173.96 VP 37.430 GAP 10.31 AZP 87.52 TAL 189.80 TAP 63.39 RCA 96.80 APO 152.61 V2 35.197 RC 158.850 GL -28.66 GP 15.64 ZAL 106.41 ZAP 159.38 ETS 46.80 ZAE 128.61 ETE 167.40 ZAC 74.77 ETC 9.56 CLP-166.39
   PLANETOCENTRIC CONIC
                                                                                                    2.06 VHP 6.983 DPA 14.11 RAP 194.82 ECC 1.2589
    C3 15.732 VHL 3.966 DLA -30.70 RAL 178.12 RAD 6567.6 VEL 11.710 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  344.93
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7 29 45 1155.95
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       110.00
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                                    722.78
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       110.00
                                  5286,46
                   13 34 23
                                                     32.60
                                                                  239.51
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4893.0 SGR 378.9 SG3 172.7
RRT -.3880 RRF -.4514 RTF .8880
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CRT -,9818 CRS .9932 CST -.9586
    TDE-1.5104 TRA -.9159 TC3-5.1689 BAU 1.0872
    RDE .2601 RRA .0196 RC3 -.0464 FAU .03768
                                                                      SGB 4907.6 R23 .1140 R13 -.8882
SG1 4895.2 SG2 349.1 THA 178.27
                                                                                                                           LSA 2352.5 MSA 191.5 SSA 18.3
    FOE -.7595 FRA .1752 FC3-2.0736 BSP 15217
BDE 1.5326 BRA .9161 BC3 5.1691 FSP -551
                                                                                                                         EL1 2263.8 EL2 70.4 ALF 170.61
                                                                                                                                      ARRIVAL CATE JAN 2 1968
                                                                          FLIGHT TIME 162.00
LAUNCH GATE JUL 24 1967
                                                                         DISTANCE 479.136
    RL 151.97 LAL .00 LOL 300.43 VL 26.062 GAL -2.35 AZL 93.98 MCA 236.83 SMA 124.33 ECC .22583 INC 3.9842 VI 29.317 RP 107.70 LAP 3.33 LOP 177.20 VP 37.379 GAP 10.58 AZP 87.82 TAL 188.13 TAP 64.95 RCA 96.26 APO 152.41 VZ 35.187 RC 160.871 GL -27.59 GP 14.76 ZAL 103.56 ZAP 160.60 ETS 46.98 ZAE 128.79 ETE 168.08 ZAC 72.68 ETC 9.18 CLP-167.26
    PLANETOCENTRIC CONIC
    C3 15.266 VHL 3.907 CLA -31.11 RAL 181.84 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 7.093 CPA 12.33 RAP 196.56 ECC 1.2512
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               INJ AZMIN.
111.47 7 56 32
111.45 12 46 56
1147 7 56 35
145 56
                                                                                                                                            25.78 338.56
                  7 37 2 1173.10
11 10 42 5774.58
                                                                                                                            573.1
                                                                              46.92
                                                                                                               7 56 35
                                                     23.07
                                                                  346.41
        76.55
                                                                                                                               5174.6
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                                                     23.09
                                                                  273.63
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       103.45
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                    7 37 2 1173.10
11 10 42 5774.58
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121.35 10 16 4
101.55 15 10 46
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       103.45
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                                                                  273.63
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                    10 4 31 695.50
10 24 5302.10
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                                                     14.38
                                                                   306.89
                                                                                   42.36
       119.90
                                                                                                                                                             231.68
                                                                                                                               4702.1
                                                                                                                                                33.65
                    13 42 24
                                                                  240.69
                                                                                  50.04
                                                     32.40
       110.00
                                                                                                                         ORBIT CETERHINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2302.1 SR 385.6 SS 663.8

CRT -.9891 CRS .9888 CST -.9615

LSA 2419.8 MSA 181.4 SSA 19.7
                                                                      SCT 4961.1 SCR 389.6 SC3 169.9
RRT - .3840 RRF - .4328 RTF .8888
SCB 4976.3 R23 .0971 R13 - .8890
SCI 4963.3 SC2 359.6 THA 178.26
    TDE-1.5461 TRA -.7359 TC3-5.4116 BAU 1.1045
    RDE .2629 RRA .0219 RC3 -.0542 FAU .03601
FCE -.7332 FRA .2379 FC3-2.0420 BSP 15465
BDE 1.5683 BRA .7363 BC3 5.4118 FSP -543
                                                                                                                           EL1 2333.5 EL2 56.1 ALF 170.59
                                                                                                                                       ARRIVAL DATE JAN 4 1968
LAUNCH DATE JUL 24 1967
                                                                           FLIGHT TIME 164.00
                                                                          DISTANCE 484.848
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 26.002 GAL -1.90 AZL 93.80 HCA 240.06 SMA 123.97 ECC .22809 INC 3.8008 V1 29.317 RP 107.73 LAP 3.29 LOP 180.44 VP 37.328 GAP 10.85 AZP 88.10 TAL 186.45 TAP 66.50 RCA 95.70 APO 152.25 V2 35.178 RC 162.878 GL -26.48 GP 13.97 ZAL 100.53 ZAP 161.73 ETS 47.35 ZAE 128.94 ETE 168.68 ZAC 70.56 ETC 8.86 CLP-168.11
   PLANETOCENTRIC CONIC
     C3 14.930 VHL 3.864 DLA -31.53 RAL 185.74 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 7.213 CPA 10.65 RAP 198.36 ECC 1.2457
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.52 7 45 23 1190.78 23.50 347.93 50.60 111.65 8 5 14 590.8 26.23 340.05 75.52 7 45 23 1190.78 23.50 271.72 50.61 111.64 13 9 15 5146.9 26.24 263.85 75.52 7 45 23 1190.78 23.50 347.93 50.60 111.65 8 5 14 590.8 26.23 340.05
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                                                      23.50
                                                                   347.93
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         75.52
                      7 45 23
                                   1190.78
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                                   5746.92
                                                     23.51
                                                                   271.72
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        104.48
                     11 33 28
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                                     663.81
                                                     15.42
                                                                   305.22
                                                                                   46.38
                    10 27 42
                                                                                                                              4721.9
                                                                                                                                               33.49
                                                                                                                                                              233,20
                     13 50 20 5321.88
                                                     32.12
                                                                   242.16
                                                                                   53.56
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2364.1 SR 395.6 SS 659.2

CRT - 9942 CRS .9829 CST - .9639

LSA 2480.0 MSA 171.9 SSA 21.2
                                                                      SGT 5016.5 SGR 400.1 SG3 166.6

RRT - .3807 RRF - .4169 RTF .8891

SGB 5032.5 R23 .0828 R13 - .8893

SGI 5018.9 SG2 369.8 THA 178.25
     TOE-1.5804 TRA -.5440 TC3-5.6075 BAU 1.1193
     RDE .2666 RRA .0229 RC3 -.0598 FAU .03422
FDE -.7048 FRA .3006 FC3-1.9842 BSP 15624
                                                                                                                           EL1 2396.6 EL2 41.9 ALF 170.55
     BOE 1.6027 BRA .5445 BC3 5.6079 FSP -530
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LAUNCH DATE JUL 24 1967
                                                                                                        FLIGHT TIME 166.00
                                                                                                                                                                                            ARRIVAL DATE JAN 6 1968
                                                                                                       DISTANCE 490.538
    HELIOCENTRIC CONIC
      RL 151.97 LAL .00 LOL 300.43 VL 25.943 GAL -1.42 A7L 93.63 MCA 243.29 SMA 123.62 ECC .23058 INC 3.6290 V1 29.317 RP 107.76 LAP 3.24 LOP 183.67 VP 37.278 GAP 11.14 A7P 88.37 TAL 184.76 TAP 68.05 RCA 95.12 APO 152.12 V2 35.167 RC 164.869 GL -25.33 GP 13.27 ZAL 97.34 ZAP 162.79 ETS 47.92 ZAE 129.07 ETE 169.22 ZAC 68.39 ETC 8.59 CLP-168.95
     PLANETOCENTRIC CONTC
      C3 14.723 VHL 3.837 OLA -31.94 RAL 189.81 RAD 6567.6 VEL 11.667 PTH
                                                                                                                                             2.05 VHP 7.341 DPA
                                                                                                                                                                                       9.04 RAP 200.21 ECC 1.2423
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    111.88 8 15 15
111.87 13 31 35
111.80 8 15 15
111.87 13 31 35
120.40 11 2 34
103.33 15 27 34
                           7 55 7 1208.02
11 56 11 5723.44
                                                                                                                   54.58
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           74.57
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                                                                                             349.40
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          105.43
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11 56 11 5723.44
10 51 59 634.74
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          110.00
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          110.00
                           13 58 29
                                                                         31.77
                                                                                             243.85
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                                                                                                                                                                                                                             234.95
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SCT 5077.1 SCR 410.7 SC3 163.5

RRT -.3813 RRF -.4061 RTF .8907

SCB 5093.7 R23 .0698 R13 -.8908

SCI 5079.5 SC2 379.5 THA 178.22
                                                                                                                                                                            ST 2424.5 SR 406.1 SS 653.6

CRT - 9973 CRS .9759 CST - .9662

LSA 2538.3 MSA 163.5 SSA 22.5
      TOE-1.6166 TRA -.3456 TC3-5.7661 BAU 1.1350
      ROE. .2718 RRA .0230 RC3 -.0617 FAU .03255
FOE -.6776 FRA .3593 FC3-1.9138 BSP 15842
BOE 1.6393 BRA .3464 BC3 5.7664 FSP -522
                                                                                                                                                                            EL1 2458.1 EL2 29.6 ALF 170.52
                                                                                                        FLIGHT TIME 168,00
                                                                                                                                                                                             ARRIVAL DATE JAN 8 1968 ...
LAUNCH DATE JUL 24 1967
    HELIOCENTRIC CONIC
                                                                                                        DISTANCE 496.207
     RL 151.97 LAL .00 LQL 300.43 VL 25.885 GAL -.93 AZL 93.47 MCA 246.51 SMA 123.27 ECC .23330 INC 3.4668 V1 29.317 RP 107.79 LAP 3.18 LQP 186.91 VP 37.227 GAP 11.43 AZP 88.62 TAL 183.07 TAP 69.58 RCA 94.51 APO 152.03 VZ 35.156 RC 166.846 GL -24.14 GP 12.65 ZAL 94.01 ZAP 163.79 ETS 48.70 ZAE 129.19 ETE 169.69 ZAC 66.19 ETC 8.35 CLP-169.77
    PLANETOCENTRIC CONIC
      C3 14.648 VHL 3.827 DLA -32.31 RAL 194.03 RAD 6567.6 VEL 11.665 PTH
                                                                                                                                             2.05 VHP 7.479 DPA
                                                                                                                                                                                       7.50 RAP 202.11 ECC 1.2411
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.74 8 6 24 1224.11 24.16 350.75 58.84 112.14 8 26 49 624.1 26.95 342.86 106.26 12 18 32 5705.07 24.17 268.83 58.84 112.13 13 53 37 5105.1 26.96 260.93
           73.74
                              8 6 24
                                                 1224.11
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119.93 11 26 59
104.33 15 36 45
                          12 18 32 5705.07
11 16 51 607.91
         106.26
                                                                         724.17
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         110.00
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                                               5369.28
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         110.00
                          14 7 16
                                                                          31.37
                                                                                             245.66
                                                                                                                   61.52
                                                                                                                                                                                                         33.02
                                                                                                                                                                                                                             236.92
                                                                                                 HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                 SGT 5136.4 SGR 421.2 SG3 160.4

RRT - .3844 RRF - .3996 RTF .8933

SGB 5153.6 R23 .0588 R13 - .8935

SG1 5139.0 SG2 388.7 THA 178.18
                                                                                                                                                                           ST 2476.9 SR 417.0 SS 646.3
CRT -.9983 CRS .9678 CST -.9684
      TOE-1.6513 TRA -.1394 TC3-5.8731 BAU 1.1502
      ROE .2784 RRA .0222 RC3 -.0606 FAU .03094
                                                                                                                                                                           LSA 2588.8 MSA 156.4 SSA 23.7
EL1 2511.7 EL2 23.8 ALF 170.46
      FDE -.6511 FRA .4144 FC3-1.8284 BSP 16078
BDE 1.6747 BRA .1411 BC3 5.8734 FSP -515
                                                                                                       FLIGHT TIME 170.00
                                                                                                                                                                                           ARRIVAL DATE JAN 10 1968
LAUNCH DATE JUL 24 1967
                                                                                                       DISTANCE 501.850
    HELIOCENTRIC CONIC
     RL 151.97 LAL .00 LOL 300.43 VL 25.828 GAL -.43 A7L 93.31 MCA 249.74 SMA 122.93 ECC .23628 INC 3.3124 VI 29.317
RP 107.83 LAP 3.11 LOP 190.14 VP 37.176 GAP 11.73 A7P 88.85 TAL 181.38 TAP 71.12 RCA 93.89 APO 151.98 V2 35.145
RC 168.808 GL -22.90 GP 12.09 ZAL 90.57 ZAP 164.72 ETS 49.70 ZAE 129.29 ETE 170.11 ZAC 63.97 ETC 8.16 CLP-170.58
    PLANETOCENTRIC CONIC
      C3 14.710 VHL 3.835 DLA -32.63 RAL 198.37 RAD 6567.6 VEL 11.666 PTH 2.05 VHP 7.626 DPA
                                                                                                                                                                                      6.03 RAP 204.04 ECC 1.2421
     THE CAPACITY LINCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG TO CST TIM INJ 2 LAT INJ 2 LONG TO CST TIM INJ 2 LAT 
                                                                                                                                       112.41 8 39 57
112.40 14 15 9
119.50 13 19 31
105.30 15 47 2
                                             5873.28
5393.82
                         11 41 38
14 17 8
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                                                                                            278.63
                                                                                                                   60.09
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                                                                                            247.44
                                                                                                                   65.88
                                                                                                                                                                                 4793.8
                                                                                                                                                                                                        32.73
                                                                                                                                                                                                                           238.68
                                                                         30.95
    DIFFERENTIAL CORRECTIONS
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                 RID-COUNSE EXECUTION ACCURACY
SGT 5192.7 SGR 431.1 SG3 157.5
RRT -.3889 RRF -.3956 RTF .8961
SGB 5210.6 R23 .0489 R13 -.8963
SGI 5195.5 SG2 397.0 THA 178.14
                                                                                                                                                                          ST 2513.9 SR 427.6 SS 635.3

CRT -.9975 CRS .9581 CST -.9599

LSA 2623.5 MSA 151.9 SSA 24.7

EL1 2549.9 EL2 29.8 ALF 170.37
      TDE-1.6801 TRA .0788 TC3-5.9235 BAU 1.1649
RDE .2861 RRA .0198 RC3 -.0567 FAU .02939
      FDE -.6228 FRA .4700 FC3-1.7297 BSP 16257
      BOE 1.7043 BRA .0812 BC3 5.9238 FSP
                                                                              - 504
LAUNCH DATE JUL 24 1967
                                                                                                        FLIGHT TIME 172.00
                                                                                                                                                                                            ARRIVAL DATE JAN 12 1968
    HELIOCENTRIC CONIC
                                                                                                       DISTANCE 507.467
     RL 151.97 LAL .00 LOL 300.43 VL 25.771 GAL .10 AZL 93.16 MCA 252.96 SMA 122.60 ECC .23953 INC 3.1644 VI 29.317 RP 107.86 LAP 3.03 LOP 193.37 VP 37.126 GAP 12.05 AZP 89.07 TAL 179.69 TAP 72.65 RCA 93.24 APO 151.97 VZ 35.134 RC 170.755 GL -21.61 GP 11.58 ZAL 87.05 ZAP 165.60 ETS 50.93 ZAE 129.39 ETE 170.48 ZAC 61.72 ETC 8.02 CLP-171.38
    PLANETOCENTRIC CONIC
      C3 14.916 VHL 3.862 DLA -32.86 RAL 202.80 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 7.782 DPA
                                                                                                                                                                                      4.61 RAP 206.02 ECC 1.2455
                                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      LNCH AZMTH LNCH TIME L-1 TIME
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                              8 33 51 1251.66
13 1 7 5685.63
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112.67 14 35 53
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106.17 15 59 0
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                                                                                            277.69
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         110.00
          110.00
                                                                         30.53
                                                                                            249.05
                                                                                                                   70.49
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                                                                                                                                                                                                         32.44
                                                                                                                                                                                                                            240.35
                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                SGT 5224.4 SGR 439.0 SG3 152.3
RRT - .3879 RRF - .3876 RTF .8957
SGB 5242.8 R23 .0413 R13 - .8958
                                                                                                                                                                          ST 2525.7 SR 436.1 SS 612.6
CRT -.9949 CRS .9453 CST -.9700
      TOE-1.6965 TRA .3070 TC3-5.8852 BAU 1.1737
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SGI 5227.1 SG2 404.4 THA 178.12

LSA 2630.9 MSA 150.7 SSA 25.2

EL1 2562.7 EL2 43.5 ALF 170.25

ROE .2939 RRA .0160 RC3 -.0548 FAU .02732 FOE -.5844 FRA .5244 FC3-1.5854 BSP 16400 BOE 1.7218 BRA .3074 BC3 5.8855 FSP -485

ARRIVAL DATE JAN 14 1968

EL1 2436.4 EL2 121.5 ALF 169.36

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FLIGHT TIME 174.00
LAUNCH DATE JUL 24 1967
                                                                                DISTANCE 513.055
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.715 GAL .64 AZL 93.02 HCA 256.18 SMA 122.28 ECC .24307 INC 3.0216 VI 29.317 RP 107.90 LAP 2.93 LOP 196.60 VP 37.076 GAP 12.37 AZP 89.28 TAL 177.99 TAP 74.17 RCA 92.55 APO 152.00 VZ 35.122 RC 172.686 GL -20.29 GP 11.13 ZAL 83.48 ZAP 166.42 ETS 52.42 ZAE 129.47 ETE 170.82 ZAC 59.45 ETC 7.91 CLP-172.18
   PLANETOCENTRIC CONIC
     C3 15.278 VHL 3.909 DLA -33.00 RAL 207.29 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 7.949 DPA
                                                                                                                                                 3.24 RAP 208.03 ECC 1.2514
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           72.97
                                                                                                           112.94
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                                                                                                                                              662.7
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        72.29
                       8 49 53 1262.73
13 20 52 5685.28
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106.84 16 13 18
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       110.00
                     12 27 11
                      12 27 11 5850.38
14 42 44 5433.67
                                                          18.88
                                                                         277.29
                                                                                           70.07
                                                                                                                                             4833.7
                                                                                                                                                               32.20
                                                          30.19
                                                                         250.30
                                                                                           75.33
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             RRT - .3962 RRF - .3910 RTF .8999
SCB 5294.6 R23 .0351 R13 - .9000
SCI 5278.6 SC2 411.1 THA 178.06
                                                                                                                                        ST 2527.4 SR 446.2 SS 598.9
CRT -.9904 CRS .9322 CST -.9710
     TOE-1.7105 TRA .5477 TC3-5.8101 BAU 1.1867
    RDE .3044 RRA .0108 RC3 -.0463 FAU .02595
                                                                                                                                        LSA 2630.9 MSA 152.1 SSA 25.3
    FOE -.5573 FRA .5781 FC3-1,4706 BSP 16580
                                                                                                                                        EL1 2565.7 EL2 60.7 ALF 170.08
     BOE 1.7373 BRA .5478 BC3 5.8103 FSP -483
                                                                                                                                                     ARRIVAL DATE JAN 16 1968
                                                                                  FLIGHT TIME 176.00
LAUNCH DATE JUL 24 1967
                                                                                  DISTANCE 518.610
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.660 GAL 1.21 AZL 92.88 MCA 259.40 SMA 121.96 ECC .24693 INC 2.8827 V1 29.317 RP 107.94 LAP 2.83 LOP 199.82 VP 37.026 GAP 12.71 AZP 89.47 TAL 176.30 TAP 75.70 RCA 91.84 APO 152.07 V2 35.110 RC 174.603 GL -18.94 GP 10.72 ZAL 79.90 ZAP 167.19 ETS 54.18 ZAE 129.55 ETE 171.11 ZAC 57.17 ETC 7.84 CLP-172.96
   PLANETOCENTRIC CONIC
    C3 15.806 VHL 3.976 DLA -33.04 RAL 211.79 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 8.126 DPA 1.92 RAP 210.07 ECC 1.2601 LNCM AZMTH LNCM TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.22 9 7 24 1271.70 24.22 354.43 78.00 113.19 9 28 36 671.7 27.15 346.58 107.78 13 39 13 5691.66 24.23 267.83 78.01 113.18 15 14 4 5091.7 27.15 259.98 107.78 13 39 13 5691.66 24.23 267.83 78.01 113.19 9 28 36 671.7 27.15 346.58 107.78 13 39 13 5691.66 24.23 267.83 78.01 113.19 9 28 36 671.7 27.15 259.98 110.00 12 46 5 5855.04 18.72 277.56 75.10 119.14 14 23 40 5255.0 22.46 270.42 110.00 14 59 42 5444.35 29.98 251.06 80.38 107.25 16 30 27 4844.3 32.05 242.46
     C3 15.806 VHL 3.976 DLA -33.04 RAL 211.79 RAD 6567.6 VEL 11.713 PTH
                                                                                                                2.06 VHP 8.126 DPA
                                                                                                                                                  1.92 RAP 210.07 ECC 1.2601
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2502.7 SR 454.0 SS 576.5
CRT -.9840 CRS .9155 CST -.9708
                                                                              SGT 5314.8 SGR 455.1 SG3 146.4
RRT -.4022 RRF -.3914 RTF .9030
    TDE-1.7103 TRA .7985 TC3-5.6647 BAU 1.1970
     ROE .3150 RRA .0042 RC3 -.0381 FAU .02442
                                                                                                                                       LSA 2603.2 MSA 157.3 SSA 24.8
EL1 2542.3 EL2 79.7 ALF 169.87
                                                                              SGB 5334.3 R23 .0285 R13 -.9031
SGI 5318.0 SG2 416.4 THA 178.02
     FOE -.5227 FRA .6304 FC3-1.5375 BSP 16714
BOE 1.7391 BRA .7985 BC3 5.6648 FSP -472
                                                                                                                                                     ARRIVAL DATE JAN 18 1968
                                                                                  FLIGHT TIME 178.00
LAUNCH DATE JUL 24 1967
                                                                                  DISTANCE 524.129
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.605 GAL 1.80 AZL 92.75 MCA 262.62 SMA 121.64 ECC .25113 INC 2.7468 VI 29.317 RP 107.97 LAP 2.72 LOP 203.04 VP 36.976 GAP 13.06 AZP 89.65 TAL 174.61 TAP 77.22 RCA 91.10 APO 152.19 V2 35.097 RC 176.504 GL -17.56 GP 10.35 ZAL 76.34 ZAP 167.92 ETS 56.23 ZAE 129.61 ETE 171.38 ZAC 54.87 ETC 7.82 CLP-173.74
   PLANETOCENTRIC CONIC
     C3 16.516 VHL 4.064 DLA -32.96 RAL 216.24 RAD 6567.7 VEL 11.743 PTH 2.07 VHP 8.316 DPA
                                                                                                                                                    .65 RAP 212.14 ECC 1.2718
    113.39 15 31 4
119.47 14 39 29
107.36 16 50 31
                     13 1 37 5872.07
15 19 44 5447.35
                                                                                                                                                                               271.47
        110.00
                                                           18.15
                                                                          278.55
                                                                                           80.06
                                                                                                                                              5272.1
                                                                                                                                                               21.94
                                                                          251.27
                                                                                           85.63
                                                                                                                                             4847.3
                                                                                                                                                               32.00
                                                                                                                                                                               242.68
        110.00
                                                          29.92
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 2456.1 SR 460.5 SS 552.4

CRT -.9752 CRS .8953 CST -.9703

LSA 2553.7 MSA 165.8 SSA 24.0

EL1 2496.9 EL2 100.2 ALF 169.62
     TDE-1.6975 TRA 1.0627 TC3-5.4552 BAU 1.2045
                                                                              SGT 5345.7 SGR 461.2 SG3 142.8
                                                                              RRT - .4078 RRF - .3935 RTF .9058
SGB 5365.5 R23 .0239 R13 - .9058
SGI 5349.0 SGZ 420.8 THA 177.97
    RDE .3266 RRA -.0039 RC3 -.0300 FAU .02283
FDE -.4872 FRA .6824 FC3-1.1966 BSP 16803
     BOE 1.7287 BRA 1.0627 BC3 5.4552 FSP
                                                             -462
                                                                                                                                                     ARRIVAL DATE JAN 20 1968
LAUNCH DATE JUL 24 1967
                                                                                   FLIGHT TIME 180.00
                                                                                  DISTANCE 529.608
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.551 GAL 2.42 AZL 92.61 HCA 265.83 SHA 121.34 ECC .25571 INC 2.6130 V1 29.317
RP 108.01 LAP 2.61 LOP 206.26 VP 36.927 GAP 13.43 AZP 89.81 TAL 172.92 TAP 78.75 RCA 90.31 APO 152.37 VZ 35.084
RC 178.389 GL -16.19 GP 10.02 ZAL 72.82 ZAP 168.59 ETS 58.62 ZAE 129.67 ETE 171.62 ZAC 52.56 ETC 7.84 CLP-174.51
   PLANETOCENTRIC CONIC
    C3 17.427 VHL 4.175 DLA -32.77 RAL 220.62 RAD 6567.7 VEL 11.782 PTH 2.08 VHP 8.518 DPA -.57 RAP 214.24 ECC 1.2868 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          113.59 10 7 33
113.58 15 46 20
                       9 46 10 1283.18
14 10 56 5724.93
                                                                                        88.28
                                                                                                                                               683.2
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         72.78
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        107.22
                      14 10 56
                                                           23.44
                                                                          270.02
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15 46 20
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                       9 46 10 1283.18
                                                           23.43
                                                                          354.94
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         72.78
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        107.22
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17 13 3
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        110.00
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                                        612.53
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        110.00
                                       5443.57
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                      15 42 19
                                                           30.00
                                                                          251.01
                                                                                            91.01
                                                                                                            107.22
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 2394.6 SR 465.5 SS 527.6
CRT -.9641 CRS .8717 CST -.9694
LSA 2489.4 MSA 177.4 SSA 23.0
                                                                              SGT 5377.5 SGR 466.3 SG3 139.3
RRT -.4146 RRF -.3972 RTF .9089
SGB 5397.7 R23 .0198 R13 -.9090
     TOE-1.6756 TRA 1.3360 TC3-5.2032 BAU 1.2123
     ROE .3391 RRA -.0132 RC3 -.0215 FAU .02133
FOE -.4517 FRA .7329 FC3-1.0598 BSP 16953
BOE 1.7096 BRA 1.3361 BC3 5.2033 FSP -453
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SG1 5381.0 SG2 424.0 THA 177.93

ARRIVAL CATE JAN 22 1968 FLIGHT TIME 182.00 LAUNCH DATE JUL 24 1967 HELIOCENTRIC CONIC DISTANCE 535.043 RL 151.97 LAL .00 LOL 300.43 VL 25.498 GAL 3.06 AZL 92.48 HCA 269.04 SMA 121.04 ECC .26070 INC 2.4804 VL 29.317
RP 108.05 LAP 2.48 LOP 209.48 VP 36.878 GAP 13.83 AZP 89.96 TAL 171.23 TAP 80.27 RCA 89.48 APO 152.59 VZ 35.071
RC 180.257 GL -14.82 GP 9.71 ZAL 69.38 ZAP 169.21 ETS 61.36 ZAE 129.73 ETE 171.84 ZAC 50.25 ETC 7.91 CLP-175.28 PLANETOCENTRIC CONIC C3 18.561 VHL 4.308 DLA -32.47 RAL 224.87 RAD 6567.8 VEL 11.830 PTH 2.10 VHP 8.735 DPA -1.75 RAP 216.36 ECC 1.3055 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 113.74 10 28 37 113.73 15 59 43 354.82 93.44 347.10 685.3 25.84 73.40 10 7 12 1285.28 22.83 93.44 5152.2 25.85 264.10 14 23 50 5752.22 22.85 271.82 106.60 113.74 10 28 37 354.82 93.44 685.3 25.84 347.10 22.83 10 7 12 1285.28 73.40 113.73 15 59 43 120.67 13 34 25 106.90 17 37 14 271.62 93.44 5152.2 25.85 264.10 14 23 50 5752.22 22.85 106.60 50.4 19.84 297.57 304.46 89.66 650.42 15.89 110.00 13 23 34 4835.1 32.18 241.77 16 6 38 250.40 96.47 5435.08 30.17 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5405.2 SGR 470.2 SG3 135.8 RRT - .4218 RRF - .4018 RTF .9122 SGB 5425.6 R23 .0161 R13 -.9123 SGI 5408.9 SG2 426.0 THA 177.89 ST 2318.3 SR 468.6 SS 502.8 CRT -.9498 CRS .8436 CST -.9683 TDE-1.6422 TRA 1.6223 TC3-4.9111 BAU 1.2187 RDE .3523 RRA -.0241 RC3 -.0132 FAU .01990 FDE -.4160 FRA .7833 FC3 -.9280 BSP 17091 LSA 2410.3 MSA 191.8 SSA 21.8 ELI 2360.8 EL2 144.0 ALF 169.09 BDE 1.6795 BRA 1.6224 BC3 4.9111 FSP -444 ARRIVAL DATE JAN 24 1968 FLIGHT TIME 184.00 LAUNCH DATE JUL 24 1967 HELIOCENTRIC CONIC DISTANCE 540.426 151.97 LAL .00 LOL 300.43 VL 25.446 GAL 3.74 A7L 92.35 MCA 272.25 SMA 120.75 ECC .26614 INC 2.3481 V1 29.317 108.09 LAP 2.35 LOP 212.69 VP 36.830 GAP 14.24 A7P 90.09 TAL 169.56 TAP 81.81 RCA 88.61 APO 152.88 V2 35.058 RL 151.97 LAL RC 182.108 GL -13.47 GP 9.44 ZAL 66.04 ZAP 169.77 ETS 64.48 ZAE 129.77 ETE 172.04 ZAC 47.93 ETC 8.03 CLP-176.05 PLANETOCENTRIC CONIC C3 19.943 VHL 4.466 DLA -32.08 RAL 228.97 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 8.967 DPA INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM" INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 113.86 684.6 25.14 346.75 22.11 354.42 98.56 10 50 38 10 29 13 1284.62 74.25 16 10 59 25.15 266.45 274.12 98.56 113.84 5186.8 5786.83 105.75 14 34 32 22.12 346.75 684.6 25.14 354.42 98.56 113.86 10 50 38 10 29 13 1284.52 74 25 22.11 113.84 16 10 59 121.38 13 42 43 106.48 18 2 11 5186.8 25.15 255.45 98.56 5786.83 274.12 105.75 14 34 32 22.12 95.4 18.36 300.22 306.99 94.27 110.00 13 31 8 695.37 14.31 16 31 47 4824.1 32.34 240.95 249.62 101.94 5424.08 30.38 119.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5427.7 SGR 472.9 SG3 132.4 RRT - .4292 RRF - .4074 RTF .9156 ST 2231.0 SR 469.9 SS 479.2 CRT -.9317 CRS .8105 CST -.9670 TOE-1.5972 TRA 1.9226 TC3-4.5871 BAU 1.2230 RDE .3660 RRA -.0363 RC3 -.0057 FAU .01849 FDE -.3806 FRA .8342 FC3 -.8028 BSP 17202 SGB 5448.3 R23 .0131 R13 -.9157 SG1 5431.5 SG2 426.8 THA 177.85 LSA 2320.3 MSA 208.6 SSA 20,6 EL1 2273.8 EL2 167.5 ALF 168.84 BDE 1.6387 BRA 1.9230 BC3 4.5871 FSP -435 ARRIVAL DATE JAN 26 1968 FLIGHT TIME 186.00 LAUNCH DATE JUL 24 1967 DISTANCE 545.753 HELIOCENTRIC CONIC RL 151.97 LAL .00 LOL 300.43 VL 25.395 GAL 4.45 A7L 92.22 HCA 275.46 SMA 120.46 ECC .27206 INC 2.2153 V1 29.317
RP 108.13 LAP 2.21 LOP 215.90 VP 36.781 GAP 14.68 A7P 90.21 TAL 167.89 TAP 83.35 RCA 87.69 APO 153.23 V2 35.045
RC 183.942 GL -12.15 GP 9.18 7AL 62.82 ZAP 170.28 ETS 68.01 ZAE 129.80 ETE 172.22 ZAC 45.61 ETC 8.21 CLP-176.81 RC 183.942 GL -12.15 GP PLANETOCENTRIC CONIC C3 21.606 VHL 4.648 DLA -31.60 RAL 232.89 RAD 6567.9 VEL 11.958 PTH 2.13 VHP 9.217 DPA -3.99 RAP 220.67 ECC 1.3556 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.94 11 13 36 113.93 16 19 54 680.6 24.32 346.11 103.61 75.34 353.72 10 52 16 1260.63 21.27 103.62 5229.2 24.34 269.33 276.94 14 42 45 5829.19 21.29 104.66 11 13 36 680.6 24.32 346.11 353.72 103.61 113.94 10 52 16 1280.63 21.27 75.34 113.93 16 19 54 103.62 5229.2 24.34 269.33 5829.19 276.94 14 42 45 21.29 104.66 122.07 13 49 36 106.03 18 27 13 98.76 145.4 16.67 303 10 13 37 10 745.38 16 57 1 5412.44 309.76 12.52 32.49 240.08 4812.4 248.78 107.38 30.60 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5442.3 SGR 474.0 SG3 129.1 RRT -.4361 RRF -.4125 RTF .9187 SGB 5462.9 R23 .0104 R13 -.9187 ST 2134.2 SR 468.9 SS 456.3 CRT -.9085 CRS .7701 CST -.9653 LSA 2220.5 MSA 228.0 SSA 19.4 TOE-1.5380 TRA 2.2412 TC3-4.2354 BAU 1.2234 ROE .3800 RRA -.0502 RC3 .0003 FAU .01705 FDE -.3439 FRA .8871 FC3 -.6831 BSP 17222 SGI 5446.2 SG2 426.3 THA 177.81 ELI 2176.7 EL2 192.1 ALF 168.62 BDE 1.5843 BRA 2.2417 BC3 4.2354 FSP -423 ARRIVAL DATE JAN 28 1968 FLIGHT TIME 188.00 LAUNCH DATE JUL 24 1967 DISTANCE 551.014 HELIOCENTRIC CONIC RL 151.97 LAL .00 LOL 300.43 VL 25.344 GAL 5.19 AZL 92.08 HCA 278.66 SMA 120.18 ECC .27853 INC 2.0812 V1 29.317 RP 108.18 LAP 2.06 LOP 219.10 VP 36.734 GAP 15.15 AZP 90.31 TAL 166.24 TAP 84.90 RCA 86.70 APO 153.65 V2 35.032 RC 185.758 GL -10.88 GP 8.95 ZAL 59.74 ZAP 170.73 ETS 71.97 ZAE 129.82 ETE 172.38 ZAC 43.29 ETC 8.44 CLP-177.58 PLANETOCENTRIC CONIC C3 23.586 VHL 4.857 DLA -31.06 RAL 236.61 RAD 6568.0 VEL 12.040 PTH 2.15 VHP 9.486 DPA -5.05 RAP 222.86 ECC 1.3882 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.68 11 16 27 1272.48 20.34 352.66 108.59 113.99 11 37 39 672.5 23.41 345.11 108.59 113.97 16 26 13 5279.9 23.42 272.78 280.33 14 48 13 5879.93 20.36 113.99- 11 37 39 672.5 23.41 345.11 108.59 11 16 27 1272.48 20.34 352.66 113.97 16 26 13 122.70 13 55 23 105.60 18 51 48 5279.9 23.42 272.78 108.59 280.33 14 48 13 5879.93 20.36 14.80 306.14 198.9 103.13 110.00 13 42 4 798.93 10.57 312.68 4801.5 239.25 5401.47 112.75 32.64 17 21 47 30.81 247.99 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2040.9 SR 466.3 SS 437.3 CRT -,8808 CRS .7266 CST -.9645 SGT 5456.2 SGR 474.2 SG3 125.8 RRT -.4439 RRF -.4194 RTF .9223 TDE-1.4741 TRA 2.5709 TC3-3.8811 BAU 1.2238 ROE .3946 RRA -.0652 RC3 .0057 FAU .01572 FDE -.3101 FRA .9392 FC3 -.5772 BSP 17324 LSA 2124.2 MSA 247.7 SSA 18.3 SGB 5476.8 R23 .0084 R13 -.9223 SGI 5460.3 SG2 424.6 THA 177.78 EL1 2082.3 EL2 216.4 ALF 168.49

BOE 1.5260 BRA 2.5717 BC3 3.8811 FSP -415

ARRIVAL DATE JAN 30 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 24 1967
                                                                                      DISTANCE 556.201
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.294 GAL 5.98 AZL 91.94 HCA 281.87 SMA 119.90 ECC .28560 INC 1.9449 V1 29.317 RP 108.22 LAP 1.90 LOP 222.31 VP 36.687 GAP 15.65 AZP 90.40 TAL 164.60 TAP 86.46 RCA 85.66 APO 154.15 V2 35.019 RC 187.557 GL -9.65 GP 8.74 ZAL 56.80 ZAP 171.11 ETS 76.37 ZAE 129.83 ETE 172.53 ZAC 40.97 ETC 8.75 CLP-178.35
   PLANETOCENTRIC CONIC
     C3 25.928 VHL 5.092 DLA -30.45 RAL 240.11 RAD 6568.0 VEL 12.137 PTH 2.18 VHP 9.776 DPA -6.06 RAP 225.06 ECC 1.4267
     25.928 VML 5.092 DLA 50.45 KAL 240.11 RAU 6506.0 VEL 12.15 TH 2.15 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.29 11 42 6 1258.79 19.33 351.16 113.46 114.00 12 3 5 658.8 22.41 343.67 101.71 14 50 30 652.15 19.35 306.47 113.46 113.99 15 1 23 52.2 22.42 298.98
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15 1 23
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         78.29
                       11 42 6 1258.79
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105.23 19 15 34
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        110.00
                        13 46 5
                                        854.90
                                                               8.49
                                                                              315.68
                                                                                              107.38
                       17 45 42 5392.07
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                                                                                                                                                                                        238.55
                                                             30.98
                                                                             247.31
                                                                                              118.03
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5464.9 SCR 473.0 SC3 122.7
RRT -.4517 RRF -.4267 RTF .9260
SCB 5485.4 R23 .0066 R13 -.9260
SCI 5469.1 SC2 421.7 THA 177.75
                                                                                                                                               ST 1950.5 SR 461.9 SS 421.2
CRT -.8473 CRS .6785 CST -.9643
     TOE-1.4019 TRA 2.9171 TC3-3.5239 BAU 1.2215
     RDE .4095 RRA -.0815 RC3 .0098 FAU .01443
                                                                                                                                               LSA 2030.6 MSA 267.7 SSA 17.3
    FOE -.2775 FRA .9923 FC3 -.4818 BSP 17419
BDE 1.4605 BRA 2.9182 BC3 3.5239 FSP -406
                                                                                                                                                EL1 1990.0 EL2 240.5 ALF 168.48
                                                                                       FLIGHT TIME 192.00
                                                                                                                                                             ARRIVAL DATE FEB I 1968
                                                                                      DISTANCE 561.301
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.245 GAL 6.81 AZL 91.81 HCA 285.07 SMA 119.64 ECC .29334 INC 1.8055 V1 29.317 RP 108.26 LAP 1.74 LOP 225.51 VP 36.640 GAP 16.19 AZP 90.47 TAL 162.98 TAP 88.04 RCA 84.54 APO 154.73 V2 35.005 RC 189.337 GL -8.48 GP 8.55 ZAL 54.03 ZAP 171.41 ETS 81.18 ZAE 129.83 ETE 172.67 ZAC 38.67 ETC 9.13 CLP-179.13
   PLANETOCENTRIC CONIC
     C3 28.686 VHL 5.356 DLA -29.81 RAL 243.40 RAD 6568.2 VEL 12.250 PTH
                                                                                                                      2.20 VHP 10.090 DPA -7.03 RAP 227.27 ECC 1.4721
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
80.27 12 10 2 1236.68 18.26 349.00 118.22 113.98 12 30 39 636.7 21.35 341.58
                       12 10 2 1236.68
                                                                                                                 113.97 15 0 51
115.20 14 45 13
112.77 15 20 13
123.66 14 4 39
104.95 19 38 17
                                                                                                                                                       124.5
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         99.73
                        14 48 46
                                        724.53
                                                              18.27
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        100.00
                        14 32 16
                                          777.27
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        100.00
                      15 9 14
                                          659.18
                                                              19.91
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        110.00
                        13 49 27
                                          912.46
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       110.00
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                                                                                              123.20
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                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5468.7 SGR 470.5 SG3 119.6
RRT -.4594 RRF -.4342 RTF .9299
SGB 5488.9 R23 .0051 R13 -.9299
SGI 5473.0 SG2 417.6 THA 177.72
                                                                                                                                                ST 1866.6 SR 455.6 SS 408.4
CRT -.8076 CRS .6265 CST -.9649
     TDE-1.3221 TRA 3.2816 TC3-3.1708 BAU 1.2160
     RDE .4245 RRA -.0990 RC3 .0126 FAU .01316
FDE -.2460 FRA 1.0472 FC3 -.3971 BSP 17488
                                                                                                                                                LSA 1943.1 MSA 287.3 SSA 16.4
     BOE 1.3886 BRA 3.2831 8C3 3.1708 FSP -397
                                                                                                                                                EL1 1903.2 EL2 263.5 ALF 168.63
                                                                                      FLIGHT TIME 194.00
                                                                                                                                                             ARRIVAL DATE FEB 3 1968
LAUNCH DATE JUL 24 1967
                                                                                      DISTANCE 566.303
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.197 GAL 7.69 AZL 91.66 MCA 288.26 SMA 119.38 ECC .30182 INC 1.6619 V1 29.317 RP 108.30 LAP 1.58 LOP 228.70 VP 36.595 GAP 16.76 AZP 90.52 TAL 161.38 TAP 89.65 RCA 83.35 APO 155.40 V2 34.992 RC 191.100 GL -7.36 GP 8.37 ZAL 51.41 ZAP 171.63 ETS 86.38 ZAE 129.81 ETE 172.80 ZAC 36.37 ETC 9.60 CLP-179.92
   PLANETOCENTRIC CONIC
     C3 31.925 VHL 5.650 CLA -29.14 RAL 246.46 RAD 6568.3 VEL 12.381 PTH 2.24 VHP 10.431 DPA -7.96 RAP 229.50 ECC 1.5254
    C3 31.925 VML 5.650 OLA -29.14 RAL 246.46 RAD 656A.3 VEL 12.381 PTH 2.24 VMP 10.431 DPA -7.96 RAP 229.50 ECC 1.5254 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.82 12 42 13 1199.53 17.14 345.73 122.85 113.93 13 2 12 599.5 20.23 338.36 97.18 14 41 2 815.35 17.16 317.56 122.86 113.92 14 54 37 215.4 20.24 310.18 100.00 14 6 40 925.69 12.14 323.22 120.36 117.53 14 22 5 325.7 15.73 316.27 100.00 15 59 16 5852.46 22.29 279.12 125.08 110.45 17 36 48 5252.5 24.87 271.28 110.00 13 52 16 971.00 4.12 321.82 115.55 123.96 14 8 27 371.0 8.55 315.53 110.00 18 30 9 5379.92 31.19 246.43 128.24 104.75 19 59 49 4779.9 32.90 237.63 DIEFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ST 1790.2 SR 447.5 SS 398.7
CRT -.7607 CRS .5699 CST -.9662
LSA 1862.9 MSA 306.0 SSA 15.5
EL1 1823.2 EL2 285.3 ALF 168.96
                                                                                  SGT 5466.8 SGR 466.4 SG3 116.8
RRT -.4667 RRF -.4415 RTF _.9338
SGB 5486.6 R23 .0036 R13 -.9338
SGI 5471.1 SG2 412.2 THA 177.71
     TDE-1.2325 TRA 3.6700 TC3-2.8220 BAU 1.2045
     RDE .4395 RRA -.1178 RC3 .0140 FAU .01186
FOE -.2148 FRA 1.1053 FC3 -.3215 BSP 17443
     BOE 1.3085 BRA 3.6719 BC3 2.8220 FSP
                                                                 - 386
                                                                                                                                                             ARRIVAL DATE FEB 5 1968
LAUNCH DATE JUL 24 1967
                                                                                       FLIGHT TIME 196.00
                                                                                      DISTANCE 571.188
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 25.150 GAL 8.62 AZL 91.51 HCA 291.46 SMA 119.12 ECC .31113 INC 1.5130 V1 29.317
RP 108.34 LAP 1.41 LOP 231.90 VP 36.550 GAP 17.39 AZP 90.55 TAL 159.82 TAP 91.27 RCA 82.06 APO 156.18 V2 34.979
RC 192.846 GL -6.31 GP 8.21 ZAL 48.96 ZAP 171.76 ETS 91.89 ZAE 129.77 ETE 172.92 ZAC _34.10 ETC 10.17 CLP 179.28
   PLANETOCENTRIC CONIC
     C3 35.724 VHL 5.977 DLA -28.45 RAL 249.30 RAD 6568.4 VEL 12.534 PTH 2.27 VHP 10.803 DPA -8.85 RAP 231.73 ECC 1.5879
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                113.85 13 47 22
113.84 14 33 5
                                                                                            127.36
                                                                                                                                                       514.1
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                                                                                                                                                                                         331.60
         87.13 13 28 48 1114.10
                                                             15.98
                                                                              338.92
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          92.87
                        14 17 8
                                         957.49
                                                              16.00
                                                                              327.47
                                                                                               127.37
                                                                                                                  118.63 14 13 32
109.32 18 8 59
124.14 14 11 48
104.66 20 20 6
                                                                                                                                                                         12.74
                                                                                                                                                                                         322.05
                        13 56 28
                                       1024.28
                                                               8.98
                                                                              328.83
                                                                                               123.83
                                                                                                                                                       424.3
        100.00
                        16 32 9
                                         5810.58
                                                              23.26
                                                                              276.39
                                                                                               130.42
                                                                                                                                                     5210.6
                                                                                                                                                                       25.68
                                                                                                                                                                                         268.43
        100.00
                                                                                                                                                                                         318.67
        110.00
                                                               1.86
                                                                                                                                                      430.0
                                                                                                                                                                          6.33
                       13 54 38
                                         1830.04
                                                                              324.91
                                                                                              119.48
                                                                                                                                                     4777.6
                                                                                                                                                                         32.93
   110.00
                       18 50 28
                                         5377.59
                                                              31.23
                                                                              246.26
                                                                                               133.15
                                                                                 - MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SCT 5462.4 SGR 461.2 SG3 113.9
RRT -.4742 RRF -.4497 RTF .9379
SGB 5481.8 R23 .0028 R13 -.9380
SGI 5466.8 SGZ 405.7 THA 177.69
                                                                                                                                                ST 1727.0 SR 438.2 SS 392.7
CRT -. 7099 CRS .5158 CST -. 9689
     TDE-1.1423 TRA 4.0737 TC3-2.4973 BAU 1.1927
     RDE .4547 RRA -.1373 RC3 .0147 FAU .01066
FDE -.1867 FRA 1.1640 FC3 -.2583 BSP 17510
BDE 1.2294 BRA 4.0760 BC3 2.4974 FSP -378
                                                                                                                                                LSA 1795.9 MSA 321.5 SSA 14.8
                                                                                                                                                EL1 1755.6 EL2 303.6 ALF 169.47
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ARRIVAL DATE FEB 7 1968
                                                                              FLIGHT TIME 198.00
LAUNCH DATE JUL 24 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 575.937
    RL 151.97 LAL .00 LOL 300.43 VL 25.103 GAL 9.62 A7L 91.36 HCA 294.65 SMA 118.87 ECC .32137 INC 1.3576 VI 29.317 RP 108.38 LAP 1.23 LOP 235.09 VP 36.505 GAP 18.07 A2P 90.57 TAL 158.29 TAP 92.94 RCA 80.67 APO 157.07 V2 34.966 RC 194.574 GL -5.31 GP 8.06 ZAL 46.67 ZAP 171.80 ETS 97.62 ZAE 129.72 ETE 173.04 ZAC 31.84 ETC 10.86 CLP 178.47
   PLANETOCENTRIC CONIC
    C3 40.179 VHL 6.339 DLA -27.75 RAL 251.93 RAD 6568.5 VEL 12.710 PTH 2.31 VHP 11.209 DPA -9.69 RAP 233.97 ECC 1.6612
                                                    INJ LAT INJ LONG INJ AT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                   116.49 13 34 19
111.09 15 8 6
119.31 14 8 35
108.59 18 35 54
124.18 14 14 45
104.67 20 39 6
                                                                                  129.62
                                                                                                                                                                      337.50
                                                      10.38
                                                                                                                                        626.8
                                                                                                                                                       13.86
         90.00 13 13 52 1226.76
                                                                      344.45
                                                                      325.02
                                                                                     133.70
                                                                                                                                        304.2
                                                                                                                                                       22.04
                                                                                                                                                                      317.39
                   14 53 1
13 50 5
                                      904.22
                                                        19.34
         90.00
                                                         6.16
                                                                      333.60
                                                                                    127.36
                                                                                                                                       509.7
                                                                                                                                                        10.02
                                                                                                                                                                      326.94
                                    1109.71
       100.00
                   16 59 30
13 56 36
19 9 28
                                                                      274.67
                                                                                     135.45
                                                                                                                                      5184.5
                                                                                                                                                       26.15
                                                                                                                                                                      256.64
                                    5784.55
                                                        23.84
       100.00
                                                                                    123.30
                                                                                                                                       489.2
                                                                                                                                                        4.09
                                                                                                                                                                      321.79
                                                         -.40
                                                                      326.00
                                    1089.23
       110.00
                                                        31.23
                                                                                                                                      4777.8
                                                                                                                                                       32.92
                                                                                                                                                                      237.46
                                    5377.78
                                                                      246.28
                                                                                      137.93
       110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 5453.6 SGR 454.6 SG3 111.2
RRT - 4815 RRF - .4579 RTF .9423
SGB 5472.5 R23 .0020 R13 - .9424
SGI 5458.0 SG2 398.1 THA 177.69
                                                                                                                                 ST 1675.3 SR 427.5 SS 389.8

CRT - .6547 CRS .4624 CST - .9723

LSA 1740.6 MSA 333.8 SSA 14.0

EL1 1699.4 EL2 318.5 ALF 170.17
    TOE-1.0475 TRA 4.5021 TC3-2.1887 BAU 1.1757

ROE .4699 RRA -.1577 RC3 .0145 FAU .00947

FDE -.1600 FRA 1.2257 FC3 -.2041 BSP 17545

BDE 1.1481 BRA 4.5049 BC3 2.1888 FSP -370
                                                                                                                                              ARRIVAL DATE FEB 9 1968
                                                                               FLIGHT TIME 200,00
LAUNCH DATE JUL 24 1967
                                                                              DISTANCE 580.525
  HELIOCENTRIC CONIC
                           .00 LOL 300.43 VL 25.058 GAL 10.69 AZL 91.19 HCA 297.84 SNA 118.63 ECC .33266 INC 1.1941 V1 29.317 1.06 LOP 238.28 VP 36.482 GAP 18.82 AZP 90.56 TAL 156.80 TAP 94.64 RCA 79.17 APO 158.09 V2 34.953 -4.37 GP 7.92 ZAL 44.54 ZAP 171.73 ETS 103.47 ZAE 129.63 ETE 173.15 ZAC 29.61 ETC 11.68 CLP 177.63
    RL 151.97 LAL
         108.42 LAP
                         -4.37 GP
    RC 196.285 GL
   PLANETOCENTRIC CONIC
                                                                                                           2.35 VHP 11.654 DPA -10.48 RAP 236.20 ECC 1.7473
    C3 45.409 VHL 6.739 OLA -27.06 RAL 254.35 RAD 6568.7 VEL 12.914 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     12 59 2 1338.32
                                                         6.93
                                                                      350.83
                                                                                    132.75
                                                                                                      117.52 13 21 20
                                                                                                                                       738.3
                                                                                                                                                       10.56
                                                                                                                                                                      344.03
        90.00
                                                                                                      109.94 15 41 25
119.70 14 5 19
108.11 18 59 31
124.09 14 17 22
104.77 20 56 50
                     15 27 11
                                                                                      138.88
                                                                                                                                        254.3
                                                                                                                                                        23.07
                                                                                                                                                                       314.09
                                      854.32
                                                        20.53
                                                                      321.85
        90.00
                                                                                      130.88
                                                                                                                                        588.2
                                                                                                                                                         7.46
                                                                                                                                                                       331.36
                     13 45 31
                                    1188.18
                                                         3.53
                                                                      337.94
       100.00
                   17 23 23
                                                                                                                                       5167.7
                                                                                                                                                        26.45
                                                                                                                                                                       265.47
                                                                      273.55
                                                                                      140.25
                                    5767.74
                                                        24.20
       100.00
                                                                                                                                                                       324.87
                                                                      331.08
                                                                                      127.04
                                                                                                                                        548.3
                                                                                                                                                         1.84
       110.00
                     13 58 13
                                    1148.27
                                                        -2.66
                    19 27 10
                                                                                      142.57
                                                                                                                                      4780.4
                                                                                                                                                        32.89
                                                                                                                                                                       237.56
                                     5380.42
                                                        31.18
                                                                      246.47
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1634.4 SR 415.5 SS 389.8
CRT -.5968 CRS .4113 CST -.9763
                                                                          SGT 5439.8 SGR 446.6 SG3 108.5
RRT - .4884 RRF - .4660 RTF .9468
    TOE -.9488 TRA 4.9556 TC3-1.8996 BAU 1.1532
    ROE .4849 RRA -.1787 RC3 .0135 FAU .00829
FOE -.1347 FRA 1.2908 FC3 -.1581 BSP 17573
                                                                                                                                 LSA 1696.7 MSA 342.3 SSA 13.4
ELI 1653.9 EL2 329.4 ALF 171.01
                                                                          SG8 5458.1 R23 .0014 R13 -.9469
SG1 5444.1 SG2 389.4 THA 177.69
    BOE 1.0655 BRA 4.9588 BC3 1.8997 FSP -362
                                                                                                                                             ARRIVAL DATE FEB 11 1968
                                                                              FLIGHT TIME 202.00
LAUNCH DATE JUL 24 1967
                                                                              DISTANCE 584.922
   HELIOCENTRIC CONIC
                           .00 LOL 300.43 VL 25.014 GAL 11.84 AZL 91.02 MCA 301.03 SMA 118.40 ECC .34514 INC 1.0209 V1 29.317
.87 LOP 241.46 VP 36.420 GAP 19.63 AZP 90.53 TAL 155.36 TAP 96.39 RCA 77.53 APO 159.26 V2 34.941
-3.48 GP 7.80 ZAL 42.58 ZAP 171.56 ETS 109.29 ZAE 129.52 ETE 173.26 ZAC 27.42 ETC 12.68 CLP 176.77
    RL 151.97 LAL
RP 108.46 LAP
                         -3.48 GP
    RC 197.979 GL
   PLANETOCENTRIC CONIC
    C3 51.561 VHL 7.181 DLA -26.37 RAL 256.57 RAO 6568.9 VEL 13.150 PTH 2.40 VHP 12.144 DPA -11.23 RAP 238.43 ECC 1.8486
    LNCH AZMTH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZMTH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                                                                                                     118.05 13 13 43
109.25 16 7 48
119.88 14 2 58
107.81 19 20 38
123.87 14 19 38
104.97 21 13 20
                   12 49 53 1430.16
                                                                                   136.01
143.67
                                                                                                                                                                   349.30
                                                                                                                                     830.2
                                                                                                                                                        7.74
                                                                      356.00
                                                        4.01
         90.00
                                                                                                                                                                      312.20
                                                                      320.02
                                                                                                                                       226.0
                                                                                                                                                       23.61
                                                       21.18
        90.00
                    15 54 2
                                     826.00
                                                                                                                                       662.1
                                                                                                                                                        5.00
                                                                                                                                                                      335.46
                   13 41 56 1262.05
17 44 40 5757.38
                                                                      342.00
                                                                                    134.36
                                                        1.03
       100.00
                                                                                                                                                                      264.75
                                                                      272.86
                                                                                    144.85
                                                                                                                                      5157.4
                                                                                                                                                       26.62
       100.00
                                                       24.41
                                                                                                                                                                      327.93
                                                                      334.15
                                                                                    130.68
                                                                                                                                       606.9
                                                                                                                                                        -.41
                   13 59 31 1206.88
19 43 35 5385.32
                                                        -4.89
       110.00
                                                                                                                                     4785.3
                                                                                                                                                      32.64
                                                                                                                                                                      238.03
                                                                                     147.07
       110.00
                                                       31.10
                                                                      246.82
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5422.9 SGR 437.1 SG3 106.0
RRT -.4946 RRF -.4736 RTF ..9514
SGB 5440.5 R23 ..0007 R13 -.9514
SGI 5427.3 SG2 379.6 THA 177.71
                                                                                                                                ST 1603.5 SR 402.2 SS 392.5

CRT -5362 CRS .3610 CST -.9802

LSA 1663.2 MSA 347.0 SSA 12.7

EL1 1618.6 EL2 336.4 ALF 171.99
     TOE -.8424 TRA 5.4425 TC3-1.6276 BAU 1.1220
    RDE .4996 RRA -.2004 RC3 .0118 FAU .00705
FOE -.1095 FRA 1.3613 FC3 -.1184 BSP 17483
    BOE .9794 BRA 5.4461 BC3 1.6277 FSP -351
                                                                              FLIGHT TIME 204.00
                                                                                                                                              ARRIVAL DATE FEB 13 1968
LAUNCH DATE JUL 24 1967
                                                                              DISTANCE 589.089
   HELIOCENTRIC CONIC
                           .00 LOL 300.43 VL 24.971 GAL 13.08 AZL 90.84 MCA 304.21 SMA 118.17 ECC .35897 INC .8358 V1 29.317 .69 LOP 244.65 VP 36.378 GAP 20.53 AZP 90.47 TAL 153.99 TAP 98.20 RCA 75.75 APO 160.59 V2 34.929 -2.65 CP 7.68 ZAL 40.78 ZAP 171.29 ETS 114.99 ZAE 129.37 ETE 173.37 ZAC 25.27 ETC 13.86 CLP 175.88
    RL 151.97 LAL
RP 108.50 LAP
    RC 199.655 GL -2.65 GP
   PLANETOCENTRIC CONIC
    C3 58.818 VHL 7.669 DLA -25.69 RAL 258.60 RAD 6569.1 VEL 13.423 PTH 2.45 VHP 12.686 DPA -11.94 RAP 240.64 ECC 1.9680 ENCH AZHTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO C9T TIM INJ 2 LAT INJ Z LONG
                                                                                   139.28
                                                                                                    118.29 13 8 25
108.81 16 30 20
                                                                                                                                                                       353.95
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                   12 43 12 1512.43
                                                        1.37
                                                                          . 60
                                                                                                                                       912.4
        90.00
                                                                                                                                        208.7
                                                                                                                                                        23.94
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                                                        21.57
                                                                      318.90
                                                                                      148.19
                                      808.66
         90.00
                     16 16 52
                                                                                                      119.86 14 1 10
107.65 19 39 40
123.53 14 21 34
105.24 21 28 38
                                                                                      137.76
                                                                                                                                        732.4
                                                                                                                                                         2.63
                                                                                                                                                                       339.34
                                                                      345.86
                                     1332.42
                                                        -1.36
       100.00
                    13 38 57
                    18 3 48
14 0 29
                                                                                      149.25
                                                                                                                                       5151.9
                                                                                                                                                        26.71
                                                                                                                                                                      264.38
                                                                      272.50
                                                        24.53
                                     5751.94
       100.00
                                                                                                                                                        -2.62
                                                                                                                                                                       330.95
                                                                                      134.22
                                                                                                                                       664.9
                                                        -7.08
                                                                      337.21
       110.00
                                     1264.85
                                                        30.97
                                                                      247.33
                                                                                      151.40
                                                                                                                                      4792.3
                                                                                                                                                       32.75
                                                                                                                                                                      238.56
       110.00
                    19 58 45 5392.27
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5400.7 SGR 426.4 SG3 103.6
RRT -.5006 RRF -.4812 RTF .9561
SGB 5417.5 R23 .0004 R13 -.9561
                                                                                                                                 ST 1581.8 SR 388.2 SS 397.6
CRT -.4784 CRS .3175 CST -.9841
LSA 1640.2 MSA 347.2 SSA 12.1
     TOE -.7383 TRA 5.9554 TC3-1.3811 BAU 1.0860
    ROE .5144 RRA -.2220 RC3 .0099 FAU .00587
FDE -.0871 FRA 1.4348 FC3 -.0863 BSP 17507
BDE .8999 BRA 5.9596 BC3 1.3811 FSP -344
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SG1 5404.9 SG2 368.8 THA 177.73

EL1 1593.2 EL2 338.5 ALF 172.99

ARRIVAL DATE FEB 15 1968

LAUNCH DATE JUL 24 1967

DISTANCE 592.977 HELIOCENTRIC CONIC .00 LOL 300.43 VL 24.929 GAL 14.43 AZL 90.64 MCA 307.39 SMA 117.95 ECC .37434 INC .6361 V1 29.317 .51 LOP 247.83 VP 36.338 GAP 21.52 AZP 90.39 TAL 152.69 TAP 100.08 RCA 75.80 APO 162.10 V2 34.917 -1.87 GP 7.57 ZAL 39.14 ZAP 170.91 ETS 120.46 ZAE 129.18 ETE 173.48 ZAC 23.17 ETC 15.29 CLP 174.96 RL 151.97 LAL RP 108.53 LAP RC 201.315 GL PLANETOCENTRIC CONTC 2.51 VHP 13.287 DPA -12.59 RAP 242.84 ECC 2.1094 C3 67.413 VHL 8.211 DLA -25.03 RAL 260.43 RAD 6569.3 VEL 13.739 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 142.50 118.30 13 4 21 988.5 2.70 358.21 90.00 -1.09 4.84 12 37 53 1588.50 16 50 7 310.33 198.4 318.23 152.48 108.55 90.00 16 36 48 798.42 21.79 13 59 39 799.8 343.04 141.09 119.69 349.57 100.00 13 36 19 1399.84 -3.64 107.60 19 56 54 5150.4 26.73 264.26 272.39 100.00 18 21 3 5750.36 24.56 153.47 123.06 14 23 11 105.59 21 42 44 14 1 9 1321.94 20 12 43 5401.02 333.95 721.9 -4.79 110.00 -9.21 340.25 137.67 32.64 4801.0 155.57 110.00 30.61 247.95 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RTI --5058 RRF --4882 RTF -9608 SGB 5390.6 R23 .0002 R13 --9608 SGI 5378.8 SGZ 357.0 THA 177.76 ST 1567.2 SR 373.4 SS 405.1 CRT - 4224 CRS .2779 CST - .9877 TDE -:6313 TRA 6.5050 TC3-1.1547 BAU 1.0407 RDE .5289 RRA -.2435 RC3 .0077 FAU .00463 FDE -.0657 FRA 1.5142 FC3 -.0595 BSP 17502 BDE .8236 BRA 6.5096 BC3 1.1547 FSP -336 LSA 1625.2 MSA 343.7 SSA 11.5 EL1 1575.5 EL2 336.6 ALF 173.98 ARRIVAL DATE FEB 17 1968 LAUNCH DATE JUL 24 1967 FLIGHT TIME 208.00 HELIOCENTRIC CONIC DISTANCE 596.526 .00 LOL 300.43 VL 24.889 GAL 15.90 AZL 90.42 HCA 310.57 SHA 117.74 ECC .39148 INC .4189 V1 29.317 .32 LOP 251.01 VP 36.299 GAP 22.63 AZP 90.27 TAL 151.48 TAP 102.05 RCA 71.65 APO 163.83 V2 34.905 -1.14 GP 7.47 ZAL 37.67 ZAP 170.42 ETS 125.64 ZAE 128.94 ETE 173.59 ZAC 21.14 ETC 17.00 CLP 173.99 RL 151.97 LAL RP 108.57 LAP RC 202.957 GL -1.14 GP PLANETOCENTRIC CONIC C3 77.638 VHL 8.811 DLA -24.38 RAL 262.07 RAD 6569.5 VEL 14.106 PTH 2.57 VHP 13.958 DPA -13.20 RAP 245.00 ECC 2.2777 C3 77.638 WHL 8.811 DLA -24.38 RAL 202.D/ RAD 0309.7 VEL 14.100 FM 2.100 FM 13 58 16 -1.85 346.59 144.32 119.37 864.6 100.00 13 33 51 1464.61 -5.A1 353.15 20 12 30 14 24 27 24.53 157.48 107.64 5151.9 26.71 264.37 100.00 18 36 36 5751.86 272.49 141.01 122.49 777.9 -6.91 336.90 343.27 110.00 14 1 29 1377.94 -11.28 21 55 41 32.51 239.99 20 25 30 105.99 4811.3 110.00 5411.30 30.62 248.70 159.56 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5344.7 SGR 400.7 SG3 98.9 RRT -.5100 RRF -.4944 RTF .9654 SGB 5359.7 R23 -.0000 R13 -.9654 ST 1557.9 SR 357.8 SS 414.8 CRT -.3696 CRS .2423 CST -.9907 TOE -.5221 TRA 7.0949 TC3 -.9483 BAU .9843 RDE .5433 RRA -.2645 RC3 .0054 FAU .00333 FDE -.0453 FRA 1.6002 FC3 -.0372 BSP 17486 LSA 1616.6 MSA 336.7 SSA 11.0 EL1 1563.7 EL2 331.2 ALF 174.92 SG1 5348.6 SG2 344.4 THA 177.80 BOE .7535 BRA 7.0998 BC3 .9483 FSP -329 ARRIVAL DATE FEB 19 1968 FLIGHT TIME 210.00 LAUNCH DATE JUL 24 1967 DISTANCE 599.657 HELIOCENTRIC CONIC RL 151.97 LAL .00 LOL 300.43 VL 24.850 GAL 17.52 A7L 90.18 MCA 313.75 SMA 117.54 ECC .41065 INC .1801 V1 29.317
RP 108.60 LAP .13 LOP 254.18 VP 36.262 GAP 23.87 A7P 90.12 TAL 150.38 TAP 104.13 RCA 69.27 APO 165.81 V2 34.894
RC 204.581 GL -.45 GP 7.38 ZAL 36.36 ZAP 169.81 ETS 130.48 ZAE 128.64 ETE 173.71 ZAC 19.18 ETC 19.06 CLP 172.96 RC 204.581 GL PLANETOCENTRIC CONIC C3 89.871 VHL 9.480 DLA -23.76 RAL 263.53 RAD 6569.8 VEL 14.533 PTH 2.64 VHP 14.709 DPA -13.77 RAP 247.12 ECC 2.4791 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1127.5 117.81 12 58 4 108.38 17 23 21 118.93 13 56 53 -1.78 12 29 16 1727.49 -5.55 12.62 148.70 90.00 24.24 191.9 90.00 17 10 9 791.89 21.93 317.60 160.39 -3.96 926.8 13 31 26 1526.83 -7.88 356.61 147.44 100.00 26.65 264.65 5155.8 107.76 20 26 37 100.00 18 50 41 5755.82 24.45 272.76 161.28 121.80 14 25 21 106.43 22 7 30 14 1 29 1432.62 20 37 7 5422.80 -8.96 339.61 832.6 110.00 -13.26 346.27 144.23 32.35 240.65 30.41 249.53 163.35 4822.8 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1552.1 SR 341.6 SS 427.0 CRT - 3206 CRS .2104 CST - 9932 LSA 1612.7 MSA 327.0 SSA 10.4 EL1 1556.1 EL2 322.7 ALF 175.78 SCT 5310.8 SCR 385.8 SC3 96.7-RRT -.5130 RRF -.4993 RTF .9699 SCB 5324.8 R23 -.0001 R13 -.9699 SCI 5314.5 SC2 330.9 THA 177.86 TOE -.4107 TRA 7.7305 TC3 -.7610 BAU .9143 ROE .5574 RRA -.2845 RC3 .0030 FAU .00193 FDE -. 0257 FRA 1.6941 FC3 -. 0186 BSP 17446 BDE .6924 BRA 7.7358 BC3 .7610 FSP - 322 ARRIVAL DATE FEB 21 1968 LAUNCH DATE JUL 24 1967 FLIGHT TIME 212.00 DISTANCE 602.272 HELIOCENTRIC CONIC RL 151.97 LAL .00 LOL 300.43 VL 24.813 GAL 19.30 AZL 89.92 MCA 316.92 SMA 117.35 ECC .43216 INC .0836 V1 29.317
RP 108.64 LAP -.06 LOP 257.36 VP 36.226 GAP 25.27 AZP 89.94 TAL 149.41 TAP 106.34 RCA 66.64 APO 168.06 V2 34.883
RC 206.187 GL .19 GP 7.29 ZAL 35.22 ZAP 169.09 ETS 134.99 ZAE 128.27 ETE 173.83 ZAC 17.32 ETC 21.55 CLP 171.87 PLANETOCENTRIC CONIC C3 104.600 VHL 10.227 OLA -23.16 RAL 264.79 RAD 6570.0 VEL 15.031 PTH 2.71 VHP 15.555 DPA -14.28 RAP 249.19 ECC 2.7214 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.37 12 55 17 108.41 17 37 19 151.63 90.00 1191.6 -3.84 -7.57 12 25 26 1791.56 16.25 24.21 193.4 90.00 17 24 6 793.36 21.90 317.90 163.99 -5.96 353.32 118.37 13 55 24 986.5 100.00 13 28 57 1586.52 -9.83 359.97 150.42 13 26 J. 19 3 16 5761.67 14 1 6 1485.74 17 36 5435.22 26.55 100.00 24.32 273.15 164.85 107.93 20 39 17 5161.7 74 25 51 22 18 12 -10.92 342.67 121.02 885.7 110.00 -15.14 349.23 147.32 32.18 4835.2 241.78 106.90 110.00 30.16 250.41 166.91 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5274.1 SGR 369.5 SG3 94.7 RRT -.5143 RRF -.5026 RTF .9742 SGB 5287.0 R23 -.0002 R13 -.9742 SGI 5277.5 SG2 316.7 THA 177.93 ST 1548.6 SR 324.8 SS 441.7 CRT -.2749 CRS .1811 CST -.9951 TOE -.2954 TRA 8.4207 TC3 -.5908 BAU .8261 ROE .5713 RRA -.3031 RC3 .0006 FAU .00034 FOE -.0062 FRA 1.7979 FC3 -.0028 BSP 17316 BOE .6431 BRA 8.4262 BC3 .5908 FSP -313 LSA 1612.3 MSA 315.1 SSA 9.8 EL1 1551.3 EL2 311.7 ALF 176.56

FLIGHT TIME 206.00

ARRIVAL CATE FEB 23 1968

EL1 1523.8 EL2 253.2 ALF 178.66

LAUNCH DATE JUL 24 1967

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HELIOCENTRIC CONIC
                                                                         DISTANCE 604.238
    RL 151.97 LAL .00 LOL 300.43 VL 24.778 GAL 21.28 AZL 89.62 HCA 320.10 SMA 117.17 ECC .45636 INC .3827 V1 29.317
RP 108.67 LAP -.25 LOP 260.53 VP 36.192 GAP 26.86 AZP 89.71 TAL 148.61 TAP 108.70 RCA 63.70 APO 170.64 V2 34.872
RC 207.774 GL .80 GP 7.21 ZAL 34.26 ZAP 168.25 ETS 139.15 ZAE 127.82 ETE 173.97 ZAC 15.58 ETC 24.54 CLP 170.69
   PLANETOCENTRIC CONIC
    C3 122.459 VHL 11.066 DLA -22.59 RAL 265.86 RAD 6570.3 VEL 15.614 PTH 2.78 VHP 16.513 DPA -14.75 RAP 251.19 ECC 3.0154
    LNCH AZMTH LNCH TIME L-I TIME
90.00 12 21 38 1852.32
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                                             110.82 12 52 31
108.51 17 49 42
117.72 13 53 42
108.14 20 50 35
120.15 14 25 54
107.39 22 27 44
                                                                                                                                          -5.78
                                                                             154.41
                                                   -9.45
                                                                  19.72
                                                                                                                          1252.3
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                                                                                167.32
                                                                                                                               197.0
                                                                                                                                              24.15
                                                                                                                                                            310.23
        90.00
                   17 36 25
                                   796.95
                                                   21.82
                                                                 318.13
                  13 26 18
                                 1643.61
                                                   -11.65
                                                                    3.22
                                                                               153.25
                                                                                                                              1043.6
                                                                                                                                              -7.85
                                                                                                                                                           356.50
       100.00
      100.00
                                 5768.94
1537.06
                                                  24.17
                                                                 273.63
                                                                               168.17
                                                                                                                              5168.9
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                   19 14 26
                                                                               150.25
                                                                                                                               937.1
                                                                                                                                            -12.79
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                   14 0 17
                                                  -16.92
                                                                 352.15
      110.00
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      110.00
                  20 56 56
                                  5448.25
                                                   29.90
                                                                 251.34
                                                                                170.23
                                                                                                                                             31.99
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5231.8 SGR 352.0 SG3 92.6
RRT -.5136 RRF -.5039 RTF .9782
                                                                                                                         ST 1545.1 SR 307.7 SS 458.9

CRT -.2349 CRS .1563 CST -.9966

LSA 1613.0 MSA 301.4 SSA 9.3
    TOE -.1841 TRA 9.1652 TC3 -.4396 BAU .7197
    ROE .5853 RRA -.3192 RC3 -.0015 FAU-.00141
    FOE .0114 FRA 1.9116 FC3 .0099 BSP 17273
BOE .6135 BRA 9.1707 BC3 .4396 FSP -307
                                                                     SG8 5243.6 R23 -.0002 R13 -.9782
                                                                     SG1 5234.9 SG2 301.8 THA 178.01
                                                                                                                          EL1 1546.9 EL2 298.8 ALF 177.22
                                                                                                                                     ARRIVAL DATE FEB 25 1968
LAUNCH DATE JUL 24 1967
                                                                          FLIGHT TIME 216.00
                                                                          DISTANCE 605.386
  HELIOCENTRIC CONIC
                          .00 LOL 300.43 VL 24.746 GAL 23.49 AZL 89.28 HCA 323.26 SMA 117.00 ECC .48369 INC .7235 VI 29.317 -.43 LOP 263.70 VP 36.160 GAP 28.66 AZP 89.42 TAL 148.00 TAP 111.27 RCA 60.41 APO 173.60 V2 34.862 1.37 GP 7.13 ZAL 33.50 ZAP 167.26 ETS 143.00 ZAE 127.26 ETE 174.12 ZAC 13.98 ETC 28.11 CLP 169.42
   RL 151.97 LAL
RP 108.70 LAP
                         1.37 GP
   RC 209.341 GL
   PLANETOCENTRIC CONIC
    C3 144.287 VHL 12.012 DLA -22.04 RAL 266.72 RAD 6570.6 VEL 16.298 PTH
                                                                                                    2.85 VHP 17.603 OPA -15.18 RAP 253.09 ECC 3.3746
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                1909.81
                                                   -11.20
                                                                                                116.18 12 49 35
                                                                                                                              1309.8
                                                                                                                                              -7.59
       90.00
                   12 17 45
                                                                  23.04
                                                                               156.99
                   17 47 10
                                                                                170.37
                                                                                                108.64 18 0 32
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                                                                                                                                                            310.58
                                   802.06
                                                  21.71
                                                                 318.47
                                                                                                116.99 13 51 41
108.38 21 0 30
119.22 14 25 26
107.89 22 36 7
                  13 23 23 1697.97
19 24 13 5777.17
13 59 0 1586.34
                                                                    6.36
                                                                                155.89
                                                                                                                              1098.0
                                                                                                                                               -9.63
                                                                                                                                                            359.55
                                                   -13.35
                                                                  274.18
                                                                             171.20
                                                                                                                              5177.2
                                                                                                                                             26.28
                                                                                                                                                            266.13
                                                   24.00
                                                   -18.58
                                                                  355.00
                                                                               152.99
                                                                                                                               986.3
                                                                                                                                             -14.55
                                                                                                                                                            348.21
                  21 5 5
                                                                              173.27
                                                                                                                              4861.6
                                                                                                                                             31.78
                                                                                                                                                            243.73
                                5461.57
                                                                  252.28
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5185.3 SGR 333.1 SG3 90.7
RRT -.5100 RRF -.5021 RTF .9820
SGB 5196.0 R23 -.0002 R13 -.9820
                                                                                                                          ST 1540.6 SR 290.5 SS 479.0 CRT -. 1988 CRS .1341 CST -. 9977
    TOE -.0737 TRA 9.9753 TC3 -.3044 BAU .5872
    RDE .5994 RRA -.3318 RC3 -.0033 FAU-.00346
    FOE .0283 FRA 2.0381 FC3 .0207 BSP 17208
BDE .6839 BRA 9.9809 BC3 .3044 FSP -300
                                                                                                                         LSA 1614.0 MSA 286.4 SSA 8.7
                                                                     SG1 5188.1 SG2 286.4 THA 178.12
                                                                                                                          EL1 1541.7 EL2 284.5 ALF 177.78
                                                                                                                                    ARRIVAL DATE FEB 27 1968
                                                                         FLIGHT TIME 214.00
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 605.493
   HELIOCENTRIC CONIC
   RL 151.97 LAL .00 LOL 300.43 VL 24.716 GAL 25.98 AZL 88.88 HCA 326.43 SMA 116.85 ECC .51461 INC 1.1184 VI 29.317 RP 108.73 LAP -.62 LOP 266.87 VP 36.131 GAP 30.74 AZP 89.07 TAL 147.64 TAP 114.07 RCA 56.72 APO 176.99 V2 34.853 RC 210.889 GL 1.90 GP 7.04 ZAL 32.94 ZAP 166.13 ETS 146.55 ZAE 126.58 ETE 174.28 ZAC 12.56 ETC 32.32 CLP 168.02
   PLANETOCENTRIC CONIC
    C3 171.196 VHL 13.084 DLA -21.52 RAL 267.36 RAD 6570.9 VEL 17.103 PTH 2.93 VHP 18.852 DPA -15.56 RAP 254.88 ECC 3.8175
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.47 12 46 22
108.80 18 9 50
116.20 13 49 15
108.63 21 9 0
118.24 14 24 22
108.37 22 43 15
                                                                                                                                          -9.27
                   12 13 38 1963.97
                                                                             159.35
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                                                   -12.81
                                                                  26.20
       90.00
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                   17 56 21
                                   808.16
                                                  21.58
                                                                 318.86
                                                                               173.10
                                                                                                                               208.2
        90.00
                  13 20 6 1749.44
19 32 34 5785.96
                                                                               158.29
                                                                                                                              1149.4
                                                                                                                                            -11.28
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      100.00
                                                  -14.92
                                                                    9.38
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                                                  23.81
                                                                 274.77
                                                                               173.92
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      100.00
                  13 57 9 1633.30
21 12 0 5474.87
                                                   -20.12
                                                                 357.77
                                                                               155.49
                                                                                                                             1033.3
                                                                                                                                            -16.19
                                                                                                                                                           350.86
      110.00
                                                                              175.99
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                                                                                                                                                           244.71
                                                   29.35
                                                                 253.21
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1533.6 SR 273.1 SS 502.4

CRT -.1662 CRS .1137 CST -.9984

LSA 1614.2 MSA 270.6 SSA 8.2

EL1 1534.3 EL2 269.1 ALF 17#:25
                                                                    SGT 5134.4 SGR 313.0 SG3 88.9

RRT -.5024 RRF -.4962 RTF .9854

SGB 5144.0 R23 -.0002 R13 -.9854

SGI 5136.8 SG2 270.5 THA 178.24
    TDE .0336 TRA10.8593 TC3 -.1844 BAU .4222
    RDE .6139 RRA -.3397 RC3 -.0048 FAU-.00592
    FDE .0441 FRA 2.1797 FC3 .0299 BSP 17117
    BOE .6148 BRAID.8646 BC3 .1845 FSP -295
                                                                          FLIGHT TIME 220,00
                                                                                                                                     ARRIVAL DATE FEB 29 1968
LAUNCH DATE JUL 24 1967
                                                                         DISTANCE 604.267
   HELIOCENTRIC CONIC
    RL 151.97 LAL .00 LOL 300.43 VL 24.691 GAL 28.80 AZL 88.42 MCA 329.59 SMA 116.72 ECC .54965 INC 1.5848 V1 29.317 RP 108.76 LAP -.80 LOP 270.04 VP 36.105 GAP 33.14 AZP 88.63 TAL 147.58 TAP 117.17 RCA 52.57 APO 180.88 V2 34.844 RC 212.418 GL 2.40 GP 6.96 ZAL 32.62 ZAP 164.82 ETS 149.84 ZAE 125.75 ETE 174.46 ZAC 11.34 ETC 37.14 CLP 166.47
   PLANETOCENTRIC CONIC
    C3 204.672 VHL 14.306 DLA -21.03 RAL 267.75 RAD 6571.1 VEL 18.055 PTH 3.01 VHP 20.290 DPA -15.89 RAP 256.52 ECC 4.3684
    UNCH AZMTH UNCH TIME L-I TIME
90.00 12 9 6 2014.69
90.00 18 3 6 2014.69
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                                           -10.82
                                                                                              114.72 12 42 41
108.96 18 17 33
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        90.00
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108.89 21 16 2
117.22 14 22 36
108.84 22 49 4
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                  13 16 18 1797.83
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                                                   -16.36
                                                                  12.26
      100.00
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                                                                 275.36
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                   19 39 27
                                   5794.94
      100.00
                                                                               157.72
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                                 1677.67
                                                   -21.52
                   13 54 38
      110.00
                  21 17 37
                                   5487.86
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                                                                 254.12
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                                                                                                                                                           245.66
      110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1379 TRAI1.8268 TC3 -.0781 BAU .2143
RDE .6289 RRA -.3412 RC3 -.0059 FAU-.00897
                                                                                                                        ST 1523.4 SR 255.7 SS 529.6
CRT -.1359 CRS .0939 CST -.9990
LSA 1613.0 MSA 254.3 SSA 7.6
                                                                     SCT 5079.7 SCR 291.8 SC3 87.3
RRT -.4892 RRF -.4846 RTF .9884
SCB 5088.1 R23 -.0003 R13 -.9884
    FOE .0592 FRA 2.3394 FC3 .0379 BSP 16916
BOE .6438 BRA11.8317 BC3 .0783 FSP -288
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FLIGHT TIME 214.00

SG1 5081.8 SG2 254.4 THA 178.39

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ARRIVAL DATE OCT 3 1967
                                                                         FLIGHT TIME 70.00
LAUNCH DATE JUL 25 1967
                                                                         DISTANCE 197.941
   HELIOCENTRIC CONTC
    RL 151.95 LAL .00 LOL 301.39 VL 28.160 GAL -13.54 A7L 92.45 HCA 88.73 SMA 139.15 ECC .25072 INC 2.4545 V1 29.320 RP 108.35 LAP -2.45 LOP 30.12 VP 38.679 GAP -6.94 A7P 90.05 TAL 235.54 TAP 324.27 RCA 104.26 APO 174.03 V2 34.977 RC 62.420 GL -9.89 GP -16.07 7AL-160.40 7AP 40.19 ETS 19.55 7AE 156.59 ETE 340.82 7AC 96.40 ETC 12.62 CLP -37.35
   PLANETOCENTRIC CONIC
    C3 46.628 VHL 6.828 DLA 5.90 RAL 137.78 RAD 6568.7 VEL 12.961 PTH 2.36 VHP 5.809 DPA -8.73 RAP 168.19 ECC 1.7674
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    ENCH AZMTH ENCH TIME E-I TIME
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                                                                               16.19
                                                                                                 99.58 24 20 36
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                   23 37 8 2608.69
13 7 15 4885.30
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        90.00
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14 25 47 4631.91
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       100.00
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       100.00
                                                    21.50
                                                                 192.97
                                                                                 11.39
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16 41 37
                                                                                                                              1503.7
                                                                                                                                                            20.61
                                                                                                103.21
                                                                                                                                             -29.67
                    2 19 50 2103.72
                                                  -31.82
                                                                  29.16
                                                                                 15.03
       110.00
                                                                                                                                            21.50
                                                                                                                                                           169.27
                                                                                                                            3838.3
                                                                                                 65.86
                   15 27 38
                                  4438.26
                                                    24.97
                                                                 176.70
                                                                                   9.81
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 464.7 SCR 465.7 SC3 177.5
RRT -.1274 RRF .4872 RTF -.2290
SCB 657.9 R23 -.1913 R13 .4786
                                                                                                                         ST 184.4 SR 377.3 SS 152.5
CRT -.7358 CRS .1562 CST -.7642
    TOE .1866 TRA - .3837 TC3 .2155 BAU
                                                       .1519
    RDE -.4417 RRA -.2791 RC3 -.1138 FAU .07203
                                                                                                                         LSA 405.7 MSA 185.7 SSA 22.7
    FOE .1222 FRA-1.1094 FC3-1.3373 BSP 990
                                                                      SG1 494.0 SG2 434.6 THA 134.50
                                                                                                                          ELI 403.4 ELZ 116.8 ALF 111.69
    BCE .4794 BRA .4745 BC3 .2437 FSP -481
                                                                                                                                     ARRIVAL DATE OCT 5 1967
                                                                         FLIGHT TIME 72.00
                                                                         DISTANCE 204.667
         151.95 LAL .00 LOL 301.39 VL 28.216 GAL -13.41 A7L 92.32 HCA 91.92 SMA 139.60 ECC .24735 INC 2.3206 V1 29.320 108.31 LAP -2.32 LOP 33.31 VP 38.731 GAP -6.15 A7P 89.92 TAL 236.23 TAP 328.16 RCA 105.07 APO 174.14 V2 34.990 64.367 GL -9.48 GP -17.10 ZAL 161.00 ZAP 44.43 ETS 17.97 ZAE 157.88 ETE 335.51 ZAC 97.67 ETC 12.27 CLP -41.66
    RL 151.95 LAL
RP 108.31 LAP
   PLANETOCENTRIC CONIC
                                                                                                                                 -9.24 RAP 166.78 ECC 1.7495
                                                                                                   2.35 VHP 5.486 DPA
    C3 45.542 VHL 6.748 DLA
                                         6.42 RAL 137.46 RAD 6568.7 VEL 12.919 PTH
    C3 45.542 VHL 6.748 DLA 6.42 RAL 137.46 RAD 6568.7 VEL 12.919 PIH 2.30 VMP 5.486 DPA -9.24 RAP 166.78 ECC 17.495 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 31 51 2619.39 -26.89 68.78 15.67 99.22 24 15 30 2019.4 -25.34 60.46 90.00 13 10 0 4862.77 19.67 210.70 11.08 69.21 14 31 3 4262.8 16.67 203.31 100.00 1 0 10 2347.17 -28.26 48.50 15.41 100.18 .1 39 18 1747.2 -26.56 40.11
                  23 31 51 2619.39
13 10 0 4862.77
1 0 10 2347.17
14 28 17 4610.21
2 15 24 2111.72
15 29 32 4418.43
                                                                                                 100.18 .1 39 18
68.19 15 45 7
102.88 2 50 36
65.29 16 43 11
                                                                                                                              4010.2
                                                                                                                                             17.81
                                                                                                                                                             184.21
                                                    20.96
                                                                 191.59
                                                                                 10.54
       100.00
                                                                                                102.88
                                                                                                                              1511.7
                                                                                                                                            -29.84
                                                                                                                                                             21.17
                                                   -31.94
                                                                   29.75
                                                                                 14.54
       110.00
                                                                                                                              3818.4
                                                                                                                                              20.87
                                                  24.41
                                                                 175.43
                                                                                   8.93
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 462.2 SGR 483.8 SG3 198.5
RRT -. 0887 RRF .5398 RTF -. 1478
                                                                                                                          ST 186.1 SR 375.1 SS 165.9
CRT -.7015 CRS .1935 CST -.8169
    TOE .1820 TRA -.4035 TC3 .1973 BAU .1471
    RDE -.4326 RRA -.2955 RC3 -.1394 FAU .07932
                                                                                                                          LSA 403.7 MSA 198.4 SSA 22.8
EL1 399.8 EL2 124.4 ALF 111.36
                                                                      SGB 669.1 R23 -.1731 R13 .5211
    FOE .1595 FRA-1.2363 FC3-1.5078 BSP 1010
BDE .4693 BRA .5001 BC3 .2416 FSP -550
                                                                      SG1 496.1 SG2 448.9 THA 121.39
                                                                                                                                     ARRIVAL DATE OCT 7 1967
                                                                         FLIGHT TIME 74.00
LAUNCH CATE JUL 25 1967
                                                                         DISTANCE 211.356
   HELIOCENTRIC CONIC
    C3 44.529 VHL 6.673 CLA 6.94 RAL 137.25 RAD 6568.7 VEL 12.880 PTH 2.35 VHP 5.200 CPA -9.72 RAP 165.16 ECC 1.7328
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 27 0 2630.23 -27.01 69.55 15.27 98.84 24 10 50 2030.2 -25.51 61.21 90.00 13 13 8 4840.63 19.13 209.30 10.37 68.71 14 33 49 4240.6 16.07 201.96
                   23 27 0 2630.23
13 13 8 4840.63
0 55 35 2257.17
14 31 10 4588.92
2 11 25 2119.67
15 31 50 4398.98
                                                                                                                             1757.2
                                                                                                                                             -26.73
                                                                                                           1 34 52
                                                                  49.22
                                                                                 15.02
                                                                                                 99.81
       100.00
                                                   -28.38
                                                                                                                                                            182.92
                                                                                                                                             17.21
                                                                                                          15 47 39
                                                                                                                              3988.9
       100.00
                                                   20.42
                                                                 190.24
                                                                                   9.82
                                                                                                 67.68
                                                                                                           2 46 45
                                                                                                                             1519.9
                                                                                                                                            - 30 .00
       110.00
                                                   -32.06
                                                                   30.36
                                                                                  14.18
                                                                                                102.54
                                                                                                          16 45 9
                                                                                                                              3799.0
                                                                                                                                              20.25
                                                                  174.20
                                                                                  8.19
                                                                                                 64.76
       110.00
                                                   23.85
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 462.8 SGR 504.3 SG3 220.0

RRT -.0221 RRF .5907 RTF -.0393

SGB 684.4 R23 -.0419 R13 .5898

SGI 504.9 SG2 462.1 THA 97.21
                                                                                                                         ST 189.2 SR 371.1 SS 179.8
CRT -.6572 CRS .2318 CST -.8693
LSA 400.6 MSA 211.6 SSA 22.9
    TOE .1775 TRA -.4313 TC3 .1705 BAU .1423
    RDE - .4216 RRA - .3128 RC3 - .1676 FAU .08675
    FOE .2044 FRA-1.3612 FC3-1.6867 BSP 1030
                                                                                                                          EL1 394.3 EL2 134.2 ALF 111.08
    BOF .4575 BRA .5327 BC3 .2391 FSP
                                                        -618
                                                                                                                                     ARRIVAL DATE OCT 9 1967
LAUNCH DATE JUL 25 1967
                                                                          FLIGHT TIME 76.00
                                                                          DISTANCE 218.009
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 28.290 GAL -13.16 AZL 92.05 HCA 98.32 SMA 140.22 ECC .24175 INC 2.0502 V1 29.320 RP 108.22 LAP -2.03 LOP 39.71 VP 38.809 GAP -4.70 AZP 89.70 TAL 237.15 TAP 335.47 RCA 106.32 APO 174.12 V2 35.016 RC 68.382 GL -8.59 GP -19.30 ZAL 161.97 ZAP 53.50 ETS 14.87 ZAE 160.45 ETE 321.06 ZAC 100.80 ETC 11.29 CLP -50.94
   PLANETOCENTRIC CONIC
    C3 43.572 VHL 6.601 DLA 7.46 RAL 137.13 RAD 6568.7 VEL 12.843 PTH 2.34 VHP 4.951 DPA -10.16 RAP 163.34 ECC 1.7171
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               14.99
                                                                                                 98.47 24 6 33
68.24 14 36 59
                                                                                                                              2041.2
                                                                                                                                             -25.67
        90.00 23 22 32 2641.21
90.00 13 16 40 4818.71
                                                   -27.12
                                                                   70.34
                                                                                                                               4218.7
                                                                                                                                              15.46
                                                    18.58
                                                                  207.92
                                                                                  9 79
                                                                                                                                             -26.89
                                                                                                  99.45
                                                                                                              1 30 51
                                                                                                                              1767.3
                     0 51 23 2367.30
                                                   -28.49
                                                                   49.95
                                                                                  14.74
       100.00
                                                                                                          1 50 5,
15 50 34
2 43 17
16 47 30
                                                                                                                               3967.8
                                                                                                                                             16.60
                    14 34 26
                                   4567.84
                                                    19.86
                                                                  188.92
                                                                                   9.23
                                                                                                  67.19
       100.00
                                                                                                                              1528.1
                                                                                                                                             -30.17
                                                                                                                                                              22.34
                                2128 . . .
4379 . 77
                                                                                                102.20
                     2 7 49
                                   2128.14
                                                   -32.18
                                                                   30.97
                                                                                  13.92
       110.00
                                                                                                                              3779.8
                                                                                                                                              19.63
                                                                                   7.57
       110.00
                    15 34 30
                                                    23.29
                                                                  172.99
                                                                                                 64.24
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 470.6 SGR 528.2 SG3 242.3

RRT .0676 RRF .6404 RTF .0892

SGB 707.5 R23 .1028 R13 .6338

SGI 532.5 SG2 465.7 THA 74.85
                                                                                                                         ST 195.2 SR 365.8 SS 193.6

CRT - 6086 CRS .2599 CST - 9099
     TOE .1752 TRA -.4654 TC3 .1362 BAU
                                                        . 14/14
     ROE -.4093 RRA -.3310 RC3 -.1988 FAU .09436
                                                                                                                         LSA 397.7 MSA 225.4 SSA 22.9
    FOE .2514 FRA-1.4847 FC3-1.8749 BSP 1101
BOE .4452 BRA .5711 BC3 .2410 FSP -694
                                                                                                                         EL1 388.1 EL2 146.0 ALF 111.12
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ARRIVAL DATE OCT II 1967

EL1 351.9 EL2 215.5 ALF 117.82

LAUNCH CATE JUL 25 1967

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DISTANCE 224.624
   HELIOCENTRIC CONIC
     RL 151.95 LAL .00 LOL 301.39 VL 28.310 GAL -13.04 A7L 91.91 MCA 101.52 SMA 140.39 ECC .23940 INC 1.9118 V1 29.320 RP 108.18 LAP -1.87 LOP 42.92 VP 38.836 GAP -4.03 A7P 89.62 TAL 237.39 TAP 338.91 RCA 106.78 APO 174.00 V2 35.029 RC 70.443 GL -8.10 GP -20.44 ZAL 162.35 ZAP 58.29 ETS 13.28 ZAE 161.44 ETE 311.53 ZAC 102.63 ETC 10.64 CLP -55.88
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 42.652 VHL 6.531 OLA 7.97 RAL 137.11 RAD 6568.6 VEL 12.807 PTH 2.33 VHP 4.739 OPA -10.56 RAP 161.36 ECC 1.7019
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 18 26 2652.34 -27.23 71.13 14.80 98.08 24 2 38 2052.3 -25.83 62.75
90.00 13 20 36 4796.82 18.02 206.56 9.32 67.78 14 40 33 4196.8 14.85 199.32
100.00 0 47 33 2377.58 -28.61 50.69 14.57 99.07 1 27 11 1777.6 -27.06 42.23
100.00 14 38 6 4546.82 19.30 187.61 8.75 66.72 15 53 53 3946.8 15.99 180.39
110.00 2 4 34 2136.53 -32.30 31.60 13.77 101.85 2 40 11 1536.5 -30.33 22.94
110.00 15 37 34 4360.63 22.72 171.80 7.07 63.74 16 50 14 3760.6 19.00 164.63
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 203.7 SR 358.5 SS 208.1

CRT -.5522 CRS .2898 CST -.9452

LSA 394.7 MSA 238.9 SSA 22.9

ELI 380.0 EL2 160.3 ALF 111.41
                                                                                     SGT 490.1 SGR 554.3 SG3 263.9

RRT .1833 RRF .6855 RTF .2361

SGB 739.8 R23 .1653 R13 .6747

SG1 577.7 SG2 462.2 THA 61.98
     TDE .1739 TRA -.5079 TC3 .0920 BAU .1423
     ROE - .3946 RRA - .3488 RC3 - .2321 FAU .10161
FOE .3057 FRA-1.5958 FC3-2.0624 BSP 1206
BOE .4312 BRA .6161 BC3 .2496 FSP -764
                                                                                           FLIGHT TIME 80.00
                                                                                                                                                                    ARRIVAL DATE OCT 13 1967
   HELIOCENTRIC CONIC
                                                                                          DISTANCE 231.202
    RL 151.95 LAL .00 LOL 301.39 VL 28.321 GAL -12.92 AZL 91.77 MCA 104.73 SMA 140.48 ECC .23727 INC 1.7702 V1 29.320 RP 108.14 LAP -1.71 LOP 46.12 VP 38.855 GAP -3.38 AZP 89.55 TAL 237.49 TAP 342.21 RCA 107.15 APO 173.82 V2 35.042 RC 72.534 GL -7.58 GP -21.60 ZAL 162.65 ZAP 63.20 ETS 11.62 ZAE 162.02 ETE 300.55 ZAC 104.58 ETC 9.87 CLP -60.99
   PLANETOCENTRIC CONIC
     C3 41.758 VHL 6.462 DLA
                                                   8.49 RAL 137.18 RAD 6568.6 VEL 12.772 PTH
                                                                                                                          2.32 VHP 4.562 OPA -10.92 RAP 159.23 ECC 1.6872
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     23 14 38 2663.70
13 24 57 4774.78
0 44 1 2388.05
14 42 11 4525.66
2 1 40 2145.09
                                                                                                                       97.69 23 59 1
67.34 14 44 32
                                                              -27.34
                                                                                 71.95
                                                                                                 14.71
                                                                                                                                                           2063.7
                                                                                                                                                                             -25.99
                                                                                                                                                                                                  63.54
          90.00
                                                               17.45
                                                                                 205.20
                                                                                                      8.96
                                                                                                                                                            4174.8
                                                                                                                                                                               14.23
                                                                                                                                                                                                 198.00
                                                                                                                                                            1788.1
                                                                                                                                                                              -27.22
                                                                                                                                                                                                  42.97
                                                               -28.72
                                                                                  51.45
                                                                                                     14.48
                                                                                                                         98.68
                                                                                                                                      1 23 49
                                                                                                                       66.27 15 57 36
101.49 2 37 25
63.26 16 53 23
                                                                                                                                                            3925.7
                                                                                                                                                                              15.36
                                                                                                                                                                                                 179.13
                                                               18.73
                                                                                 186.30
                                                                                                      8.38
        100.00
                                                                                                    13.72
                                                                                                                                                            1545.1
                                                                                                                                                                              - 30 . 50
                                                                                                                                                                                                  23.55
                                                              -32.42
                                                                                  32.24
                                                                                                                       101.49
        110.00
        110.00
                                                                                                      6.67
                                                                                                                                                            3741.4
                                                                                                                                                                               18.37
                       15 41 2 4341.39
                                                                22.13
                                                                                 170.61
                                                                                                                                                                                                 163.50
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SCT 525.4 SGR 583.3 SC3 284.8

RRT .3070 RRF .7271 RTF .3813

SGB 785.0 R23 .1836 R13 .7229

SCI 638.4 SG2 456.9 THA 54.42
                                                                                                                                                      ST 216.0 SR 350.0 SS 221.9
CRT -.4963 CRS .3106 CST -.9682
     TOE .1756 TRA -.5568 TC3 .0394 BAU .1511
     ROE -.3786 RRA -.3663 RC3 -.2677 FAU .10851
                                                                                                                                                    LSA 393.1 HSA 251.7 SSA 23.0
EL1 371.4 EL2 176.7 ALF 112.36
     FOE .3596 FRA-1.6949 FC3-2.2496 BSP 1379
BDE .4173 BRA .6665 BC3 .2706 FSP -839
                                                                                                                                                                   ARRIVAL DATE OCT 15 1967
                                                                                          FLIGHT TIME 82.00
LAUNCH DATE JUL 25 1967
                                                                                          DISTANCE 237.741
    RL 151.95 LAL .00 LOL 301.39 VL 28.323 GAL -12.80 AZL 91.62 HCA 107.93 SMA 140.50 ECC .23532 INC 1.6243 V1 29.320 RP 108.10 LAP -1.55 LOP 49.33 VP 38.868 GAP -2.77 AZP 89.50 TAL 237.45 TAP 345.39 RCA 107.44 APO 173.56 V2 35.056 RC 74.652 GL -7.03 GP -22.74 ZAL 162.88 ZAP 68.19 ETS 9.87 ZAE 162.01 ETE 288.67 ZAC 106.63 ETC 9.00 CLP -66.24
    PLANETOCENTRIC CONIC
                                                 9.02 RAL 137.33 RAO 6568.6 VEL 12.738 PTH 2.32 VHP 4.420 OPA -11.25 RAP 157.01 ECC 1.6728
     C3 40.879 VHL 6.394 DLA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     23 11 5 2675.37
13 29 45 4752.37
0 40 46 2398.82
14 46 41 4504.16
1 59 2 2153.88
15 44 55 4321.86
                                                                                                14.71
                                                                                                                     97.28 23 55 40
66.91 14 48 57
                                                                                                                                                       2075.4
                                                                                                                                                                         -26.15
                                                              -27.44
                                                                                 72.79
          90.00
                                                                                                                                                           4152.4
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                                                               16.86
                                                                                 203.82
                                                                                                     8.69
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                                                                                                                                    1 20 44
                                                                                                                                                           1798.8
                                                                                 52.23
                                                                                                    14.49
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        100.00
                                                              -28.82
                                                                                                                        65.82 16 1 46
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        100.00
                                                             18.14
                                                                                 184.98
                                                                                                     8.10
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                                                                                                                                    2 34 56
                                                                                                                                                                             -30.66
                                                              -32.54
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                                                                                                                                                           1553.9
        110.00
                                                                                                                        62.78 16 56 56
                                                                                                      6.36
                                                                                                                                                           3721.9
                                                                                                                                                                             17.71
                                                                                                                                                                                                162.37
                                                            21.53
                                                                                 169.41
        110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 251.7 SR 339.1 SS 236.0

CRT -.4591 CRS .3343 CST -.9838

LSA 394.0 MSA 261.9 SSA 23.0

EL1 361.2 EL2 195.4 ALF 114.19
                                                                                     SGT 579.8 SGR 612.7 SG3 303.3
RRT .4293 RRF .7628 RTF .5142
SGB 843.5 R23 .1887 R13 .7675
SG1 713.8 SG2 449.5 THA 48.67
     TOE .1794 TRA - .6131 TC3 - .0234 BAU .1668
     ROE -.3600 RRA -.3818 RC3 -.3042 FAU .11441
FOE .4193 FRA-1.7698 FC3-2.4231 BSP 1604
BOE .4022 BRA .7222 BC3 .3051 FSP -900
                                                                                                                                                                    ARRIVAL DATE OCT 17 1967
LAUNCH DATE JUL 25 1967
                                                                                           FLIGHT TIME 84.00
                                                                                          DISTANCE 244.244
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOU 301.39 VL 28.316 GAL -12.67 AZL 91.47 HCA 111.14 SMA 140.44 ECC .23352 INC 1.4728 V1 29.320 RP 108.06 LAP -1.37 LOP 52.54 VP 38.876 GAP -2.18 AZP 89.47 TAL 237.30 TAP 348.44 RCA 107.65 APO 173.24 V2 35.069 RC 76.795 GL -6.45 GP -23.86 ZAL 163.05 ZAP 73.20 ETS 8.02 ZAE 161.33 ETE 276.79 ZAC 108.72 ETC 8.04 CLP -71.57
   PLANETOCENTRIC CONIC
                                                  9.56 RAL 137.58 RAD 6568.5 VEL 12.703 PTH 2.31 VHP 4.311 OPA -11.54 RAP 154.73 ECC 1.6584
     C3 40.008 VHL 6.325 DLA
                                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-27,54 73.66 14.79 96.85 23 52 31 2087.5 -26.31 65.21
    UNCH A7MTH LNCH TIME L-I TIME

90.00 23 7 44 2667.52

90.00 13 35 2 4729.35

100.00 0 37 42 2410.02

100.00 14 51 41 4442 08
                                                                                                                    96.85 23 52 31
66.48 14 53 51
97.87 1 17 42
                                                                                                 14.79
                                                                                                                                                            4129.4
                                                                                                                                                                              12.92
                                                                                                                                                                                                 195.31
                                                                15.24
                                                                                 202.41
                                                                                                     8.51
                                                                                                                                                                                                  44.52
                                                                                                                                      1 17 52
                                                                                                                                                            1610.0
                                                                                                                                                                              -27.54
                      156 38 2163.02
15 49 14 4301
                                                                                  53.05
                                                                                                    14.59
                                                                                                                         97.87
                                                                                                                      97.87 1 17 52
65.38 16 6 23
100.72 2 32 41
62.32 17 0 56
                                                                                 183.64
                                                                                                      7.91
                                                                                                                                                            3882.1
                                                                                                                                                                              14.05
                                                                                                                                                                                                176.56
                                                                17.51
        100.00
                                                                                                                                                                                                  24.84
                                                                                                                                                            1563.0
                                                                                                                                                                             -30.83
                                                             -32.65
                                                                                  33.58
                                                                                                     13.88
        110.00
                                                                                                                                                            3701.8
                                                                                                                                                                               17.03
                                                               20.90
                                                                                 168.20
                                                                                                      6.15
         110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 653.1 SGR 643.3 SG3 319.4
RRT .5343 RRF .7942 RTF .6217
SGB 916.8 R23 .1884 R13 .8061
                                                                                                                                                    ST 251.5 SR 327.0 SS 249.0
CRT -.3882 CRS .3497 CST -.9907
LSA 399.4 MSA 268.8 SSA 23.0
     TOE .1872 TRA -.6742 TC3 -.0946 BAU .1897
     RDE -.3401 RRA -.3955 RC3 -.3418 FAU .11937
     FDE .4748 FRA-1.8233 FC3-2.5830 BSP 1891
BDE .3882 BRA .7816 BC3 .3547 FSP -961
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FLIGHT TIME 78.00

SG1 803.0 SG2 442.3 THA 44.19

ARRIVAL DATE OCT 19 1967

LAUNCH DATE JUL 25 1967

DISTANCE 250.710 HELLOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 28.302 GAL -12.55 A7L 91.31 MCA 114.35 SMA 140.33 ECC .23184 INC 1.3146 V1 29.320 RP 108.02 LAP -1.20 LOP 55.75 VP 38.877 GAP -1.62 AZP 89.46 TAL 237.03 TAP 351.38 RCA 107.79 APO 172.86 V2 35.082 RC 78.958 GL -5.81 GP -24.95 ZAL 163.14 ZAP 78.17 ETS 6.08 ZAE 160.01 ETE 265.84 ZAC 110.79 ETC 6.99 CLP -76.93 PLANETOCENTRIC CONIC C3 39.139 VHL 6.256 CLA 10.12 RAL 137.90 RAD 6568.5 VEL 12.669 PTH 2.30 VHP 4.234 CPA -11.81 RAP 152.47 ECC 1.6441 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 96.40 23 49 31 66.05 14 59 17 23 4 31 2700.33 13 40 52 4705.45 14.96 2100.3 -25.47 74.59 90.00 -27.64 4105.4 12.22 15.58 200.96 8.42 90.00 0 34 48 14 57 11 1 15 10 1821.8 -27.71 14.77 97,43 100.00 2421.82 -29.04 53.91 97.43 1 15 10 64.95 16 11 31 13.34 100.00 4459.19 16.86 182.25 7.81 3859.2 100.31 2 30 38 61.85 17 5 24 1 54 26 2172.64 15 54 3 4281.13 1572.6 -31.01 25.54 -32.77 34.31 14.09 110.00 16.32 3681.1 20.24 166.96 6.03 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 744.9 SGR 672.1 SG3 331.6 RRT .6206 RRF .8203 RTF .7044 SGB 1003.2 R23 .1872 R13 .8366 SG1 904.5 SG2 434.0 THA 40.29 ST 275.0 SR 312.6 SS 262.3 CRT -.3415 CRS .3680 CST -.9922 TOE .1982 TRA -.7400 TC3 -.1750 BAU .2183 ROE -.3177 RRA -.4055 RC3 -.3788 FAU .12280 FDE .5335 FRA-1.8445 FC3-2.7163 BSP 2218 BDE .3745 BRA .8438 BC3 .4173 FSP -1003 LSA 410.8 MSA 269.9 SSA 23.0 EL1 343.6 EL2 235.2 ALF 124.71 FLIGHT TIME 88.00 ARRIVAL DATE OCT 21 1967 LAUNCH DATE JUL 25 1967 DISTANCE 257.140 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 28.282 GAL -12.42 AZL 91.15 MCA 117.56 SMA 140.15 ECC .23027 INC 1.1479 V1 29.320 RP 107.98 LAP -1.02 LOP 58.96 VP 38.874 GAP -1.08 AZP 89.47 TAL 236.66 TAP 354.22 RCA 107.88 APO 172.43 V2 35.094 RC 81.139 GL -5.13 GP -26.00 ZAL 163.16 ZAP 83.05 ETS 4.03 ZAE 158.15 ETE 256.35 ZAC 112.79 ETC 5.88 CLP -82.26 PLANETOCENTRIC CONIC C3 38.269 VHL 6.186 DLA 10.71 RAL 138.31 RAD 6568.5 VEL 12.635 PTH 2.29 VHP 4.188 DPA -12.09 RAP 150.26 ECC 1.6298 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 1 21 2714.06 -27.74 75.58 15.22 95.91 23 46 35 2114.1 -26.63 67.09 90.00 13 47 18 4680.35 14.88 199.45 8.42 65.63 15 5 18 4080.4 11.47 192.44 100.00 0 31 59 2434.47 -29.15 54.83 15.04 96.95 1 12 33 1834.5 -27.88 46.26 0 31 59 2434.47 15 3 17 4435.17 1 52 21 2182.97 15 59 24 4259.44 64.51 16 17 13 99.86 2 28 44 61.38 17 10 24 3835.2 12.60 173.83 100.00 16.16 180.81 7.80 26.29 110.00 1583.0 -31.19 -32.90 35.09 14.39 99.86 19.54 110.00 165.66 5.99 3659.4 15.57 158.80 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 302.7 SR 296.9 SS 274.4 CRT -.3032 CRS .3795 CST .9902 LSA 428.6 MSA 266.1 SSA 23.1 EL1 342.3 EL2 250.2 ALF 136.84 SGT 851.5 SGR 699.9 SG3 340.4 RRT .6865 RRF .8428 RTF .7642 SGB 1102.2 R23 .1871 R13 .8605 SG1 1016.4 SG2 426.3 THA 36.98 TOE .2141 TRA -.8081 TC3 -.2625 BAU .2515 RDE -.2943 RRA -.4124 RC3 -.4156 FAU .12491 FOE .3852 FRA-1.8393 FC3-2.8257 BSP 2589 BDE .3639 BRA .9072 BC3 .4916 FSP -1040 ARRIVAL DATE OCT 23 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 25 1967 DISTANCE 263.535 RL 151.95 LAL .00 LOL 301.39 VL 28.255 GAL -12.29 AZL 90.97 HCA 120.78 SMA 139.93 ECC .22878 INC .9710 V1 29.320 RP 107.94 LAP -.83 LOP 62.17 VP 38.865 GAP -.57 AZP 89.50 TAL 236.18 TAP 356.96 RCA 107.92 APO 171.94 V2 35.107 RC 83.336 GL -4.39 GP -27.02 7AL 163.09 ZAP 87.77 ETS 1.89 ZAE 155.89 ETE 248.46 ZAC 114.68 ETC 4.73 CLP -87.50 PLANETOCENTRIC CONIC C3 37.395 VHL 6.115 OLA 11.34 RAL 138.81 RAD 6568.5 VEL 12.600 PTH 2.29 VHP 4.170 DPA -12.39 RAP 148.16 ECC 1.6154 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG 95.38 23 43 39 65.20 15 12 0 -26.81 15.57 2129.0 68.15 22 58 10 2729.05 13 54 26 4653.69 -27.84 76.66 90.00 190.89 13 54 26 14.13 197.86 8.50 4053.7 10.67 90.00 0 29 9 2448.28 15 10 4 4409.69 1 50 20 2194.24 16 5 22 4236.49 47.25 1 9 57 1848.3 -28.06 100.00 -29.25 55.85 15.40 96.43 64.06 16 23 34 15.41 179.29 7.88 3809.7 11.80 172.36 100.00 -33.02 35.95 14.79 99.37 2 26 54 1594.2 -31.38 27.11 110.00 60.90 17 15 59 3636.5 14.76 157.51 164.31 6.04 110.00 18.79 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 970.4 SCR 723.8 SC3 344.6 RRT .7369 RRF .8614 RTF .8071 SCB 1210.6 R23 .1885 R13 .8784 SCI 1136.2 SC2 417.9 THA 34.01 ST 334.2 SR 278.7 SS 286.9 CRT -.2702 CRS .3920 CST -.9859 LSA 452.8 MSA 257.3 SSA 23.2 TOE .2346 TRA -.8772 TC3 -.3571 BAU .2874 ROE -.2685 RRA -.4147 RC3 -.4505 FAU .12530 FOE .6372 FRA-1.8013 FC3-2.9008 BSP 2981 EL1 353.7 EL2 253.6 ALF 152.03 BOE .3565 BRA .9703 BC3 .5749 FSP -1056 FLIGHT TIME 92.00 ARRIVAL DATE OCT 25 1967 LAUNCH DATE JUL 25 1967 DISTANCE 269.897 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 28.223 GAL -12.15 A7L 90.78 MCA 124.00 SMA 139.66 ECC .22737 INC .7818 V1 29.320 RP 107.91 LAP -.65 LOP 65.39 VP 38.853 GAP -.07 A7P 89.56 TAL 235.61 TAP 359.61 RCA 107.91 APO 171.42 V2 35.119 RC 85.546 GL -3.57 GP -28.01 ZAL 162.95 ZAP 92.30 ETS 359.66 ZAE 153.39 ETE 242.04 ZAC 116.40 ETC 3.55 CLP -92.60 PLANETOCENTRIC CONIC C3 36.518 VHL 6.043 OLA 12.01 RAL 139.39 RAD 6568.4 VEL 12.565 PTH 2.28 VHP 4.178 DPA -12.73 RAP 146.20 ECC 1.6010 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 94.78 23 40 35 64.77 15 19 29 2145.7 16.01 -26.99 90.00 22 54 50 2745.72 69.34 -27.94 77.87 4025.0 189.24 14 2 24 4625.02 13.30 196.16 8.68 9.74 48.35 0 26 14 15.86 95.85 1 7 17 16 30 40 2 25 5 17 22 14 1 7 17 1463.6 -28.25100.00 2463.63 -29.37 56.97 8.04 63.62 3782.3 10.93 170.80 100.00 15 17 38 4382.34 14.59 177.68 28.03 15.29 98.82 1606.8 -31.59 110.00 1 48 18 2206.80 -33,16 36.90 110.00 16 12 2 4211.94 17.97 162.88 6.17 60.42 3611.9 13.89 156.13 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 370.0 SR 258.9 SS 299.1 CRT -.2424 CRS .3999 CST -.9810 LSA 482.5 MSA 245.0 SSA 23.2 SGT 1098.2 SGR 744.7 SG3 344.7 RRT .7744 RRF .8774 RTF .8373 SGB 1326.9 R23 .1921 R13 .8917 TOE .2606 TRA -.9453 TC3 -.4572 BAU .3250 ROE - .2412 RRA - .4128 RC3 - .4839 FAU .12421 FOE .6838 FRA-1.7364 FC3-2.9448 BSP 3395 BOE .3551 BRA 1.0315 BC3 .6657 FSP -1060 EL1 379.4 EL2 245.0 ALF 163.19 SG1 1262.0 SG2 410.0 THA 31.39

FLIGHT TIME 86.00

ARRIVAL DATE OCT 27 1967

LAUNCH DATE JUL 25 1967

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DISTANCE 276.226
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 28.185 CAL -12.01 AZL 90.58 MCA 127.22 SMA 139.35 ECC .22603 INC .5773 VI 29.320 RP 107.87 LAP -.46 LOP 68.61 VP 38.837 CAP .40 AZP 89.65 TAL 234.96 TAP 2.17 RCA 107.85 APO 170.85 V2 35.131 RC 87.767 GL -2.67 GP -29.00 ZAL 162.72 ZAP 96.58 ETS 357.33 ZAE 150.74 ETE 236.87 ZAC 117.93 ETC 2.38 CLP -97.52
   PLANETOCENTRIC CONIC
    C3 35.640 VHL 5.970 DLA 12.75 RAL 140.06 RAD 6568.4 VEL 12.530 PTH 2.27 VHP 4.211 DPA -13.14 RAP 144.41 ECC 1.5865 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 1232.4 SGR 764.9 SG3 342.2
RRT .8027 RRF .8920 RTF .8590
SGB 1450.5 R23 .1980 R13 .9022
SGI 1393.2 SG2 403.5 THA 29.16
                                                                                                                                   ST 410.1 SR 238.6 SS 310.0

CRT - .2168 CRS .3962 CST - .9775

LSA 516.9 MSA 231.2 SSA 23.4
    TOE .2923 TRA-1.0109 TC3 -.5621 BAU .3640
    ROE - .2137 RRA - .4082 RC3 - .5174 FAU .12216
    FOE .7184 FRA-1.6562 FC3-2.9674 BSP 3845
BOE .3621 BRA 1.0902 BC3 .7640 FSP -1068
                                                                                                                                   EL1 414.8 EL2 230.3 ALF 169.56
                                                                                FLIGHT TIME 96.00
                                                                                                                                                ARRIVAL DATE OCT 29 1967
                                                                               DISTANCE 282.524
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 28.144 GAL -11.85 AZL 90.35 HCA 130.44 SMA 139.01 ECC .22474 INC .3547 V1 29.320 RP 107.83 LAP -.27 LOP 71.83 VP 38.817 GAP .85 AZP 89.77 TAL 234.22 TAP 4.66 RCA 107.77 APO 170.25 V2 35.143 RC 89.996 GL -1.66 GP -30.02 ZAL 162.38 ZAP 100.57 ETS 354.91 ZAE 148.03 ETE 232.75 ZAC 119.23 ETC 1.21 CLP-102.23
   PLANETOCENTRIC CONIC
    C3 34.762 VHL 5.896 DLA 13.57 RAL 140.83 RAD 6568.4 VEL 12.495 PTH
                                                                                                            2.26 VHP 4.268 DPA -13.66 RAP 142.81 ECC 1.5721
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 47 11 2786.53 -28.14 80.84 17.24 93.30 23 33 38 2186.5 -27.39 72.26
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                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RRT .8241 RRF .9040 RTF .8743
SGB 1576.2 R23 .2060 R13 .9093
SGI 1525.5 SG2 396.3 THA 27.08
                                                                                                                                    ST 455.4 SR 215.0 SS 323.2
CRT -.1878 CRS .3904 CST -.9732
    TOE .3310 TRA-1.0721 TC3 -.6706 BAU .4024
    ROE -.1830 RRA -.3978 RC3 -.5476 FAU .11845
                                                                                                                                   LSA 558.3 MSA 214.1 SSA 23.5
EL1 457.7 EL2 210.1 ALF 173.57
    FDE .7577 FRA-1.5469 FC3-2.9500 BSP 4278
BDE .3782 BRA 1.1435 BC3 .8658 FSP -1046
                                                                                                                                               ARRIVAL DATE OCT 31 1967
                                                                               FLIGHT TIME 98.00
LAUNCH DATE JUL 25 1967
                                                                               DISTANCE 288.792
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 28.098 GAL -11.70 AZL 90.11 HCA 133.66 SMA 138.64 ECC .22351 INC .1093 V1 29.320 RP 107.80 LAP -.08 LOP 75.05 VP 38.794 GAP 1.29 AZP 89.92 TAL 233.41 TAP 7.07 RCA 107.65 APO 169.62 V2 35.154 RC 92.232 GL -.52 GP -31.09 ZAL 161.93 ZAP 104.25 ETS 352.38 ZAE 145.30 ETE 229.47 ZAC 120.30 ETC .04 CLP-106.71
   PLANETOCENTRIC CONIC
    C3 33.893 VHL 5.822 DLA 14.50 RAL 141.70 RAD 6568.3 VEL 12.460 PTH 2.25 VHP 4.347 DPA -14.30 RAP 141.39 ECC 1.5578
    CO 33.093 VAL 3.062 ULA 14.30 KAL 141.10 KAU 0308.3 VEL 12.400 PIN 2.62 VAP 4.347 UPA -14.30 KAP 141.39 ECC 1.3578 UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 42 29 2812.39 -28.23 82.73 18.05 92.36 23 29 21 2212.4 -27.60 74.12 90.00 14 33 13 4520.67 10.20 190.07 9.88 63.44 15 48 34 3920.7 6.55 183.29
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       110.00
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                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 506.6 SR 190.6 SS 336.5

CRT -.1491 CRS .3664 CST -.9706

LSA 605.9 MSA 196.2 SSA 23.7

ELI 507.5 EL2 188.1 ALF 176.28
                                                                          SCT 1510.3 SCR 792.1 SC3 325.6

RRT .8404 RRF .9152 RTF .8853

SCB 1705.4 R23 .2162 R13 .9148

SCI 1660.1 SC2 390.6 THA 25.28
    TOE .3770 TRA-1.1276 TC3 -.7822 BAU .4406
    RDE -.1513 RRA -.3844 RC3 -.5778 FAU .11398
FDE .7890 FRA-1.4271 FC3-2.9114 BSP 4732
    BDE .4062 BRA 1.1913 BC3 .9725 FSP -1025
                                                                                                                                                ARRIVAL DATE NOV 2 1967
                                                                                FLIGHT TIME 100.00
LAUNCH DATE JUL 25 1967
                                                                               DISTANCE 295.031
   HELIOCENTRIC CONIC
                             .00 LOL 301.39 VL 28.048 GAL -11.53 AZL 89.84 HCA 136.88 SMA 138.24 ECC .22233 INC .1631 V1 29.320 .11 LOP 78.27 VP 38.768 GAP 1.71 AZP 90.12 TAL 232.53 TAP 9.42 RCA 107.50 APO 168.97 V2 35.165 .78 GP -32.25 ZAL 161.34 ZAP 107.60 ETS 349.72 ZAE 142.59 ETE 226.90 ZAC 121.12 ETC 358.89 CLP-110.95
    RL 151.95 LAL
    RP 107.77 LAP
    RC 94.474 GL
   PLANETOCENTRIC CONIC
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.29 85.01 19.04 91 22 23 24 14
     C3 33.039 VHL 5.748 DLA 15.55 RAL 142.70 RAD 6568.3 VEL 12.426 PTH 2.25 VHP 4.449 DPA -15.12 RAP 140.16 ECC 1.5437
    UNCH AZHTH LNCH TIME L-I TIME
90.00 22 36 48 2843.56
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62.99 16 1 26
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       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 565.5 SR 163.9 SS 352.7
CRT -.0862 CRS .3170 CST -.9683
     TOE .4324 TRA-1.1752 TC3 -.8953 BAU .4775
                                                                           SGT 1650.3 SGR 801.4 SG3 313.0
    RDE -.1166 RRA -.3662 RC3 -.6059 FAU .10844
FDE .8223 FRA-1.2909 FC3-2.8413 BSP 5164
BDE .4478 BRA 1.2309 BC3 1.0810 FSP -985
                                                                          RRT .8525 RRF .9251 RTF .8930
5GB 1834.6 R23 .2284 R13 .9184
                                                                                                                                   LSA 662.7 MSA 176.9 SSA 23.9
                                                                                                                                  EL1 565.7 EL2 163.2 ALF 178.44
                                                                         SG1 1793,6 SG2 385.4 THA 23.65
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FLIGHT TIME 94.00

ARRIVAL CATE NOV 4 1967 FLIGHT TIME 102.00 LAUNCH DATE JUL 25 1967 DISTANCE 301.242 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 27.996 GAL -11.36 A7L 89.53 MCA 140.11 SMA 137.81 ECC .22121 INC .4721 V1 .29.320 RP 107.73 LAP .30 LOP 81.50 VP 38.740 GAP 2.11 A7P 90.36 TAL 231.59 TAP 11.70 RCA 107.33 APO 168.30 V2 35.175 RC 96.719 GL 2.28 GP -33.55 TAL 160.59 TAP 110.58 ETS 346.91 TAE 139.90 ETE 224.91 TAC 121.70 ETC 357.72 CLP-114.95 PLANETOCENTRIC CONIC C3 32.217 VHL 5.676 DLA 16.77 RAL 143.83 RAD 6568.3 VEL 12.393 PTH 2.24 VHP 4.574 DPA -16.13 RAP 139.08 ECC 1.5302 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 89.81 23 17 44 62.55 16 16 41 20.23 79.16 2282.0 -28.04 90.00 22 29 42 2881.99 -28.32 87.82 177.94 4425.51 7.25 184.63 11.49 3825.5 3.52 90.00 15 2 56 57.47 0 4 30 2588.95 -29.88 66.25 20.21 91.00 0 47 39 1988.9 -29.42 100.00 16 14 44 4193.79 8.63 166.85 10.75 61.27 17 24 38 3593.8 4.73 160.23 -33.00 35.71 20.00 94.20 2 12 17 1709.6 1 33 47 2309.59 -33.96 44.82 57.80 18 9 23 3445.9 7.81 147.12 110.00 17 1 57 4045.91 12.15 153.53 8.64 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .8615 RRF .9346 RTF .8987 SGB 1966.2 R23 .2423 R13 .9213 SGI 1928.7 SG2 382.5 THA 22.24 ST 633.4 SR 137.7 SS 370.2 CRT .0226 CRS .2151 CST -.9677 TOE .4977 TRA-1.2146 TC3-1.0105 BAU .5140 ROE -.0803 RRA -.3452 RC3 -.6346 FAU .10247 LSA 729.2 MSA 157.8 SSA 24.0 FOE .8499 FRA-1.1514 FC3-2.7536 BSP 5622 BOE .5042 BRA 1.2627 BC3 1.1933 FSP -948 EL1 633.4 EL2 137.6 ALF FLIGHT TIME 104.00 ARRIVAL DATE NOV 5 1967 **DISTANCE 307.427** HELIOCENTRIC CONIC RL 151.95 LAL RP 107.70 LAP .00 LOL 301.39 VL 27.941 GAL -11.18 AZL 89.17 MCA 143.33 SMA 137.37 ECC .22014 INC .8253 V1 29.320 .49 LOP 84.73 VP 38.709 GAP 2.50 AZP 90.66 TAL 230.59 TAP 13.92 RCA 107.13 APO 167.61 V2 35.185 4.04 GP -35.03 7AL 159.63 7AP 113.18 ETS 343.92 7AE 137.22 ETE 223.41 7AC 122.04 ETC 356.53 CLP-118.73 98.967 GL PLANETOCENTRIC CONIC C3 31.447 VHL 5.608 DLA 18.20 RAL 145.12 RAD 6568.3 VEL 12.362 PTH 2.23 VHP 4.724 DPA -17.39 RAP 138.13 ECC 1.5175 C3 31.447 VHL 5.608 DLA 18.20 RAL 145.12 RAD 6568.3 VEL 12.362 PTH 2.25 VHP 4.724 UPA -17.39 RAP 136.13 ECC 1.3175 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 20 29 2930.57 -28.25 91.37 21.67 88.03 23 9 20 2330.6 -28.23 82.70 90.00 15 22 27 4364.75 5.33 181.19 12.70 62.15 16 35 12 3764.7 1.56 174.54 100.00 23 52 40 2633.31 -29.88 69.55 21.72 89.26 24 36 33 2033.3 -29.67 60.75 100.00 16 32 58 4137.24 6.76 163.69 11.91 60.81 17 41 55 3537.2 2.82 157.12 1 28 31 2345.75 -34.10 47.63 92.54 2 7 36 1745.8 -33.37 38.46 110.00 21.64 57.25 18 24 10 17 17 32 9.72 3397.6 5.99 144.56 10.38 150.90 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1929.8 SGR 818.4 SG3 282.8 RRT .8677 RRF .9432 RTF .9025 SGB 2096.2 R23 .2576 R13 .9230 ST 714.1 SR 113.0 SS 392.1 CRT .2241 CRS .0131 CST -.9678 TDE .5773 TRA-1.2423 TC3-1.1247 BAU .5485 RDE -.0399 RRA -.3192 RC3 -.6614 FAU .09576 FOE .8810 FRA-1.0023 FC3-2.6362 BSP 6049 LSA 810.3 MSA 139.2 SSA 23.9 EL1 714.6 EL2 110.0 ALF 2.08 SG1 2061.3 SG2 380.9 THA 20.95 .5787 BRA 1.2826 BC3 1.3048 FSP -896 ARRIVAL DATE NOV 8 1967 FLIGHT TIME 106.00 LAUNCH DATE JUL 25 1967 DISTANCE 313.586 HELIOCENTRIC CONIC .00 LOL 301.39 VL 27.883 GAL -11.00 AZL 88.76 HCA 146.56 SMA 136.92 ECC .21912 INC 1.2369 V1 29.320 .68 LOP 87.96 VP 38.676 GAP 2.87 AZP 91.03 TAL 229.53 TAP 16.09 RCA 106.92 APO 166.92 V2 35.195 6.12 GP -36.76 ZAL 158.40 ZAP 115.35 ETS 340.71 ZAE 134.50 ETE 222.35 ZAC 122.15 ETC 355.29 CLP-122.31 RL 151.95 LAL RP 107.67 LAP RC 101.218 GL PLANETOCENTRIC CONIC C3 30.760 VHL 5.546 DLA 19.91 RAL 146.61 RAO 6568.2 VEL 12.334 PTH 2.22 VHP 4.905 DPA -18.93 RAP 137.26 ECC 1.5062 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.73 22 57 55 61.82 16 58 22 23.43 87.34 2393.9 -28.32 22 8 1 2993.91 -28.02 95.99 90.00 15 46 51 177.02 14.33 3690.3 170.39 4290.32 2.95 90.00 23 42 3 24 26 53 2090.7 -29.85 65.01 2690.71 -29.76 73.81 23.56 87.02 100.00 . 50 16 55 31 13.49 60.41 18 3 20 3468.8 153.36 4068.75 4.48 159.89 100.00 1 21 27 -33.75 90.41 2 1 19 1792.0 42.02 -34.18 51.24 23.67 2392.02 110.00 56.71 18 42 12 141.55 3340.2 3.81 147.82 11.16 110.00 17 36 32 3940.20 8.25 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 810.5 SR 98.2 SS 416.9 CRT .5405 CRS -.3326 CST -.9693 TOE .6729 TRA-1.2581 TC3-1.2381 BAU .5825 SGT 2068.8 SGR 826.9 SG3 265.4 RRT .8713 RRF .9512 RTF .9054 SGB 2228.0 R23 .2734 R13 .9244 RDE .0035 RRA -.2896 RC3 -.6880 FAU .08875 .9089 FRA -.8537 FC3-2.4978 BSP 6501 LSA 908.1 MSA 122.7 SSA 23.5 ELI 812.2 EL2 82.5 ALF 3.79 FOE SGI 2194.9 SG2 382.5 THA 19.83 BOE .6729 BRA 1.2910 BC3 1.4165 FSP -847 ARRIVAL DATE NOV 10 1967 FLIGHT TIME 108.00 LAUNCH DATE JUL 25 1967 **DISTANCE 319.720** HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 27.823 GAL -10.80 AZL 88.27 MCA 149.79 SMA 136.45 ECC .21815 INC 1.7254 V1 29.320 RP 107.65 LAP .87 LOP 91.19 VP 38.641 GAP 3.23 AZP 91.49 TAL 228.42 TAP 18.21 RCA 106.68 APO 166.21 V2 35.204 RC 103.470 GL 8.61 GP -38.80 ZAL 156.81 ZAP 117.06 ETS 337.24 ZAE 131.71 ETE 221.65 ZAC 122.04 ETC 353.95 CLP-125.71 PLANETOCENTRIC CONIC C3 30.210 VHL 5.496 DLA 21.97 RAL 148.37 RAD 6568.2 VEL 12.312 PTH 2.22 VHP 5.123 DPA -20.81 RAP 136.42 ECC 1.4972 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.55 82.65 22 41 26 -28.16 21 50 6 3080.28 -27.42 102.24 2480.3 93.65 90.00 16 18 47 4194.90 -.13 171.70 16.61 61.68 17 28 42 3594.9 -1 01 165 06 90.00 24 13 9 2167.7 -29.86 70.73 23 27 1 2767.74 -29.35 79.50 25.80 84.05 100.00 18 30 55 3382.7 -2.42 148.63 17 24 32 1.57 155.16 15.66 60.14 100.00 3982.67 1 11 37 1 52 30 1852.8 -34.07 46.74 2452.79 -34.11 55.99 26.21 87.60 110.00 110.00 18 0 21 3870.38 5.62 144.12 13.14 56.23 19 4 52 3270.4 1.15 137.90 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TDE .7912 TRA-1.2581 TC3-1.3463 BAU .6151 ST 928.5 SR 104.1 SS 446.6 CRT .8479 CRS -.7132 CST -.9717 SGT 2206.9 SGR 835.2 SG3 246.5 RRT .8723 RRF .9584 RTF .9076 SGB 2359.6 R23 .2891 R13 .9254 RDE .0517 RRA -.2547 RC3 -.7120 FAU .08131 LSA 1029.5 MSA 109.6 SSA 22.2 EL1 932.7 EL2 54.9 ALF 5.45 FOE .9378 FRA -.7034 FC3-2.3301 BSP 6953 BOE .7929 BRA 1.2837 BC3 1.5230 FSP -793 SG1 2327.6 SG2 387.3 THA 18.81

ARRIVAL DATE NOV 12 1967

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LAUNCH DATE JUL 25 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 325.830
    RL 151.95 LAL .00 LOL 301.39 VL 27.762 GAL -10.60 AZL 87.68 HCA 153.01 SMA 135.97 ECC .21724 INC 2.3188 VI 29.320 RP 107.62 LAP 1.05 LOP 94.42 VP 38.604 GAP 3.58 AZP 92.07 TAL 227.26 TAP 20.27 RCA 106.43 APO 165.51 VZ 35.212 RC 105.723 GL 11.65 GP -41.24 ZAL 154.75 ZAP 118.23 ETS 333.46 ZAE 128.77 ETE 221.25 ZAC 121.71 ETC 352.48 CLP-128.98
   PLANETOCENTRIC CONIC
    C3 29.883 VHL 5.467 OLA 24.50 RAL 150.47 RAD 6568.2 VEL 12.299 PTH 2.22 VMP 5.393 OPA -23.11 RAP 135.52 ECC 1.4918
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 21 31 3207.98 -25.98 111.30 27.98 78.53 22 14 59 2608.0 -27.33 102.89
                                                                                                 78.33 22 14 59
62.00 18 11 49
                                 4061.73
2877.48
                                                                                    19.98
                                                                                                                                  3461.7
                                                                                                                                                  -8.12
                                                                                                                                                                 157.54
        90.00
                    17 4 8
                                                     -4.41
                                                                   164.26
                                                                                                     79.98 23 51 59
                  23 4 2
                                                    -28.31
                                                                     87.49
                                                                                    28.48
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                                                                                                                                                                  78.85
       100.00
                    18 4 18 3867.47
0 57 17 2535.46
18 31 28 1300
       100.00
                    18 4 18
                                                     -2.34
                                                                   148.84
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55.88 19 34 31
                                                                                                                                  1935.5
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                                                                                                                                                                  53.19
                                                    -33.69
                                                                     62.40
                                                                                    29.38
       110.00
                                                    2.27
                                                                                                                                  3182.3
                                                                                                                                                 -2.22
                                                                                                                                                                 133.30
       110.00
                   18 31 28
                                                                   139.51
                                                                                    15.96
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SCT 2342.8 SCR 840.7 SC3 225.7
RRT .8700 RRF .9643 RTF .9091
SCB 2489.1 R23 .3043 R13 .9261
                                                                                                                             ST 1077.3 SR 136.2 SS 483.6
CRT .9774 CRS -.9195 CST -.9748
    TOE .9423 TRA-1.2371 TC3-1.4413 BAU .6452
ROE .1073 RRA -.2115 RC3 -.7287 FAU .07327
    FOE .9713 FRA -.5488 FC3-2.1225 BSP 7364
BOE .9484 BRA 1.2551 BC3 1.6150 FSP -727
                                                                                                                             LSA 1184.1 MSA 102.1 SSA 19.6
                                                                                                                             EL1 1085.5 EL2 28.6 ALF 7.05
                                                                        SG1 2467.5 SG2 395.1 THA 17.81
                                                                                                                                         ARRIVAL DATE NOV 14 1967
                                                                            FLIGHT TIME 112.00
LAUNCH DATE JUL 25 1967
                                                                           DISTANCE 331.916
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.698 GAL -10.39 AZL 86.94 MCA 156.24 SMA 135.48 ECC .21638 INC 3.0604 V1 29.320 RP 107.60 LAP 1.23 LOP 97.66 VP 38.566 GAP 3.91 AZP 92.80 TAL 226.06 TAP 22.30 RCA 106.17 APO 164.80 V2 35.220 RC 107.975 GL 15.42 GP -44.18 ZAL 152.03 ZAP 118.79 ETS 329.32 ZAE 125.59 ETE 221.08 ZAC 121.18 ETC 350.79 CLP-132.19
  PLANETOCENTRIC CONIC
    C3 29.935 VHL 5.471 OLA 27.63 RAL 153.06 RAD 6568.2 VEL 12.301 PTH 2.22 VHP 5.736 DPA -25.89 RAP 134.45 ECC 1.4927 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 17 46 3457.51 -21.46 128.16 29.91 71.07 21 15 24 2857.5 -23.85 120.31
                   18 28 33
                                  3813.07
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        90.00
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                                 3057.60
3688.21
2654.58
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       100.00
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78.60 1 18 47
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       100.00
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       110.00
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                                                   -32.44
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       110.00
                   19 14 53
                                   3664.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                       SGT 2481.0 SGR 845.4 SG3 203.5
RRT .8641 RRF .9687 RTF .9110
SGB 2621.1 R23 .3169 R13 .9272
SGI 2589.2 SG2 407.8 THA 16.84
                                                                                                                             ST 1265.1 SR 187.7 SS 525.7
CRT .9955 CRS -.9823 CST -.9785
    TOE 1.1377 TRA-1.1915 TC3-1.5161 BAU .6744
    ROE .1693 RRA -.1598 RC3 -.7354 FAU .06493
                                                                                                                             LSA 1379.0 MSA 100.3 SSA 16.0
EL1 1278.8 EL2 17.6 ALF 8.40
    FOE 1.0021 FRA -.3965 FC3-1.8777 BSP 7821
    BOE 1.1503 BRA 1.2022 BC3 1.6850 FSP
                                                                                                                                        ARRIVAL DATE NOV 16 1967
                                                                           FLIGHT TIME 114.00
LAUNCH DATE JUL 25 1967
                                                                           DISTANCE 337.978
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 27.634 GAL -10.17 AZL 85.98 HCA 159.46 SMA 134.99 ECC .21557 INC 4.0198 V1 29.320 RP 107.58 LAP 1.41 LOP 100.89 VP 38.526 GAP 4.24 AZP 93.77 TAL 224.81 TAP 24.27 RCA 105.89 APO 164.09 V2 35.227 RC 110.226 GL 20.14 GP -47.78 ZAL 148.40 ZAP 118.61 ETS 324.76 ZAE 122.03 ETE 221.03 ZAC 120.45 ETC 348.78 CLP-135.44
   PLANETOCENTRIC CONIC
    C3 30.659 VML 5.537 DLA 31.56 RAL 156.38 RAD 6568.2 VEL 12.330 PTH 2.22 VMP 6.191 DPA -29.25 RAP 133.03 ECC 1.5046
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   LNCH TIME L-1 TIME
17 42 2 4008.27
21 30 46 3274.30
17 42 2 4008.27
21 30 46 3274.30
23 46 45 2652.10
20 25 13 3478.47
                                                                                                  64.16 18 48 50
64.15 22 25 20
64.16 18 48 50
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                                                    -18.79
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        75.45
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                                                                   113.49
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       104.55
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        75.45
                                                   -18.79
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       104.55
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56.95 21 23 12
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                                                    -28.88
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       110.00
                                                                   123.54
                                                                                    27.24
                                                                                                                                 2878.5
                                                                                                                                                 -13.54
                                                    -9.26
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 2618.3 SGR 841.2 SG3 179.0
RRT .8518 RRF .9702 RTF .9132
SGB 2750.1 R23 .3267 R13 .9285
SG1 2717.2 SG2 424.7 THA 15.70
                                                                                                                             ST 1509.5 SR 252.0 SS 575.7
    TOE 1.4049 TRA-1.1071 TC3-1.5469 BAU .6991
                                                                                                                             CRT .9890 CRS -.9976 CST -.9825
    ROE .2403 RRA -.0929 RC3 -.1107 FRA -.2466 FC3-1.5790 BSP 8221
    ROE .2403 RRA -.0929 RC3 -.7185 FAU .05592
                                                                                                                            LSA 1631.7 MSA 104.5 SSA 11.9
EL1 1530.0 EL2 36.7 ALF 9.38
                                                                                                                                         ARRIVAL DATE NOV 18 1967
                                                                            FLIGHT TIME 116.00
LAUNCH DATE JUL 25 1967
                                                                           DISTANCE 344.014
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 27.568 GAL -9.94 AZL 84.68 MCA 162.67 SMA 134.49 ECC .21481 INC 5.3186 V1 29.320 RP 107.56 LAP 1.58 LOP 104.13 VP 38.484 GAP 4.55 AZP 95.08 TAL 223.52 TAP 26.20 RCA 105.60 APO 163.38 V2 35.233 RC 112.475 GL 26.13 GP -52.18 ZAL 143.53 ZAP 117.55 ETS 319.65 ZAE 117.90 ETE 220.89 ZAC 119.53 ETC 346.25 CLP-138.96
   PLANETOCENTRIC CONIC
    C3 32.664 VHL 5.715 DLA 36.47 RAL 160.85 RAD 6568.3 VEL 12.411 PTH 2.24 VHP 6.828 DPA -33.29 RAP 130.98 ECC 1.5376
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.99 17 1 57 4201.43 -20.90 184.00 39.76 59.41 18 11 58 3601.4 -24.80 176.83
                                                                                                    59.41 18 11 58
59.40 23 38 23
                                 3113.02
4201.43
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       114.01
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       114.01
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59.40 23 38 23
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                                   4201.43
        65.99
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                    22 46 30
                                    3113.02
                                                    -20.89
                                                                    102.16
                                                                                    39.75
       114.01
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 2761.1 SCR 822.2 SC3 153.0
RRT .8283 RRF .9659 RTF .9171
SCB 2880.9 R23 .3314 R13 .9310
                                                                                                                             ST 1823.8 SR 314.9 SS 628.7
CRT .9806 CRS -.9991 CST -.9864
    TOE 1.7823 TRA -.9690 TC3-1.5082 BAU .7197
    RDE .3132 RRA -.0063 RC3 -.6647 FAU .04652
                                                                                                                              LSA 1951.4 MSA 112.2 SSA 8.4
    FDE 1.0614 FRA -.1010 FC3-1.2329 BSP 8675
                                                                                                                              EL1 1849.8 EL2 60.9 ALF 9.62
                                                                        SG1 2846.0 SG2 446.9 THA 14.21
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FLIGHT TIME 110.00

BDE 1.8096 BRA .9690 BC3 1.6482 FSP

ARRIVAL DATE NOV 20 1967

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FLIGHT TIME 118.00
                                                                       DISTANCE 350.019
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.501 GAL -9.70 AZL 82.81 HCA 165.88 SMA 133.99 ECC .21410 INC 7.1871 V1 29.320 RP 107.54 LAP 1.75 LOP 107.37 VP 38.442 GAP 4.84 AZP 96.97 TAL 222.20 TAP 28.08 RCA 105.31 APO 162.68 V2 35.239 RC 114.720 GL 33.70 GP -57.60 ZAL 137.00 ZAP 115.42 ETS 313.72 ZAE 112.95 ETE 220.21 ZAC 118.46 ETC 342.78 CLP-143.23
  PLANETOCENTRIC CONIC
   C3 37.367 VHL 6.113 DLA 42.47 RAL 167.26 RAD 6568.5 VEL 12.599 PTH 2.29 VHP 7.786 DPA -38.10 RAP 127.80 ECC 1.6150
                                              INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-22.53 198.25 50.34 52.99 17 57 19 3757.5 -27.18 191.49
-22.51 95.95 50.33 52.98 24 45 21 2424.9 -27.17 89.20
    LNCH AZMTH LNCH TIME L-I TIME
       56.91 16 44 41 4357.49
                   23 54 56
                                 3024.86
      123.09
                                                                                               52.99 17 57 19
52.98 24 45 21
52.99 17 57 19
52.98 24 45 21
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                   16 44 41 4357.49
                                                  -22.53
                                                                198.25
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       56.91
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                   23 54 56
                                 3024.86
                                                  -22.51
                                                                 95.95
                                                                                50.33
                                                                                                                           2424.9
      123.09
                                                                                                                                        -27.18
                                                                                                                           3757.5
                                                                                                                                                        191.49
                                                                                50.34
                   16 44 41 4357.49
                                                  -22.53
                                                                198.25
       56.91
                                                                                                                           2424.9
                                                                                                                                          -27.17
                                                                                50.33
                   23 54 56
                                 3024.86
                                                  -22.51
                                                                 95.95
      123.09
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2224.1 SR 345.2 SS 682.0
CRT .9681 CRS -.9937 CST -.9899
                                                                    SGT 2908.6 SGR 766.0 SG3 125.2
RRT .7752 RRF .9438 RTF .9236
SGB 3007.8 R23 .3296 R13 .9351
SGI 2970.2 SG2 473.9 THA 11.84
   TOE 2.3534 TRA -.7341 TC3-1.3499 BAU .7279
   ROE .3648 RRA .1126 RC3 -.5483 FAU .03653
FDE 1.0810 FRA .0419 FC3 -.8464 BSP 9053
BDE 2.3815 BRA .7427 BC3 1.4570 FSP -420
                                                                                                                       LSA 2348.6 MSA 123.2 SSA 5.5
EL1 2249.1 EL2 85.6 ALF 8.56
                                                                        FLIGHT TIME 120.00
                                                                                                                                  ARRIVAL DATE NOV 22 1967
LAUNCH DATE JUL 25 1967
                                                                        DISTANCE 355.984
  HELIOCENTRIC CONIC
                         .00 LOL 301.39 VL 27.434 GAL -9.45 AZL 79.88 MCA 169.06 SMA 133.50 ECC .21340 INC10.1214 VI 29.320 1.91 LOP 110.62 VP 38.399 GAP 5.13 AZP 99.94 TAL 220.82 TAP 29.89 RCA 105.01 APO 161.98 V2 35.244
   RL 151.95 LAL
       107.52 LAP
                       43.00 GP -64.24 ZAL 128.49 ZAP 112.03 ETS 306.05 ZAE 106.77 ETE 217.81 ZAC 117.34 ETC 337.25 CLP-149.65
   RC 116.961 GL
  PLANETOCENTRIC CONIC
                                                                                                  2.38 VHP 9.371 DPA -43.61 RAP 122.50 ECC 1.8003
   C3 48.628 VHL 6.973 DLA 49.24 RAL 177.14 RAD 6568.8 VEL 13.038 PTH 2.38 VHP 9.371 DPA -43.61 RAP 122.50 ECC 1.8003 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -27.83
                                  4509.89
                                                                212.25
                                                                                66.46
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                    1 11 43
                                 3005.13
      132.13
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                                                                    MID-COURSE EXECUTION ACCURACY
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      132.13
                                  3005.13
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  DIFFERENTIAL CORRECTIONS
                                                                   SCT 3064.0 SCR 640.9 SC3 97.4
RRT .6032 RRF .8328 RTF .9359
SCB 3130.3 R23 .3164 R13 .9429
SCI 3089.0 SC2 507.0 THA 7.39
                                                                                                                        ST 2677.3 SR 248.3 SS 722.9
CRT .8926 CRS -.9403 CST -.9927
    TOE 3.2548 TRA -.3162 TC3-1.0336 BAU .7105
    RDE .2752 RRA .2685 RC3 -.3552 FAU .02637
                                                                                                                       LSA 2780.8 MSA 138.2 SSA
EL1 2686.4 EL2 111.5 ALF
    FOE 1.0833 FRA .1796 FC3 -.4694 BSP 9455
                                                                                                                                                              3.5
    BDE 3.2664 BRA .4148 BC3 1.0930 FSP -333
                                                                                                                                  ARRIVAL DATE NOV 24 1967
                                                                        FLIGHT TIME 122.00
LAUNCH DATE JUL 25 1967
                                                                        DISTANCE 361.882
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.366 GAL -9.17 A7L 74.60 MCA 172.20 SMA 133.00 ECC .21265 INC15.3996 VI 29.320 RP 107.51 LAP 2.07 LOP 113.86 VP 38.354 GAP 5.39 A7P 105.26 TAL 219.40 TAP 31.59 RCA 104.72 APO 161.28 V2 35.248 RC 119.197 GL 53.41 GP -71.99 ZAL 118.05 ZAP 107.25 ETS 292.76 ZAE 98.63 ETE 209.43 ZAC 116.50 ETC 325.44 CLP-163.66
   PLANETOCENTRIC CONIC
    C3 79.831 VHL 8.935 DLA 55.13 RAL 192.76 RAD 6569.6 VEL 14.184 PTH 2.58 VHP 12.379 DPA -49.32 RAP 112.93 ECC 2.3138
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      139.50
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                                 3073.96
                                                  -17.82
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2964.1 SR 357.2 SS 742.9

CRT -.9119 CRS .8661 CST -.9950

LSA 3072.2 MSA 164.4 SSA 2.0

EL1 2982.0 EL2 145.7 ALF 173.71
                                                                    SGT 3185.5 SGR 572.7 SG3 72.7
    TOE 4.6131 TRA .5464 TC3 -.5655 BAU .6154
    ROE -.5212 RRA .3739 RC3 -.1125 FAU .01612
FOE 1.0688 FRA .3340 FC3 -.1748 BSP 9832
BOE 4.6425 BRA .6620 BC3 .5766 FSP -251
                                                                    RRT - .2897 RRF - .0191 RTF .9601
SGB 3236.6 R23 - .2795 R13 - .9575
SG1 3190.0 SG2 547.3 THA 176.93
                                                                                                                                   ARRIVAL DATE NOV 26 1967
                                                                        FLIGHT TIME 124.00
LAUNCH DATE JUL 25 1967
                                                                        DISTANCE 367.610
   HELIOCENTRIC CONTC
   RL 151.95 LAL .00 LOL 301.39 VL 27.298 GAL -8.86 AZL 62.61 MCA 175.18 SMA 132.50 ECC .21163 INC27.3893 V1 29.320 RP 107.50 LAP 2.22 LOP 117.11 VP 38.309 GAP 5.60 AZP 117.31 TAL 217.87 TAP 33.05 RCA 104.46 APO 160.54 V2 35.252 RC 121.426 GL 61.55 GP -77.01 ZAL 106.65 ZAP 101.22 ETS 253.21 ZAE 86.50 ETE 174.06 ZAC 117.21 ETC 285.77 CLP 149.97
   PLANETOCENTRIC CONIC
    C3 199.162 VML 14.112 DLA 55.60 RAL 212.94 RAD 6571.1 VEL 17.902 PTH 3.00 VMP 19.492 DPA -52.69 RAP 94.23 ECC 4.2777
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
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                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2006.1 SR 1915.5 SS 795.1
CRT -.9915 CRS .9862 CST -.9994
LSA 2878.8 MSA 195.8 SSA 1.2
                                                                     SGT 2575.2 SGR 2055.5 SG3 55.2
RRT -.9435 RRF -.9212 RTF ..9975
SGB 3294.9 R23 -.1888 R13 -.9813
    TOE 4.7834 TRA 2.3319 TC3 -.0806 BAU .2165
    RDE-4.6828 RRA-1.0866 RC3 -.0103 FAU .00362
    FDE 1.1147 FRA .6239 FC3 -.0157 BSP
                                                      9783
                                                                                                                        EL1 2767.8 EL2 181.0 ALF 136.33
    BOE 6.6940 BRA 2.5727 BC3 .0813 FSP -181
                                                                     SG1 3250.4 SG2 539.7 THA 141.77
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ARRIVAL DATE NOV 28 1967

LAUNCH DATE JUL 25 1967

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HELIOCENTRIC CONIC
                                                                DISTANCE 372.565
    RL 151.95 LAL .00 LOL 301.39 VL 27.229 GAL -8.39 ATL 23.71 HCA 177.42 SHA 132.01 ECC .20891 INC66.2885 V1 29.320 RP 107.49 LAP 2.36 LOP 120.35 VP 38.262 GAP 5.58 AZP 156.27 TAL 215.92 TAP 33.35 RCA 104.43 APO 159.59 V2 35.255
                     52.57 CP -58.48 ZAL 97.05 ZAP 95.19 ETS 194.08 ZAE 61.56 ETE 119.54 ZAC 124.59 ETC 219.16 CLP
    RC 123.648 GL
   PLANETOCENTRIC CONIC
    C3 964.583 VHL 31.058 DLA 40.31 RAL 221.40 RAD 6572.9 VEL 32.953 PTH 3.49 VHP 41.621 DPA -41.14 RAP 62.42 ECC16.8746
   MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 650.2 SGR 2897.7 SG3 47.2
RRT .5668 RRF -.9962 RTF -.4945
.SGB 2969.7 R23 -.1090 R13 -.9939
                                                                                                           ST 547.9 SR 1858.4 SS 1155.1
CRT .9205 CRS .9980 CST .8940
LSA 2244.3 MSA 225.9 SSA 1.1
    TOE-2.9615 TRA .5586 TC3 -.0524 BAU 2.4904
   RDE-9.5365 RRA-8.2342 RC3 -.1859 FAU-.03774
   FOE 1.6097 FRA 1.6846 FC3 .0339 BSP 8856
BDE 9.9858 BRA 8.2532 BC3 .1931 FSP -150
                                                              SGI 2921.8 SGZ 531.2 THA 82.50
                                                                                                            EL1 1926.4 EL2 206.6 ALF 74.63
                                                                 FLIGHT TIME 128.00
                                                                                                                      ARRIVAL DATE NOV 30 1967
LAUNCH DATE JUL 25 1967
                                                                 DISTANCE 381-, 254
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.160 GAL -8.67 AZL 138.44 HCA 183.33 SHA 131.52 ECC .21522 INC48.4438 V1 29.320 RP 107.48 LAP 2.49 LOP 123.60 VP 38.216 GAP 6.64 AZP 41.60 TAL 215.79 TAP 39.13 RCA 103.21 APO 159.82 VZ 35.257 RC 125.861 GL -58,81 GP 69.96 ZAL 99.64 ZAP 98.79 ETS 163.95 ZAE 73.81 ETE 238.65 ZAC 93.99 ETC 123.54 CLP 116.48
  PLANETOCENTRIC CONIC
   C3 551.593 VHL 23.486 DLA -56.05 RAL 154.85 RAD 6572.5 VEL 25.940 PTH
                                                                                         3.37 VHP 29.111 DPA 75.51 RAP 333.88 ECC10.0778
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             2335.31
                                                                                                 3 36 56
       39.37
                  2 58 1
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      140.63
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                                                             HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                            SCT 580.2 SGR 3284.9 SG3 52.8
RRT -.5533 RRF .9945 RTF -.4666
SGB 3335.7 R23 -.1150 R13 .9929
   TOE -.1555 TRA 1.2604 TC3 -.0381 BAU 1.2655
                                                                                                            ST 169.6 SR 2663.6 SS 1328.5 CRT .0167 CRS -.9993 CST -.0548
   RO-10.6808 RRA-4.2103 RC3 .1673 FAU-.01556
FOE-2.1336 FRA -.6845 FC3 .0244 BSP 9863
BOE10.6820 BRA 4.3949 BC3 .1716 FSP -161
                                                                                                           LSA 2976.1 MSA 175.5 SSA
                                                              SG1 3300.8 SG2 481.0 THA 95.70
                                                                                                            EL1 2663.6 EL2 169.5 ALF 89.94
                                                                                                                     ARRIVAL DATE DEC 2 1967
                                                                 FLIGHT TIME 130.00
LAUNCH DATE JUL 25 1967
                                                                DISTANCE 386.671
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.092 GAL -8.28 ATL 115.67 HCA 186.05 SMA 131.03 ECC .21377 INC25.6745 V1 29.320 RP 107.48 LAP 2.62 LOP 126.85 VP 38.168 GAP 6.75 ATP 64.45 TAL 214.07 TAP 40.13 RCA 103.02 APO 159.05 V2 35.258
   RC 128.066 GL -61.26 GP
                                   73.24 7AL 106.40 ZAP 106.66 ETS 105.87 ZAE 91.56 ETE 182.75 ZAC 89.55 ETC 65.35 CLP 174.05
  PLANETOCENTRIC CONIC
   C3 175.494 VHL 13.247 DLA -52.11 RAL 141.31 RAD 6570.9 VEL 17.228 PTH
                                                                                       2.94 VHP 15.714 DPA 78.81 RAP 241.44 ECC 3.8882
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                     44.36
                                                                                   141.58
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                 2 18 2 2169.71
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                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                           ST 2097.6 SR 1100.7 SS 827.8
CRT .9744 CRS -.9638 CST -.9991
                                                             SGT 2935.9 SGR 2101.7 SG3 69.6
RRT .9569 RRF .9257 RTF .9950
SG0 3610.6 R23 -.1885 R13 .9812
    TOE-4.6184 TRA-3.0305 TC3 -.1027 BAU .2433
   RDE-2.1869 RRA-2.6644 RC3 -.0143 FAU .00954
FDE-1.3598 FRA -.7616 FC3 -.0471 BSP 10984
                                                                                                           LSA 2498.6 MSA 231.2 SSA
                                                                                                           EL1 2358.6 EL2 220.0 ALF 27.34
                                                             SGI 3575.7 SG2 501.0 THA 35.21
   BOE 5.1100 BRA 4.0352 BC3 .1037 FSP -220
                                                                                                                     ARRIVAL DATE DEC 4 1967
                                                                 FLIGHT TIME 132.00
LAUNCH DATE JUL 25 1967
                                                                DISTANCE 392.432
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 27.023 GAL -7.95 A7L 107.52 HCA 189.13 SMA 130.56 ECC .21331 INC17.5220 V1 29.320 RP 107.48 LAP 2.74 LOP 130.10 VP 38.120 GAP 6.97 A7P 72.69 TAL 212.49 TAP 41.62 RCA 102.71 APO 158.40 V2 35.259 RC 130.261 GL -57.08 GP 64.38 ZAL 111.88 ZAP 114.69 ETS 76.70 ZAE 101.77 ETE 156.55 ZAC 89.41 ETC 36.38 CLP-165.03
  PLANETOCENTRIC CONIC
   C3 92.147 VHL 9.599 DLA -46.51 RAL 140.61 RAD 6569.8 VEL 14.611 PTH 2.65 VHP 11.077 OPA 70.22 RAP 206.76 ECC 2.5165
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                 2 38 59 1987.60
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      128.58
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 3683.5 SGR 624.6 SG3 93.3
RRT .6576 RRF .4518 RTF .9668
   TOE-3.3661 TRA-3.4051 TC3 -.4689 BAU .5776
                                                                                                           ST 2195.9 SR 230.3 SS 741.4
   ROE .2353 RRA - .7017 RC3 .0013 FAU .02155
FOE-1.2526 FRA - .7778 FC3 - .2024 BSP 11493
                                                                                                           CRT -.2380 CRS .3814 CST -.9886
                                                             SGB 3736.1 R23 -.2581 R13 .9632
SGI 3706.7 SG2 467.6 THA 6.47
                                                                                                           LSA 2316.0 MSA 246.6 SSA
                                                                                                                                              2.1
                                                                                                           EL1 2196.6 EL2 223.7 ALF 178.55
   BDE 3.3743 BRA 3.4766 BC3 .4689 FSP
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FLIGHT TIME 126.00

-299

ARRIVAL DATE DEC 6 1967

ELI 1939.0 ELZ 179.0 ALF 170.25

LAUNCH DATE JUL 25 1967

DISTANCE 398.272 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 26.954 GAL -7.64 AZL 103.49 HCA 192.29 SMA 130.08 ECC .21317 INC13.4926 VI 29.320 RP 107.48 LAP 2.85 LOP 133.35 VP 38.071 GAP 7.20 AZP 76.81 TAL 210.94 TAP 43.23 RCA 102.35 APO 157.81 V2 35.259 RC 132.447 GL -52.51 GP 55.62 ZAL 115.81 ZAP 121.95 ETS 67.14 ZAE 108.92 ETE 150.91 ZAC 89.91 ETC 27.09 CLP-159.57 PLANETOCENTRIC CONIC C3 61.717 VHL 7.856 DLA -41.93 RAL 142.45 RAD 6569.2 VEL 13.530 PTH 2.47 VHP 9.002 DPA 61.67 RAP 195.02 ECC 2.0157 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 128.90 3 41 16 128.90 11 51 31 128.90 3 41 16 128.90 11 51 31 128.90 3 41 16 128.90 3 41 16 128.90 11 51 31 1230.1 21.96 57.68 3 10 46 1830.11 17.05 34.98 32.47 21.97 5202.4 10 14 49 5802.42 17.07 272.09 32.48 122.32 21.96 28.69 3 10 46 10 14 49 1230.1 1830.11 17.05 34.98 32.47 265.80 122.32 202.42 2 10 46 1830.11 10 14 49 4800 5802.42 17.07 272.09 32.48 5202.4 21.97 28.69 17.05 34.98 32.47 1230.1 21.96 21.97 265.80 17.07 272.09 32.48 5202.4 122.32 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2076.1 SR 362.5 SS 725.2 CRT -.8031 CRS .9086 CST -.9785 LSA 2214.6 MSA 251.2 SSA 3.0 EL1 2096.7 EL2 213.9 ALF 171.93 SCT 3807.2 SGR 431.7 SG3 117.2 RRT -.0769 RRF -.3777 RTF .9462 SGB 3831.6 R23 .3049 R13 -.9465 .SGI 3807.4 SG2 430.4 THA 179.49 TDE-2.5587 TRA-3.0910 TC3 -.8613 BAU .7125 RDE .4885 RRA -.2268 RC3 .0635 FAU .03050 FDE-1.2398 FRA -.7711 FC3 -.4279 BSP 11793 BOE 2.6049 BRA 3.0993 BC3 .8636 FSP -377 FLIGHT TIME 136.00 ARRIVAL DATE DEC 8 1967 DISTANCE 404.134 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 26.886 GAL -7.32 AZL 101.10 MCA 195.49 SMA 129.61 ECC .21322 INC11.1003 V1 29.320 RP 107.48 LAP 2.95 LOP 136.60 VP 38.022 GAP 7.44 AZP 79.29 TAL 209.38 TAP 44.87 RCA 101.98 APO 157.25 V2 35.258 RC 134.624 GL -48.53 GP 48.19 ZAL 118.45 ZAP 128.19 ETS 62.33 ZAE 114.12 ETE 150.55 ZAC 90.20 ETC 22.61 CLP-158.04 PLANETOCENTRIC CONIC C3 46.941 VHL 6.851 DLA -38.39 RAL 144.83 RAD 6568.8 VEL 12.973 PTH 2.37 VHP 7.931 DPA 54.20 RAP 189.66 ECC 1.7725 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG 3 44 8 18.45 24.63 29.92 124.29 4 12 24 1095.3 22.81 17.88 1695.32 10 0 28 18.46 273.14 29.93 124.28 11 37 10 5202.0 22.83 266.39 5802.02 3 44 8 18.45 24.63 29.92 124.29 4 12 24 1095.3 22.81 17.88 62.92 1695.32 124.29 4 12 24 124.28 11 37 10 124.29 4 12 24 124.28 11 37 10 10 0 28 5802.02 18.46 273.14 29.93 5202.0 22.83 266.39 18.45 24.63 29.92 1095.3 22.81 17.88 62.92 3 44 8 1695.32 10 0 28 5802.02 5202.0 22.83 266.39 117.08 273.14 29.93 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3899.9 SGR 429.4 SG3 137.8 RRT -.3879 RRF -.6709 RTF .9316 ST 1996.4 SR 394.4 SS 718.2 CRT -.8550 CRS .9551 CST -.9702 TDE-2.1262 TRA-2.8313 TC3-1.2475 BAU .7856 ROE .4703 RRA -.0909 RC3 .1039 FAU .03722 FOE-1.2208 FRA -.7353 FC3 -.6865 BSP 12095 SGB 3923.5 R23 .3317 R13 -.9331 SGI 3903.5 SG2 395.4 THA 177.53 LSA 2143.1 MSA 253.2 SSA 3.9 EL1 2024.9 EL2 201.7 ALF 170.32 BOE 2.1776 BRA 2.8328 BC3 1.2518 FSP ARRIVAL DATE DEC 10 1967 FLIGHT TIME 138.00 LAUNCH DATE JUL 25 1967 DISTANCE 410.000 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 26.818 GAL -7.00 AZL 99.51 MCA 198.70 SMA 129.15 ECC .21342 INC 9.5126 V1 29.320 RP 107.48 LAP 3.04 LOP 139.85 VP 37.972 GAP 7.69 AZP 80.98 TAL 207.81 TAP 46.51 RCA 101.59 APO 156.72 V2 35.256 RC 136.791 GL -45.23 GP 42.06 ZAL 120.07 ZAP 133.45 ETS 59.09 ZAE 117.94 ETE 151.88 ZAC 90.10 ETC 19.79 CLP-157.86 PLANETOCENTRIC CONIC C3 38.400 VHL 6.197 OLA -35.71 RAL 147.33 RAD 6568.5 VEL 12.640 PTH 2.29 VHP 7.335 OPA 47.82 RAP 187.03 ECC 1.6320 C3 38.400 VHL 6.197 OLA -35.71 RAL 147.33 RAD 6568.5 VEL 12.640 PTM 2.29 VHP 7.355 OPA 47.82 RAP 187.65 ECC 1.632.65 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.27 4 16 51 1577.77 19.09 15.53 28.55 120.77 4 43 8 977.8 23.02 8.48 112.73 9 47 38 5818.36 19.10 274.90 28.54 120.76 11 24 37 5218.4 23.04 267.85 67.27 4 16 51 1577.77 19.09 15.53 28.53 120.77 4 43 8 977.8 23.02 8.48 112.73 9 47 38 5818.36 19.10 274.90 28.54 120.76 11 24 37 5218.4 23.04 267.85 67.27 4 16 51 1577.77 19.09 15.53 28.55 120.77 4 43 8 977.8 23.02 8.48 112.73 9 47 38 5818.36 19.10 274.90 28.54 120.76 11 24 37 5218.4 23.04 267.85 112.73 9 47 38 5818.36 19.10 274.90 28.54 120.76 11 24 37 5218.4 23.04 267.85 112.73 9 47 38 5818.36 19.10 274.90 28.54 120.76 11 24 37 5218.4 23.04 267.85 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1944.0 SR 387.7 SS 709.1 SGT 3993.1 SGR 418.3 SG3 153.5 TOE-1.8642 TRA-2.6256 TC3-1.6208 BAU .8344 RRT -.4865 RRF -.7516 RTF .9210 SGB 4015.0 R23 .3431 R13 -.9226 SG1 3998.4 SG2 365.0 THA 177.06 ROE .4190 RRA -.0454 RC3 .1202 FAU .04185 FOE-1.1836 FRA -.6750 FC3 -.9435 BSP 12397 CRT -.8678 CRS .9693 CST -.9632 LSA 2089.9 MSA 254.1 SSA 4.9 EL1 1973.2 EL2 189.8 ALF 170.09 BOE 1.9107 BRA 2.6260 BC3 1.6253 FSP -496 FLIGHT TIME 140.00 ARRIVAL DATE DEC 12 1967 LAUNCH DATE JUL 25 1967 DISTANCE 415.864 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 26.750 GAL -6.67 AZL 98.38 MCA 201.92 SMA 128.70 ECC .21376 INC 8.3774 V1 29.320 RP 107.49 LAP 3.12 LOP 143.10 VP 37.922 GAP 7.93 AZP 82.22 TAL 206.24 TAP 48.16 RCA 101.19 APO 156.21 V2 35.254 RC 138.949 GL -42.48 GP 37.03 ZAL 120.91 ZAP 137.86 ETS 56.60 ZAE 120.73 ETE 153.77 ZAC 89.61 ETC 17.74 CLP-158.25 PLANETOCENTRIC CONIC C3 32.852 VHL 5.732 DLA -33.70 RAL 149.83 RAD 6568.3 VEL 12.419 PTH 2.24 VHP 6.993 DPA 42.39 RAP 185.83 ECC 1.5407 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.92 4 48 9 1473.88 19.39 7.55 27.96 118.12 5 12 43 873.9 23.00 .30 118.12 5 12 43 118.11 11 13 44 118.12 5 12 43 19.41 277.05 27.97 5243.5 23.01 269.81 9 36 21 5843.45 109.08 873.9 23.00 .30 7.55 27.96 4 48 9 1473.88 19.39 70.92 118.11 11 13 44 121.02 9 9 33 115.33 12 0 13 5243.5 23.01 269.81 27.97 9 36 21 5843.45 277.05 19.41 109.0A 71.6 298.82 15.15 305.66 25.44 19.15 671.62 110.00 8 58 21 267.76 30.33 5093.7 26.97 260.06 5693.72 23.76 110.00 10 25 19 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1911.2 SR 372.9 SS 698.1 CRT -.8733 CRS .9767 CST -.9574 LSA 2052.9 MSA 254.0 SSA 6.0 SGT 4087.7 SGR 398.4 SG3 164.6 TDE-1.6938 TRA-2.4524 TC3-1.9816 BAU .8719 RRT -.5170 RRF -.7682 RTF .9130 SGB 4107.1 R23 .3422 R13 -.9144 SGI 4092.9 SG2 340.6 THA 177.10 ROE .3729 RRA -.0281 RC3 .1192 FAU .04470 FOE-1.1347 FRA -.5990 FC3-1.1780 BSP 12701 BOE 1.7343 BRA 2.4525 BC3 1.9852 FSP -532

FLIGHT TIME 134.00

ARRIVAL DATE DEC 14 1967

LAUNCH DATE JUL 25 1967

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DISTANCE 421.720
   HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 26.683 GAL -6.33 AZL 97.52 MCA 205.15 SMA 128.25 ECC .21423 INC 7.5213 V1 29.320 RP 107.50 LAP 3.19 LOP 146.35 VP 37.872 GAP 8.18 AZP 83.18 TAL 204.65 TAP 49.80 RCA 100.78 APO 155.73 V2 35.251 RC 141.095 GL -40.19 GP 32.89 ZAL 121.11 ZAP 141.58 ETS 54.55 ZAE 122.78 ETE 155.78 ZAC 88.78 ETC 16.12 CLP-158.91
   PLANETOCENTRIC CONIC
    C3 28.940 VHL 5.380 DLA -32.22 RAL 152.36 RAD 6568.2 VEL 12.260 PTH 2.21 VHP 6.798 DPA 37.76 RAP 185.49 ECC 1.4763
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     5 17 39 1381.98
9 26 58 5871.67
5 17 39 1381.98
9 26 58 5871.67
8 24 32 777.02
                                                                                 28.00
                                                                                                                 5 40 41
                                                                                                                                     782.0
                                                                                                 116.12
116.11
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                                                      19.58
                                                                    279.32
       106.05
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                                                                                                                                     782.0
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                                                                                                   116.12 5 40 41
116.11 11 4 50
122.46 8 37 29
110.13 12 51 20
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       106.05
                                                      19.58
                                                                    279.32
                                                                                     28.00
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                                                                                                                                    177.0
                                                    11.37
                                                                    311.49
                                                                                     23.23
                                                                                                                                                    15.57
                                                                                                                               4924.6
                                  5524.63
                                                                    256.65
                                                                                                                                                    30.70
                                                                                                                                                                   248.33
                                                                                     32.03
                   11 19 16
                                                      28.23
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1898.0 SR 360.4 SS 689.0 CRT -.8792 CRS .9820 CST -.9530 LSA 2035.5 MSA 253.0 SSA 7.1 EL1 1924.5 EL2 169.4 ALF 170.45
                                                                        SCT 4190.4 SCR 379.6 SC3 172.6
RRT - .5232 RRF - .7589 RTF .9073
SCB 4207.6 R23 .3302 R13 -.9085
SCI 4195.2 SC2 323.1 THA 177.27
    TOE-1.5828 TRA-2.3003 TC3-2.3381 BAU
                                                          .9056
    RDE .3383 RRA -.0191 RC3 .1088 FAU .04637
FDE-1.0851 FRA -.5187 FC3-1.3872 BSP 13095
    BDE 1.6185 BRA 2.3009 BC3 2.3406 FSP -564
                                                                                                                                           ARRIVAL DATE DEC 16 1967
                                                                             FLIGHT TIME 144.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 427.562
   RL 151.95 LAL .00 LOL 301.39 VL 26.616 GAL -5.98 AZL 96.85 MCA 208.38 SMA 127.81 ECC .21484 INC 6.8490 VI 29.320 RP 107.51 LAP 3.25 LOP 149.60 VP 37.822 GAP 8.43 AZP 83.97 TAL 203.05 TAP 51.43 RCA 100.35 APO 155.27 V2 35.247 RC 143.232 GL -38.24 GP 29.48 ZAL 120.82 ZAP 144.74 ETS 52.84 ZAE 124.29 ETE 157.71 ZAC 87.69 ETC 14.80 CLP-159.71
   PLANETOCENTRIC CONIC
    C3 26.014 VHL 5.100 DLA -31.15 RAL 154.91 RAD 6568.1 VEL 12.140 PTH
                                                                                                        2.18 VHP 6.695 DPA 33.75 RAP 185.71 ECC 1.4281
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 45 1 1301.62
9 19 59 610.96
5 45 1 1301.62
9 19 59 610.96
8 13 48 817.92
                                                                                                                                                     22.88
                                                                                  28.51
                                                                                                                                     701.6
                                                                                                   114.61 6 6 42
                                                      19.72
                                                                    354.56
                                                                                                   114.60 9 30 9
114.61 6 6 42
114.60 9 30 9
122.89 8 27 25
106.73 13 20 53
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                                                      19.74
                                                                    303.56
                                                                                     28.51
       103.55
                                                                                                                                     701.6
                                                                                                                                                     22.88
                                                      19.72
                                                                    354.56
                                                                                     28.51
                                                   19.74
                                                                                                                                      11.0
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                                                                                                                                                                  296.08
       103.55
                                                                    303.56
                                                                                     28.51
                                                                    313.70
                                                                                                                                     217.9
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                      8 13 48
                                     817.92
                                                       9.87
                                                                                     22.92
       110.00
                   11 50 22 5430.70
                                                                    250.09
                                                                                                                                   4830.7
                                                                                                                                                     32.24
                                                      30.25
                                                                                     32.88
       110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4409.3 SGR 379.3 SG3 187.0

RRT -.5603 RRF -.7603 RTF .9113

SGB 4425.6 R23 .2984 R13 -.9124

SG1 4414.5 SG2 313.8 THA 177.23
                                                                                                                               ST 1957.9 SR 362.9 SS 713.4
CRT -.8939 CRS .9870 CST -.9538
    TOE-1.5596 TRA-2.2094 TC3-2.7662 BAU .9628
    ROE .3230 RRA -.0027 RC3 .1082 FAU .04926
                                                                                                                              LSA 2100.2 MSA 251.5 SSA 8.3
EL1 1984.8 EL2 160.5 ALF 170.53
    FDE-1.0838 FRA -.4845 FC3-1.6394 BSP 14721
     BOE 1.5927 BRA 2.2094 BC3 2.7683 FSP -683
                                                                                                                                          ARRIVAL DATE DEC 18 1967
                                                                            FLIGHT TIME 146.00
LAUNCH DATE JUL 25 1967
                                                                            DISTANCE 433.407
   HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 26.550 GAL -5.63 AZL 96.30 HCA 211.62 SHA 127.38 ECC .21557 INC 6.3041 VI 29.320 RP 107.55 LAP 3.30 LOP 152.85 VP 37.771 GAP 8.67 AZP 84.63 TAL 201.43 TAP 53.05 RCA 99.92 APO 154.84 VZ 35.243 RC 145.356 GL -36.56 GP 26.63 ZAL 120.08 ZAP 147.46 ETS 51.40 ZAE 125.43 ETE 159.48 ZAC 86.36 ETC 13.69 CLP-160.57
   PLANETOCENTRIC CONIC
    C3 23.719 VHL 4.870 DLA -30.42 RAL 157.53 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 6.650 DPA 30.26 RAP 186.33 ECC 1.3904
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 113.49 6 29 59
113.48 9 27 2
113.49 6 29 59
113.49 6 29 59
113.48 9 27 2
123.06 8 26 9
104.30 13 42 17
                                                                                                                                                22.92 342.09
                                                                                 29.42
                                                                                                                                    634.8
                     6 9 24 1234.80
9 16 29 632.32
                                                     19.92
                                                                   349.64
        78.38
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       101.62
                                                      19.93
                                                                    305.26
                                                                                     29.42
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                                  1234.80
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        78.38
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       101.62
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                      8 12 15
                                     834.58
                                                       9.25
                                                                    314.60
                                                                                     23.50
       110.00
                                                                                                                                                    33.03
                                 5368.57
                                                                                                                                   4768.6
                                                                    245.60
                                                                                     33.76
                   12 12 49
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4327.7 SGR 347.6 SG3 175.8

RRT -.4748 RRF -.6827 RTF .8944

SGB 4341.6 R23 .2908 R13 -.8952

SG1 4330.8 SG2 305.7 THA 177.81
                                                                                                                              ST 1877.6 SR 341.3 SS 657.3
CRT -.8931 CRS .9905 CST -.9454
    TOE-1.4356 TRA-1.9928 TC3-2.9905 BAU .9485
    ROE .2901 RRA -.0126 RC3 .0651 FAU .04582
FOE -.9647 FRA -.3276 FC3-1.6724 BSP 13217
                                                                                                                              LSA 2003.1 MSA 247.4 SSA
                                                                                                                                                                       9.5
                                                                                                                               EL1 1902.3 EL2 151.6 ALF 170.72
    BDE 1.4646 BRA 1.9928 BC3 2.9912 FSP -549
                                                                                                                                           ARRIVAL DATE DEC 20 1967
LAUNCH DATE JUL 25 1967
                                                                             FLIGHT TIME 148.00
                                                                            DISTANCE 439.232
   HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 26.484 GAL -5.26 A7L 95.85 MCA 214.85 SMA 126.96 ECC .21645 INC 5.8509 VI 29.320 RP 107.54 LAP 3.34 LOP 156.10 VP 37.720 GAP 8.92 A7P 85.19 TAL 199.80 TAP 54.66 RCA 99.48 APO 154.44 V2 35.237 RC 147.469 GL -35.09 GP 24.24 ZAL 118.98 ZAP 149.83 ETS 50.22 ZAE 126.28 ETE 161.07 ZAC 84.87 ETC 12.76 CLP-161.47
   PLANETOCENTRIC CONIC
    C3 21.872 VHL 4.677 DLA -29.97 RAL 160.23 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 6.647 DPA 27.16 RAP 187.23 ECC 1.3600
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
79.76 6 30 28 1182.25 20.15 345.82 30.67 112.66 6 50 10 582.3 23.05 338.22
                                                                                                  112.66 6 50 10
112.64 9 27 41
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                      9 16 56
                                     645.44
                                                      20.17
                                                                    306.34
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112.64 9 27 41 45.4
123.09 8 29 59 238.1
102.54 13 59 20 4725.6
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       100.24
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                                                                                     24.65
                      8 16 0
                                      838.13
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                                                                    314.79
                                                                                                                                                    33.46
                                                                                     34.86
       110.00
                    12 30 34 5325.60
                                                      32.06
                                                                    242.44
                                                                      MID-COURSE EXECUTION ACCURACY
SGT 4432.7 SGR 344.0 SG3 178.0
RRT -.4606 RRF -.6447 RTF .8924
SGB 4446.0 R23 .2610 R13 -.8931
SG1 4435.5 SG2 305.2 THA 177.94
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1904.8 SR 341.2 SS 655.3
CRT - .9059 CRS .9941 CST - .9449
LSA 2028.5 MSA 242.8 SSA 10.7
    TOE-1.4133 TRA-1.8580 TC3-3.3378 BAU .9761
     RDE .2785 RRA -.0063 RC3 .0463 FAU .04543
     FOE - .9264 FRA - .2509 FC3-1.7981 BSP 13683
                                                                                                                               EL1 1929.8 EL2 142.6 ALF 170.73
    BOE 1.4405 BRA 1.8580 BC3 3.3381 FSP - -566
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 22 1967

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FLIGHT TIME 150.00
LAUNCH DATE JUL 25 1967
                                                                      DISTANCE 445.045
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 26.419 GAL -4.88 AZL 95.47 HCA 218.09 SMA 126.54 ECC .21747 INC 5.4659 VI 29.320 RP 107.56 LAP 3.37 LOP 159.35 VP 37.668 GAP 9.17 AZP 85.69 TAL 198.17 TAP 56.25 RCA 99.02 APO 154.06 V2 35.231 RC 149.570 GL -33.77 GP 22.22 ZAL 117.56 ZAP 151.92 ETS 49.27 ZAE 126.94 ETE 162.49 ZAC 83.23 ETC 11.95 CLP-162.37
   PLANETOCENTRIC CONIC
    C3 20.350 VHL 4.511 DLA -29.73 RAL 163.03 RAD 6567.8 VEL 11.905 PTH 2.12 VHP 6.673 DPA 24.38 RAP 188.35 ECC 1.3349
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       80.54
                  6 47 36 1145.90
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                                 647.13
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        99.46
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       100.00
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                    9 52 22 5838.61
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      100.00
                                                  22.62
                                                               278.23
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                                                                                            123.03
                   8 23 45
                                 832.31
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                                                               314.47
      110.00
                                                                                            101.33 14 13 27
                                                                                                                       4696.8
                                                                                                                                       33.69
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                                                                              36.26
                  12 45 11
                                 5296.77
                                                  32.47
                                                               240.29
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 4516.7 SGR 343.4 SG3 177.7

RRT -.4396 RRF -.6013 RTF .8896

SGB 4529.7 R23 .2320 R13 -.8901

SG1 4519.2 SG2 308.2 THA 178.08
                                                                                                                     ST 1932.8 SR 342.6 SS 650.6
CRT -.9193 CRS .9968 CST -.9449
    TDE-1.3998 TRA-1.7131 TC3-3.6695 BAU .9984
    ROE .2697 RRA -.0012 RC3 .0259 FAU .04439
                                                                                                                    LSA 2054.3 MSA 236.9 SSA 12.0
    FOE -.8856 FRA -.1701 FC3-1.8884 BSP 13948
BDE 1.4255 BRA 1.7131 BC3 3.6696 FSP -565
                                                                                                                     EL1 1958.4 EL2 133.0 ALF 170.70
                                                                                                                                ARRIVAL DATE DEC 24 1967
                                                                       FLIGHT TIME 152.00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 450.846
   RL 151.95 LAL .00 LOL 301.39 VL 26.355 GAL -4.50 A7L 95.13 MCA 221.32 SMA 126.13 ECC .21865 INC 5.1329 V1 29.320 RP 107.58 LAP 3.39 LOP 162.60 VP 37.617 GAP 9.41 AZP 86.14 TAL 196.52 TAP 57.84 RCA 98.55 APO 153.71 V2 35.225 RC 151.657 GL -32.56 GP 20.49 ZAL 115.85 ZAP 153.78 ETS 48.53 ZAE 127.44 ETE 163.74 ZAC 81.47 ETC 11.25 CLP-163.28
   PLANETOCENTRIC CONIC
                                                                                                2.10 VHP 6.721 DPA 21.87 RAP 189.63 ECC 1.3140
    C3 19.080 VHL 4.368 DLA -29.68 RAL 165.95 RAD 6567.8 VEL 11.852 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      23.56
                                                                                                                          526.1
                                                                                            111.65 7 19 27
                                                                             34.12
                    7 0 41 1126.12
                                                  20.80
                                                               341.94
       80.72
                                                                                            111.64 9 43 2
113.98 9 19 43
109.33 11 44 50
122.91 8 48 20
100.56 14 25 35
                                                                                                                                         23.57
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                                                                                                                            36.3
                    9 32 26
                               636.31
                                                   20.82
                                                               305.95
                                                                                                                                         21.49
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                  9 7 48 715.02
10 7 59 5810.68
                                                   18.40
                                                               310.71
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                                                  23.26
                                                               276.40
                                                                               35.11
       100.00
                                                                                                                                         14.08
                                                                                                                                                       307.29
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                    8 34 40
                                  819.54
                                                   9.81
                                                               313.79
       110.00
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                                5278.93
                  12 57 36
                                                  32.70
                                                               238.95
                                                                               37.96
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 4598.6 SGR 346.5 SG3 176.7
RRT -.4208 RRF -.5600 RTF .8875
                                                                                                                     ST 1971.2 SR 346.4 SS 647.9
CRT -.9334 CRS .9984 CST -.9460
    TDE-1.4000 TRA-1.5646 TC3-3.9973 BAU 1.0196
    RDE .2641 RRA .0038 RC3 .0068 FAU .04312
                                                                   SGB 4611.6 R23 .2037 R13 -.8879
SG1 4600.9 SG2 314.1 THA 178.18
                                                                                                                     LSA 2091.0 MSA 229.8 SSA 13.3
    FDE -.8492 FRA -.0930 FC3-1.9563 BSP 14224
                                                                                                                     EL1 1997.6 EL2 122.6 ALF 170.65
    BDE 1.4247 BRA 1.5646 BC3 3.9973 FSP -562
                                                                                                                               ARRIVAL DATE CEC 26 1967
                                                                      FLIGHT TIME 154.00
LAUNCH CATE JUL 25 1967
                                                                      DISTANCE 456.632
    RL 151.95 LAL .00 LOL 301.39 VL 26.291 CAL -4.10 AZL 94.84 MCA 224.56 SMA 125.73 ECC .21998 INC 4.8401 V1 29.320 RP 107.60 LAP 3.39 LOP 165.85 VP 37.566 CAP 9.67 AZP 86.55 TAL 194.86 TAP 59.42 RCA 98.07 APO 153.39 V2 35.217 RC 153.730 GL -51.42 GP 19.00 TAL 113.87 ZAP 155.46 ETS 48.00 ZAE 127.84 ETE 164.84 ZAC 79.62 ETC 10.64 CLP-164.18
   PLANETOCENTRIC CONIC
    C3 18.014 VML 4.244 DLA -29.77 RAL 169.03 RAD 6567.7 VEL 11.807 PTH 2.09 VMP 6.785 CPA 19.56 RAP 191.05 ECC 1.2965
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          111.40 7 29 3

111.39 9 57 28

113.16 9 39 6

109.64 11 49 30

122.73 9 1 40

100.18 14 36 18
                                                                                                                          520.8
                                                                                                                                     23.93 333.98
                                                                           36.30
                                                  21.21
                                                               341.71
                     7 10 23 1120.79
        80.39
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                    9 47 13
                                  614.66
                                                   21.22
                                                                304.51
                                                                               36.31
        99.61
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                                                                                                                                        22.42
                                                                                                                                                      300.80
                    9 27 49
                                                   19.45
                                                               308.34
                                                                               35.53
       100.00
                                   676.67
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                                                                                                                         5222.1
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       100.00
                   10 12 28
                                  5822.06
                                                   23.00
                                                               277.14
                                                                               37.03
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                    8 48 18
                                   801.39
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       110.00
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                               5270.10
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                                                               238.28
                                                                               39.98
                   13 8 28
                                                  32.81
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4678.4 SGR 352.4 SG3 175.1
RRT -.4054 RRF -.5228 RTF .8860
SGB 4691.7 R23 .1771 R13 -.8864
SG1 4680.6 SG2 322.0 THA 178.24
                                                                                                                     ST 2019.0 SR 352.1 SS 646.9

CRT -.9474 CRS .9989 CST -.9479

LSA 2137.7 MSA 221.3 SSA 14.6
    TCE-1.4115 TRA-1.4113 TC3-4.3187 BAU 1.0400
    RCE .2608 RRA .0087 RC3 -.0104 FAU .04169
FDE -.8165 FRA -.0197 FC3-2.0037 BSP 14497
                                                                                                                     ELI 2046.5 ELZ 111.2 ALF 170.59
    BOE 1.4354 BRA 1.4114 BC3 4.3187 FSP -558
                                                                                                                                 ARRIVAL DATE DEC 28 1967
LAUNCH DATE JUL 25 1967
                                                                       FLIGHT TIME 156.00
                                                                       DISTÂNCE 462.404
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 26.228 GAL -3.69 AZL 94.58 MCA 227.79 SMA 125.34 ECC .22149 INC 4.5793 VI 29.320 RP 107.63 LAP 3.39 LOP 169.09 VP 37.514 GAP 9.92 AZP 86.92 TAL 193.20 TAP 60.99 RCA 97.58 APO 153.10 V2 35.210 RC 155.789 GL -30.33 GP 17.71 ZAL 111.63 ZAP 156.99 ETS 47.66 ZAE 128.16 ETE 165.81 ZAC 77.69 ETC 10.11 CLP-165.07
   PLANETOCENTRIC CONIC
    C3 17.121 VHL 4.138 DLA -29.99 RAL 172.25 RAD 6567.7 VEL 11.769 PTH 2.08 VHP 6.864 CPA 17.43 RAP 192.57 ECC 1.2818
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.28 7 36 39
111.27 11 43 23
                                                                                                                                       24.35
                                                                               38.79
                     7 17 52 1126.19
         79.69
                                                  21.65
                                                                342.30
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       100.31
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100.13 14 46 0
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                                                                                42.32
       110.00
                    13 18 11
                                  5268.90
                                                   32.82
                                                                238.19
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2071.1 SR 359.0 SS 645.4

CRT -.9604 CRS ..9980 CST -.9503

LSA 2188.5 MSA 212.0 55A 15.9
                                                                  SGT 4748.0 SGR 360.2 SG3 172.8
RRT -.3920 RRF -.4895 RTF .8846
     TOE-1.4293 TRA-1.2489 TC3-4.6234 BAU 1.0583
     RDE .2592 RRA .0130 RC3 -.0257 FAU .04009
FDE -.7849 FRA .0523 FC3-2.0270 BSP 14703
BOE 1.4526 BRA 1.2490 BC3 4.6234 FSP -548
                                                                   SGB 4761.6 R23 .1533 R13 -.8849
SG1 4750.1 SG2 331.2 THA 178.29
                                                                                                                      EL1 2099.6 EL2 98.7 ALF 170.53
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LAUNCH DATE JUL 25 1967

ARRIVAL DATE DEC 30 1967

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DISTANCE 468.160
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 26.166 GAL -3.27 AZL 94.34 MCA 231.03 SMA 124.95 ECC .22317 INC 4.3440 VI 29.320 RP 107.65 LAP 3.38 LOP 172.34 VP 37.462 GAP 10.18 AZP 87.26 TAL 191.53 TAP 62.55 RCA 97.07 APO 152.83 VZ 35.201 RC 157.834 GL -29.27 GP 16.59 ZAL 109.17 ZAP 158.39 ETS 47.52 ZAE 128.42 ETE 166.66 ZAC 75.69 ETC 9.64 CLP-165.95
   PLANETOCENTRIC CONIC
    C3 16.382 VHL 4.047 OLA -30.30 RAL 175.65 RAD 6567.7 VEL 11.737 PTH
                                                                                                   2.07 VHP 6.954 DPA 15.44 RAP 194.19 ECC 1.2696
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  7 24 24 1138.45
10 26 5 5841.20
7 24 24 1138.45
10 26 5 5841.20
9 22 34 753.38
                                                                              41.59
       78.75
                                                    22.11
                                                                 343.40
                                                                                               111.26
                                                                                                              7 43 23
                                                                                                                               538.4
                                                                                                111.25 12 3 26
                                                    22.12
                                                                 278.22
                                                                                  41.59
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       101.25
                                                                  343.40
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                                                                                                111.26
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        78.75
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                                                                                 41.59
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       101.25
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                                                                                               122.17 9 35 8
100.36 14 55 0
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                                                                                                                                                            303.56
       110.00
                                                    12.23
                                                                  310.20
                                                                                36.39
                                                                                                                               153.4
                                                                                                                                              16.39
                                                                               44.98
                  13 27 6
                                                                 238.60
                                                                                                                                              33.84
       110.00
                                   5274.26
                                                    32.76
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 4821.6 SGR 369.7 SG3 170.6
RRT - .3859 RRF - .4627 RTF .8843
SGB 4835.7 R23 .1316 R13 - .8846
SGI 4823.7 SG2 341.3 THA 178.31
                                                                                                                         ST 2133.6 SR 367.5 SS 645.8
CRT -.9720 CRS .9959 CST -.9533
    TOE-1.4571 TRA-1.0825 TC3-4.9171 BAU 1.0769
    RDE .2595 RRA .0169 RC3 -.0381 FAU .03849
FDE -.7574 FRA .1190 FC3-2.0341 BSP 14962
                                                                                                                        LSA 2250.2 MSA 201.8 SSA 17.3
    BOE 1.4800 BRA 1.0826 BC3 4.9173 FSP -542
                                                                                                                         EL1 2163.4 EL2 85.2 ALF 170.48
                                                                         FLIGHT TIME 160.00
                                                                                                                                     ARRIVAL DATE JAN 1 1968
LAUNCH DATE JUL 25 1967
                                                                         DISTANCE 473.899
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 26.104 GAL -2.83 AZL 94.13 HCA 234.26 SMA 124.57 ECC .22503 INC 4.1294 V1 29.320 RP 107.68 LAP 3.35 LOP 175.58 VP 37.411 GAP 10.44 AZP 87.59 TAL 189.85 TAP 64.11 RCA 96.54 APO 152.60 V2 35.192 RC 159.863 GL -28.20 GP 15.60 ZAL 106.48 ZAP 159.68 ETS 47.57 ZAE 128.64 ETE 167.41 ZAC 73.64 ETC 9.23 CLP-166.81
   PLANETOCENTRIC CONIC
    C3 15.784 VHL 3.973 DLA -30.67 RAL 179.23 RAD 6567.6 VEL 11.712 PTH
                                                                                                   2.06 VHP 7.055 DPA 13.58 RAP 195.88 ECC 1.2598
    15.784 VML 3.973 ULA -30.67
LNCH AZMTH LNCH TIME L-I TIME
77.70 7 30 58 1154.50
102.30 10 48 5 5808.24
77.70 7 30 58 1154.50
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              44.69
                                                    22.58
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121.81 9 54 50
100.84 15 3 34
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       102.30
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                                                    22.59
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                                725.42
5285.31
                    9 42 45
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                                                    13.24
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       110.00
                   13 35 28
                                                   32.62
                                                                 239.43
                                                                                 47.96
                                                                                                                              4685.3
                                                                                                                                              33.77
                                                                                                                                                            230.38
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     $GT 4892.1 SGR 380.1 SG3 168.2
RRT -.3790 RRF -.4411 RTF .8846
                                                                                                                         ST 2200.2 SR 376.9 SS 646.0
CRT -.9816 CRS ..9924 CST -.9564
    TOE-1.4899 TRA -.9082 TC3-5.1886 BAU 1.0949
    ROE .2613 RRA .0200 RC3 -.0476 FAU .03687
FOE -.7313 FRA .1831 FC3-2.0223 BSP 15212
BOE 1.5126 BRA .9084 BC3 5.1888 FSP -535
                                                                   SGB 4906,9 R23 .1125 R13 -.8849
SG1 4894.3 SG2 351.6 THA 178.30
                                                                                                                         LSA 2315.9 MSA 191.4 SSA 18.7
                                                                                                                        ELI 2231.1 EL2 71.0 ALF 170.44
                                                                                                                                    ARRIVAL DATE JAN 3 1968
                                                                         FLIGHT TIME 162.00
LAUNCH DATE JUL 25 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 479.620
    RL 151.95 LAL .00 LOL 301.39 VL 26.043 GAL -2.38 AZL 93.93 HCA 237.49 SMA 124.20 ECC .22710 INC 3.9316 V1 29.320 RP 107.71 LAP 3.31 LOP 178.82 VP 37.359 GAP 10.71 AZP 87.88 TAL 188.16 TAP 65.65 RCA 96.00 APO 152.41 V2 35.183 RC 161.876 GL -27.12 GP 14.73 ZAL 103.60 ZAP 160.87 ETS 47.80 ZAE 128.82 ETE 168.07 ZAC 71.53 ETC 8.88 CLP-167.66
   PLANETOCENTRIC CONIC
    C3 15.320 VHL 3.914 OLA -31.08 RAL 182.99 RAD 6567.6 VEL 11.692 PTH 2.06 VHP 7.165 OPA 11.81 RAP 197.64 ECC 1.2521
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         25.74
                  7 38 13 1172.25
11 10 50 5777.02
7 38 13 1172.25
11 10 50 5777.02
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111.45 12 47 7
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      103.38
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111.45 12 47 7
121.39 10 16 15
101.51 15 11 56
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        76.62
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                                                                 273.80
      103.38
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      110.00
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                                                                 240.62
                                                                                 51.25
                  13 43 34
                                  5301.20
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 4959.2 SCR 391.0 SC3 165.6

RRT - .3768 RRF - .4242 RTF .8856

SCB 4974.6 R23 .0957 R13 - .8858

SCI 4961.4 SC2 362.0 THA 178.29
                                                                                                                        ST 2268.0 SR 387.0 SS 645.0
CRT -.9890 CRS .9876 CST -.9595
LSA 2382.5 MSA 180.9 SSA 20.2
    TOE-1.5259 TRA -.7256 TC3-5.4296 BAU 1.1121
    RDE .2643 RRA .0222 RC3 -.0542 FAU .03523
    FOE -.7059 FRA .2443 FC3-1.9911 BSP 15457
BDE 1.5486 BRA .7260 BC3 5.4299 FSP -528
                                                                                                                        EL1 2300.1 EL2 56.3 ALF 170.41
                                                                         FLIGHT TIME 164.00
                                                                                                                                    ARRIVAL DATE JAN 5 1968
LAUNCH DATE JUL 25 1967
                                                                         DISTANCE 485.322
  HELIOCENTRIC CONIC
   RL 151.95 LAL .00 LOL 301.39 VL 25.983 GAL -1.92 A7L 93.75 MCA 240.72 SMA 123.84 ECC .22937 INC 3.7477 V1 29.320 RP 107.74 LAP 3.27 LOP 182.06 VP 37.308 GAP 10.99 A7P 88.16 TAL 186.47 TAP 67.19 RCA 95.43 APO 152.24 V2 35.172 RC 163.875 GL -26.00 GP 13.96 ZAL 100.53 ZAP 161.98 ETS 48.24 ZAE 128.98 ETE 168.66 ZAC 69.38 ETC 8.58 CLP-168.50
  PLANETOCENTRIC CONIC
    C3 14.987 VHL 3.871 DLA -31.50 RAL-186.93 RAD 6567.6 VEL 11.678 PTH
                                                                                                   2.05 VHP 7.284 DPA 10.14 RAP 199.46 ECC 1.2467
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     7 46 40 1190.18
11 33 49 5749.23
                                                   23.46
                                                                 347.86
                                                                                 51.84
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                   11 33 49
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11 33 49 5749.23
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        75.58
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120.93 10 39 5
102.35 15 20 21
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                                                                 271.88
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      104.42
                  11 33 49
                                                                                                                               66.4
                                                                                                                                             19.32
                                                                                                                                                           298.51
                                                   15.33
                                                                 305.36
                                                                                 47.59
      110.00
                  10 27 59
                                   666.38
                                                                                                                                                          233.13
                                 5321.03
                                                                                                                            4721.0
                                                                                                                                             33.50
                  13 51 40
                                                                 242.10
                                                                               54.84
                                                   32.13
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5014.0 SGR 401.7 SG3 162.5

RRT - .3755 RRF - .4101 RTF .8862

SGB 5030.0 R23 .0815 R13 - .8863 -

SGI 5016.3 SG2 372.1 THA 178.27
                                                                                                                        ST 2329.0 SR 397.3 SS 640.7
CRT -.9943 CRS .9814 CST -.9621
    TOE-1.5600 TRA -.5309 TC3-5.6238 BAU 1.1269
    ROE .2683 RRA .0230 RC3 -.0586 FAU .03351
    FDE -.6787 FRA .3057 FC3-1.9356 BSP 15611
                                                                                                                        LSA 2441.8 MSA 171.3 SSA 21.7
    BDE 1.5829 BRA .5314 BC3 5.6241 FSP -516
                                                                                                                        "EL1 2362.2 EL2 41.9 ALF 170.37
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FLIGHT TIME 158,00

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LAUNCH DATE JUL 25 1967
                                                                      FLIGHT TIME 166.00
                                                                                                                               ARRIVAL CATE JAN 7 1968
   HELIOCENTRIC CONIC
                                                                      OISTANCE 491.002
    RL 151.95 LAL .00 LOL 301.39 VL 25.923 GAL -1.44 AZL 93.58 MCA 243.95 SMA 123.48 ECC .23187 INC 3.5752 VI 29.320 RP 107.78 LAP 3.21 LOP 185.29 VP 37.256 GAP 11.27 AZP 88.43 TAL 184.78 TAP 68.72 RCA 94.85 APO 152.11 V2 35.162 RC 165.860 GL -24.85 GP 13.28 ZAL 97.30 ZAP 163.02 ETS 48.87 ZAE 129.12 ETE 169.18 ZAC 67.20 ETC 8.32 CLP-169.32
   PLANETOCENTRIC CONIC
    C3 14.786 VHL 3.845 OLA -31.91 RAL 191.04 RAD 6567.6 VEL 11.669 PTH 2.05 VHP 7.413 OPA
    LNCH AZMIM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  7 56 34
11 56 41
       74.64
                                 1207.48
                                                  23.82
                                                               349.34
                                                                              55.87
                                                                                            111.89
                                                                                                        8 16 41
                                                                                                                         607.5
                                                                                                       13 32 7
      105.36
                                 5725.88
                                                  23.83
                                                               270.27
                                                                              55.87
                                                                                            111.87
                                                                                                                        5125.9
                                                                                                                                        26.59
        74.64
                    7 56 34
                                 1207.48
                                                  23.82
                                                               349.34
                                                                              55.87
                                                                                            111.89
                                                                                                        8 16 41
                                                                                                                          607.5
                                                                                                                                                     341.45
                                                                                                                                        26.58
                  11 56 41 5725.88
                                                                                                      13 32 7
                                                                                            111.87
       105.36
                                                  23.83
                                                               270.27
                                                                              55.87
                                                                                                                        5125.9
                                                                                                                                        26.59
                                                                                            120.46 11 2 58
103.29 15 29 9
                                  637.69
                                                               303.74
      110.00
                  10 52 20
                                                  16.33
                                                                              51.95
                                                                                                                           37.7
                                                                                                                                        20.25
                                                                                                                                                     296.81
                  14 0 6 5343.67
                                                               243.78
                                                                                                                        4743.7
      110.00
                                                                              58.72
                                                                                                                                        33.29
                                                                                                                                                     234.87
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SCT 5076.3 SCR 412.5 SC3 159.6
RRT - .3777 RRF - .4012 RTF .8883
SCB 5093.1 R23 .0689 R13 - .8885
SCI 5078.7 SC2 381.8 THA 178.23
                                                                                                                    ST 2389.9 SR 408.2 SS 635.9
CRT -.9973 CRS .9742 CST -.9647
    TOE-1.5971 TRA -.3316 TC3-5.7812 BAU 1.1428
    ROE .2738 RRA .0230 RC3 -.0595 FAU .03189
    FDE -.6533 FRA .3619 FC3-1.8670 BSP 15863
BDE 1.6204 BRA .3324 BC3 5.7815 FSP -510
                                                                                                                    LSA 2501.1 MSA 162.6 SSA 23.0
                                                                                                                    EL1 2424.3 EL2 29.5 ALF 170.33
LAUNCH DATE JUL 25 1967
                                                                      FLIGHT TIME 168.00
                                                                                                                               ARRIVAL DATE JAN 9 1968
  HELIOCENTRIC CONIC
                                                                     DISTANCE 496.660
   RL 151.95 LAL .00 LOL 301.39 VL 25.864 GAL -.94 AZL 93.41 HCA 247.17 SMA 123.13 ECC .23461 INC 3.4120 V1 29.320 RP 107.81 LAP 3.14 LOP 188.52 VP 37.205 GAP 11.56 AZP 88.67 TAL 183.08 TAP 70.25 RCA 94.24 APO 152.02 V2 35.151 RC 167.829 GL -23.65 GP 12.66 ZAL 93.94 ZAP 164.00 ETS 49.71 ZAE 129.24 ETE 169.64 ZAC 64.99 ETC 8.10 CLP-170.13
  PLANETOCENTRIC CONIC
    C3 14.718 VHL 3.836 DLA -32.28 RAL 195.30 RAD 6567.6 VEL 11.666 PTH 2.05 VHP 7.550 DPA
                                                                                                                            7.02 RAP 203.24 ECC 1.2422
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       73.82
                    8 8 4 1223.55
                                                              350.69
                                                  24.11
                                                                              60.17
                                                                                           112.14 8 28 28
                                                                                                                         623.6
                                                                                                                                        26.90
                                                                                                                                                 342.79
                  12 19 9
                                5707.78
                                                                                                       13 54 17
      106.18
                                                  24.12
                                                               269.01
                                                                              60.18
                                                                                            112.13
                                                                                                                        5107.8
                                                                                                                                        26.91
                                                                                                                                                     261.12
                  8 8 4 1223.55
12 19 9 5707.78
       73.82
                                                  24.11
                                                               350.69
                                                                              60.17
                                                                                                        8 28 28
                                                                                            112.14
                                                                                                                          623.6
                                                                                                                                        26.90
                                                                                                                                                     342.79
      106.18
                                                                                                       13 54 17
                                                  24.12
                                                               269.01
                                                                              60.18
                                                                                            112.13
                                                                                                                        5107.8
                                                                                                                                        26.91
                                                                                                                                                     261.12
                                                                                                     11 27 22
15 38 41
      110.00
                  11 17 11
                                  611.58
                                                  17.22
                                                               302.24
                                                                              56.58
                                                                                            119.99
                                                                                                                          11.6
                                                                                                                                        21.08
                                                                                                                                                     295.24
                  14 9 13
      110.00
                                 5367.74
                                                  31.40
                                                               245.54
                                                                              62.88
                                                                                            104.27
                                                                                                                        4767.7
                                                                                                                                                     236.70
                                                                                                                                        33.04
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
    TOE-1.6302 TRA -.1216 TC3-5.8820 BAU 1.1574
                                                                  SGT 5132.5 SGR 423.0 SG3 156.6
RRT -.3813 RRF -.3954 RTF .8907
                                                                                                                    ST 2439.2 SR 419.0 SS 628.0 CRT -.9983 CRS .9655 CST -.9668
    RDE .2805 RRA .0218 RC3 -.0579 FAU .03027
   FOE -.6268 FRA .4172 FC3-1.7806 BSP 16065
BOE 1.6541 BRA .1235 BC3 5.8823 FSP -502
                                                                  SGB 5149.9 R23 .0582 R13 -.8908
                                                                                                                    LSA 2548.5 MSA 155.8 SSA
                                                                                                                                                        24.2
                                                                  SG1 5135.0 SG2 390.8 THA 178.19
                                                                                                                    EL1 2474.8 EL2 24.2 ALF 170.27
LAUNCH DATE JUL 25 1967
                                                                      FLIGHT TIME 170.00
                                                                                                                              ARRIVAL DATE JAN 11 1968
   HELIOCENTRIC CONIC
                                                                     DISTANCE 502.293
   RL 151.95 LAL .00 LOL 301.39 VL 25.806 GAL -.43 AZL 93.26 HCA 250.40 SMA 122.79 ECC .23761 INC 3.2564 VI 29.320 RP 107.84 LAP 3.07 LOP 191.76 VP 37.154 GAP 11.86 AZP 88.91 TAL 181.38 TAP 71.77 RCA 93.61 APO 151.97 V2 35.139 RC 169.783 GL -22.41 GP 12.12 ZAL 90.46 ZAP 164.91 ETS 50.78 ZAE 129.35 ETE 170.05 ZAC 62.75 ETC 7.93 CLP-170.94
   PLANETOCENTRIC CONIC
    C3 14.790 VHL 3.846 DLA -32.58 RAL 199.68 RAD 6567.6 VEL 11.669 PTH 2.05 VHP 7.697 DPA
                                                                                                                           5.55 RAP 205.19 ECC 1.2434
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.17 8 21 14 1238.05 24.29 351.88 64.72 112.41 8 41 52 638.1 27.12 343.99 106.83 12 40 57 5695.45 24.31 268.16 64.73 112.39 14 15 52 5095.5 27.13 260.26
                   8 21 14 1238.05
                                                  24.29
                                                              351.88
                                                                             64.72
                                                                                            112.41
                                                                                                      8 41 52
                                                                                                                         638.1
                                                                                                                                        27.12
                                                                                                                                                     343.99
                                                                                            112.39 14 15 52
119.59 13 19 45
                                                                                                                                                     260.26
      106.83
                  12 40 57
                                 5695.45
                                                 24.31
                                                              268.16
                                                                             64.73
                                                                                                                        5095.5
                                                                                                                                       27.13
      110.00
                  11 41 47
                              5878.12
                                                  17.95
                                                              278.91
                                                                             61.41
                                                                                                                        5278.1
                                                                                                                                                     271.84
                                                                                                                                        21.75
      110.00
                  14 19 34
                                 5391.43
                                                  30.99
                                                              247.27
                                                                             67.30
                                                                                            105.21
                                                                                                       15 49 26
                                                                                                                        4791.4
                                                                                                                                                     238.50
                                                                                                                                        32.76
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 5185.8 SGR 432.8 SG3 153.7

RRT -.3863 RRF -.3923 RTF .8937

SGB 5203.8 R23 .0487 R13 -.8939
    TDE-1.6572 TRA .0992 TC3-5.9246 BAU 1.1715
                                                                                                                    ST. 2473.3 SR 429.7 SS 616.9
                                                                                                                   CRT -.9973 CRS .9553 CST -.9685
LSA 2580.5 MSA 151.4 SSA 25.2
EL1 2510.2 EL2 31.1 ALF 170.17
    RDE .2883 RRA .0191 RC3 -.0535 FAU .02873
    FDE -.5991 FRA .4713 FC3-1.6818 BSP 16270
    BOE 1.6821 BRA .1011 BC3 5.9248 FSP -496
                                                                  SG1 5188.5 SG2 399.0 THA 178.14
                                                                      FLIGHT TIME 172.00
                                                                                                                               ARRIVAL DATE JAN 13 1968
                                                                     DISTANCE 507.899
   RL 151.95 LAL .00 LOL 301.39 VL 25.749 GAL .10 AZL 93.11 MCA 253.62 SMA 122.46 ECC .24088 INC 3.1071 V1 29.320 RP 107.88 LAP 2.98 LOP 194.98 VP 37.103 GAP 12.18 AZP 89.12 TAL 179.67 TAP 73.29 RCA 92.96 APO 151.95 V2 35.128 RC 171.722 GL -21.12 GP 11.62 ZAL 86.91 ZAP 165.77 ETS 52.08 ZAE 129.45 ETE 170.41 ZAC 60.49 ETC 7.80 CLP-171.73
  PLANETOCENTRIC CONIC
   C3 15.010 VHL 3.874 DLA -32.80 RAL 204.15 RAD 6567.6 VEL 11.679 PTH
                                                                                               2.05 VHP 7.854 DPA
                                                                                                                           4.14 RAP 207.18 ECC 1.2470
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       72.70
                    8 36 4
                                1250.63
                                                 24.37
                                                                                                        8 56 54
                                                              352.88
                                                                             69.49
                                                                                           112.67
                                                                                                                         650.6
                                                                                                                                       27.22
                                                                                                                                                    344.99
                  13 1 46 5689.46
8 36 4 1250.63
      107.30
                                                              267.73
                                                                              69.50
                                                                                                       14 36 35
                                                  24.38
                                                                                            112.66
                                                                                                                        5089.5
                                                                                                                                        27.23
                                                                                                                                                     259.84
       72.70
                                                  24.37
                                                               352.88
                                                                              69.49
                                                                                            112.67
                                                                                                        8 56 54
                                                                                                                         650.6
                                                                                                                                        27.22
                                                                                                                                                     344.99
                  13 1 46
12 5 14
      107.30
                                 5689.46
                                                                                                                                        27.23
                                                 24.38
                                                              267.73
                                                                              89.50
                                                                                            112.66 14 36 35
                                                                                                                        5089.5
                                                                                                                                                     259.84
                                                                                           119.31 13 42 58
106.03 16 1 59
      110.00
                                 5863.66
                                                 18.44
                                                              278.06
                                                                             66.39
                                                                                                                        5263.7
                                                                                                                                       22.20
                                                                                                                                                     270.95
                  14 31 46 5412.47
      110.00
                                                              248.79
                                                  30,60
                                                                             71.96
                                                                                                                        4812.5
                                                                                                                                       32.49
                                                                                                                                                     240.08
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 5217.0 SGR 440.7 SG3 149.2
RRT -.3864 RRF -.3857 RTF .8944
SGB 5235.6 R23 .0412 R13 -.8945
   TOE-1.6682 TRA .3329 TC3-5.8841 BAU 1.1808
                                                                                                                   ST 2477.1 SR 438.3 SS 595.4
CRT -.9944 CRS .9419 CST -.9687
   RDE .2963 RRA .0149 RC3 -.0502 FAU .02682
   FOE -.5624 FRA .5252 FC3-1.5470 BSP 16336
BDE 1.6943 BRA .3332 BC3 5.8843 FSP -476
                                                                                                                  LSA 2580.6 MSA 150.3 SSA 25.7
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SG1 5219.8 SG2 406.3 THA 178.12

EL1 2515.2 EL2 45.8 ALF 170.02

ARRIVAL DATE JAN 15 1968

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LAUNCH DATE JUL 25 1967
    RL 151.95 LAL .00 LOL 301.39 VL 25.692 GAL .66 A7L 92.96 HCA 256.84 SMA 122.13 ECC .24446 INC 2.9628 VI 29.320 RP 107.92 LAP 2.88 LOP 198.21 VP 37.053 GAP 12.50 A7P 89.32 TAL 177.97 TAP 74.81 RCA 92.27 APO 151.99 V2 35.116 RC 173.647 GL -19.79 GP 11.18 7AL 83.32 ZAP 166.57 ETS 53.64 ZAE 129.54 ETE 170.74 ZAC 58.21 ETC 7.71 CLP-172.51
                                                                                   DISTANCE 513.476
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 15.387 VHL 3.923 DLA -32.93 RAL 208.67 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 8.021 DPA 2.79 RAP 209.20 ECC 1.2532 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 52 27 1261.26
13 21 26 5689.98
8 52 27 1261.26
13 21 26 5689.98
12 26 36 5858.75
14 46 27 5428.52
                                                                                         74.43
                                                                                                            112.93 9 13 28
112.92 14 56 16
                                                           24.31
                                                                          353.67
         72.45
                                                                                                                                                  5090.0
                                                                                                                                                                    27.20
                                                                                              74.44
                                                            24.32
                                                                            267.74
        107.55
                                                                                                              112.93 9 13 28
112.92 14 56 16
119.21 14 4 15
106.65 16 16 56
                                                                                                                                                   661.3
                                                                                                                                                                    27.19
                                                            24.31
                                                                            353.67
                                                                                              74.43
         72.45
                                                                                                                                                                    27.20
                                                            24.32
                                                                            267.74
                                                                                              74.44
                                                                                                                                                  5090.0
        107.55
                                                                                                                                                 5258.8
                                                                                                                                                                    22.35
                                                                                             71,44
                                                                            277.78
       110.00
                                                            18.60
                                                                                                                                                 4828.5
                                                                                                                                                                    32.27
                                                           30.29
                                                                            249.94
                                                                                              76.86
       110.00
                     14 46 27
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 2477.9 SR 447.7 SS 579.3 CRT -.9896 CRS .9273 CST -.9691 LSA 2579.1 MSA 153.0 SSA 25.6
                                                                               SCT 5266.0 SCR 449.1 SC3 146.6

RRT -.3948 RRF -.3877 RTF .8976

SCB 5285.1 R23 .0339 R13 -.8977

SCI 5269.0 SCZ 412.4 THA 178.06
    TOE-1.6814 TRA .5748 TC3-5.7991 BAU 1.1930

ROE .3065 RRA .0091 RC3 -.0419 FAU .02540

FOE -.5330 FRA .5796 FC3-1.4293 BSP 16521

BOE 1.7091 BRA .5749 BC3 5.7992 FSP -469
                                                                                                                                            EL1 2517.2 EL2 63.3 ALF 169.86
                                                                                                                                                          ARRIVAL DATE JAN 17 1968
                                                                                     FLIGHT TIME 176.00
LAUNCH DATE JUL 25 1967
                                                                                    DISTANCE 519.019
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 25.637 GAL 1.23 AZL 92.82 HCA 260.05 SMA 121.81 ECC .24836 INC 2.8223 V1 29.320
RP 107.96 LAP 2.78 LOP 201.43 VP 37.002 GAP 12.84 AZP 89.51 TAL 176.27 TAP 76.32 RCA 91.56 APO 152.06 V2 35.103
RC 175.555 GL -18.43 GP 10.78 ZAL 79.71 ZAP 167.32 ETS 55.48 ZAE 129.62 ETE 171.03 ZAC 55.91 ETC 7.66 CLP-173.28
    PLANETOCENTRIC CONIC
     C3 15.936 VHL 3.992 DLA -32.94 RAL 213.19 RAD 6567.6 VEL 11.718 PTH 2.06 VHP 8.199 DPA 1.48 RAP 211.26 ECC 1.2623 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     NCM TIME L-1 TIME
9 10 18 1269.74
13 39 38 5697.33
9 10 18 1269.74
13 39 38 5697.33
12 45 1 5865.45
15 4 6 5437.65
                                                                                                                                                                    27.03
                                                                            354.23
                                                                                              79.50
                                                                                                             113.16
                                                                                                                              9 31 28
                                                            24.10
         72.42
                                                                                                                                                  5097.3
                                                                                                                                                                     27.04
                                                                                               79.51
                                                                                                               113.15 15 14 36
                                                            24.12
                                                                            268.21
        107.58
                                                                                                                                                                     27.03
                                                                                                                              9 31 28
                                                                                                                                                   669.7
                                                                            354.23
                                                                                               79.50
                                                                                                               113.16
                                                            24.10
         72.42
                                                                                                               113.15 15 14 36
119.34 14 22 46
106.99 16 34 44
                                                                                                                                                  5097.3
                                                                                                                                                                     27.04
                                                                                               79.51
                                                            24.12
                                                                            268.21
        107.58
                                                                                                                                                  5265.5
                                                                                                                                                                     22.14
                                                                            278.17
                                                                                              76.47
                                                            18.38
        110.00
                                                                                                                                                  4837.7
                                                                                                                                                                     32.14
                                                                                              81.97
                                                            30.12
                                                                            250.59
        110.00
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 2451.9 SR 455.4 SS 557.6
CRT -.9828 CRS .9099 CST -.9691
                                                                              SCT 5304.8 SGR 456.2 SG3 143.1

RRT - 4009 RRF - 3892 RTF 9009

SGB 5324.4 R23 .0281 R13 - 9009

SGI 5308.0 SG2 417.7 THA 178.01
     TOE-1.6799 TRA .8268 TC3-5.6472 BAU 1.2031
     ROE .3173 RRA .0024 RC3 -.0339 FAU .02386
FOE -.4996 FRA .6297 FC3-1.2961 BSP 16699
                                                                                                                                            LSA 2550.4 MSA 158.5 SSA 25.1
EL1 2492.5 EL2 82.7 ALF 169.64
     BDE 1.7096 BRA .8268 BC3 5.6473 FSP -463
                                                                                                                                                         ARRIVAL DATE JAN 19 1968
                                                                                     FLIGHT TIME 178.00
LAUNCH DATE JUL 25 1967
                                                                                    DISTANCE 524.527
     RELIOCENTRIC CONIC

REL 151.95 LAL .00 LOL 301.39 VE 25.582 GAL 1.83 AZE 92.68 MCA 263.27 SMA 121.49 ECC .25260 INC 2.6846 VI 29.320

RP 107.99 LAP 2.67 LOP 204.65 VP 36.952 GAP 13.19 AZP 89.69 TAL 174.57 TAP 77.84 RCA 90.80 APO 152.18 V2 35.091

RC 177.448 GL -17.06 GP 10.41 ZAL 76.12 ZAP 168.03 ETS 57.62 ZAE 129.69 ETE 171.29 ZAC 53.61 ETC 7.65 CLP-174.05
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 16.670 VHL 4.083 DLA -32.84 RAL 217.67 RAD 6567.7 VEL 11.750 PTH 2.07 VHP 8.390 DPA
                                                                                                                                                        .22 RAP 213.34 ECC 1.2744
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            113.37 9 50 44

113.36 15 31 24

113.37 9 50 44

113.37 9 50 44

113.36 15 31 24

119.71 14 38 14

107.06 16 55 20
                                                                                                                                                               26.71 346.74
                      9 29 28 1276.00
13 56 12 5711.64
9 29 28 1276.00
13 56 12 5711.64
13 0 9 5884.27
15 24 41 5439.41
                                                                                          84.65
                                                                            354.54
          72.62
                                                            23.76
                                                                                                                                                  5111.6
                                                                                                                                                                                    261.35
                                                                             269.15
                                                             23.77
                                                                                               84,66
         107.38
                                                                                                                                                   676.0
                                                                                                                                                                                   346.74
                                                                                               84.65
                                                             23.76
                                                                             354.54
          72.62
                                                                                                                                                                                    261.35
                                                                                                                                                  5111.6
                                                                                                                                                                     26.72
                                                            23,77
                                                                             269.15
                                                                                               84.66
         107.38
                                                                                                                                                  5284.3
                                                                                                                                                                                    272.21
                                                             17.74
                                                                             279.26
                                                                                               81.44
         110.00
                                                                                                                                                                                     242.09
                                                                                                                                                  4839.4
                                                                                                                                                                     32.12
                                                                                               87.26
                                                                             250.71
                                                            30.08
         110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SGT 5335.3 SGR 462.1 SG3 139.8

RRT -.4071 RRF -.3916 RTF .9038

SGB 5355.3 R23 .0234 R13 -.9039

SGI 5338.6 SG2 421.8 THA 177.97
                                                                                                                                            ST 2402.5 SR 461.5 SS 533.8
      TOE-1.6642 TRA 1.0943 TC3-5.4314 BAU 1.2105
                                                                                                                                            CRT -.9735 CRS .8882 CST -.9683
      ROE .3289 RRA -.0062 RC3 -.0257 FAU .02232
FOE -.4645 FRA .6816 FC3-1.1590 BSP 16767
                                                                                                                                            LSA 2498.2 MSA 167.9 SSA 24.2
                                                                                                                                            EL1 2444.2 EL2 103.8 ALF 169.39
      BDE 1.6963 BRA 1.0943 BC3 5.4314 FSP -451
                                                                                                                                                          ARRIVAL DATE JAN 21 1968
                                                                                      FLIGHT TIME 180,00
 LAUNCH DATE JUL 25 1967
                                                                                     DISTANCE 529.993
     RL 151.95 LAL .00 LOL 301.39 VL 25.528 GAL 2.46 AZL 92.55 MCA 266.48 SMA 121.19 ECC .25723 INC 2.5489 VI 29.320 RP 108.03 LAP 2.54 LOP 207.87 VP 36.903 GAP 13.57 AZP 89.84 TAL 172.87 TAP 79.35 RCA 90.01 APO 152.36 V2 35.078 RC 179.325 GL -15.68 GP 10.08 ZAL 72.59 ZAP 168.68 ETS 60.09 ZAE 129.75 ETE 171.53 ZAC 51.29 ETC 7.69 CLP-174.82
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 17.611 VHL 4.197 DLA -32.63 RAL 222.05 RAD 6567.7 VEL 11.790 PTH 2.08 VHP 8.593 DPA
                                                                                                                                                        -.99 RAP 215.45 ECC 1.2898
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.07 9 49 51 1279.77 23.27 354.60 89.83 113.54 10 11 10 679.8 26.25 346.84
                                                                                                             113.54 10 11 10
113.53 15 46 23
                      9 49 51 1279.77
14 10 50 5733.20
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                                                             23.28
                                                                             270.58
                                                                                                89.84
         106.93
                                                                                                               113.54 10 11 10
113.53 15 46 23
120.25 13 22 38
106.89 17 18 14
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                                                                                                89.83
                                                                             354.60
                                                             23.27
                         9 49 51
                                         1279.77
           73.07
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                                                                                                89.84
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                                                                             270.58
                                                             23.28
                       14 10 50 5733.20
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                                                             16,73
                                                                             303.08
                      13 12 12 626.12
15 47 39 5434.85
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                                                                                                                                                                     32.18
                                                                                                                                                                                     241.75
                                                                             250.39
                                                             30.17
                                                                                                92.68
         110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 2338.7 SR 466.1 SS 509.8
CRT -.9615 CRS .8629 CST -.9674
LSA 2431.8 MSA 180.3 SSA 23.0
                                                                            SGT 5366.9 SGR 467.0 SG3 136.4

RRT -.4142 RRF -.3956 RTF .9074

SGB 5387.2 R23 .0191 R13 -.9074

SGT 5370.4 SG2 424.7 THA 177.92
       TDE-1.6391 TRA 1.3704 TC3-5.1742 BAU 1.2182
       RDE .3413 RRA -.0160 RC3 -.0171 FAU .02088
      FOE -.4297 FRA .7316 FC3-1.0265 BSP 16923
BOE 1.6743 BRA 1.3705 BC3 5.1743 FSP -444
                                                                                                                                           ELI 2381.4 ELZ 125.8 ALF 169.12
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FLIGHT TIME 174.00

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ARRIVAL DATE JAN 23 1968
                                                                                     FLIGHT TIME 182.00
LAUNCH DATE JUL 25 1967
                                                                                    DISTANCE 535.413
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 25.474 GAL 3.11 AZL 92.41 MCA 269.69 SMA 120.89 ECC .26228 INC 2.4141 VI 29.320 RP 108.07 LAP 2.41 LOP 211.08 VP 36.853 GAP 13.96 AZP 89.99 TAL 171.18 TAP 80.87 RCA 89.18 APO 152.59 V2 35.065 RC 181.185 GL -14.31 GP 9.78 ZAL 69.14 ZAP 169.27 ETS 62.92 ZAE 129.81 ETE 171.74 ZAC 48.97 ETC 7.78 CLP-175.58
    PLANETOCENTRIC CONIC
     C3 18.779 VHL 4.334 OLA -32.31 RAL 226.32 RAD 6567.8 VEL 11.839 PTH 2.10 VMP 8.812 OPA -2.16 RAP 217.58 ECC 1.3091
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.75 10 11 18 1280.91 22.65 354.40 95.01 113.68 10 32 39 680.9 25.66 346.69
                                                                            354,40
                                                                                              95.01
                                                                                                               113.68
        73.75
                      10 11 18 1280.91
14 23 22 5762.08
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                                                                                                                           15 59 24
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15 59 24
                      10 11 18 1280.91
14 23 22 5762.08
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                                                            22.65
         73.75
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106.55 17 42 37
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                                                            30.34
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RIT - 4215 RRF - .4006 RTF .9108
SGB 5413.8 R23 .0157 R13 - .9109
SGI 5397.0 SG2 426.5 THA 177.88
                                                                                                                                             ST 2260.3 SR 468.8 SS 485.9
CRT -.9461 CRS .8327 CST -.9661
     TOE-1.6019 TRA 1.6598 TC3-4.8760 BAU 1.2242
     ROE .3545 RRA -.0272 RC3 -.0091 FAU .01946
                                                                                                                                             LSA 2350.7 MSA 195.6 SSA 21.8
    FOE -.3945 FRA .7819 FC3 -.8971 BSP 17051
BOE 1.6407 BRA 1.6601 BC3 4.8760 FSP -435
                                                                                                                                              EL1 2303.6 EL2 149.0 ALF 168.85
                                                                                                                                                           ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUL 25 1967
                                                                                     FLIGHT TIME 184.00
                                                                                     DISTANCE 540.782
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 25.422 GAL 3.79 AZL 92.28 HCA 272.90 SMA 120.59 ECC .26778 INC 2.2796 V1 29.320 RP 108.11 LAP 2.28 LOP 214.29 VP 36.804 GAP 14.38 AZP 90.12 TAL 169.49 TAP 82.40 RCA 88.30 APO 152.89 VZ 35.052 RC 183.028 GL -12.97 GP 9.51 ZAL 65.79 ZAP 169.82 ETS 66.12 ZAE 129.86 ETE 171.93 ZAC 46.64 ETC 7.92 CLP-176.34
   PLANETOCENTRIC CONIC
                                                                                                                                                      -3.29 RAP 219.74 ECC 1.3325
                                                                                                                    2.11 VHP 9.046 DPA
     C3 20.203 VHL 4.495 DLA -31.90 RAL 230.42 RAD 6567.8 VEL 11.899 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.66 10 33 48 1279.07 21.91 353.90 100.15 113.79 10 55 7 679.1 24.93 346.25
                      10 33 48 1279.07
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113.79 10 55 7
113.77 16 10 14
121.60 13 41 0
106.13 18 7 39
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       105.34
                       14 33 35 5798.54
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                                                                                             100.15
         74.66
                       10 33 48
                                        1279.07
                                                             21.91
                                                                            353.90
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                      14 33 35 5798.54
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        105.34
                                                             21.92
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       110.00
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                                        5415.01
                                                                                             103.65
       110.00
                      16 37 24
                                                             30.55
                                                                            248.97
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5414.9 SGR 473.0 SG3 129.8
RRT -.4289 RRF -.4061 RTF .9143
                                                                                                                                              ST 2172.1 SR 469.6 SS 463.0
CRT -.9266 CRS .7969 CST -.9646
     TDE-1.5534 TRA 1.9630 TC3-4.5476 BAU 1.2283
     RDE .3681 RRA -.0399 RC3 -.0019 FAU .01808
     FOE -.3593 FRA .8327 FC3 -.7747 BSP 17170
BDE 1.5965 BRA 1.9634 BC3 4.5476 FSP -426
                                                                                 SGB 5435.5 R23 .0127 R13 -.9143
SG1 5418.7 SG2 427.0 THA 177.84
                                                                                                                                              LSA 2259.9 MSA 213.4 SSA 20.5
                                                                                                                                              EL1 2215.5 EL2 173.2 ALF 168.60
                                                                                                                                                          ARRIVAL DATE JAN 27 1968
                                                                                     FLIGHT TIME 186.00
LAUNCH DATE JUL 25 1967
                                                                                     DISTANCE 546.092
    HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 25.370 GAL 4.51 AZL 92.14 HCA 276.11 SHA 120.31 ECC .27379 INC 2.1444 VI 29.320 RP 108.16 LAP 2.13 LOP 217.50 VP 36.756 GAP 14.82 AZP 90.23 TAL 167.82 TAP 83.93 RCA 87.37 APO 153.24 V2 35.039 RC 184.853 GL -11.66 GP 9.26 ZAL 62.56 ZAP 170.30 ETS 69.73 ZAE 129.89 ETE 172.11 ZAC 44.32 ETC 8.12 CLP-177.10
    PLANETOCENTRIC CONIC
     C3 21.915 VHL 4,681 DLA -31.40 RAL 234.33 RAD 6567.9 VEL 11.971 PTH 2.13 VHP 9.297 DPA -4.38 RAP 221.92 ECC 1.3607
    C3 21.915 VHL 4.681 DLA -31.40 RAL 234.33 RAD 6567.9 VEL 11.971 PTH 2.13 VMP 9.297 DPA -4.38 RAP 221.92 ECC 1.3607 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.83 10 57 25 1273.52 21.05 353.08 105.22 113.85 11 18 38 673.5 24.09 345.48 104.17 14 41 12 5843.15 21.07 277.89 105.22 113.84 16 18 35 5243.2 24.11 270.29 105.41 110.00 13 35 10 761.08 11.95 310.62 100.17 122.27 13 47 51 161.1 16.13 304.00 110.00 17 2 36 5403.59 30.77 248.15 109.09 105.69 18 32 40 4803.6 32.61 239.41
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 5428.3 SGR 473.9 SG3 126.7
RRT -,4358 RRF -.4113 RTF .9175
SGB 5449.0 R23 .0100 R13 -.9175
SGI 5432.3 SG2 426.2 THA 177.81
                                                                                                                                              ST 2075.6 SR 468.1 SS 441.4
CRT -.9014 CRS .7534 CST -.9629
     TDE-1.4905 TRA 2.2853 TC3-4.1915 BAU 1.2280
     RDE .3820 RRA -.0542 RC3 .0037 FAU .01665
     FOE -.3231 FRA .8857 FC3 -.6579 8SP 17179
                                                                                                                                              LSA 2160.3 MSA 233.6 SSA 19.3
                                                                                                                                              EL1 2118.4 EL2 198.5 ALF 168.41
     BDE 1.5386 BRA 2.2859 BC3 4.1915 FSP -415
                                                                                                                                                           ARRIVAL DATE JAN 29 1968
LAUNCH DATE JUL 25 1967
                                                                                      FLIGHT TIME 188.00
                                                                                      DISTANCE 551.336
    RL 151.95 LAL .00 LOL 301.39 VL 25.319 GAL 5.26 A7L 92.01 MCA 279.31 SMA 120.02 ECC .28034 INC 2.0076 V1 29.320 RP 108.20 LAP 1.98 LOP 220.71 VP 36.708 GAP 15.29 A7P 90.32 TAL 166.16 TAP 85.47 RCA 86.38 APO 153.67 VZ 35.025 RC 186.660 GL -10.40 GP 9.03 ZAL 59.48 ZAP 170.72 ETS 73.75 ZAE 129.92 ETE 172.27 ZAC 41.99 ETC 8.39 CLP-177.86
    PLANETOCENTRIC CONIC
     C3 23.953 VHL 4.894 DLA -30.84 RAL 238.03 RAD 6568.0 VEL 12.055 PTH 2.15 VHP 9.569 DPA -5.42 RAP 224.11 ECC 1.3942
                                                          RAL 238.03 RAO 6568.0 VEL 12.055 PTH 2.15 VMP 9.569 DPA -5.42 RAP 224.11 ECC 1.3942
INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
20.10 351.86 110.20 113.89 11 43 20 663.4 23.16 344.32
20.12 303.56 110.20 113.88 14 56 2 8.6 23.17 296.03
20.10 351.86 110.20 113.89 11 43 20 663.4 23.16 344.32
20.12 303.56 110.20 113.88 14 56 2 8.6 23.17 296.03
9.98 313.54 104.54 122.87 13 53 39 215.0 14.24 307.03
30.96 247.38 114.47 105.27 18 57 10 4793.0 32.74 238.61
     LNCH AZHTH LNCH TIME L-I TIME
          77.25 11 22 17 1263.36
102.75 14 45 53 608.56
        102.75
          77.25
                       11 22 17 1263.36
        102.75
                       14 45 53
                                         608.56
        110.00
                       13 40 4
                                         814.98
                       17 27 17
        110.00
                                         5392.98
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 1983.5 SR 465.0 SS 423.5
CRT -.8713 CRS .7068 CST -.9621
                                                                                 SGT 5441.1 SGR 473.8 SG3 123.5
     TOE-1.4229 TRA 2.6178 TC3-3.8350 BAU 1.2281
                                                                                RRT - .4434 RRF - .4182 RTF .9212
SGB 5461.7 R23 .0080 R13 - .9212
SGI 5445.2 SG2 424.3 THA 177.78
     RDE .3964 RRA -.0696 RC3 .0086 FAU .01535
FDE -.2898 FRA .9376 FC3 -.5548 BSP 17288
BDE 1.4771 BRA 2.6187 BC3 3.8350 FSP -407
                                                                                                                                             LSA 2065.1 MSA 254.0 SSA 18.2
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EL1 2024.9 EL2 223.5 ALF 168.31

ARRIVAL DATE JAN 31 1968

EL1 1711.6 EL2 311.0 ALF 169.59

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LAUNCH DATE JUL 25 1967

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DISTANCE 556.503
    HELIOCENTRIC CONIC
      RL 151.95 LAL .00 LOL 301.39 VL 25.269 GAL 6.06 A7L 91.87 HCA 282.51 SMA 119.75 ECC .28751 INC 1.8684 VI 29.320 RP 108.24 LAP 1.82 LOP 223.91 VP 36.661 GAP 15.80 A7P 90.40 TAL 164.52 TAP 87.03 RCA 85.32 APO 154.18 V2 35.012 RC 188.449 GL -9.18 GP 8.82 TAL 56.55 ZAP 171.07 ETS 78.19 ZAE 129.93 ETE 172.42 ZAC 39.68 ETC 8.72 CLP-178.63
    PLANETOCENTRIC CONIC
      C3 26.363 VHL 5.135 DLA -30.22 RAL 241.52 RAD 6568.1 VEL 12.155 PTH 2.18 VMP 9.862 DPA -6.42 RAP 226.35 ECC 1.4339 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             10.13 115.07 113.89 12 9 41 17.87 115.08 113.89 12 9 41 17.87 115.08 113.88 14 58 18 10.13 115.07 113.89 12 9 41 17.87 115.08 113.88 14 58 18 6.55 108.80 123.37 13 58 38 16.73 119.74 104.92 19 20 48 119.74 104.92 19 20 48 119.74 104.92 19 20 48 119.74 104.92 19 20 48 119.74 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 17.87 1
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            78.98 11 48 54 1246.69
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           101.02
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          110.00
                                                                                   31.12
                                                                                                        246.73
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                                                                                                                                                                                                                                  32.85
                                                                                                                                                                                                                                                       237.94
           110.00
                                                       5384.02
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SCT 5449.1 SCR 472.3 SC3 120.5

RRT -.4511 RRF -.4254 RTF .9251

SCB 5469.6 R23 .0062 R13 -.9251

SCI 5453.3 SG2 421.2 THA 177.75
                                                                                                                                                                                                 ST 1895.2 SR 460.0 SS 408.8 CRT -.8349 CRS .6554 CST -.9621
       TOE-1.3466 TRA 2.9680 TC3-3.4764 BAU 1.2253
      ROE .4111 RRA -.0862 RC3 .0122 FAU .01408
FOE -.2575 FRA .9911 FC3 -.4624 BSP 17366
BOE 1.4080 BRA 2.9693 BC3 3.4764 FSP -399
                                                                                                                                                                                                  LSA 1973.5 MSA 274.7 SSA 17.2
                                                                                                                                                                                                ELI 1934.4 ELZ 248.0 ALF 168.35
                                                                                                                     FLIGHT TIME 192.00
                                                                                                                                                                                                                    ARRIVAL DATE FEB 2 1968
    HELIOCENTRIC CONIC
                                                                                                                     DISTANCE 561.583
      RL 151.95 LAL .00 LOL 301.39 VL 25.220 GAL 6.90 AZL 91.73 MCA 285.71 SMA 119.48 ECC .29536 INC 1.7260 V1 29.320 RP 108.28 LAP 1.66 LOP 227.11 VP 36.615 GAP 16.34 AZP 90.47 TAL 162.89 TAP 88.60 RCA 84.19 APO 154.77 V2 34.999 RC 190.221 GL -8.02 GP 8.63 ZAL 53.78 ZAP 171.35 ETS 83.02 ZAE 129.93 ETE 172.56 ZAC 37.37 ETC 9.14 CLP-179.40
    PLANETOCENTRIC CONIC
      C3 29.202 VHL 5.404 DLA -29.56 RAL 244.79 RAD 6568.2 VEL 12.271 PTH
                                                                                                                                                                2.21 VHP 10.180 DPA -7.37 RAP 228.55 ECC 1.4806
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.14 12 18 21 1219.72 17.99 347.62 119.83 113.86 12 38 41 619.7 21.07 340.20
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116.31 14 29 4
111.44 15 39 46
123.76 14 2 59
104.65 19 43 21
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            98.86
                              14 43 42
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           100,00
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          100.00
                                                          603.20
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                                                                                                                           121.32
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          110.00
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                               13 47 30
                                                        928.94
                                                                                    5.71
                                                                                                         319.61
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                                                                                                                                                                                                                                   32.93
                                                                                                                                                                                                                                                         237.42
                                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              MID-COURSE EXECUTION ACCORACY
SCT 5452.0 SGR 469.4 SG3 117.6
RRT - .4587 RRF - .4529 RTF .9292
SGB 5472.1 R23 .0048 R13 -.9292
SGI 5456.3 SG2 416.8 THA 177.73
                                                                                                                                                                                                 ST 1814.9 SR 453.3 SS 397.4

CRT -.7922 CRS .6009 CST -.9631

LSA 1889.5 MSA 294.5 SSA 16.3
      TOE-1.2638 TRA 3.3359 TC3-3.1232 BAU 1.2194
      ROE .4260 RRA -.1040 RC3 .0146 FAU .01284
FOE -.2266 FRA 1.0460 FC3 -.3806 8SP 17439
BOE 1.3337 BRA 3.3375 BC3 3.1233 FSP -391
                                                                                                                                                                                                  EL1 1850.9 EL2 271.3 ALF 168.56
                                                                                                                                                                                                                   ARRIVAL DATE FEB 4 1968
                                                                                                                    FLIGHT TIME 194.00
LAUNCH DATE JUL 25 1967
                                                                                                                    DISTANCE 566.560
    HELIOCENTRIC CONIC
      RL 151.95 LAL .00 LOL 301.39 VL 25.171 GAL 7.80 A7L 91.58 HCA 288.91 SMA 119.22 ECC .30397 INC 1.5789 V1 29.320
RP 108.32 LAP 1.49 LOP 230.30 VP 36.569 GAP 16.92 A7P 90.51 TAL 161.29 TAP 90.20 RCA 82.98 APO 155.46 VZ 34.986
RC 191.975 GL -6.92 GP 8.46 ZAL 51.17 ZAP 171.54 ETS 88.20 ZAE 129.91 ETE 172.69 ZAC 35.07 ETC 9.65 CLP 179.81
    PLANETOCENTRIC CONIC
      C3 32.537 VHL 5.704 DLA =28.88 RAL 247.83 RAD 6568.3 VEL 12.406 PTH 2.24 VHP 10.526 DPA -8.29 RAP 230.79 ECC 1.5355
      C3 32,537 VHL 5.704 OLA -28.88 RAL 247.83 RAD 6568.3 VEL 12.406 PTH 2.24 VHP 10.526 DPA -8.29 RAP 230.79 ECC 1,2555 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 84.08 12 53 55 1171.58 16.86 343.55 124.47 113.79 13 13 26 571.6 19.94 336.18 95.92 14 32 24 852.87 16.88 320.19 124.48 113.79 14 46 37 252.9 19.95 312.82 100.00 13 59 11 959.75 11.06 325.17 121.57 117.95 14 15 11 359.7 14.72 318.29 100.00 16 9 49 5827.97 22.86 277.53 127.02 109.80 17 46 57 5228.0 25.35 269.62 110.00 13 50 20 987.60 3.48 322.69 116.99 124.03 14 6 48 387.6 7.95 316.42 110.00 18 35 10 5372.88 31.31 245.92 129.94 104.47 20 4 42 4772.9 32.98 237.09
    DIFFERENTIAL CORRECTIONS
                                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                               ST 1742.4 SR 444.8 SS 389.2

CRT -.7417 CRS .5415 CST -.9648

LSA 1813.0 MSA 313.2 SSA 15.5

EL1 1774.2 EL2 292.9 ALF 168.97
                                                                                                              RRT - 4657 RRF - 4401 RTF . 9331
SGB 5469.2 R23 .0035 R13 - 9331
SGI 5453.7 SG2 411.2 THA 177.71
      TDE-1.1703 TRA 3.7271 TC3-2.7767 BAU 1.2079
      RDE .4408 RRA -.1230 RC3 .0156 FAU .01155
FDE -.1956 FRA 1.1045 FC3 -.3074 BSP 17396
      BDE 1.2505 BRA 3.7291 BC3 2.7768 FSP -379
                                                                                                                                                                                                                    ARRIVAL DATE FEB 6 1968
LAUNCH DATE JUL 25 1967
                                                                                                                     FLIGHT TIME 196.00
                                                                                                                     DISTANCE 571.418
    HELIOCENTRIC CONIC
      RL 151.95 LAL .00 LOL 301.39 VL 25.124 GAL 8.75 AZL 91.43 MCA 292.10 SMA 118.97 ECC .31343 INC 1.4263 V1 29.320 RP 108.36 LAP 1.32 LOP 233,49 VP 36.524 GAP 17.56 AZP 90.54 TAL 159.72 TAP 91.82 RCA 81.68 APO 156.25 V2 34.973 RC 193.712 GL -5.88 GP 8.30 ZAL 48.73 ZAP 171.64 ETS 93.65 ZAE 129.87 ETE 172.81 ZAC 32.80 ETC 10.28 CLP 179.01
    PLANETOCENTRIC CONIC
      C3 36.450 VHL 6.037 DLA -28.18 RAL 250.65 RAD 6568.4 VEL 12.563 PTH 2.28 VHP 10.902 DPA -9.16 RAP 233.03 ECC 1.5999
      LNCH AZMTH LNCH TIME L-I TIME
90.00 13 29 58 1120.19
90.00 14 18 52 961.57
                                                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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112.31 14 34 53
118.88 14 8 31
108.83 18 17 5
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             90,00
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           100.00
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           110.00
                               18 55 17
                                                       5371.07
                                                                                                        245.79
                                                                                                                                134.65
                                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SCT 5444.9 SCR 459.5 SC3 112.1
RRT -.4729 RRF -.4481 RTF .9376
SCB 5464.2 R23 .0026 R13 -.9376
                                                                                                                                                                                                ST 1684.3 SR 435.0 SS 384.6
CRT -.6872 CRS .4856 CST -.9681
LSA 1751.0 MSA 328.3 SSA 14.7
       TDE-1.0764 TRA 4.1370 TC3-2.4519 BAU 1.1949
      RDE .4558 RRA -.1427 RC3 .0159 FAU .01038
FDE -.1679 FRA 1.1637 FC3 -.2465 BSP 17460
BDE 1.1690 BRA 4.1394 BC3 2.4520 FSP -372
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FLIGHT TIME 190.00

SG1 5449.3 SG2 404.5 THA 177.70

ARRIVAL CATE FEB 8 1968

LAUNCH DATE JUL 25 1967

DISTANCE 576.135 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 25.077 GAL 9.76 AZL 91.27 MCA 295.29 SMA 118.72 ECC .32384 INC 1.2668 V1 29.320 RP 108.40 LAP 1.15 LOP 236.68 VP 36.479 GAP 18.25 AZP 90.54 TAL 158.19 TAP 93.48 RCA 80.27 APO 157.16 V2 34.960 RC 195.431 GL -4.89 GP 8.15 ZAL 46.45 ZAP 171.65 ETS 99.29 ZAE 129.81 ETE 172.93 ZAC 30.54 ETC 11.03 CLP 178.20 PLANETOCENTRIC CONTC. C3 41.042 VHL 6.406 DLA -27.48 RAL 253.26 RAD 6568.6 VEL 12.744 PTH 2.32 VHP 11.314 DPA -9.98 RAP 235.27 ECC 1.6754 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 130.75 116.92 13 25 25 668.1 339.94 346.83 90.00 13 4 17 1268.10 15 5 21 873.60 9.12 135.71 110.39 15 19 54 273.6 315.37 323.08 90.00 20.08 119.46 14 4 27 108.18 18 42 56 124.17 14 13 9 104.43 20 43 37 13 45 32 1134.78 17 6 46 5770.20 128.70 534.8 9.21 328.36 5.32 334.99 100.00 5170.2 265.65 137.24 100.00 24.14 273.72 322.66 124.76 506.0 110.00 13 54 43 1105.96 -1.04 328.87 4771.8 32.99 237.01 110.00 19 14 5 245.84 139.61 5371.79 31.33 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 5433.8 SGR 452.5 SG3 109.5 RRT -,4798 RRF -.4561 RTF .9422 SGB 5452.6 R23 .0018 R13 -.9422 SGI 5438.1 SG2 396.7 THA 177.70 ST 1637.2 SR 424.0 SS 383.0 CRT -.6288 CRS .4310 CST -.9720 TOE -.9777 TRA 4.5687 TC3-2.1446 BAU 1.1767 RDE .4708 RRA -.1632 RC3 .0153 FAU .00921 FDE -.1415 FRA 1.2259 FC3 -.1943 BSP 17502 BDE J.0851 BRA 4.5716 BC3 2.1447 FSP -364 LSA 1700.3 MSA 339.8 SSA 13.9 EL1 1659.6 EL2 325.2 ALF 170.38 ARRIVAL DATE FEB 10 1968 LAUNCH DATE JUL 25 1967 FLIGHT TIME 200,00 DISTANCE 580.686 HELIOCENTRIC CONIC .00 LOL 301.39 VL 25.032 CAL 10.85 AZL 91.10 MCA 298.48 SMA 118.48 ECC .33533 INC 1.0987 V1 29.320 .97 LOP 239.87 VP 36.436 CAP 19.00 AZP 90.52 TAL 156.70 TAP 95.18 RCA 78.75 APO 158.20 V2 34.947 -3.97 GP 8.02 ZAL 44.34 ZAP 171.56 ETS 105.01 ZAE 129.73 ETE 173.04 ZAC 28.82 ETC 11.93 CLP 177.37 RL 151.95 LAL RP 108.44 LAP RC 197.134 GL -3.97 GP PLANETOCENTRIC CONIC C3 46.435 VHL 6.814 DLA -26.77 RAL 255.65 RAD 6568.7 VEL 12.954 PTH 2.36 VHP 11.767 DPA -10.76 RAP 237.51 ECC 1.7642 LINCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 52 27 1370.04 5.93 352.62 134.01 117.74 13 15 17 770.0 9.60 345.86 12 52 27 1370.04 109.44 15 50 12 119.78 14 1 43 107.75 19 5 50 124.04 14 15 46 104.55 21 1 9 140.75 233.8 23.47 312.72 90.00 15 36 18 633.63 21.00 320:53 6.68 13 41 31 132.25 611.5 100.00 1211.53 2.74 339.23 17 29 55 5755.61 13 56 21 1164.98 19 31 34 5374.92 24.45 272.74 142.00 5155.6 26.65 100.00 565.0 1.20 331.95 128.50 110.00 -3.29 4774.9 32.96 246.07 110.00 31.28 144.24 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5419.2 SGR 444.1 SG3 106.9 RRT -.4863 RRF -.4639 RTF .9468 ST 1601.4 SR 411.7 SS 384.2 CRT -.5678 CRS .3789 CST -.9763 TOE -.8748 TRA 5.0277 1C3-1.8572 BAU 1.1530 ROE .4857 RRA -.1842 RC3 .0141 FAU .00804 FDE -.1163 FRA 1.2918 FC3 -.1499 BSP 17521 SG8 5437.4 R23 .0012 R13 -.9468 SG1 5423.6 SG2 387.7 THA 177.71 LSA 1661.6 MSA 347.4 SSA 13.3 EL1 1619.2 EL2 335.1 ALF 171.32 BOE 1.0006 BRA 5.0311 BC3 1.8573 FSP -356 ARRIVAL DATE FEB 12 1968 FLIGHT TIME 202.00 LAUNCH DATE JUL 25 1967 DISTANCE 585.040 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 24.987 GAL 12.02 AZL 90.92 MCA 301.66 SMA 118.24 ECC .34804 INC .9203 V1 29.320 RP 108.48 LAP .78 LOP 243.06 VP 36.394 GAP 19.83 AZP 90.48 TAL 155.27 TAP 96.93 RCA 77.09 APO 159.39 VZ 34.935 RC 198.819 GL -3.10 GP 7.89 TAL 42.39 ZAP 171.37 ETS 110.68 ZAE 129.61 ETE 173.15 ZAC 26.13 ETC 13.02 CLP 176.51 PLANETOCENTRIC CONIC C3 52.784 VHL 7.265 DLA -26.08 RAL 257.85 RAD 6568.9 VEL 13.196 PTH 2.41 VHP 12.265 DPA -11.49 RAP 239.75 ECC 1.8687 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.16 13 8 52 108.84 16 15 11 119.89 13 59 44 107.50 19 26 24 123.79 14 18 3 104.77 21 17 27 857.8 6.87 350.87 137.32 12 44 34 1457.80 3.13 357.55 23.91 311.12 210.0 21.54 810.00 318.98 145.47 336.68 684.2 4.25 13 38 20 . 28 343.22 135.74 100.00 1284.19 264.02 5146.9 26.79 17 50 37 5746.88 24.63 272.16 146.57 13 57 39 1223.54 19 47 47 5380.30 -1.04 328.80 623.5 -5.52 335.02 132.14 32.90 4780.3 31.18 246.46 148.72 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5401.5 SGR 434.3 SG3 104.5 RRT -.4922 RRF -.4712 RTF .9515 SGB 5418.9 R23 .0006 R13 -.9515 SGI 5405.7 SG2 377.7 THA 177.72 ST 1575.5 SR 398.2 SS 388.1 CRT -.5049 CRS .3282 CST -.9805 LSA 1633.5 MSA 350.9 SSA 12.6 TOE -.7645 TRA 5.5197 TC3-1.5879 BAU 1.1206 ROE .5002 RRA -.2059 RC3 .0121 FAU .00681 FOE -.0912 FRA 1.3631 FC3 -.1117 BSP 17425 EL1 1588.9 EL2 340.8 ALF 172.38 BOE .9136 BRA 5.5235 BC3 1.5879 FSP -346 ARRIVAL DATE FEB 14 1968 LAUNCH DATE JUL 25 1967 FLIGHT TIME 204,00 DISTANCE 589.155 HELIOCENTRIC CONIC RL 151.95 LAL .00 LOL 301.39 VL 24.944 GAL 13.28 A7L 90.73 MCA 304.85 SMA 118.02 ECC .36213 INC .7292 V1 29.320
RP 108.51 LAP .60 LOP 246.24 VP 36.352 GAP 20.75 A7P 90.42 TAL 153.90 TAP 98.75 RCA 75.28 APO 160.75 V2 34.923
RC 200.487 GL -2.28 GP 7.78 ZAL 40.61 ZAP 171.08 ETS 116.21 ZAE 129.46 ETE 173.26 ZAC 23.99 ETC 14.32 CLP 175.62 PLANETOCENTRIC CONIC C3 60.281 VHL 7.764 OLA -25.40 RAL 259.85 RAD 6569.1 VEL 13.477 PTH 2.46 VHP 12.817 OPA -12.17 RAP 241.97 ECC 1.9921 LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 937.7 4.33 140.62 118.31 13 4 15 108.47 16 36 50 90.00 12 38 37 1537.67 . 55 2.01 195.4 24.18 90.00 16 23 35 795.39 21.85 318.03 149.94 119.83 13 58 11 107.37 19 44 59 753.6 1.91 13 35 37 1353.63 -2.08 347.03 139.16 100.00 263.73 18 9 16 5742.70 24.72 271.67 150.95 5142.7 26.86 100.00 14 20 0 21 32 32 -3.25 331.82 123.41 681.4 110.00 13 58 38 1281.40 -7.70 338.08 135.69 105.06 4787.7 32.81 110.00 20 2 44 5387.70 31.05 247.00 153.03 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1558.6 SR 384.0 SS 394.3 CRT -.4452 CRS .2848 CST -.9846 SGT 5378.7 SGR 423.1 SG3 102.2 RRT -.4976 RRF -.4784 RTF .9563 SGB 5395.3 R23 .0004 R13 -.9563 TOE -.6562 TRA 6.0392 TC3-1.3438 BAU 1.0830 RDE .5148 RRA -.2273 RC3 .0100 FAU .00563 FDE -.0688 FRA 1.4379 FC3 -.0809 BSP 17447 BDE .8340 BRA 6.0435 BC3 1.3439 FSP -339 LSA 1615.4 MSA 349.8 SSA 12.0 EL1 1568.4 EL2 341.6 ALF 173.43 SG1 5382.8 SG2 366.7 THA 177.75

FLIGHT TIME 198.00

ARRIVAL DATE FEB 16 1968

ELI 1540.6 EL2 310.3 ALF 177.02

LAUNCH DATE JUL 25 1967

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DISTANCE 592.981
   HELIOCENTRIC CONIC
                          .00 LOL 301.39 VL 24.902 GAL 14.66 A7L 90.52 HCA 308.03 SMA 117.80 ECC .37781 INC .5231 V1 29.320 .41 LOP 249.42 VP 36.312 GAP 21.76 A7P 90.32 TAL 152.61 TAP 100.63 RCA 73.29 APO 162.30 V2 34.911 -1.52 GP 7.67 ZAL 38.99 ZAP 170.68 ETS 121.52 ZAE 129.26 ETE 173.38 ZAC 21.90 ETC 15.90 CLP 174.69
    RL 151.95 LAL
RP 108.55 LAP
    RC 202.138 GL
   PLANETOCENTRIC CONIC
     C3 69.168 VHL 8.317 DLA -24.74 RAL 261.65 RAD 6569.3 VEL 13.803 PTH
                                                                                                             2.52 VHP 13.429 OPA -12.81 RAP 244.16 ECC 2.1383
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         118.26 13 0 38
108.25 16 55 58
119.61 13 56 51
107.35 20 1 49
122.91 14 21 37
105.42 21 46 26
                     12 33 46 1612.09
                                                         -1.85
                                                                          6.16
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        90.00
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                     13 59 18 1338.33
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       110.00
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       110.00
                                      5396.86
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT - 5022 RRF - .4849 RTF .9611
SGB 5367.5 R23 .0002 R13 - .9611
SGI 5355.7 SG2 354.8 THA 177.78
                                                                                                                                      ST 1548.1 SR 368.9 SS 402.7

CRT -.3881 CRS .2453 CST -.9882
    TOE -.5446 TRA 6.5954 TC3-1.1201 BAU 1.0358
    ROE .5292 RRA -.2485 RC3 .0076 FAU .00440
FOE -.0473 FRA 1.5185 FC3 -.0551 BSP 17441
BOE .7594 BRA 6.6001 BC3 1.1201 FSP -332
                                                                                                                                      LSA 1604.9 MSA 345.0 SSA 11.4
                                                                                                                                      EL1 1555.0 EL2 338.5 ALF 174.45
                                                                                 FLIGHT TIME 208.00
                                                                                                                                                   ARRIVAL DATE FEB 18 1968
LAUNCH DATE JUL 25 1967
                                                                                 DISTANCE 596.455
   HELIOCENTRIC CONIC
                             .00 LOL 301.39 VL 24.862 GAL 16.16 ATL 90.30 MCA 311.21 SMA 117.59 ECC .39530 INC .2982 V1 29.320 .22 LOP 252.60 VP 36.274 GAP 22.89 ATP 90.20 TAL 151.41 TAP 102.61 RCA 71.11 APO 164.07 V2 34.899 -.80 GP 7.57 ZAL 37.54 ZAP 170.17 ETS 126.54 ZAE 129.01 ETE 173.49 ZAC 19.89 ETC 17.80 CLP 173.71
    RL 151.95 LAL
    RP 108.59 LAP
    RC 203.771 GL
   PLANETOCENTRIC CONIC

C3 79.753 VHL 8.930 DLA -24.10 RAL 263.27 RAD 6569.6 VEL 14.181 PTH 2.58 VHP 14.114 DPA -13.40 RAP 246.33 ECC 2.....

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG 147.03 118.04 12 57 36 1082.2 -.32 3.44

17 13 0 183.3 24.39 309.31
   PLANETOCENTRIC CONIC
                                                                                                         108.15 17 13 0
119.25 13 55 36
107.42 20 17 4
122.30 14 22 53
105.84 21 59 10
                    13 30 52 1484.33
18 41 20 5744.50
13 59 39 1394.09
                                                                                                                                             884.3
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       100.00
                                                         -6.47
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       100.00
                                                         24.68
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       110.00
                                                        -11.86
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       110.00
   DIFFERENTIAL CORRECTIONS
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                           SGT 5320.9 SGR 396.7 SG3 97.7

RRT -.5056 RRF -.4904 RTF ..9658

SGB 5335.6 R23 .0000 R13 -.9658

SGI 5324.7 SG2 342.0 THA 177.83
                                                                                                                                     ST 1542.3 SR 353.2 SS 413.5

CRT -.3347 CRS .2100 CST -.9912

LSA 1600.3 MSA 336.9 SSA 10.9

EL1 1547.1 EL2 331.8 ALF 175.41
    TOE -.4305 TRA 7.1928 TC3 -.9164 BAU .9771
    ROE .5433 RRA -.2690 RC3 .0052 FAU .00310
FDE -.0266 FRA 1.6060 FC3 -.0337 88P 17419
    BOE .6932 BRA 7.1976 BC3 .9164 FSP
                                                             - 325
                                                                                                                                                  ARRIVAL DATE FEB 20 1968
                                                                                 FLIGHT TIME 210.00
LAUNCH DATE JUL 25 1967
                                                                                 DISTANCE 599.496
   HELIOCENTRIC CONIC
                             .00 LOL 301.39 VL 24.823 GAL 17.81 AZL 90.05 HCA 314.38 SMA 117.39 ECC .41487 INC .0485 V1 29.320 .04 LOP 255.77 VP 36.236 GAP 24.16 AZP 90.04 TAL 150.32 TAP 104.70 RCA 68.69 APO 166.09 V2 34.888 -.13 GP 7.48 ZAL 36.25 ZAP 169.54 ETS 131.25 ZAE 128.71 ETE 173.61 ZAC 17.95 ETC 20.12 CLP 172.67
    RL 151.95 LAL
RP 108.62 LAP
    RC 205.386 GL
   PLANETOCENTRIC CONIC
    C3 92.434 VHL 9.614 DLA -23.48 RAL 264.70 RAD 6569.8 VEL 14.621 PTH 2.65 VHP 14.881 DPA -13.94 RAP 248.45 ECC 2.5212
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       1NJ 71ME

117.68 12 54 53

108.15 17 28 13

118.77 13 54 20

107.56 20 30 50

121.58 14 23 46

106.30 22 10 46
                                                                                     150.09
                                                                                                                                       1148.7 -2.46
                                                                        13.82
        90.00
                   12 25 44 1748.68
                                                        -6.22
                                                                        317.22
                                                                                        162.02
                                                                                                                                            183.1
                                                                                                                                                            24.39
                                                                                                                                                                            309.29
                                                         22.12
         90.00
                     17 15 10
                                       783.09
                                                                                                                                                                         351.07
                                                                                                                                            945.9
                                                                                                                                                             -4.60
                                                                        357.68
                                                                                      148.85
                                    1545.87
       100.00
                     13 28 34
                                                         -8.50
                                                                                                                                                            26.75
                                                                                                                                                                           264.18
                                                                                        162.88
                                                                                                                                          5149.2
                                                        24.58
                                                                        272.31
       100.00
                     18 55 1
                                     5749.17
                                                                                                                                                                            340.66
                   13 59 36 1448.48
20 40 27 5419.33
                                                                                        145.70
                                                                                                                                            848.5
                                                                                                                                                             -9.55
       110.00
                                                        -13.82
                                                                        347.15
                                                                                                                                                             32.40
                                                                                                                                                                            240.59
                                                                                                                                           4819.3
                                                                                        164.90
       110.00
                                                         30.47
                                                                        249.28
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5287.9 SGR 381.4 SG3 95.6
RRT -.5077 RRF -.4944 RTF .9703
SGB 5301.6 R23 -.0001 R13 -.9703
                                                                                                                                     ST 1540.2 SR 336.8 SS 426.7
CRT -.2840 CRS .1769 CST -.9936
LSA 1600.3 MSA 326.2 SSA 10.3
     TOE -.3099 TRA 7.8414 TC3 -.7300 BAU .9021
    RDE .5572 RRA -.2885 RC3 .0027 FAU .00164
FDE -.0056 FRA 1.7027 FC3 -.0153 BSP 17268
                                                                            SG1 5291.5 SG2 328.3 THA 177.90
                                                                                                                                      EL1 1543.3 EL2 322.3 ALF 176.28
    BDE .6376 BRA 7.8467 BC3 .7300 FSP
                                                            -315
                                                                                                                                                   ARRIVAL DATE FEB 22 1968
                                                                                 FLIGHT TIME 212,00
LAUNCH DATE JUL 25 1967
                                                                                 DISTANCE 601.995
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 24.787 GAL 19.63 AZL 89.78 HCA 317.56 SNA 117.20 ECC .43686 INC .2249 VI 29.320 RP 108.65 LAP -.15 LOP 258.94 VP 36.201 GAP 25.59 AZP 89.83 TAL 149.37 TAP 106.93 RCA 66.00 APO 168.40 V2 34.878 RC 206.983 GL .91 GP 7.39 ZAL 35.14 ZAP 168.81 ETS 135.63 ZAE 128.33 ETE 173.74 ZAC 16.12 ETC 22.92 CLP 171.57
   PLANETOCENTRIC CONIC
                                                                                                              2.72 VMP 15.746 DPA -14.44 RAP 250.51 ECC 2.7728
     C3 107.722 VHL 10.379 DLA -22.88 RAL 265.93 RAD 6570.1 VEL 15.135 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      153.01
                    12 22 5 1811.75
17 28 41 785.47
                                                                                                         117.20 12 52 17
108.21 17 41 46
                                                         -8.20
                                                                         17.39
                                                                                                                                                                             10.66
                                                                                                                                          1211.6
         90.00
                                                                                                                                                                            309.46
                                                                                                                                                             24.35
                                                                        317.38
                                                                                        165.57
                                                                                                                                            185.5
                                                         22.07
         90.00
                                                                                                         118.18 13 52 55
107.75 20 43 12
120.77 14 24 15
106.78 22 21 14
                                                                                                                                           1004.9
                                                                                                                                                             -6.57
                                                                                                                                                                            354.34
                                                       -10.42
                                                                           1.01
                                                                                        151.83
       100,00
                     13 26 11
                                      1604.87
                                                                                                                                                             26.65
                                                                                                                                           5155.6
                                                                                                                                                                            264.63
                     19 7 16
13 59 14
                                                                        272.74
       100.00
                                      5755.63
                                                        24.45
                                                                                        166.41
                                                                                      148.78
                                                                                                                                             901.2
                                                                                                                                                           -11.49
                                                                                                                                                                            343.51
                                                       -15.68
                                                                        350.10
       110.00
                                      1501.23
                     20 50 42 5432.03
                                                                                                                                           4832.0
                                                                                                                                                           32.22
                                                                                        168.43
                                                                                                                                                                            241.54
                                                         30.23
                                                                        250.19
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5248.6 SCR 364.8 SC3 93.6
RRT -5080 RRF -.4969 RTF .9747
SCB 5261.2 R23 -.0001 R13 -.9747
                                                                                                                                     ST 1538.6 SR 320.1 SS 442.1
CRT -.2400 CRS .1497 CST -.9955
LSA 1602.2 MSA 313.4 SSA 9.7
     TOE -.1940 TRA 8.5363 TC3 -.5645-BAU
                                                             .A129
    RDE .5712 RRA -.3060 RC3 .0004 FAU .00008
FOE .0132 FRA 1.8074 FC3 -.0007 BSP 17254
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FLIGHT TIME 206.00

-309

BOE .6032 BRA 8.5418 BC3 .5645 FSP

SGI 5251.9 SG2 314.0 THA 177.97

ARRIVAL DATE FEB 24 1968

LAUNCH DATE JUL 25 1967

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DISTANCE 603.819
                        .00 LOL 301.39 VL 24.752 GAL 21.65 AZL 89.46 MCA 320.73 SMA 117.02 ECC .46162 INC .5360 V1 29.320 -.34 LOP 262.12 VP 36.167 GAP 27.21 AZP 89.58 TAL 148.60 TAP 109.32 RCA 63.00 APO 171.04 V2 34.867 1.10 GP 7.31 ZAL 34.21 ZAP 167.94 ETS 139.70 ZAE 127.86 ETE 173.88 ZAC 14.42 ETC 26.33 CLP 170.38
  HELIOCENTRIC CONIC
   RL 151.95 LAL
       108.69 LAP
   RC 208.560 GL
  PLANETOCENTRIC CONIC
                                                                                                  2.79 VHP 16.727 DPA -14.89 RAP 252.49 ECC 3.0784
    C3 126.289 VHL 11.238 DLA -22.32 RAL 266.97 RAD 6570.3 VEL 15.736 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              116.62 12 49 36
108.32 17 53 45
                                                                             155.78
                                                                                                                                                            14.05
                                                                                                                            1271.6
                                                                                                                                            ~6.39
       90.00
                                                                 20.82
                   12 18 26 1871.55
17 40 35 789.82
                                                  -10.04
                                                                                                                                             24.28
                                                                                                                                                           309.75
                                                                                                                              189.8
                                                                 317.67
                                                                               168.86
                                                  21.97
        90.00
                                                                                              117.50 13 51 17
107.98 20 54 10
119.88 14 24 17
107.28 22 30 33
                                                                                                                                                           357.49
                                                                               154.65
                                                                                                                             1061.2
                                                                                                                                             -8.43
                                                                  4.24
                   13 23 36 1661.24
                                                 -12.21
                                                                                                                                                           265.17
                                                                                                                             5163.4
                                                                                                                                            26.52
                                                                 273.26
                                                                               169.68
       100.00
                   19 18 7
                                 5763.41
                                                   24.29
                                                                             151.69
                                                                                                                              952.1
                                                                                                                                            -13.33
                                                                                                                                                           346.31
                 13 58 25 1552.11
20 59 47 5445.30
                                                 -17.43
                                                                 353.01
                                                                                                                                                           242.53
                                                                                                                            4845.3
                                                                                                                                            32.03
                                                                               171.71
                                                   29.96
                                                                 251.13
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1537.0 SR 303.0 SS 460.2
CRT -. 2002 CRS .1252 CST -. 9969
                                                                   SGT 5205.6 SGR 346.8 SG3 91.6
RRT -.5060 RRF -.4968 RTF .9787
    TOE -.0773 TRA 9.2916 TC3 -.4158 BAU .7020
   ROE .5832 RRA -.3208 RC3 -.0017 FAU-.00171
FDE .0315 FRA 1.9235 FC3 .0117 BSP 17204
BDE .5903 BRA 9.2971 BC3 .4158 FSP -303
                                                                                                                        LSA 1605.2 MSA 299.0 SSA
                                                                    SGB 5217.1 R23 -.0001 R13 -.9767
                                                                                                                                                                9.2
                                                                     SG1 5208.5 SG2 299.0 THA 178.06
                                                                                                                         EL1 1538.3 EL2 296.7 ALF 177.65
                                                                                                                                    ARRIVAL DATE FEB 26 1968
                                                                         FLIGHT TIME 216.00
  HELIOCENTRIC CONIC
                                                                         DISTANCE 604.786
                          .00 LOL 301.39 VL 24.720 GAL 23.91 AZL 89.11 HCA 323.89 SHA 116.86 ECC .48958 INC .8922 V1 29.320 -.53 LOP 265.29 VP 36.136 GAP 29.06 AZP 89.28 TAL 148.02 TAP 111.92 RCA 59.65 APO 174.07 V2 34.858 1.65 GP 7.22 ZAL 33.47 ZAP 166.94 ETS 143.46 ZAE 127.28 ETE 174.03 ZAC 12.88 ETC 30.43 CLP 169.09
   RL 151.95 LAL
RP 108.72 LAP
   RC 210.118 GL
  PLANETOCENTRIC CONIC
    C3 149.021 VHL 12.207 DLA -21.78 RAL 267.79 RAD 6570.6 VEL 16.442 PTH 2.87 VHP 17.846 DPA -15.29 RAP 254.38 ECC 3.4525
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               115.95 12 46 48
                                                                                                                            1328.1
                                                                                                                                              -8.16
                                                                               158.34
                   12 14 40
                                 1928.07
                                                  -11.75
                                                                 24.10
                                                                                                                                              24.17
                                                                                                                                                            310.14
                                                                                                108.47
                                                                                                            18 4 12
                                                                                                                               195.6
                   17 50 56
                                  795.57
                                                   21.85
                                                                 318.04
                                                                                171.85
                                                                                                                                                               .51
                                                                                                116.75
                                                                                                            13 49 19
                                                                                                                              1114.8
                                                                                                                                             -10.17
                  13 20 44 1714.63
19 27 33 5772.09
                                                  -13.87
                                                                   7.35
                                                                                157.26
       100,00
                                                                                               108.24 21 3 45
118.93 14 23 46
                                                                                                                              5172.1
                                                                                                                                              26.37
                                                                                                                                                            265.78
                                                                 273.84
                                                                                172.67
                                                  24.10
                                                                                                                             1000.9
                                                                                                                                                            349.02
                   13 57 6 1600.86
21 7 41 5458.83
                                                                                                                                            -15.06
                                                  -19.06
                                                                 355.85
                                                                                154.41
                                                                                                107.79 22 38 40
                                                                                                                              4858.8
                                                                                                                                              31.83
                                                                                                                                                            243.53
                                                                 252.08
                                                   29.68
                                                                                174.70
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1533.8 SR 285.8 SS 481.2
CRT -.1643 CRS .1030 CST -.9979
                                                                     SGT 5158.3 SGR 327.7 SG3 89.8
RRT -.5008 RRF -.4934 RTF .9825
   TDE .0390 TRAIO.1139 TC3 -.2831 BAU .5641 RDE .5994 RRA -.3319 RC3 -.0035 FAU-.00381
                                                                     SGB 5168.7 R23 -.0001 R13 -.9825
                                                                                                                          LSA 1607.9 MSA 283.5 SSA 8.6
    FOE .0490 FRA 2.0329 FC3 .0222 BSP 17129
BOE .6007 BRAID.1193 BC3 .2831 FSP -297
                                                                                                                         ELI 1534.5 ELZ 281.8 ALF 178.19
                                                                     SG1 5160.9 SG2 283.5 THA 178.17
                                                                                                                                    ARRIVAL DATE FEB 28 1968
                                                                         FLIGHT TIME 218.00
LAUNCH DATE JUL 25 1967
                                                                        DISTANCE 604.663
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 24.691 GAL 26.47 AZL 88.69 HCA 327.06 SMA 116.71 ECC .52125 INC 1.3067 V1 29.320 RP 108.74 LAP -.71 LOP 268.45 VP 36.107 GAP 31.20 AZP 88.90 TAL 147.71 TAP 114.76 RCA 55.88 APO 177.55 V2 34.848
                                        7.14 7AL 32.95 7AP 165.78 ETS 146.95 7AE 126.58 ETE 174.20 7AC 11.52 ETC 35.28 CLP 167.67
    RC 211.656 GL
                          2.17 68
   PLANETOCENTRIC CONIC
    C3 177.094 VHL 13.308 CLA -21.26 RAL 268.39 RAD 6570.9 VEL 17.275 PTH 2.95 VHP 19.128 QPA -15.66 RAP 256.15 ECC 3.9145
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM "INJ E LAT INJ E LONG
                                                                                               115.23 12 43 38
108.64 18 13 6
115.94 13 46 53
108.50 21 11 55
                                                                             160.67
                                                                                                                           1381.2
                                                                                                                                          -9.80
                                                  -13.31
                                                                  27.22
        90.00
                   12 10 37 1981.22
17 59 44 802.23
                                                                                                                                             24.05
                                                                                                                               202.2
                                                  21.71
                                                                 318.48
                                                                                174.52
        90.00
                                                                                                                                            -11.79
                                                                                                                             1165.5
                   13 17 28 1765.45
19 35 34 5781.27
                                                                  10.33
                                                                                159.63
                                                  -15.40
       100.00
                                                                                                                                            26.21
                                                                                                                                                            266.41
                                                                                                                             5181.3
                                                  23.91
                                                                 274.45
                                                                                175.32
       100.00
                   19 35 54 21011
13 55 12 1647.18
24 14 19 5472.31
                                                                                                117.93 14 22 39
108.28 22 45 31
                                                                                                                                             -16.67
                                                                                                                                                            351.65
                                                                  358.61
                                                                                156.88
                                                                                                                             1047.2
      110.00
                                                  -20.56
                                                                                                                                              31.61
                                                                                                                             4872.3
                                                                 253.03
                                                   29.40
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1527.5 SR 268.5 SS 505.6

CRT -.1319 CRS .0826 CST -.9986

LSA 1609.2 MSA 267.3 SSA 8.1

EL1 1528.0 EL2 266.1 ALF 178.63
                                                                     SCT 5106.4 SCR 307.3 SG3 88.0
RRT -.4911 RRF -.4854 RTF .9859
SCB 5115.6 R23 -.0001 R13 -.9859
    TOE .1522 TRA11.0106 TC3 -.1656 BAU .3922
    ROE .6141 RRA - .3377 RC3 - .0049 FAU- .00635
FOE .0656 FRA 2.1976 FC3 .0311 BSP 17036
BOE .6327 BRA11.0158 BC3 .1656 FSP -292
                                                                     SG1 5108.6 SG2 267.5 THA 178.30
                                                                                                                                     ARRIVAL DATE MAR 1 1968
                                                                          FLIGHT TIME 220.00
LAUNCH DATE JUL 25 1967
                                                                         DISTANCE 603.142
   HELIOCENTRIC CONIC
    RL 151.95 LAL .00 LOL 301.39 VL 24.666 GAL 29.37 AZL 88.20 HCA 330.22 SMA 116.58 ECC .55713 INC 1.7981 V1 29.320 HP 108.77 LAP -.89 LOP 271.62 VP 36.082 GAP 33.66 AZP 88.44 TAL 147.70 TAP 117.92 RCA 51.63 APO 181.54 V2 34.840 RC 213.175 GL 2.65 GP 7.06 ZAL 32.68 ZAP 164.44 ETS 150.19 ZAE 125.72 ETE 174.39 ZAC 10.39 ETC 40.83 CLP 166.09
   PLANETOCENTRIC CONIC
    C3 212,082 VHL 14.563 DLA -20.78 RAL 268.73 RAD 5571.2 VEL 18.259 PTH 3.03 VHP 20.606 DPA -15.98 RAP 257.77 ECC 4.4903
    LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 6 8 2030.87 -14.73 30.17 162.71 114.46 12 39 59 1430.9 -11.31 23.17 90.00 18 6 55 809.37 21.55 318.94 176.82 108.83 18 20 24 209.4 23.92 311.08
                    12 6 8 2030.87
18 6 55 809.37
                                                                                                                                                               6.14
                                                                                                                                             -13.28
                                                   -16.80
                                                                                                 115.10
                                                                                                           13 43 53
                                                                                                                              1212.9
                                                                   13.16
                                                                                 161.72
                    13 13 40 1812.91
       100.00
                   19 42 4 5790.60
13 52 37 1690.83
21 19 36 5485.45
                                                                                                 108.76
                                                                                                           21 18 35
                                                                                                                              5190.6
                                                                                                                                             26.05
                                                   23.70
                                                                  275.07
                                                                                 177.61
       100.00
                                                                                                116.90 14 20 48
108.76 22 51 2
                                                                                                                                             -18.15
                                                                                                                                                            354.17
                                                                                                                              1090.8
                                                   -21.93
                                                                                 159.06
                                                                    1.25
       110.00
                                                                                                                                             31.40
                                                                                                                              4885.4
                                                    29.12
                                                                  253.95
                                                                                 179.66
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1517.4 SR 251.3 SS 533.6
CRT -.1017 CRS .0626 CST -.9991
LSA 1608.6 MSA 250.8 SSA 7.5
    TDE .2619 TRA11.9918 TC3 -.0617 BAU .1757
                                                                     SGT 5050.6 SGR 285.8 SG3 86.4
RRT -.4751 RRF -.4709 RTF .9889
    ROE .6295 RRA -.3364 RC3 -.0099 FAU-.00952
FDE .0816 FRA 2.3610 FC3 .0389 BSP 16841
BOE .6818 BRA11.9965 BC3 .0620 FSP -285
                                                                     SGB 5058.7 R23 -.0001 R13 -.9889
                                                                                                                          EL1 1517.6 EL2 249.9 ALF 179.01
                                                                     SG1 5052.4 SG2 251.4 THA 178.46
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FLIGHT TIME 214.00

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FLIGHT TIME 70.00
 LAUNCH DATE JUL 26 1967
                                                                                                                                          ARRIVAL DATE OCT 4 1967
                                                                            DISTANCE 199.119
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 28.292 GAL -13.86 AZL 92.39 HCA 89.37 SMA 140.22 ECC .25291 INC 2.3877 VI 29.322 RP 108.33 LAP -2.39 LOP 31.72 VP 38.779 GAP -6.52 AZP 90.03 TAL 237.43 TAP 326.80 RCA 104.76 APO 175.68 V2 34.983 RC 63.388 GL -9.46 GP -16.74 ZAL 161.60 ZAP 42.90 ETS 18.57 ZAE 157.72 ETE 337.26 ZAC 97.63 ETC 12.31 CLP -40.10
   PLANETOCENTRIC CONIC
    C3 48.486 VHL 6.963 DLA 6.36 RAL 137,73 RAO 6568.8 VEL 13.033 PTH 2.38 VHP 5.692 DPA -8.90 RAP 166.89 ECC 1.7980 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                  17.09
                                                                                                                                                -25.55
                                                                                                     98.75 24 13 20
69.62 14 27 59
                                                     -27.04
        90.00
                    23 29 26 2633.14
                                                                     69.76
                                                                                                                                  2033.1
                                                                                                                                                                   61.41
        90.00
                    13 6 39
                                    4880.42
                                                      20.09
                                                                    211.82
                                                                                     12.42
                                                                                                                                   4280.4
                                                                                                                                                   17.14
                                                                                                                                                                  204.39
                                                                                                   59.67 1 37 5
68.62 15 42 6
102.30 2 48 20
65.79 16 40 17
       100.00
                      0 57 44
                                   2361.02
                                                     -28.42
                                                                     49.50
                                                                                     16.84
                                                                                                                                   1761.0
                                                                                                                                                  -26.79
                                                                                                                                                                   41.07
       100.00
                    14 24 58
                                    4627.76
                                                      21.40
                                                                    192.71
                                                                                     11.88
                                                                                                                                   4027.8
                                                                                                                                                   18.31
                                                                                                                                                                  185.28
                                   2125.79
       110.00
                      2 12 54
                                                     -32.15
                                                                     30.80
                                                                                     16.00
                                                                                                                                   1525.8
                                                                                                                                                  -30.12
                                                                                                                                                                   22.17
       110.00
                    15 26 18 4435.76
                                                      24.90
                                                                    176.54
                                                                                     10.28
                                                                                                                                   3835.8
                                                                                                                                                   21.42
                                                                                                                                                                  169.12
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 455.9 SGR 471.1 SG3 181.8
RRT -. 0883 RRF .5060 RTF -. 1544
SGB 655.6 R23 -. 1770 R13 .4866
                                                                                                                               ST 183.5 SR 374.1 SS 158.4
CRT -.7094 CRS .2209 CST -.8260
    TOE .1856 TRA -.4085 TC3 .1901 BAU
                                                          .1463
    ROE -.4459 RRA -.2925 RC3 -.1217 FAU .07503
                                                                                                                              LSA 402.6 MSA 190.0 55A 22.3
    FOE .1586 FRA-1.1636 FC3-1.3397 BSP 948
                                                        -497
                                                                         SG1 484.9 SG2 441.2 THA 124.76
    BOE .4830 BRA .5025 BC3 .2257 FSP
                                                                                                                               EL1 398.6 EL2 121.4 ALF 111.26
LAUNCH DATE JUL 26 1967
                                                                             FLIGHT TIME 72.00
                                                                                                                                          ARRIVAL DATE OCT 6 1967
   HELIOCENTRIC CONIC
                                                                            01STANCE 205.831
    RL 151.94 LAL .00 LOL 302.34 VL 28.339 GAL -13.72 AZL 92.25 MCA 92.57 SMA 140.61 ECC .24973 INC 2.2515 V1 29.322 RP 108.29 LAP -2.25 LOP 34.91 VP 38.825 GAP -5.75 AZP 89.90 TAL 238.02 TAP 330.58 RCA 105.50 APO 175.73 V2 34.996 RC 65.357 GL -9.04 GP -17.79 ZAL 162.14 ZAP 47.27 ETS 17.00 ZAE 159.03 ETE 331.17 ZAC 99.03 ETC 11.90 CLP -44.55
   PLANETOCENTRIC CONIC
    C3 47.363 VHL 6.882 DLA
                                           6.87 RAL 137.48 RAD 6568.8 VEL 12.989 PTH
                                                                                                        2.37 VHP 5.387 DPA
                                                                                                                                      -9.37 RAP 165.35 ECC 1.7795
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 24 31 2643.56 -27.15. 70.51 16.65 98.39 24 8 34 2043.6 -25.71 62.13
                                                                                                      69.11 14 30 35
        en na
                   13 9 37
                                   4858.27
                                                     19.56
                                                                    210.41
                                                                                     11.66
                                                                                                                                   4258.3
                                                                                                                                                   16.55
                                                                                                                                                                  203.04
                                   2370.61
       100.00
                     0 53 4
                                                     -28.53
                                                                     50.19
                                                                                     16.40
                                                                                                      99.32
                                                                                                                  1 32 35
                                                                                                                                   1770.6
                                                                                                                                                   -26.95
                                                                                                                                                                   41.74
                                                                                                   68.09 15 44 27
101.97 2 44 23
                  14 27 40 4606.45
       100.00
                                                     20.86
                                                                    191.35
                                                                                     11.12
                                                                                                                                   4006.4
                                                                                                                                                   17.71
                                                                                                                                                                  143.94
                   2 8 49 2133.55
15 28 25 4416.27
       110.00
                                                     -32.26
                                                                     31.38
                                                                                     15.59
                                                                                                                 2 44 23
                                                                                                                                   1533.6
                                                                                                                                                  -30.27
                                                                                                                                                                   22.72
                                                                                                     65.23 16 42 1
       110.00
                                                      24.35
                                                                    175.29
                                                                                     9.49
                                                                                                                                   3816.3
                                                                                                                                                  20.80
                                                                                                                                                                 167.94
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 456.8 SGR 490.1 SG3 202.4
RRT -.0351 RRF .5576 RTF -.0590
    TOE .1821 TRA -.4330 TC3 .1685 BAU .1417
                                                                                                                               ST 186.8 SR 371.3 SS 171.9
CRT -.6718 CRS .2525 CST -.8699
    ROE -.4361 RRA -.3094 RC3 -.1473 FAU .08235
                                                                        SG8 670.0 R23 -.0797 R13 .5533
    FOE .1993 FRA-1.2883 FC3-1.5053 BSP 979
80E .4726 BRA .5322 BC3 .2238 FSP -566
                                                                                                                              LSA 400.9 MSA 202.7 SSA 22.4
                                                                        SG1 492.0 SG2 454.8 THA 103.22
                                                                                                                               EL1 394.8 EL2 130.2 ALF 111.07
                                                                            FLIGHT TIME 74.00
                                                                                                                                         ARRIVAL DATE OCT 8 1967
LAUNCH DATE JUL 26 1967
                                                                           DISTANCE 212.505
   HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 28.373 GAL -13.58 AZL 92.11 MCA 95.77 SMA 140.90 ECC .24691 INC 2.1145 V1 29.322
RP 108.25 LAP -2.10 LOP 38.11 VP 38.662 GAP -5.02 AZP 89.79 TAL 238.45 TAP 334.22 RCA 106.11 APO 175.69 V2 35.009
RC 67.365 GL -8.60 GP -18.87 ZAL 162.61 ZAP 51.83 ETS 15.44 ZAE 160.30 ETE 323.71 ZAC 100.61 ETC 11.40 CLP -49.22
   PLANETOCENTRIC CONIC
    C3 46.309 VHL 6.805 DLA 7.38 RAL 137.33 RAD 6568.7 VEL 12.949 PTH 2.36 VHP 5.120 DPA -9.81 RAP 163.62 ECC 1.7621
    C5 46.509 VML 6.805 DLA 7.38 RAL 157,35 RAD 6588.7 VEL 12.949 PM 2.36 VAP 5.120 DVA -9.51 RAP 163.52 ECC 17.021 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 20 0 2654.09 -27.25 71.26 16.31 98.02 24 4 14 2054.1 -25.86 62.87 90.00 13 12 57 4836.45 19.02 209.04 11.03 68.62 14 33 34 4236.5 15.95 201.71 100.00 0 48 49 2380.31 -28.63 50.89 16.08 98.97 1 28 29 1780.3 -27.10 42.42
                  23 20 0 2654.09
13 12 57 4836.45
0 48 49 2380.31
                                                                                                    67.60 15 47 11
101.64 2 40 50
                  14 30 45 4585.46
2 5 9 2141.43
15 30 55 4397.11
                                                                                                                                                                 182.71
       100.00
                                                     20.33
                                                                    190.03
                                                                                    10.47
                                                                                                                                  3985.5
                                                                                                                                                  17.11
       110.00
                                                     -32.37
                                                                     31.96
                                                                                    15.29
                                                                                                   101.64
                                                                                                                                  1541.4
                                                                                                                                                  -30.43
                                                                                                                                                                   23.29
                                                                                                     64.70 16 44 12
       110.00
                                                     23.80
                                                                    174.08
                                                                                     8.82
                                                                                                                                  3797.1
                                                                                                                                                   20.19
                                                                                                                                                                 166.79
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 191.7 SR 366.8 SS 186.0

CRT - .6247 CRS .2858 CST - .9121

LSA 398.5 MSA 215.8 SSA 22.5

EL1 389.1 EL2 141.1 ALF 110.97
                                                                       SGT 463.1 SGR 511.3 SG3 223.3
RRT .0463 RRF .6067 RTF .0619
SGB 689.9 R23 .0851 R13 .6017
SG1 513.7 SG2 460.4 THA 777.50
    TDE .1788 TRA -.4657 TC3 .1384 BAU .1383
    RDE -.4242 RRA -.3268 RC3 -.1754 FAU .08971
    FOE .2475 FRA-1.4082 FC3-1.6770 89P 1021
    BOE .4603 BRA .5689 BC3 .2234 FSP
                                                         -632
LAUNCH DATE JUL 26 1967
                                                                            FLIGHT TIME 76.00
                                                                                                                                          ARRIVAL DATE OCT 10 1967
                                                                            DISTANCE 219.141
   RL 151.94 LAL .00 LOL 302.34 VL 28.396 GAL -13.45 AZL 91.98 HCA 98.97 SMA 141.10 ECC .24438 INC 1.9759 V1 29.322
RP 108.20 LAP -1.95 LOP 41.32 VP 38.890 GAP -4.32 AZP 89.69 TAL 238.74 TAP 357.70 RCA 106.62 APO 175.58 V2 35.023
RC 69.409 GL -8.13 GP -19.98 ZAL 163.01 ZAP 56.55 ETS 13.85 ZAE 161.39 ETE 314.70 ZAC 102.37 ETC 10.78 CLP -54.09
   PLANETOCENTRIC CONIC
    C3 45.305 VHL 6.731 DLA 7.89 RAL 137.28 RAD 6568.7 VEL 12.910 PTH 2.35 VHP 4.889 OPA -10.21 RAP 161.70 ECC 1.7456
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                16.08
                                                                                                  97.65 24 0 16
68.16 14 36 55
                                                                                                                                               -26.00
                 23 15 51 2664.75
        90.00
                                                    -27.35
                                                                     72.02
                                                                                                                                   2064.7
                                                                                                                                                                   63.61
        90.00
                   13 16 40
                                   4814.79
                                                     18.48
                                                                    207.68
                                                                                    10.51
                                                                                                                                   4214.8
                                                                                                                                                  15.36
                                                                                                                                                                  200.40
                                                                                                                 1 24 46
                                    2390.13
                                                    -28.74
                                                                    51.60
                                                                                    15.86
                                                                                                     98.61
                                                                                                                                   1790.1
                                                                                                                                                 -27.25
                                                                                                                                                                   43.12
       100.00
                     0 44 56
                                                                                                             15 50 17
2 37 40
16 46 45
                   14 34 13
                                    4564.64
                                                     19.78
                                                                    188.72
                                                                                      9.95
                                                                                                     67.12
                                                                                                                                   3964.6
                                                                                                                                                   16.51
                                                                                                                                                                 181.45
                     2 1 51 2149.41
15 33 47 4376.13
                                                                                    15.09
                                                                                                   101.30
                                                    -32.48
                                                                     32.56
                                                                                                                                   1549.4
                                                                                                                                                 - 30 . 58
                                                                                                                                                                   23.86
                                                                                                                                   3778.1
       110.00
                    15 33 47
                                                     23.24
                                                                    172.89
                                                                                     8.27
                                                                                                    64.20
                                                                                                                                                   19.58
                                                                                                                                                                 165.66
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT OFTERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 479.1 SGR 535.7 SG3 244.6
RRT .1474 RRF .6542 RTF .1973
SGB 718.7 R23 .1549 R13 .6437
                                                                                                                            ST 199.8 SR 361.0 SS 199.6
CRT -.5753 CRS .3091 CST -.9427
LSA 396.3 MSA 229.3 SSA 22.5
    TOE .1781 TRA -.5047 TC3 .1008 BAU
                                                         .1389
    ROE -.4109 RRA -.3447 RC3 -.2060 FAU .09708
    FOE .2967 FRA-1.5241 FC3-1.8551 BSP 1121
BOE .4478 BBA .6112 BC3 .2294 FSP -706
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BOE .4478 BRA .6112 BC3 .2294 FSP

SG1 553.0 SG2 459.1 THA 63.62

EL1 382.7 EL2 154.2 ALF 111.28

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LAUNCH DATE JUL 26 1967
                                                                            FLIGHT TIME 78.00
                                                                                                                                        ARRIVAL DATE OCT 12 1967
    HELIOCENTRIC CONIC
                                                                           DISTANCE 225.738
     RL 151.94 LAL .00 LOL 302.34 VL 28.409 GAL -13.33 AZL 91.83 MCA 102.17 SMA 141.21 ECC .24210 INC 1.8346 V1 29.322 RP 108.16 LAP -1.79 LOP 44.52 VP 38.912 GAP -3.66 AZP 89.61 TAL 238.88 TAP 341.05 RCA 107.02 APO 175.39 V2 35.036
     RC 71.485 GL -7.64 GP -21.10 7AL 163.33 ZAP 61.41 ETS 12.21 ZAE 162.12 ETE 304.14 ZAC 104.27 ETC 10.06 CLP -59.14
     C3 44.335 VHL 6.658 OLA
                                           8.39 RAL 137.32 RAD 6568.7 VEL 12.872 PTH
                                                                                                      2.34 VHP 4.695 OPA -10.56 RAP 159.64 ECC 1.7296
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   23 12 2 2675.56
13 20 47 4793.09
                                                                                                    97.27 23 56 38
67.71 14 40 40
                                                     -27.44
                                                                     72.80
                                                                                   15.95
                                                                                                                                 2075.6
                                                                                                                                                -26.15
                                                                                                                                                                 64.37
                                                     17.93
                                                                    206.33
                                                                                    10.11
                                                                                                                                 4193.1
                                                                                                                                                 14.75
                                                                                                                                                                199.09
                      0 41 23 2400.09
                                                                     52.33
                                                                                    15.73
                                                                                                    98.24
                                                                                                                1 21 23
                                                                                                                                                                 43.82
                                                     -28.84
                                                                                                                                 1800.1
                                                                                                                                                -27.40
                                                                                                    66.66 15 53 48
100.96 2 34 51
63.71 16 49 41
                   14 38 4 4543.80
                                                                                     9.53
                                                                                                                                 3943.8
                                                                                                                                                 15.90
                                                     19.22
                                                                    187.42
                                                                                                                                                                180.21
                   1 58 54 2157.50
15 37 2 4359.15
       110.00
                                                    -32.58
                                                                     33.17
                                                                                    14.99
                                                                                                  100.96
                                                                                                                                 1557.5
                                                                                                                                                                 24.44
                                                                                                                                                -30.73
                                                                   171.70
                                                                                     7.82
                                                                                                    63.71
                                                     22.67
                                                                                                                                 3759.2
                                                                                                                                                 18.96
                                                                                                                                                                164.54
    DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 509.1 SGR 561.5 SG3 264.7
RRT .2660 RRF .6966 RTF .3405
SGB 758.0 R23 .1793 R13 .6921
SG1 606.9 SG2 454.1 THA 55.13
                                                                                                                            ST 210.6 SR 353.1 SS 214.0
CRT -.5203 CRS .3356 CST -.9676
LSA 394.7 MSA 242.0 SSA 22.6
     TOE .1786 TRA -.5519 TC3 .0538 BAU .1448
    TOE .1766 IRA -.3517 RC3 -.2383 FAU .10392
FOE .3530 FRA-1.6238 FC3-2.0292 85P 1263
BOE .4337 BRA .6599 BC3 .2443 FSP -772
                                                                                                                             EL1 374.5 EL2 169.6 ALF 111.97
LAUNCH DATE JUL 26 1967
                                                                           FLIGHT TIME 80.00
                                                                                                                                        ARRIVAL DATE OCT 14 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 232.297
          151.94 LAL .00 LOL 302.34 VL 28.412 GAL -13.20 AZL 91.69 HCA 105:37 SMA 141.24 ECC .24000 INC 1.6899 V1 29.322 108.12 LAP -1.63 LOP 47.72 VP 38.926 GAP -3.03 AZP 89.55 TAL 238.89 TAP 344.27 RCA 107.34 APO 175.13 V2 35.049 73.590 GL -7.11 GP -22.22 ZAL 163.59 ZAP 66.36 ETS 10.49 ZAE 162.32 ETE 292.44 ZAC 106.28 ETC 9.24 CLP -64.34
    RL 151.94 LAL
RP 108.12 LAP
    RC 73.590 GL
   PLANETOCENTRIC CONIC
    C3 43.389 VHL 6.587 DLA
                                          8.90 RAL 137.44 RAD 6568.6 VEL 12.836 PTH
                                                                                                      2.34 VHP 4.537 OPA -10.87 RAP 157.47 ECC 1.7141
    UNCH AZMTH LNCH TIME L-I TIME
90.00 23 8 30 2686.62
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.54 73.60 15.90 96.88 23 53 17 2086.6 -26.30 65.15 17.36 204.97 9.79 67.27 14 44 50 4171.2 14.13 197.79
                  13 25 19
         90.00
                                    4771.17
                      0 38 7 2410.27
                                                                     53.07
                                                                                    15.70
                                                     -28.93
                                                                                                    97.86
                                                                                                                1 18 17
                                                                                                                                 1810.3
                                                                                                                                                -27.54
                                                                                                                                                                 44.54
                    14 42 19 4522.76
                                                                                                    66.21 15 57 42
                                                     18.65
                                                                   186.12
                                                                                     9.21
                                                                                                                                 3922.8
                                                                                                                                                 15.28
                                                                                                                                                               174.96
                    1 56 15 2165.77
                                                     -32.69
                                                                     33.79
                                                                                    14.99
                                                                                                   100.60
                                                                                                               2 32 21
                                                                                                                                 1565.8
                                                                                                                                                -30.88
                                                                                                                                                                 25.04
                                                                                                    63.23 16 53 1
                    15 40 41
                                    4340.02
                                                     22.09
                                                                                     7.48
                                                                   170.52
                                                                                                                                 3740.0
                                                                                                                                                 18.32
                                                                                                                                                               163.42
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 555.9 SGR 589.6 SG3 283.8
RRT .3836 RRF .7353 RTF .4729
SGB 810.3 R23 .1847 R13 .7411
SG1 674.9 SG2 448.4 THA 49.36
                                                                                                                            ST 225.2 SR 343.9 SS 227.6
CRT -.4679 CRS .3537 CST -.9821
     TOE .1824 TRA -.6051 TC3 -.0014 BAU .1580
     RDE -.3781 RRA -.3779 RC3 -.2724 FAU .11023
    FOE .4076 FRA-1.7092 FC3-2.1994 BSP
BOE .4198 BRA .7134 BC3 .2724 FSP
                                                       1470
-840
                                                                                                                            LSA 395.0 MSA 253.5 SSA 22.6
EL1 366.1 EL2 187.0 ALF 113.51
LAUNCH DATE JUL 26 1967
                                                                           FLIGHT TIME 82.00
                                                                                                                                       ARRIVAL DATE OCT 16 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 238.817
    RL 151.94 LAL .00 LOL 302.34 VL 28.407 GAL -13.08 A7L 91.54 MCA 108.58 SMA 141.19 ECC .23807 INC 1.5404 V1 29.322
RP 108.08 LAP -1.46 LOP 50.93 VP 38.934 GAP -2.42 AZP 89.51 TAL 238.78 TAP 347.36 RCA 107.58 APO 174.81 V2 35.062
RC 75.721 GL -6.56 GP -23.32 ZAL 163.78 ZAP 71.36 ETS 8.68 ZAE 161.87 ETE 280.42 ZAC 108.34 ETC 8.32 CLP -69.63
   PLANETOCENTRIC CONIC
    C3 42.455 VHL 6.516 DLA 9.42 RAL 137.65 RAD 6568.6 VEL 12.799 PTH 2.33 VHP 4.412 DPA -11.15 RAP 155.24 ECC 1.6987
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 23 5 12 2698.02

90.00 13 30 18 4748.81

100.00 0 35 6 2420.76

100.00 14 47 1 4501.30

110.00 1 53 51 2174.29

110.00 15 44 45 4320.54
                                                                               15.94
                                                                                                 96.48 23 50 10
66.84 14 49 27
                                                                                                                                             -26.44
                                                    -27.63
                                                                   74.42
                                                                                                                              2098.0
                                                                                                                                                               65.95
                                                    16.76
                                                                   203.60
                                                                                    9.58
                                                                                                                                4148.8
                                                                                                                                                13.48
                                                                                                                                                              196.46
       100.00
                                                                                   15.75
                                                   -29.03
                                                                   53.83
                                                                                                   97.47
                                                                                                              1 15 26
                                                                                                                                1820.8
                                                                                                                                               -27.69
                                                                                                                                                               45.28
       100.00
                                                                                                   65.76 16 2 2
100.24 2 30 6
                                                    18.06
                                                                   184.81
                                                                                    8.98
                                                                                                                                3901.3
                                                                                                                                                14.63
                                                                                                                                                              177.69
       110.00
                                                    -32.79
                                                                    34.43
                                                                                   15.07
                                                                                                  100.24
                                                                                                                                1574.3
                                                                                                                                               -31.03
                                                                                                                                                                25.65
                                                                                                   62.75 16 56 45
                                                                                                                                               17.67
       110.00
                                                     21.49
                                                                   169.33
                                                                                    7.22
                                                                                                                                3720.5
                                                                                                                                                               162.29
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      RRT .4924 RRF .7682 RTF .5866
SGB 876.0 R23 .1850 R13 .7831
SG1 756.7 SG2 441:3 THA 44.61
    TOE .1887 TRA -.6650 TC3 -.0660 BAU .1781 RDE -.3586 RRA -.3915 RC3 -.3068 FAU .11540
                                                                                                                           ST 243.2 SR 332.5 SS 241.2

CRT -.4164 CRS .3745 CST -.9902

LSA 398.5 MSA 261.8 SSA 22.6
    FDE .4666 FRA-1.7681 FC3-2.3532 BSP 1726
BDE .4052 BRA .7717 BC3 .3138 FSP -895
                                                                                                                            EL1 356.7 EL2 206.1 ALF 116.33
LAUNCH DATE JUL 26 1967
                                                                           FLIGHT TIME 84.00
                                                                                                                                       ARRIVAL DATE OCT 18 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 245.299
   RL 151.94 LAL .00 LOL 302.34 VL 28.394 GAL -12.95 AZL 91.39 HCA 111.79 SMA 141.08 ECC .23627 INC 1.3851 V1 29.322
RP 108.04 LAP -1.29 LOP 54.14 VP 38.936 GAP -1.84 AZP 89.49 TAL 238.54 TAP 350.33 RCA 107.75 APO 174.41 V2 35.075
RC 77.874 GL -5.96 GP -24.38 ZAL 163.90 ZAP 76.33 ETS 6.78 ZAE 160.77 ETE 269.04 ZAC 110.40 ETC 7.31 CLP -74.97
  PLANETOCENTRIC CONIC
    C3 41.529 VHL 6.444 DLA
                                         9.96 RAL 137.94 RAD 6568.6 VEL 12.763 PTH 2.32 VMP 4.321 DPA -11.41 RAP 152.99 ECC 1.6835
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-27.71 75.28 16.07 96.06 23 47 14 21040 -26 40 66 40
    LNCH AZMTH LNCH TIME L-I TIME
                  23 2 4 2709.95
13 35 46 4725.75
                                                                                                   96.06 23 47 14
66.41 14 54 32
                                                                                                                                             -26.59
        90.00
                                                                   75.28
                                                                               16.07
                                                                                                                                2109.9
        90.00
                                                    16.14
                                                                   202.19
                                                                                    9.45
                                                                                                                                 4125.8
                                                                                                                                                 12.81
                                                                                                                                                               195.10
                     0 32 15 2431.73
14 52 12 4479.20
       100.00
                                                    -29.12
                                                                    54.63
                                                                                   15.89
                                                                                                    97.06
                                                                                                               1 12 47
                                                                                                                                1831.7
                                                                                                                                               -27.84
                                                                                                                                                                46.07
                   14 52 12
                                                                                                    65.33 16 6 51
       100.00
                                                    17.43
                                                                   183.46
                                                                                    8.84
                                                                                                                                3879.2
                                                                                                                                                 13.96
                                                                                                                                                               176.39
                     1 51 41 2183.19
15 49 16 4300.50
       110.00
                                                   -32.90
                                                                                                              2 28 4
                                                                   35.11
                                                                                   15.23
                                                                                                   99.85
                                                                                                                                1583.2
                                                                                                                                               -31.19
                                                                                                                                                                26.30
                                                                                                             17 0 56
      110.00
                   15 49 16
                                                                                    7.06
                                                    20.86
                                                                   168.12
                                                                                                    62.28
                                                                                                                                3700.5
                                                                                                                                                 16.99
                                                                                                                                                               161.13
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
    TDE .1992 TRA - .7289 TC3 - .1381 BAU .2047
                                                                      SGT 704.3 SGR 645.6 SG3 313.7
RRT .5820 RRF .7973 RTF .6749
SGB 955.4 R23 .1836 R13 .8181
                                                                                                                          ST 265.2 SR 319.9 SS 253.8

CRT -.3722 CRS .3876 CST -.9922

LSA 407.0 MSA 266.4 SSA 22.7
   FOE -.3379 RRA -.4030 RC3 -.3418 FAU .11954
FOE .5201 FRA-1.8051 FC3-2.4920 BSP 2035
BOE .3922 BRA .8329 BC3 .3687 FSP -948
                                                                     SG1 850.8 SG2 434.5 THA 40.74
                                                                                                                          EL1 348.9 EL2 225.7 ALF 121.57
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ARRIVAL DATE OCT 20 1967

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LAUNCH DATE JUL 26 1967
                                                                                 DISTANCE 251.745
    RL 151.94 EAL .00 LOL 302.34 VL 28.374 GAL -12.82 A7L 91.22 MCA 115.00 SMA 140.91 ECC .23457 INC 1.2226 VI 29.322 RP 108.00 LAP -1.11 LOP 57.35 VP 38.933 GAP -1.29 A7P 89.48 TAL 238.20 TAP 353.20 RCA 107.86 APO 173.96 V2 35.088 RC 80.046 GL -5.32 GP -25.41 7AL 163.94 7AP 81.24 ETS 4.79 7AE 159.09 ETE 258.99 7AC 112.42 ETC 6.24 CLP -80.29
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 40.603 VHL 6.372 DLA 10.52 RAL 138.32 RAD 6568.6 VEL 12.727 PTH 2.31 VHP 4.260 OPA -11.66 RAP 150.79 ECC 1.6682
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        16.28
                                                                                                              95.61 23 44 24
65.99 15 0 9
                                                                                                                                             2122.6
                      22 59 2 2722.59
                                                         -27.80
                                                                           76.20
         90.00
                                                                                                                                              4101.7
                                                                                                                                                                                193.69
                                                                         200.74
                                                                                            9.40
                     13 41 47
                                      4701.73
                                                          15.48
         90.00
                                                                                                              96.62 1 10 16
64.89 16 12 10
                                                                                                                                              1843.4
                                                                                                                                                                                 46.90
                      0 29 32 2443.36
                                                         -29.22
                                                                           55.49
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        100.00
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                                                          16.77
                                                                          182.07
                                                                                             8.78
                                      4456.19
                     14 57 54
        100.00
                                                                                                              99.44 2 26 12
61.82 17 5 35
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                                                                                            15.48
                                                         -33.01
                                                                           35.82
                       1 49 40 2192.64
        110.00
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                                                                                            6.97
                                                         20.20
                                                                         166.87
                    15 54 16 4279.69
       110.00
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 290.9 SR 304.9 SS 266.5
CRT -.3330 CRS .4043 CST -.9903
                                                                              SGT 803.2 SGR 671.0 SG3 323.3
RRT .6540 RRF .8213 RTF .7411
SGB 1046.5 R23 .1829 R13 .8449
    TDE .2132 TRA -.7967 TC3 -.2184 BAU .2359
    RDE -.3148 RRA -.4103 RC3 -.3757 FAU .12206
FDE .5759 FRA-1.8085 FC3-2.6026 BSP 2378
BDE .3802 BRA .8961 BC3 .4346 FSP -981
                                                                                                                                         LSA 421.6 MSA 265.3 SSA 22.7
                                                                                                                                         EL1 344.4 EL2 242.8 ALF 130.96
                                                                              SG1 955.7 SG2 426.6 THA 37.27
                                                                                                                                                      ARRIVAL DATE OCT 22 1967
                                                                                   FLIGHT TIME 88.00
LAUNCH DATE JUL 26 1967
                                                                                   DISTANCE 258.154
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 28.348 GAL -12.68 A7L 91.05 HCA 118.22 SMA 140.69 ECC .23296 INC 1.0512 V1 29.322 RP 107.96 LAP -.93 LOP 60.56 VP 38.925 GAP -.76 AZP 89.50 TAL 237.75 TAP 355.97 RCA 107.91 APO 173.46 V2 35.101 RC 82.236 GL -4.62 GP -26.39 ZAL 163.91 ZAP 86.02 ETS 2.71 ZAE 156.97 ETE 250.54 ZAC 114.34 ETC 5.12 CLP -85.56
   PLANETOCENTRIC CONIC
    C3 39.677 VHL 6.299 DLA 11.11 RAL 138.77 RAD 6568.5 VEL 12.690 PTH 2.31 VHP 4.229 DPA -11.91 RAP 148.67 ECC 1.6530 ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     22 56 1 2736.25
13 48 26 4676.42
0 26 52 2455.92
15 4 12 4431.98
1 47 45 2202.84
15 59 49 4257.83
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                                                                                                              95.12 23 41 38
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                                                          -27.89
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         90.00
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        100.00
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98.99 2 24 28
61.34 17 10 47
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        100.00
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                                                         -33.12
                                                                            36.60
                                                                                            15.82
        110.00
                                                                                                                                               3657.8
                                                                                                                                                                                 15A.71
                                                                                              6.97
                                                                           165.57
        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 914.4 SGR 695.4 SG3 329.8
RRT .7088 RRP .6424 RTF .7889
SGB .148.8 R23 .1839 R13 .8659
SCI 1069.5 SG2 419.4 THA 34.32
                                                                                                                                          ST 320.4 SR 289.0 SS 277.9
CRT -.3014 CRS .4135 CST -.9868
    TOE .2321 TRA -.8657 TC3 -.3051 BAU .2708
     RDE - . 2908 RRA - . 4147 RC3 - . 4093 FAU . 12335
                                                                                                                                          LSA 441.8 MSA 260.2 55A 22.8
     FDE .6227 FRA-1.7889 FC3-2.6915 BSP 2761
                                                                                                                                          EL1 350.1 EL2 252.1 ALF 144.47
     BOE .3721 BRA .9599 BC3 .5105 FSP -1012
                                                                                                                                                     ARRIVAL DATE OCT 24 1967
                                                                                   FLIGHT TIME 90.00
LAUNCH CATE JUL 26 1967
                                                                                  DISTANCE 264.529
    HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 28.316 GAL -12.54 AZL 90.87 MCA 121.43 SMA 140.42 ECC .23143 INC .8690 V1 29.322 RP 107.92 LAP -.74 LOP 63.78 VP 38.913 GAP -.26 AZP 89.55 TAL 237.21 TAP 358.64 RCA 107.92 APO 172.91 V2 35.113 RC 84.440 GL -3.86 GP -27.35 ZAL 163.80 ZAP 90.62 ETS .54 ZAE 154.56 ETE 243.63 ZAC 116.11 ETC 3.99 CLP -90.69
     C3 38.748 VHL 6.225 DLA 11.73 RAL 139.31 RAD 6568.5 VEL 12.654 PTH 2.30 VHP 4.224 DPA -12.20 RAP 146.69 ECC 1.6377 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 52 57 2751.26 -27.97 78.28 16.95 94.58 23 38 48 2151.3 -27.05 69.73 90.00 13 55 49 4649.43 14.01 197.61 9.56 65.14 15 13 18 4049.4 10.54 190.65
    PLANETOCENTRIC CONIC
                                                                                                                                              1869.7
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                       0 24 10 2469.73
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        100.00
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                                      4406.20
        100.00
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60.86 17 16 34
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                       1 45 53 2214.06
16 5 59 4234.63
                                                                            37.45
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                                                         -33.23
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                                                                                                                                                                                 157.40
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                                                                           164.20
                                                                                              7.06
                      16 5 59
                                                          18.72
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 1035.8 SGK 715.4 SG3 331.7
RRT .7508 RRF .8598 RTF .8231
SGB 1258.9 R23 .1867 R13 .8813
SGI 1189.7 SG2 411.4 THA 31.62
                                                                                                                                         ST 353.9 SR 270.5 S5 290.0

CRT -.2750 CRS .4248 CST -.9818

LSA 468.3 MSA 250.4 SSA 22.9
     TOE .2559 TRA -.9348 TC3 -.3976 BAU .3075
     ROE -.2645 RRA -.4141 RC3 -.4407 FAU .12293
FOE .6702 FRA-1.7371 FC3-2.7466 BSP 3134
                                                                                                                                          EL1 369.1 EL2 249.4 ALF 157.34
     BOE .3681 BRA 1.0224 BC3 .5936 FSP -1019
                                                                                                                                                       ARRIVAL DATE OCT 26 1967
                                                                                   FLIGHT TIME 92.00
LAUNCH DATE JUL 26 1967
                                                                                   DISTANCE 270.869
     RL 151.94 LAL .00 LOL 302.34 VL 28.278 GAL -12.39 AZL 90.67 MCA 124.65 SMA 140.10 ECC .22996 INC .6737 VI 29.322
RP 107.89 LAP -.55 LOP 67.00 VP 38.897 GAP .23 AZP 89.62 TAL 236.57 TAP 1.22 RCA 107.88 APO 172.32 V2 35.125
RC 86.655 GL -3.03 GP -28.30 ZAL 163.61 ZAP 94.99 ETS 358.28 ZAE 151.98 ETE 238.05 ZAC 117.69 ETC 2.84 CLP -95.67
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 37.817 VHL 6.150 DLA 12.42 RAL 139.94 RAD 6568.5 VEL 12.617 PTH 2.29 VHP 4.245 DPA -12.55 RAP 144.87 ECC 1.6224

LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 49 42 2768.09 -28.06 79.50 17.43 93.97 23 35 50 2168.1 -27.21 70.94

90.00 14 4 3 4620.31 13.17 195.88 9.78 64.70 15 21 3 4020.3 9.65 188.97
                      14 4 3 4620.31
0 21 20 2485.21
                                                                                                                            1 2 46
                                                                                                                                               1885.2
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                                        4378.43
                       15 19 1
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13.81
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                      1 43 58 2226.68
16 12 53 4209.72
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                                                           -33.36
                                                                             38.42
         110.00
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                                                                           162.75
                                                                                              7.23
                                                          17.89
         110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 391.4 SR 251.1 SS 300.9
CRT - 2527 CRS .4283 CST - .9776
LSA 499.6 MSA 238.2 SSA 23.0
                                                                               SGT 1164.0 SGR 733.7 SG3 330.5
RRT .7824 RRF .8754 RTF .8475
SG8 1375.9 R23 .1919 R13 .8931
      TOE .2853 TRA-1.0020 TC3 -.4948 BAU .3455
      RDE -.2375 RRA -.4102 RC3 -.4715 FAU .12135
FDE .7080 FRA-1.6657 FC3-2.7781 BSP 3577
BDE .3712 BRA 1.0827 BC3 .6835 FSP -1025
                                                                                                                                         EL1 399.5 EL2 238.0 ALF 165.58
                                                                               SGI 1315.1 SG2 404.5 THA 29.29
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FLIGHT TIME 86.00

ARRIVAL DATE OCT 28 1967

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FLIGHT TIME 94.00
LAUNCH DATE JUL 26 1967
                                                                          DISTANCE 277.177
  HELIOCENTRIC CONIC
                        .00 LOL 302.34 VL 28.236 GAL -12.24 AZL 90.46 HCA 127.87 SHA 139.75 ECC .22856 INC .4623 V1 29.322 -37 LOP 70.22 VP 38.877 GAP .69 AZP 89.72 TAL 235.86 TAP 3.73 RCA 107.81 APO 171.69 V2 35.137
    RL 151.94 LAL
    RP 107.85 LAP
    RC 88.880 GL -2.10 GP -29.25 ZAL 163.32 ZAP .99.09 ETS 355.94 ZAE 149.31 ETE 233.58 ZAC 119.07 ETC 1.71 CLP-100.44
   PLANETOCENTRIC CONIC
   C3 36.886 VHL 6.073 OLA 13.16 RAL 140.65 RAD 6568.4 VEL 12.580 PTH 2.28 VHP 4.290 OPA -12.99 RAP 143.23 ECC 1.6070 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 46 7 2787.33 -28,14 80.90 18.02 93.27 23 32 35 2187.3 -27.39 72.32 90.00 14 13 19 4588.47 12.23 194.01 10.10 64.26 15 29 48 3988.5 8.67 187.14
                                                                                                                                1902.9
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                                                                                                   94.34
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                                                    -29.60
                                                                   59.87
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       100.00
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       100.00
                   15 27 49
                                  4348.14
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                                                                  175.67
                                                                                    9.43
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                                                                                                   97.30
                                                                                                              2 19 16
                                                                                                                                1641.1
                                                                                                                                               -32.12
                                2241.13
4182.68
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      110.00
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                                                                  161.19
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      110.00
                   16 20 38
                                                    16.97
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 1296.7 SGR 747.6 SG3 325.5
RRT .8065 RRF .8887 RTF .8649
SGB 1496.8 R23 .1992 R13 .9016
SGI 1443.1 SG2 397.2 THA 27.16
                                                                                                                            ST 433.6 SR 229.2 SS 313.0
CRT -.2306 CRS .4293 CST -.9733
    TDE .3208 TRA-1.0657 TC3 -.5958 BAU .3836
   RDE -.2083 RRA -.4015 RC3 -.5001 FAU .11837
FOE .7457 FRA-1.5697 FC3-2.7781 BSP 3997
BDE .3825 BRA 1.1388 BC3 .7779 FSP -1011
                                                                                                                            LSA 536.9 HSA 223.1 SSA 23.1
                                                                                                                            EL1 438.0 EL2 220.9 ALF 170.65
                                                                                                                                       ARRIVAL DATE OCT 30 1967
                                                                           FLIGHT TIME 96.00
LAUNCH DATE JUL 26 1967
                                                                           DISTANCE 283.455
  HELIOCENTRIC CONIC
                       .00 LOL 302.34 VL 28.190 GAL -12.09 AZL 90.23 HCA 131.09 SMA 139.37 ECC .22721 INC .2311 V1 29.322
-.17 LOP 73.44 VP 36.654 GAP 1.14 AZP 89.65 TAL 235.07 TAP 6.16 RCA 107.70 APO 171.03 V2 35.149
-1.07 GP -30.24 ZAL 162.93 ZAP 102.91 ETS 353.50 ZAE 146.63 ETE 239.01 ZAC 120.22 ETC .58 CLP-104.98
   RL 151.94 LAL
RP 107.82 LAP
    RC 91.113 GL
  PLANETOCENTRIC CONIC
                                                                                                     2.27 VHP 4.357 OPA -13.53 RAP 141.78 ECC 1.5918
    C3 35.960 VHL 5.997 DLA 14.00 RAL 141.46 RAD 6560.4 VEL 12.543 PTH
    LNOW AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                2209.8
                                                                                                  92.45 23 28 53
                                                    -28.22
                                                                   82.54
                                                                                  15.73
        90.00
                    22 42 3
                                 2809.77
                                -553.19
2523.54
4314
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                    14 23 51
                                                                   191.95
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        90.00
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       100.00
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                                 2258.01
4152.95
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                    16 29 25
       110.00
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                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1432.5 SGR 760.0 SG3 318.0
RRT .8249 RRF .9010 RTF .8774
SGB 1621.6 R23 .2089 R13 .9080
                                                                                                                            ST 480.9 SR 206.3 SS 325.1
CRT -.2042 CRS .4185 CST -.9703
    TOE .3630 TRA-1.1247 TC3 -.7002 BAU .4217
    RDE -.1780 RRA -.3697 RC3 -.5282 FAU .11450
                                                                                                                            LSA 579.9 MSA 206.7 SSA 23.3
EL1 483.2 EL2 201.0 ALF 173.94
    FOE .7761 FRA-1.4610 FC3-2.7567 BSP 4436
BDE .4043 BRA 1.1903 BC3 .8771 FSP -995
                                                                       SG1 1573.7 SG2 391.0 THA 25.31
 BOE .4043 BRA 1.1903 BC3 .8771 FSP
                                                                                                                                       ARRIVAL DATE NOV 1 1967
                                                                           FLIGHT TIME 98.00
LAUNCH DATE JUL 26 1967
                                                                           DISTANCE 289.702
   HELIOCENTRIC CONIC
                          .00 LOL 302.34 VL 28.140 GAL -11.92 AZL 89.98 HCA 134.32 SMA 138.95 ECC .22591 INC .0171 V1 29.322 .02 LOP 76.66 VP 38.827 GAP 1.57 AZP 90.02 TAL 234.20 TAP 8.52 RCA 107.56 APO 170.35 V2 35.160 .11 GP -31.29 ZAL 162.41 ZAP 106.40 ETS 350.95 ZAE 143.95 ETE 227.19 ZAC 121.12 ETC 359.47 CLP-109.29
    RL 151.94 LAL
RP 107.78 LAP
    RC 93.352 GL
   PLANETOCENTRIC CONIC
    C3 35.046 VHL 5.920 DLA 14.94 RAL 142.38 RAD 6568.4 VEL 12.507 PTH 2.26 VHP 4.445 DPA -14.23 RAP 140.52 ECC 1.5768 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2236.5
                                                                                                                                             -27.78
                                                                                 19.59
                                                                                                  91.48 23 24 31
         90.00
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                    22 37 15 2836.46
14 35 59 4513.49
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         90.00
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15 49 15 4277.11
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                    1 36 53 2278.10
16 39 27 4119.84
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                                                                   157.63
       110.00
                                                    14.79
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 534.3 SR 181.8 SS 338.1

CRT - 1.1659 CRS .3916 CST - .9684

LSA 629.8 MSA 189.0 SSA 23.4

EL1 535.3 EL2 179.0 ALF 176.36
                                                                       SGT 1569.8 SGR 770.4 SG3 308.1
     TOE .4126 TRA-1.1775 TC3 -.8073 BAU .4592
                                                                       RRT .8390 RRF .9122 RTF .8865
SGB 1748.6 R23 .2206 R13 .9127
    ROE -.1462 RRA -.3744 RC3 -.5557 FAU .10980
FDE .8027 FRA-1.3402 FC3-2.7125 BSP 4884
BDE .4378 BRA 1.2356 BC3 .9800 FSP -972
                                                                       SG1 1705.5 SG2 385.8 THA 23.67
     BOE .4378 BRA 1.2356 BC3 .9800 FSP
                                                                                                                                        ARRIVAL DATE NOV 3 1967
                                                                           FLIGHT TIME 100.00
 LAUNCH DATE JUL 26 1967
                                                                           DISTANCE 295.921
   HELIOCENTRIC CONTC
    RL 151.94 LAL .00 LOL 302.34 VL 28.086 GAL -11.75 AZL 89.69 MCA 137.54 SMA 138.52 ECC .22467 INC .3069 VI 29.322 RP 107.75 LAP .21 LOP 79.88 VP 38.798 GAP 1.98 AZP 90.23 TAL 233.27 TAP 10.81 RCA 107.40 APO 169.64 V2 35.170 RC 95.596 GL 1.45 GP -32.46 ZAL 161.75 ZAP 109.55 ETS 348.27 ZAE 141.31 ETE 224.99 ZAC 121.79 ETC 358.36 CLP-113.36
   PLANETOCENTRIC CONIC
     C3 34.153 VHL 5.844 DLA 16.02 RAL 143.42 RAD 6568.3 VEL 12.471 PTH 2.26 VHP 4.555 DPA -15.10 RAP 139.43 ECC 1.5621
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 31 23 2868.87 -28.32 86.86 20.62 90.29 23 19 11 2268.9 -27.98 78.21
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62.91 16 4 37
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                                    4468.05
                                                       8.58
                                                                    187.05
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                    14 50 9
         90.00
                     0 5 33 2577.82
16 2 35 4234.33
                                                                                                                                  1977.8
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                                                     -29.86
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        100.00
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        100.00
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                      1 33 34
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                                    2302.46
                                                     -33.92
                                                                     44.26
                                                                                    20.34
       110.00
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                                                                                     9.06
                                    4082.47
                                                     13.47
                                                                    155.54
                                                                                                     58.28
                                                                                                               17 59 6
                     16 51 4
        110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 596.0 SR 155.1 SS 354.4
CRT - 1001 CRS .3367 CST - .9668
                                                                      SGT 1706.3 SGR 777.4 SG3 295.6
RRT .8496 RRF .9223 RTF .8928
SGB 1875.1 R23 .2342 R13 .9158
     TDE .4724 TRA-1.2217 TC3 -.9152 BAU .4951
     ROE -.1111 RRA -.3545 RC3 -.5814 FAU .10418
FOE .8324 FRA-1.2053 FC3-2.6407 BSP 5307
BOE .4853 BRA 1.2721 BC3 1.0843 FSP -932
                                                                                                                            LSA 689.4 MSA 170.2 SSA 23.6
                                                                                                                            EL1 596.2 EL2 154.3 ALF 178.40
                                                                       SG1_1836.0 SG2 381.1 THA 22.17
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LAUNCH DATE JUL 26 1967
                                                                        FLIGHT TIME 102.00
                                                                                                                                 ARRIVAL DATE NOV 5 1967
   HEL TOCENTRIC CONTC
                                                                       DISTANCE 302.112
                         .00 LOL 302.34 VL 28.030 GAL -11.57 AZL 89.37 MCA 140.77 SMA 138.06 ECC .22348 INC .6289 V1 29.322 .40 LOP 83.11 VP 38.767 GAP 2.37 AZP 90.49 TAL 232.28 TAP 13.05 RCA 107.21 APO 168.92 V2 35.180 3.00 GP -33.78 ZAL 160.91 ZAP 112.33 ETS 345.43 ZAE 138.68 ETE 223.31 ZAC 122.22 ETC 357.25 CLP-117.21
    RL 151.94 LAL
    RP 107.72 LAP
    RC 97.843 GL
   PLANETOCENTRIC CONIC
    C3 33.300 VHL 5.771 DLA 17.27 RAL 144.60 RAD 6568.5 VEL 12.437 PTH 2.25 VHP 4.688 DPA -16.18 RAP 138.48 ECC 1.5480
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                           88.81 23 12 25
62.47 16 20 35
89.99 24 38 49
61.19 17 28 7
93.15 2 8 13
57.72 18 12 1
        90.00
                                                                           21.87
                                                                                                                                      -28.16
                                                                                                                       2309.1
                                                                                                                                                        81.14
                   22 23 56 2909.13
                                                  -28.29
                                                                89.80
                   15 7 0 4415.03
                                                   6.92
                                                                184.03
                                                                               12.86
                                                                                                                          3615.0
                                                                                                                                          3.18
                                                                                                                                                        177.35
        90.00
                  23 55 15 2614.60
                                                                                                                          2014.7
                                                                                                                                                        59.37
       100.00
                                                 -29.89
                                                                 68.16
                                                                               21.88
                                                                                                                                         -29.57
                   16 18 23 4184.71
       100.00
                                                    8.33
                                                                166.34
                                                                               12.09
                                                                                                                          3584.7
                                                                                                                                           4.42
                                                                                                                                                       159.73
                  1 29 21 2332.55
17 4 42 4039.60
                                                 -34.06
                                                                 46.60
                                                                               21.75
                                                                                                                          1732.6
                                                                                                                                         -33.24
                                                                                                                                                         37.46
       110.00
                                                  11.92
                                                                153.19
                                                                                 9.94
                                                                                                                          3439.6
       110.00
                                                                                                                                          7.57
                                                                                                                                                        146.79
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1843.2 SGR 785.1 SG3 281.8
RRT .8573 RRF .9320 RTF .8974
SGB 2003.5 R23 .2494 R13 .9182
SGI 1967.3 SG2 378.7 THA 20.87
                                                                                                                  ST 667.3 SR 128.9 SS 371.9
CRT .0174 CRS .2243 CST -.9667
LSA 759.3 MSA 151.8 SSA 23.7
    TOE .5426 TRA-1.2571 TC3-1.0248 BAU .5304
    ROE -.0745 RRA -.3318 RC3 -.6077 FAU .09818
    FOE .8571 FRA-1.0688 FC3-2.5526 BSP 5748
BOE .5477 BRA 1.3001 BC3 1.1914 FSP -894
                                                                                                                      EL1 667.3 EL2 128.9 ALF
                                                                        FLIGHT TIME 104.00
                                                                                                                                 ARRIVAL DATE NOV 7 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 308.278
   RL 151.94 LAL
RP 107.69 LAP
                          .00 LOL 302.34 VL 27.971 GAL -11.39 AZL 89.00 MCA 143.99 SMA 137.59 ECC .22234 INC .9991 VI 29.322 .59 LOP 86.34 VP 38.733 GAP 2.75 AZP 90.81 TAL 231.24 TAP 15.23 RCA 107.00 APO 168.18 VZ 35.190
                         4.81 GP -35.30 7AL 159.84 ZAP 114.73 ETS 342.40 ZAE 136.06 ETE 222.07 ZAC 122.41 ETC 356.10 CLP-120.83
   RC 100.092 GL
  PLANETOCENTRIC CONIC
    C3 32.500 VHL 5.702 DLA 18.74 RAL 145.95 RAO 6568.3 VEL 12.405 PTH 2.24 VHP 4.847 DPA -17.51 RAP 137.65 ECC 1.5350 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 22 14 10 2960.41
15 27 33 4551.62
23 46 53 2661.39
16 37 30 4125.88
1 23 49 2370.45
17 21 0 3989.58
                                                                                             86.94 23 3 30
62.08 16 40 4
88.16 24 31 15
60.74 17 46 16
91.40 2 3 19
57.16 18 27 30
       90.00
                                                 -28.16
                                                                93.55
                                                                              23.38
                                                                                                                          2360.4
                                                                                                                                        -28.29
                                                                                                                                                        84.89
        90.00
                                                   4.91
                                                               180.46
                                                                               14.16
                                                                                                                          3751.6
                                                                                                                                          1.14
                                                                                                                                                        173.81
      100.00
                                                 -29.84
                                                                71.63
                                                                               23.46
                                                                                                                          2061.4
                                                                                                                                         -29.78
                                                                                                                                                         62.83
      100.00
                                                   6.39
                                                               163.06
                                                                               13.36
                                                                                                                          3525.9
                                                                                                                                           2.44
                                                                                                                                                        156.49
      110.00
                                                 -34.16
                                                                 49.56
                                                                               23.48
                                                                                                                          1770.5
                                                                                                                                         -33.59
                                                                                                                                                        40.36
      110.00
                                                   10.09
                                                                150.47
                                                                               11.11
                                                                                                                          3389.6
                                                                                                                                          5.69
                                                                                                                                                        144.14
                                                                  HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SCT 1978.4 SGR 790.7 SG3 266.1

RRT .8624 RRF .9408 RTF .9005

SGB 2130.6 R23 .2659 R13 .9195

SG1 2096.9 SG2 377.7 THA 19.68
    TOE .6276 TRA-1.2806 TC3-1.1332 BAU .5640
                                                                                                                      ST 752.0 SR 104.9 $5 394.1
CRT .2401 CRS -.0012 CST -.9673
    ROE -.0536 RRA -.3043 RC3 -.6323 FAU .09155
   FOE .8855 FRA -.9241 FC3-2.4380 BSP 6167
BDE .6285 BRA 1.3162 BC3 1.2977 FSP -844
                                                                                                                      LSA 844.5 MSA 134.1 SSA 23.5
EL1 752.4 EL2 101.8 ALF 1.95
LAUNCH DATE JUL 26 1967
                                                                       FLIGHT TIME 106.00
                                                                                                                                 ARRIVAL DATE NOV 9 1967
                                                                       DISTANCE 314.418
  HELIOCENTRIC CONIC
                         .00 LOL 302.34 VL 27.910 GAL -11.19 AZL 88.57 HCA 147.22 SMA 137.11 ECC .22125 INC 1.4316 V1 29.322 .78 LOP 89.57 VP 38.697 GAP 3.12 AZP 91.20 TAL 230.14 TAP 17.36 RCA 106.77 APO 167.44 V2 35.199 6.97 GP -37.08 ZAL 158.49 ZAP 116.70 ETS 339.13 ZAE 133.39 ETE 221.22 ZAC 122.39 ETC 354.88 CLP-124.27
   RL 151.94 LAL
    RP 107.66 LAP
    RC 102.344 GL
   PLANETOCENTRIC CONTC
    C3 31.817 VHL 5.641 DLA 20.51 RAL 147.51 RAD 6568.3 VEL 12.377 PTH 2.23 VHP 5.038 DPA -19.14 RAP 136.88 ECC 1.5236
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             84.50 22 51 11
61.78 17 4 40
85.80 24 20 53
60.35 18 8 55
                                                                           25.20
       2428.0
                                                                                                                                     -28.29
                                                                                                                                                       89.83
                                                 -27.62
                                                               98.46
                                                               176.07
                                                                                                                          3673.2
                                                                                                                                                       169.44
                                                   2.40
                                                                               15.94
                                                                                                                                         -1.39
                                                                                                                          2122.3
                                                                                                                                                        67.36
      100.00
                                                 -29.62
                                                                76.15
                                                                               25.38
                                                                                                                                       -29.89
                                                                              15.06
                                4054.11
      100.00
                  17 1 21
                                                   3.98
                                                               159.08
                                                                                                                          3454.1
                                                                                                                                            .01
                                                                                                                                                      152.56
                 1 16 18 2419.26
17 40 58 3929.94
                                                                                                         1 56 3A
      110.00
                                                 -34.17
                                                                53.37
                                                                              25.61
                                                                                              89.15
                                                                                                                          1419.3
                                                                                                                                       - 33.91
                                                                                                                                                        44.13
                                                                                              56.63 18 46 28
                                                                                                                                       . 3.42
      110.00
                                                   7.87
                                                               147.28
                                                                              12.67
                                                                                                                          3329.9
                                                                                                                                                       141.01
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 2113.8 SGR 797.8 SG3 249.3
RRT .8649 RRF .9492 RTF .9030
SGB 2259.3 R23 .2826 R13 .9207
SGI 2227.1 SGZ 380.1 THA 18.64
                                                                                                                     ST 853.3 SR 92.2 S5 419.1
CRT .5819 CRS -.3795 CST -.9692
    TOE .7300 TRA-1.2914 TC3-1.2399 BAU .5968
    ROE .0100 RRA -.2732 RC3 -.6565 FAU .08466
                                                                                                                     LSA. 947.5 MSA 118.7 SSA 22.9
EL1 855.0 EL2 74.8 ALF 3.62
   FOE .9110 FRA -.7811 FC3-2.3037 BSP 6607
   BOE .7301 BRA 1.3199 BC3 1.4030 FSP
                                                     -797
LAUNCH DATE JUL 26 1967
                                                                       FLIGHT TIME 108.00
                                                                                                                                 ARRIVAL DATE NOV 11 1967
                                                                       DISTANCE 320.533
  HELIOCENTRIC CONIC
                      .00 LOL 302.34 VL 27.847 GAL -10.99 AZL 88.05 HCA 150.45 SMA 136.61 ECC .22021 INC 1.9474 V1 29.322 .96 LOP 92.80 VP 38.660 GAP 3.47 AZP 91.69 TAL 228.99 TAP 19.44 RCA 106.53 APO 166.69 V2 35.208 9.56 GP -39.20 ZAL 156.76 ZAP 118.19 ETS 335.60 ZAE 130.64 ETE 220.70 ZAC 122.16 ETC 353.57 CLP-127.55
   RL 151.94 LAL
RP 107.63 LAP
   RC 104.596 GL
  PLANETOCENTRIC CONIC
   C3 31.286 VHL 5.593 DLA 22.65 RAL 149.35 RAD 6568.2 VEL 12.356 PTH 2.23 VHP 5.269 DPA -21.13 RAP 136.10 ECC 1.5149
   82.64 24 5 53
60.12 18 38 25
                                                                                                                          2205.1
      100.00
                  23 19 8
                               2805.10
                                                 -29.05
                                                                82.24
                                                                               27.70
                                                                                                                                        -29.77
                                                                                                                                                        73.50
      100,00
                  17 32 22
                                 3962.87
                                                    .90
                                                               154.07
                                                                               17.45
                                                                                                                          3362.9
                                                                                                                                         -3.08
                                                                                                                                                       147.55
                   1 5 45
                                                 -33.99
                                                                                                          1 47 9
                                                                                                                          1883.8
                                                                                                                                        -34.15
                                                                                                                                                        49.16
      110.00
                                 2483.85
                                                                58.41
                                                                               28.27
                                                                                              86.17
      110.00
                                                                                                        19 10 28
                                                                                                                          3256.9
                                                                                                                                                       137.19
                                 3856.89
                                                  5.11
                                                               143.41
                                                                               14.82
                                                                                              56.16
                                                                                                                                           .63
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 2248.7 SGR 804.6 SG3 231.2
RRT .8647 RRF .9565 RTF .9048
SGB 2388.3 R23 .2990 R13 .9217
SG1 2357.0 SG2 385.7 THA 17.68
    TDE .8567 TRA-1.2858 TC3-1.3408 BAU .6284
                                                                                                                     ST 977.5 SR 101.5 SS 449.0
CRT .8798 CRS -.7578 CST -.9719
    RDE .0585 RRA - .2365 RC3 - .6778 FAU .07739
                                                                                                                     LSA 1074.9 MSA 107.1 SSA 21.4
    FOE .9376 FRA -.6370 FC3-2.1415 88P 7052
BOE .8587 BRA 1.3074 BC3 1.5024 F9P -746
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ELI 981.5 EL2 48.1 ALF 5.23

ARRIVAL DATE NOV 13 1967

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LAUNCH DATE JUL 26 1967
                                                                       DISTANCE 326.625
  HELIOCENTRIC CONIC
   RL 151.94 LAE .00 LOL 302.34 VL 27.782 GAL -10.78 AZL 87.42 MCA 153.67 SMA 136.11 ECC .21928 INC 2.5773 V1 29.322
RP 107.61 LAP 1.14 LOP 96.04 VP 38.620 GAP 3.81 AZP 92.31 TAL 227.80 TAP 21.47 RCA 106.27 APO 165.94 V2 35.216
RC 106.849 GL 12.73 GP -41.74 ZAL 154.52 ZAP 119.13 ETS 331.74 ZAE 127.71 ETE 220.45 ZAC 121.72 ETC 352.10 CLP-130.72
  PLANETOCENTRIC CONIC
    C3 31.016 VHL 5.569 DLA 25.27 RAL 151.56 RAD 6568.2 VEL 12.345 PTH 2.23 VHP 5.555 DPA -23.55 RAP 135.24 ECC 1.5105
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2664.7
                                                 -25.14
                                                               115.25
                                                                              29.80
                                                                                              76.52 22 2 33
                                 3264.74
                  21 8 9
       90.00
                                                                                                                                          -9.30
                                                                                                                                                       155.37
                                                                                                        18 25 22
                                                                                                                          3423.7
                                                                               22.22
                                                                                               62.20
                   17 18 19
                                                 -5.62
                                                               162.11
                                 4023.66
        90.00
                                                                                                                                        -29.03
                   22 53 19
18 15 49
                                                                                                                          2325.7
                                                 -27.69
                                                                 90.93
                                                                               30.43
                                                                                              78.26 23 42 5
                                 2925.66
      100.00
                                                                                              60.28 19 19 47
82.16 1 32 57
55.85 19 42 13
                                                                                                                                         -7.27
                                                                                                                          3238.0
                                                                               20.96
                                                 -3.33
                                                               147.21
                                 3837.97
      100.00
                   0 50 5
                                                                                                                          1972.6
                                                                                                                                        -34.10
                                                                               31.57
                                 2572.65
                                                 -33.38
                                                                 65.26
      110.00
                                                                                                                                         -2.93
                                                                                                                         3163.7
                                                  1.57
                                                               138.54
                                                                               17.91
                   18 39 29
      110.00
                                 3763.74
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1134.1 SR 136.4 SS 486.3
CRT .9850 CRS -.9378 CST -.9751
                                                                   $67 2381.7 $6R 808.5 $63 211.2

RRT .8609 RRF .9624 RTF .9063

$68 2515.2 R23 .3145 R13 .9223
    TDE 1.0192 TRA-1.2578 TC3-1.4268 BAU .6574
    RDE .1143 RRA -.1911 RC3 -.6911 FAU .06953
                                                                                                                      LSA 1237.2 MSA 101.1 SSA 18.6
EL1 1142.0 EL2 23.4 ALF 6.76
    FOE .9693 FRA -.4889 FC3-1.9406 BSP 7456
                                                                   SG1 2484.1 SG2 394.4 THA 16.72
    BOE 1.0256 BRA 1.2722 BC3 1.5853 FSP -682
                                                                                                                                 ARRIVAL DATE NOV 15 1967
                                                                       FLIGHT TIME 112.00
LAUNCH DATE JUL 26 1967
                                                                       DISTANCE 332.692
  HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 27.716 GAL -10.56 A7L 86.63 HCA 156.90 SMA 135.59 ECC .21831 INC 3.3694 V1 29.322
RP 107.59 LAP 1.32 LOP 99.28 VP 36.580 GAP 4.14 A7P 93.10 TAL 226.56 TAP 23.45 RCA 105.99 APO 165.20 V2 35.223
RC 109.101 GL 16.66 GP -44.81 ZAL 151.57 ZAP 119.44 ETS 327.51 ZAE 124.51 ETE 220.40 ZAC 121.10 ETC 350.39 CLP-133.86
   PLANETOCENTRIC CONIC
    C3 31.193 WHL 5.585 DLA 28.54 RAL 154.30 RAD 6568.2 VEL 12.352 PTH 2.23 VHP 5.922 DPA -26.47 RAP 134.16 ECC 1.5134 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   18 53 17 3745.65
                                                 -16.98
                                                               147.41
                                                                               30.16
                                                                                              66.71 19 55 42
       86.30
                                                                                                                                                        125.36
                   19 55 2
22 0 57
                                                                                               66.70
                                                                                                        20 54 8
                                                                                                                          2945.6
                                                                                                                                         -19.97
                                  3545.60
                                                 -16.96
                                                                132.76
                                                                               30.16
       93.70
                                                                                               71.42 22 53 17
61.80 20 30 29
                                                                                                                                                         97.66
                                                                                                                          2540.2
                                                                                                                                         -26.16
                                                                105.70
                                                                               32.96
                                  3140.20
                                                 -23.84
       100.00
                                                                                                                                                        128.56
                                                                                                                                         -14.03
                   19 30 3
                                                                                                                      3026.3
                                  3626.28
                                                 -10.34
                                                                135.41
                                                                               26.87
       100.00
                                                                                               76.57 1 9 32
55.96 20 27 32
                                                                                                                          2103.2
                                                                                                                                         -33.25
                                                                                                                                                         66.18
                   0 24 29 2703.17
                                                 -31.73
                                                                 75.08
                                                                               35.52
      110.00
                                                                131.88
                                                                               22.60
                                                                                                                          3036.1
                                                                                                                                          -7.76
                                                  -3.31
      110.00
                  19 26 56
                                  3636.07
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1332.3 SR 188.2 SS 528.5
CRT .9943 CRS -.9878 CST -.9790
                                                                   $67 2516.8 $6R 810.6 $63 189.9

RRT .8526 RRF .9663 RTF .9082

$68 2644.1 R23 .3270 R13 .9235
    TOE 1.2310 TRA-1.2027 TC3-1.4891 BAU .6849
    RDE .1760 RRA -.1365 RC3 -.6930 FAU .06135
    FOE .9985 FRA -.3450 FC3-1.7029 BSP 7891
BDE 1.2436 BRA 1.2104 BC3 1.6425 FSP -6204
                                                                                                                       LSA 1442.0 MSA 100.6 SSA 14.9
                                                                   SG1 2612.4 SG2 408.2 THA 15.75
                                                                                                                       EL1 1345.3 EL2 19.9 ALF 8.00
    BOE 1.2436 BRA 1.2104 BC3 1.6425 FSP
                                                                                                                                ARRIVAL DATE NOV 17 1967
                                                                       FLIGHT TIME 114.00
LAUNCH DATE JUL 26 1967
                                                                       DISTANCE 338.736
    RL 151.94 LAL .00 LOL 302.34 VL 27.649 GAL -10.34 AZL 85.60 MCA 160.12 SMA 135.08 ECC .21744 INC 4.4027 V1 29.322 RP 107.57 LAP 1.50 LOP 102.51 VP 38.537 GAP 4.46 AZP 94.14 TAL 225.28 TAP 25.40 RCA 105.71 APO 164.45 V2 35.230 RC 111.351 GL 21.60 GP -48.57 ZAL 147.65 ZAP 118.99 ETS 322.84 ZAE 120.89 ETE 220.41 ZAC 120.29 ETC 348.33 CLP-137.09
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 32.167 VML 5.672 DLA 32.62 RAL 157.84 RAD 6568.3 VEL 12.391 PTH 2.24 VHP 6.413 DPA -29.98 RAP 132.68 ECC 1.5294
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            62.97 18 35 54
62.96 22 42 25
62.97 18 35 54
                                                                                                                       3469.8
                                                                                                                                         -22.47
                                                                             35.31
                                                               172.57
                   17 28 4 4069.76
                                                 -19.00
        73.09
                                                                                                                                                       103.47
                                                                               35.30
                                                                                                                          2637.0
                                                                                                                                         -22.45
                   21 48 29
17 28 4
                                                                110.76
                                  3236.95
                                                 -18.98
                                                                                                                                                       165.28
                                                                               35.31
                                                                                                                          3469.8
                                                                                                                                         -22.47
                                                                172.57
                                  4069.76
                                                 -19.00
                                                                                                        22 42 25
                                                                                                                          2637.0
                                                                                                                                         -22.45
                                                                                                                                                       103.47
                                                                                               62.96
                                                                               35.30
                                                                110.76
                    21 48 29 3236.95
                                                 -18.98
                                                                                                       24 14 46
                                                                                                                                                         63.39
                                                                                                                          2537.0
                                                                                                                                         -29.59
                   23 25 49 2936.97
20 49 54 3417.74
                                                                                               68.00
                                                                               39.19
                                                 -26.85
                                                                 91.50
                                                                                                                                                       113.67
                                                                                                       21 46 51
                                                                                                                          2817.7
                                                                                                                                        -15.69
                                                                                               57.58
                                                                120.26
                                                 -11.49
                                                                               30.88
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 2652.0 SGR 802.7 SG3 166.5
RRT .8364 RRF .9664 RTF .9108
SGB 2770.8 R23 .3362 R13 .9251
SGI 2737.8 SG2 426.2 THA 14.57
                                                                                                                      ST 1589.0 SR 249.6 35 578.0
CRT .9858 CRS -.9986 CST -.9830
    TOE 1.5219 TRA-1.1056 TC3-1.5040 BAU .7080
          .2449 RRA -. 0655 RC3 - . 6696 FAU . 05254
                                                                                                                       LSA 1705.8 MSA 105.7 55A 11.0
    FOE 1.0291 FRA -.2000 FC3-1.4141 BSP 8286
BOE 1.5415 BRA 1.1075 BC3 1.6463 FSP -546
                                                                                                                       EL1 1607.9 EL2 41.4 ALF 8.81
    BOE 1.5415 BRA 1.1075 BC3 1.6463 FSP
                                                                                                                                 ARRIVAL DATE NOV 19 1967
                                                                        FLIGHT TIME 116.00
LAUNCH DATE JUL 26 1967
                                                                        DISTANCE 344.752
    RL 151.94 LAL .00 LOL 302.34 VL 27.580 GAL -10.10 AZL 84.18 HCA 163.33 SMA 134.56 ECC .21661 INC 5.8168 V1 29.322 RP 107.55 LAP 1.67 LOP 105.75 VP 38.494 GAP 4.76 AZP 95.57 TAL 223.96 TAP 27.29 RCA 105.42 APO 163.71 V2 35.236 RC 113.598 GL 27.86 GP -53.18 ZAL 142.42 ZAP 117.62 ETS 317.58 ZAE 116.65 ETE 220.24 ZAC 119.31 ETC 345.67 CLP-140.67
   PLANETOCENTRIC CONIC
    C3 34.685 VHL 5.889 DLA 37.71 RAL 162.65 RAD 6568.4 VEL 12.492 PTH 2.26 VHP 7.110 DPA -34.20 RAP 130.47 ECC 1.5708
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                               57.93 18 5 34
57.92 23 51 48
                                                                                                                                                        180.71
                   16 54 47 4247.16
23 0 10 3097.55
                                                                                                                           3647.2
                                                                                                                                        -25.07
                                                                187.77
                                                                               42.91
                                  4247.16
                                                  -20.99
        63.99
                                                                                                                                         -25.06
                                                                                                                                                         93.91
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                                                                100.97
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                                                                187.77
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                                  4247.16
        63.99
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                                                                                               57.93 18 5 34
57.92 23 51 48
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                                  4247.16
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                    23 0 10
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                                                  -20.98
       116.01
                                  3097.55
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                      ST 1917.9 SR 303.4 SS 630.0
CRT .9759 CRS -.9980 CST -.9870
                                                                    $61 2792.9 $6R 777.1 $63 141.4

RRT .8051 RRF .9581 RTF .9154

$68 2899.0 R23 .3394 R13 .9283
     TOE 1.9376 TRA -.9478 TC3-1.4430 BAU .7259
    ROE .3109 RRA .0266 RC3 -.6071 FAU .04335
FOE 1.0532 FRA -.0613 FC3-1.0820 BSP 8721
                                                                                                                       LSA 2038.2 MSA 113.8 SSA
                                                                                                                                                            7.6
                                                                                                                       EL1 1940.6 EL2 65.5 ALF 8.79
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FLIGHT TIME 110,00

BDE 1.9624 BRA .9482 BC3 1.5655 FSP -472

SG1 2864.0 SG2 449.5 THA 12.95

E.

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ARRIVAL DATE NOV 21 1967
LAUNCH DATE JUL 26 1967
                                                                                FLIGHT TIME 118.00
                                                                               DISTANCE 350.737
   HELIOCENTRIC CONIC
                            .00 LOL 302.34 VL 27.511 GAL -9.85 AZL 82.12 MCA 166.53 SMA 134.05 ECC .21583 INC 7.8821 V1 29.322
1.83 LOP 109,00 VP 38.449 GAP 5.05 AZP 97.67 TAL 222.60 TAP 29.13 RCA 105.12 APO 162.98 V2 35.241
    RL 151.94 LAL
     RP 107.53 LAP
     RC 115.842 GL 35.73 GP -58.84 ZAL 135.47 ZAP 115.15 ETS 311.38 ZAE 111.52 ETE 219.35 ZAC 118.22 ETC 341.91 CLP-145.21
   PLANETOCENTRIC CONIC
    C3 40.323 VHL 6.366 DLA 43.84 RAL 169.65 RAD 6568.6 VEL 12.724 PTH 2.31 VHP 8.177 DPA -39.17 RAP 126.96 ECC 1.6669 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        55.01
                     16 42 35
                                      4398.62
                                                       -22.27
                                                                       201.70
                                                                                        54.42
                                                                                                          51.21 17 55 54
51.20 1 2 32
                                                                                                                                         3798.6
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                      0 12 8
                                      3024.71
                                                       -22.26
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       124.99
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                                                                        95.72
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                                      4396 . 62
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       124.99
                                      3024.71
                                                       -22.26
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                                                                                                                                                                           89.14
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT OFTERMINATION ACCURACY
    TOE 2.5723 TRA -.6786 TC3-1.2562 BAU .7287

ROE .3377 RRA .1529 RC3 -.4806 FAU .03359

FOE 1.0703 FRA .0755 FC3 -.7177 BSP 9078

BOE 2.5944 BRA .6956 BC3 1.3450 FSP -387
                                                                           RET . 7296 RRF . .9213 RTF . .9234
SGB 3023.0 R25 .3351 R13 .9335
SGI 2985.0 SGZ 477.6 THA 10.25
                                                                                                                                    ST 2329.6 SR 309.9 SS 681.2
CRT .9560 CRS -.9873 CST -.9904
                                                                                                                                    LSA 2443.6 MSA 125.5 SSA 5.0
                                                                                                                                    EL1 2348.4 EL2 90.1 ALF
                                                                                                                                                                             7.26
LAUNCH DATE JUL 26 1967
                                                                                FLIGHT TIME 120,00
                                                                                                                                                 ARRIVAL DATE NOV 23 1967
                                                                               DISTANCE 356.678
  HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 27.442 GAL -9.59 AZL 78.80 MCA 169.70 SMA 133.53 ECC .21505 INC11.1991 V1 29.322
RF 107.52 LAP 1.99 LOP 112.24 VP 38.404 GAP 5.33 AZP 101.02 TAL 221.20 TAP 30.90 RCA 104.81 APO 162.25 V2 35.246
RC 118.080 GL 45.27 GP -65.73 ZAL 126.52 ZAP 111.39 ETS 302.99 ZAE 105.03 ETE 216.20 ZAC 117.14 ETC 335.58 CLP-152.55
   PLANETOCENTRIC CONIC
                                                                                                            2.42 WHP 9.987 DPA -44.77 RAP 120.99 ECC 1.9006
    C3 54.725 VHL 7.398 DLA 50.52 RAL 180.51 RAD 6569.0 VEL 13.270 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.24 16 54 54 4551.71 -21.28 215.37 71.81 43.03 18 10 45 3951.7 -27.02 209.67
                   16 54 54 4551.71
       133.76
                      1 26 31
                                    3022.00
                                                       -21.27
                                                                        94.45
                                                                                         71.79
                                                                                                          43.02
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1 26 31 3022.00
16 54 54 4551.71
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        46.24
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        46.24
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MID-COURSE EXECUTION ACCURACY

SGT 3088.3 869
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                      1 26 31
                                     3022.00
                                                                         94.48
                                                                                                                                                         -27.00
                                                                                                                                                                           88.78
       133.76
                                                       -21.27
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           RET .4532 RRF .7600 RTF .9365
SGB 3141.7 R23 .3171 R13 .9432
SGI 3099.7 SGZ 512.2 THA 4.97
                                                                                                                                    ST 2767.8 SR 165.2 SS 718.9
CRT .7052 CRS -.7833 CST -.9931
    TOE 3.5720 TRA -. 1914 TC3 -. 9142 BAU . 7001
    ROE .1539 RRA .3110 RC3 -.2826 FAU .02372
FOE 1.0709 FRA .2097 FC3 -.3752 89P 9494
BOE 3.5753 BRA .3651 BC3 .9569 FSP -305
                                                                                                                                    LSA 2860.9 MSA 141.9 SSA 3.1
EL1 2770.2 EL2 117.0 ALF 2.41
                                                                               FLIGHT TIME 122.00
                                                                                                                                               ARRIVAL DATE NOV 25 1967
LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 362.538 _
    RL 151.94 LAL .00 LOL 302.34 VL 27.372 GAL -9.31 AZL TZ.61 MCA 172.81 SMA 133.02 ECC .21420 INC17.3865 V1 29.322
RP 107.50 LAP 2.14 LOP 115.48 VP 38.358 GAP 5.58 AZP 107.26 TAL 219.74 TAP 32.55 RCA 104.52 APO 161.51 VZ 35.250
RC 120.312 GL 55.53 GP -73.51 ZAL 115.78 ZAP 106.25 ETS 286.92 ZAE 96.33 ETE 204.90 ZAC 116.55 ETC 320.77 CLP-170.30
   PLANETOCENTRIC CONIC
    C3 95,845 VHL 9.790 DLA 55.64 RAL 197.38 RAD 6569.9 VEL 14.737 PTH 2.67 VHP 13.547 DPA -50.27 RAP 110.00 ECC 2.5774
LNCH AZHTH LNCH TIME L-1 TIME INJLAT INJLONG INJRT ASC INJAZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
39.87 17 43 17 4724.53 -15.70 227.02 96.31 35.89 19 2 2 4124.5 -22.12 222.39
140.13 2 52 41 3111.09 -15.69 97.00 96.30 35.89 3 44 32 2511.1 -22.11 92.37
39.87 17 43 17 4724.53 -15.70 227.02 96.31 35.89 19 2 2 4124.5 -22.12 222.39
                   2 52 41 3111.09
17 43 17 4724.53
2 52 41 3111.09
                                                                        97.00
                                                                                        96.30
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                                                      -15.69
                                                                                                          35.89
                                                                                                                                                        -22.11
       140.13
                                                      -15.70
                                                                       227.02
                                                                                        96.31
                                                                                                          35.89
                                                                                                                   19 2 2
                                                                                                                                        4124.5
                                                                                                                                                        -22.12
        39.A7
                                                                         NID-COURSE EXECUTION ACCURACY
SGT 3161-3 SCP
                                                                        97.00
                                                                                                                                        2511.1
                                                                                                                                                        -22.11
       140.13
                                                      -15.69
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 3161.3 SGR 711.4 SG3 66.7
RRT -.6227 RRF -.4108 RTF .9675
SG8 3240.3 R23 -.2690 R13 -.9611
                                                                                                                                   ST 2924.1 SR 624.7 SS 741.4

CRT -.9681 CRS .9402 CST -.9955

LSA 3075.9 MSA 170.8 SSA 1.8
    TOE 4.9758 TRA .8502 TC3 -.4383 BAU .5666
    ROE-1.0533 RRA .3241 RC3 -.0565 FAU .01360
FOE 1.0638 FRA .3746 FC3 -.1228 BSP 9815
BOE 5.0860 BRA .9099 BC3 .4422 FSP -229
                                                                           SG1 3193.1 SG2 551.1 THA 171.78
                                                                                                                                   EL1 2986.2 EL2 153.2 ALF 168.28
                                                                                                                                                ARRIVAL DATE NOV 27 1967
                                                                               FLIGHT TIME 124,00
LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 368.176
   RL 151.94 LAL .00 LOL 302.34 VL 27.301 GAL -8.98 A7L 57.64 MCA 175.72 SMA 132.51 ECC .21293 INC32.3609 V1 29.322 RP 107.49 LAP 2.29 LOP 118.73 VP 38.310 GAP 5.76 A2P 122.29 TAL 218.15 TAP 33.87 RCA 104.29 APO 160.72 V2 35.253 RC 122.538 GL 61.87 GP -75.69 ZAL 104.47 ZAP 99.99 ETS 237.31 ZAE 82.71 ETE 159.33 ZAC 118.19 ETC 270.38 CLP 134.58
   PLANETOCENTRIC CONIC
    C3 267.889 VHL 16,367 DLA 53.90 RAL 216.85 RAD 6571.6 VEL 19.728 PTH 3.12 VHP 22.449 DPA -52.05 RAP 88.60 ECC 5.4088 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    122.75
                                                                                                          36.30 20 28 32
                                                                                                                                         4290.5
                   19 7 2
                                     4890.46
                                                       -5.62
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                                                                       231.77
        42.01
                      4 4 17
                                                                                                                                                         -12.03
                                                                                      122.73
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                                     1102 A4
                                                        -5.61
                                                                       104.69
       137.99
                                                                       231.77
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       137.99
                                     3302.84
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                                     4890.46
                                                        -5.62
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                                     3302.84
                                                        -5.61
       137.99
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 1991.3 SGR 2595.4 SG3 52.1
RRT -.9450 RRF -.9580 RTF ..9983
                                                                                                                                    ST 1386.5 SR 2264.4 SS 837.5
                                                            .2017
    TOE 3.7475 TRA 2.5184 TC3 -.0226 BAU
                                                                                                                                    CRT -.9881 CRS .9908 CST -.9998
    RDE-6.3692 RRA-2.2179 RC3 -.0516 FAU-.00065
    FOE 1.1743 FRA .7414 FC3 .0021 BSP 9546
BOE 7.3899 BRA 3.3557 BC3 .0563 FSP -166
                                                                          SGB 3271.3 R23 -.1659 R13 -.9855
                                                                                                                                   LSA 2777.2 MSA 196.9 SSA 1.2
                                                                                                                                   ELI 2648.9 ELZ 182.1 ALF 121.34
                                                                           SG1 3229.2 SG2 523.3 THA 127.08
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ARRIVAL DATE NOV 29 1967

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FLIGHT TIME 126.00
LAUNCH DATE JUL 26 1967
                                                                      DISTANCE 372.684
  HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 27.231 GAL -8.41 AZL 8.61 HCA 177.55 SHA 132.00 ECC .20913 INC81.3911 V1 29.322 RP 107.49 LAP 2.43 LOP 121.98 VP 38.263 GAP 5.62 AZP 171.39 TAL 215.98 TAP 53.52 RCA 104.39 APO 159.60 V2 35.256 RC 124.755 GL 46.16 GP -50.37 ZAL 95.93 ZAP 94.41 ETS 189.76 ZAE 53.46 ETE 117.57 ZAC 127.97 ETC 211.41 CLP 96.93
   PLANETOCENTRIC CONIC
    C31363.494 VML 36.926 DLA 33.41 RAL 220.59 RAD 6573.1 VEL 38.533 PTH 3.55 VHP 49.147 OPA -34.23 RAP 56.94 ECC23.4397
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   -3.72
                                                                                                                                                 199.97
                                                                                                                    4065.5
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                                                                                          56.59 22 45 50
       71.47
                  21 28 5 4665.47
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                                                              206.24
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21 28 5 4665.47
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      108.53
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                                                                                             56.24
       110.00
                                                  -5.70
                                                              128.58
                                                                 161.40 56.47 2 32 29
MID-COURSE EXECUTION ACCURACY
SGT 838.7 SGP PERF
                                                                                                                        3309.1
                                                                                                                                        2.63
                                                                                                                                                     139.92
      110.00
                                                   7.09
                                                              146.17
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 655.4 SR 1489.8 SS 1219.8
CRT .9409 CRS .9985 CST .9208
LSA 2020.9 MSA 230.3 SSA 1.0
                                                                  SGT 838.7 SGR 2603.1 SG3 46.6
RRT .7624 RRF -.9978 RTF -.7189
SGB 2736.8 R23 -.1146 R13 -.9933
    TOE-4.2220 TRA -.1552 TC3 -.0708 BAU 3.5562
    RDE-8.9865 RRA-9.3794 RC3 -.1818 FAU-.05784
    FOE 1.6943 FRA 2.0708 FC3 .0367 BSP 7793
BOE 9.9289 BRA 9.3806 BC3 .1951 FSP -142
                                                                  SG1 2685.7 SG2 526.5 THA 75.65
                                                                                                                    EL1 1614.7 EL2 204.8 ALF 67.13
                                                                                                                               ARRIVAL DATE DEC 1 1967
                                                                      FLIGHT TIME 128.00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 381.765
   RL 151.94 LAL .00 LOL 302.34 VL 27.160 GAL -8.77 AZL 131.62 HCA 183.85 SMA 131.50 ECC .21642 INC41.6211 V1 29.322 RP 107.48 LAP 2.56 LOP 125.22 VP 38.214 GAP 6.78 AZP 48.44 TAL 216.00 TAP 39.85 RCA 103.04 APO 159.96 V2 35.258
    RC 126.964 GL -60.54 GP 72.80 ZAL 101.18 ZAP 100.38 ETS 154.90 ZAE 78.50 ETE 229.72 ZAC 92.58 ETC 113.39 CLP 127.55
   PLANETOCENTRIC CONIC
    C3 419.299 VHL 20.477 DLA -56.09 RAL 150.49 RAD 6572.2 VEL 23.251 PTH 3.28 VHP 25.173 DPA 78.81 RAP 317.17 ECC 7.9006 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            146.03
                                                                                                        3 15 8
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                   11 45 17
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                                                               295.81
                                                                              58.51
       140.67
                                  692.28
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 524.4 SGR 3362.5 SG3 54.7
RRT .3865 RRF .9901 RTF .5086
SGB 3403.2 R23 -.1278 R13 .9913
SGI 3368.8 SGZ 482.7 THA 86.48
                                                                                                                    ST 481.9 SR 2543.7 SS 1147.1
CRT .9241 CRS -.9983 CST -.9451
    TOE-1.7086 TRA .4019 TC3 -.0185 BAU .7708
    RDE-8.7706 RRA-4.4466 RC3 .1362 FAU-.00773
FDE-1.8447 FRA -.7208 FC3 .0160 BSP 9954
BDE 8.9355 BRA 4.4647 BC3 .1375 FSP -166
                                                                                                                    LSA 2825.5 MSA 187.9 SSA
                                                                                                                    EL1 2582.6 EL2 181.4 ALF 80.02
                                                                                                                              ARRIVAL DATE DEC 3 1967
                                                                      FLIGHT TIME 130.00
LAUNCH DATE JUE-26 1967
   HELIOCENTRIC CONIC
                                                                     DISTANCE 387.286
    RL 151.94 LAL .00 LOL 302.34 VL 27.090 GAL -8.39 AZL 113.66 HCA 186.69 SMA 131.00 ECC .21522 INC23.6641 V1 29.322 RP 107.48 LAP 2.68 LOP 128.47 VP 38.165 GAP 6.93 AZP 66.48 TAL 214.32 TAP 41.01 RCA 102.81 APO 159.19 V2 35.259
                                    71.57 ZAL 107.83 ZAP 108.43 ETS 97.53 ZAE 93.86 ETE 174.57 ZAC 89.44 ETC
    RC 129.165 GL -60.47 GP
   PLANETOCENTRIC CONIC
    C3 152.835 VML 12.363 DLA -51.04 RAL 141.22 RAD 6570.7 VEL 16.558 PTH 2.88 VMP 14.594 DPA 77.27 RAP 229.79 ECC 3.5153
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
45.58 2 17 54 2136.55 9.93 56.56 43.06 140.33 2 53 31 1536.3 16.04 51.67
                                                               272.55
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                                                                                            140.33
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                                5884.42
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                    2 17 54 2136.35
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                                                               272.55
       134.42
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 2173.4 SR 756.9 SS 787.8
                                                                  SGT 3223.0 SGR 1667.0 SG3 72.7
RRT .9434 RRF .8875 RTF .9892
SGB 3628.6 R23 -.2057 R13 .9774
    TDE-4.4111 TRA-3.3359 TC3 -.1630 BAU .3373
                                                                                                                    CRT .9498 CRS -.9246 CST -.9974
    RDE-1.2858 RRA-2.1104 RC3 -.0260 FAU .01223
FDE-1.2979 FRA -.7634 FC3 -.0693 BSP 11143
                                                                                                                    LSA 2420.9 MSA 237.9 SSA 1.5
EL1 2290.4 EL2 224.6 ALF 18.49
    BDE 4.5947 BRA 3.9474 BC3 .1651 FSP -232
                                                                  SG1 3594.6 SG2 495.6 THA 26.56
                                                                                                                               ARRIVAL DATE DEC 5 1967
                                                                      FLIGHT TIME 132.00
LAUNCH DATE JUL 25 1967
                                                                     DISTANCE 393.058
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 27.019 GAL -8.07 AZL 106.66 MCA 189.78 SMA 130.51 ECC .21477 INC16.6642 VI 29.322 RP 107.48 LAP 2.79 LOP 131.72 VP 38.115 GAP 7.14 AZP 73.56 TAL 212.73 TAP 42.51 RCA 102.48 APO 158.54 V2 35.259 RC 131.355 GL -56.01 GP 62.52 ZAL 113.04 ZAP 116.33 ETS 74.77 ZAE 103.27 ETE 154.96 ZAC 89.40 ETC 33.48 CLP-164.03
   PLANETOCENTRIC CONIC
    C3 85.609 VHL 9.253 OLA -45.57 RAL 141.34 RAD 6569.7 VEL 14.386 PTH 2.61 VHP 10.677 OPA 68.32 RAP 203.65 ECC 2.4089
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       38.74
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                                1959.55
                                                  14.70
                                                               44.48
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       127.32
                   10 26 18
                                                  14.71
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                  SGT 3697.8 SGR 557.7 SG3 95.6

RRT .5655 RRF .3251 RTF .9615

SGB 3739.6 R23 -.2727 R13 .9586

SGI 3711.3 SG2 459.0 THA 4.93
                                                                                                                    ST 2140.0 SR 250.2 SS 722.5

CRT -.4459 CRS .5890 CST -.9860

LSA 2258.8 MSA 249.5 SSA 2.3
    TDE-3.1381 TRA-3.3763 TC3 -.5344 BAU .6117
          .3150 RRA - .5903 RC3 .0099 FAU .02321
     RDE
     FDE-1.2207 FRA -.7710 FC3 -.2347 BSP 11454
                                                                                                                    EL1 2143.0 EL2 223.6 ALF 176.98
    BOE 3.1538 BRA 3.4275 BC3 .5345 FSP -306
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FLIGHT TIME 134.00
                                                                                                                                                      ARRIVAL DATE DEC 7 1967
LAUNCH DATE JUL 26 1967
                                                                                   DISTANCE 398.893
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.949 GAL -7.75 AZL 103.03 HCA 192.95 SMA 130.03 ECC .21461 INC13.0343 V1 29.322
RP 107.48 LAP 2.90 LOP 134.97 VP 38.065 GAP 7.38 AZP 77.29 TAL 211.16 TAP 44.11 RCA 102.12 APO 157.93 V2 35.259
RC 133.537 GL -51.52 GP 54.07 ZAL 116.75 ZAP 123.38 ETS 66.61 ZAE 109.96 ETE 150.83 ZAC 89.77 ETC 25.61 CLP-159.66
   PLANETOCENTRIC CONIC
     C3 59.192 VHL 7.694 DLA -41.18 RAL [43.35 RAD 6569.1 VEL 13.437 PTH 2.46 VHP 8.851 DPA 59.96 RAP 194.01 ECC 1.9742
    LOCH ATMITH LINCH TIME L-I TIME IN LAT INJ LONG IN AT ASC INJ ATMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.76 3 15 3 1807.22 17.22 33.13 32.58 128.00 3 45 10 1207.2 22.02 26.75 121.24 10 9 51 5805.00 17.24 272.45 32.59 127.99 11 46 36 5205.0 22.04 266.08 12.24 10 9 51 5805.00 17.24 272.45 32.59 127.99 11 46 36 5205.0 22.04 266.08
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128.00 3 45 10
127.99 11 46 36
                     3 15 3 1807.22
10 9 51 5805.00
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   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGT 3813.4 SGR 424.1 SG3 118.1

RRT -.0950 RRF -.4051 RTF .9415

SGB 3836.9 R23 .3159 R13 -.9419

SGI 3813.6 SG2 422.2 THA 179.39
                                                                                                                                        ST 2029.8 SR 360.3 SS 707.9

CRT -.8016 CRS .9132 CST -.9757

LSA 2164.9 MSA 253.5 SSA 3.2
     TOE-2.4344 TRA-3.0727 TC3 -.9220 BAU .7315
    RDE .4765 RRA -.2109 RC3 .0663 FAU .03153
FDE-1.2055 FRA -.7561 FC3 -.4612 BSP 11801
                                                                                                                                          EL1 2050.5 EL2 213.3 ALF 171.81
     BOE 2.4806 BRA 3.0799 BC3 .9244 FSP
                                                              - 379
                                                                                    FLIGHT TIME 136.00
                                                                                                                                                       ARRIVAL DATE DEC 9 1967
LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 404.746
    RL 151.94 LAL .00 LOL 302.34 VL 26.879 GAL -7.42 AZL 100.82 MCA 196.15 SMA 129.55 ECC .21463 INC10.8182 V1 29.322 RP 107.48 LAP 2.99 LOB 138.22 VP 38.015 GAP 7.61 AZP 79.60 TAL 209.59 TAP 45.74 RCA 101.74 APO 157.36 V2 35.257 RC 135.709 GL -47.66 GP 46.95 ZAL 119.21 ZAP 129.41 ETS 62.21 ZAE 114.85 ETE 150.87 ZAC 89.89 ETC 21.58 CLP-158.44
   PLANETOCENTRIC CONIC
    C3 45.806 VHL 6.768 DLA -37.80 RAL 145.76 RAD 6568.7 VEL 12.929 PTH 2.36 VHP 7.888 DPA 52.71 RAP 189.48 ECC 1.7539 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
        63.84 3 48 30 1675.91
116.16 9 55 40 5809.15
63.84 3 48 30 1675.91
116.16 9 55 40 5809.15
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123.60 11 32 29
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123.60 11 32 29
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        116.16
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123.60 11 32 29
                      3 48 30
                                     1675.91
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         63.84
                        9 55 40
                                       5809.15
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        116.16
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 3904.2 SGR 417.2 SG3 136.9
RRT -.3636 RRF -.6573 RTF .9272
SGB 3926.4 R23 .3401 R13 -.9285
                                                                                                                                          ST 1954.4 SR 382.4 SS 698.8
CRT -.8457 CRS .9537 CST -.9670
     TOE-2.0436 TRA-2.8241 TC3-1.2997 BAU
                                                               .7983
     ROE .4503 RRA -.0945 RC3 .1004 FAU .03765
                                                                                                                                          LSA 2095.0 MSA 255.5 SSA 4.1
     FOE-1.1801 FRA -.7129 FC3 -.7115 BSP 12069
                                                                               SG1 3907.2 SG2 388.3 THA 177.75
     BOE 2.0926 BRA 2.8257 BC3 1.3035 FSP -440
                                                                                                                                          ELI 1981.3 EL2 201.3 ALF 170.50
                                                                                                                                                      ARRIVAL DATE DEC 11 1967
                                                                                   FLIGHT TIME 138.00
LAUNCH DATE JUL 26 1967
                                                                                  DISTANCE 410.603 ---
    RL 151.94 LAL .00 LOL 302.34 VL 26.810 GAL -7.10 AZL 99.32 MCA 199.37 SMA 129.08 ECC .21481 INC 9.3208 VI 29.322 RP 107.49 LAP 3.08 LOP 141.48 VP 37.964 GAP 7.86 AZP 81.20 TAL 208.01 TAP 47.37 RCA 101.35 APO 156.81 V2 35.255 RC 137.871 GL -44.46 GP 41.08 ZAL 120.71 ZAP 134.49 ETS 59.15 ZAE 118.43 ETE 152.31 ZAC 89.63 ETC 18.95 CLP-158.36
   PLANETOCENTRIC CONIC
     C3 37.851 VML 6.152 DLA -35.25 RAL 148.26 RAD 6568.5 VEL 12.618 PTH 2.29 VMP 7.344 DPA 46.54 RAP 187.26 ECC 1.6229
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.08 4 21 10 1550.56 18.99 14.10 29.10 120.27 4 47 10 960.6 22.87 7.03 68.08 4 21 10 1560.56 18.99 14.10 29.10 120.27 4 47 10 960.6 22.87 7.03
                      9 42 54 5828.30
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   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SGT 3998.7 SGR 403.9 SG3 151.1
RRT - .4548 RRF - .7312 RTF .9167
SGB 4019.1 R23 .3490 R13 - .9182
SG1 4003.0 SG2 359.3 THA 177.35
                                                                                                                                         ST 1905.6 SR 375.1 35 688.5

CRT -.8581 CRS .9677 CST -.9597

LSA 2044.6 MSA 256.3 SSA 5.1
     TDE-1.8034 TRA-2.6259 TC3-1.6662 BAU .8451
    RDE .4023 RRA -.0523 RC3 .1126 FAU .04181
FDE-1.1398 FRA -.6491 FC3 -.9582 BSP 12388
                                                                                                                                         EL1 1932.9 EL2 189.9 ALF 170.32
                                                            -487
    BOE 1.8477 BRA 2.6264 BC3 1.6700 FSP
                                                                                                                                                      ARRIVAL DATE DEC 13 1967
                                                                                   FLIGHT TIME 140.00
LAUNCH DATE JUL 26 1967
                                                                                   DISTANCE 416.456
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.741 GAL -6.76 AZL 98.24 MCA 202.59 SNA 128.62 ECC .21512 INC 8.2367 VI 29.322 RP 107.50 LAP 3.16 LOP 144.73 VP 37.912 GAP 8.10 AZP 82.39 TAL 206.41 TAP 49.00 RCA 100.95 APO 156.29 VZ 35.253 RC 140.023 GL -41.80 GP 36.26 ZAL 121.44 ZAP 138.74 ETS 56.76 ZAE 121.06 ETE 154.20 ZAC 89.01 ETC 17.01 CLP-158.79
   PLANETOCENTRIC CONIC
    C3 32.584 VHL 5.708 OLA -33.33 RAL 150.77 RAD 6568.3 VEL 12.408 PTH 2.24 VHP 7.030 DPA 41.28 RAP 186.30 ECC 1.5362
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.63 4 52 23 1458.19 19.26 6.26 28.65 117.74 5 16 41 858.2 22.82 359.00 108.37 9 31 42 5855.01 19.28 277.88 28.66 117.73 11 9 17 5255.0 22.83 270.61
                       4 52 23 1458.19
9 31 42 5855.01
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        108.37
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        110.00
                      10 39 13 5648.00
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                                                           25.06
        110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              9GT 4093.7 SGR 385.1 SG3 161.1
RRT -.4845 RRF -.7458 RTF .9088
SGB 4111.8 R23 .3459 R13 -.9101
                                                                                                                                         ST 1874.8 SR 362.1 SS 676.7
CRT -.8643 CRS .9754 CST -.9537
     TOE-1.6451 TRA-2.4562 TC3-2.0212 BAU .8817
    RDE .3605 RRA -.0345 RC3 .1095 FAU .04432
FDE-1.0901 FRA -.5721 FC3-1.1776 BSP 12701
                                                                                                                                         LSA 2009.6 MSA 256.2 SSA
                                                                                                                                                                                     6.2
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BOE 1.6841 BRA 2.4564 BC3 2.0241 FSP

SG1 4098.0 SG2 336.6 THA 177.37

ELI 1901.0 ELZ 179.6 ALF 170.44

ARRIVAL DATE DEC 15 1967

LAUNCH DATE JUL 26 1967

DISTANCE 422.301 HELIOCENTRIC CONIC RL 151.94 LAL .00 LOL 302.34 VL 26.673 GAL -6.42 AZL 97.41 HCA 205.82 SMA 128.16 ECC .21557 INC 7.4114 V1 29.322 RP 107.51 LAP 3.22 LOP 147.98 VP 37.861 GAP 8.34 AZP 83.32 TAL 204.81 TAP 50.63 RCA 100.54 APO 155.79 V2 35.249 RC 142.165 GL -39.56 GP 32.29 TAL 121.57 ZAP 142.33 ETS 54.79 ZAE 123.00 ETE 156.17 ZAC 88.07 ETC 15.48 CLP-159.45 PLANETOCENTRIC CONIC C3 28.816 VHL 5.368 DLA -31.93 RAL 153.29 RAD 6568.2 VEL 12.255 PTH 2.20 VHP 6.850 DPA 36.78 RAP 186.11 ECC 1.4742 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.60 5 21 48 1367.33 49.44 359.39 28.78 115.84 5 44 35 767.3 22.75 352.00 74.60 5 21 48 1367.33 115.83 11 0 29 5284.2 22.76 5884.18 28.78 105.40 9 22 25 19.45 280.20 22.75 767.3 1367.33 5 44 35 74.60 5 21 48 19,44 359.39 28.78 115.84 115.83 11 0 29 122.66 8 31 25 109.41 12 56 58 22.76 272.81 5284.2 5884.18 19.45 280.20 28.78 105.40 9 22 25 14.92 195.7 110.00 8 18 9 795.70 10.69 312.50 23.71 4903.8 246.82 31.08 110.00 11 25 15 5503.80 28.71 255.22 33.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 4194.8 SGR 368.3 SG3 168.2 RRT -.4908 RRF -.7351 RTF .9030 SGB 4210.9 R23 .3320 R13 -.9041 SGI 4198.7 SG2 320.6 THA 177.52 ST 1862.3 SR 351.7 SS 667.1 CRT -.8711 CRS .9813 CST -.9490 TDE-1.5411 TRA-2.3055 TC3-2.3719 BAU .9145 .3294 RRA - .0243 RC3 .0983 FAU .04572 LSA 1992.9 MSA 255.1 SSA 7.4 EL1 1887.5 EL2 170.4 ALF 170.58 FOE-1.0407 FRA -.4918 FC3-1.3736 BSP 13084 BOE 1.5759 BRA 2.3056 BC3 2.3739 FSP -548 ARRIVAL DATE DEC 17 1967 FLIGHT TIME 144.00 DISTANCE 428.132 RL 151.94 LAL .00 LOL 302.34 VL 26.605 GAL -6.06 AZL 96.76 MCA 209.05 SMA 127.72 ECC .21617 INC 6.7587 VI 29.322 RP 107.52 LAP 3.28 LOP 151.23 VP 37.809 GAP 8.58 AZP 84.09 TAL 203.19 TAP 52.25 RCA 100.11 APO 155.33 VZ 35.245 RC 144.295 GL -37.66 GP 29.00 ZAL 121.21 ZAP 145.40 ETS 53.15 ZAE 124.44 ETE 158.05 ZAC 86.89 ETC 14.23 CLP-160.24 PLANETOCENTRIC CONIC C3 25.970 VHL 5.096 DLA -30.91 RAL 155.85 RAD 6568.1 VEL 12.139 PTH 2.18 VHP 6.756 DPA 32.89 RAP 186.44 ECC 1.4274 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 10 31 9 25 58 29.35 114.40 687.9 22.72 345.98 77.05 5 49 3 1287.87 19.60 353.46 23.9 22.74 102.95 9 15 35 623.86 19.61 304.47 29.36 114.39 6 10 31 9 25 58 8 23 26 647.9 22.72 345.98 77.05 5 49 3 1287.87 19.60 353.46 29.35 114.40 22.74 102.95 9 15 35 623.86 19.61 304.47 29.36 114.39 23.9 110.00 8 9 35 830.65 9.40 314.39 9.12 33.80 106.21 13 24 30 MID-COURSE EXECUTION ACCURACY 23.59 123.02 230.6 13.68 307.90 240.43 110.00 11 54 13 5417.12 30.51 249.12 4817.1 32.43 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1931.3 SR 357.5 SS 695.9 CRT -.8885 CRS .9867 CST -.9507 SGT 4429.4 SGR 371.7 SG3 183.3 RRT -.5377 RRF -.7416 RTF .9087 SGB 4445.0 R23 .2972 R13 -.9096 SG1 4433.9 SG2 313.1 THA 177.40 TDE-1.5302 TRA-2.2213 TC3-2.8072 BAU .9752 ROE .3179 RRA -.0054 RC3 .0996 FAU .04873 LSA 2068.3 MSA 253.7 SSA FDE-1.0469 FRA -.4651 FC3-1.6246 BSP 14883 8.6 FLT 1957.5 EL2 161.9 ALF 170.60 BOE 1.5629 BRA 2.2213 BC3 2.8089 FSP -677 ARRIVAL DATE DEC 19 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 26 1967 HELIOCENTRIC CONIC DISTANCE 433.967 RL 151.94 LAL .00 LOL 302.34 VL 26.537 GAL -5.70 A7L 96.23 MCA 212.29 SMA 127.28 ECC .21687 INC 6.2266 VI 29.322
RP 107.55 LAP 3.32 LOP 154.48 VP 37.757 GAP 8.82 A7P 84.73 TAL 201.56 TAP 53.85 RCA 99.68 APO 154.88 V2 35.240
RC 146.414 GL -36.02 GP 26.26 7AL 120.42 7AP 148.03 ETS 51.78 7AE 125.53 ETE 159.76 7AC 85.49 ETC 13.17 CLP-161.09 PLANETOCENTRIC CONIC C3 23.717 VHL 4.870 DLA -30.24 RAL 158.48 RAO 6568.0 VEL 12.046 PTH 2.15 VHP 6.717 DPA 29.47 RAP 187.14 ECC 1.3903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 19.80 30.31 113.33 6 33 39 113.32 9 23 5 22.79 341.08 6 13 17 1222.00 348.63 622.0 78.93 306.16 30.32 113.32 45.1 22.40 298.61 9 12 20 645.08 19.82 101.07 113.33 6 33 39 113.32 9 23 5 123.14 8 23 17 103.91 13 44 53 622.D 22.79 341.08 6 13 17 1222.00 19.80 346.63 30.31 78.93 45.1 22.80 298.61 19.82 306.16 30.32 101.07 9 12 20 645,08 308.65 244.2 13.20 110.00 8 9 13 844.17 8.89 315.11 24.28 236.03 34.69 475A.9 33.13 12 15 35 5358.95 31.54 244.90 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 4332.3 SCR 341.8 SC3 171.0 RRT -.4465 RRF -.6586 RTF .8902 SCB 4345.7 R23 .2896 R13 -.8909 SCI 4335.0 SC2 305.6 THA 177.97 ST 1844.1 SR 336.8 SS 636.7 CRT -.8875 CRS .9905 CST -.9413 LSA 1964.0 MSA 249.2 SSA 9.8 TDE-1.4037 TRA-1.9974 TC3-3.0183 BAU .9572 RDE .2862 RRA - .0150 RC3 .0560 FAU .04498 FDE -.9256 FRA -.3057 FC3-1.6421 BSP 13218 BDE 1.4326 BRA 1.9975 BC3 3.0188 FSP -533 EL1 1868.4 EL2 153.2 ALF 170.73 ARRIVAL DATE DEC 21 1967 LAUNCH DATE JUL 26 1967 FLIGHT TIME 148.00 DISTANCE 439.782 HELIOCENTRIC CONIC RL 151.94 LAL .00 LOL 302.34 VL 26.471 GAL -5.33 AZL 95.78 HCA 215.52 SMA 126.85 ECC .21774 INC 5.7820 V1 29.322 RP 107.55 LAP 3.36 LOP 157.73 VP 37.705 GAP 9.07 AZP 85.29 TAL 199.92 TAP 55.44 RCA 99.23 APO 154.47 V2 35.234 RC 148.521 GL -34.57 GP 23.95 ZAL 119.28 ZAP 150.34 ETS 50.66 ZAE 126.35 ETE 161.30 ZAC 83.94 ETC 12.28 CLP-161.97 PLANETOCENTRIC CONIC C3 21.895 VHL 4.679 DLA -29.82 RAL 161.19 RAD 6567.9 VEL 11.970 PTH 2.13 VMP 6.716 DPA 26.44 RAP 188.10 ECC 1.3603 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.93 . 337.31 1170.64 6 53 37 570.6 20.05 344.91 31.61 112.54 6 34 6 57.5 299.59 9 24 6 22.95 20.07 307.20 31.61 112.53 657.54 302.89 8 57 2 708.97 18.57 310.34 30.94 113.85 9 8 51 109.0 21.64 11 10 56 273.30 5282.5 24.25 9 32 54 5882.49 21.56 281.06 32.26 111.22 8 27 50 8 13 44 845.72 8.84 315.19 25.50 123.16 245.7 13.14 102.24 14 1 19 232.94 12 32 41 5318.51 32.17 241.91 35.82 4718.5 33.52 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1872.1 SR 338.1 SS 635.3 CRT -.9017 CRS .9942 CST -.9410 LSA 1990.7 MSA 244.5 SSA 11.0 EL1 1896.9 EL2 144.3 ALF 170.70 SGT 4437.4 SGR 340.2 SG3 173.1 RRT -.4357 RRF -.6221 RTF .8884 SGB 4450.4 R23 .2591 R13 -.8890 TDE-1.3846 TRA-1.8616 TC3-3.3644 BAU .9849 RDE .2761 RRA -.0077 RC3 .0384 FAU .04457 FOE -.8896 FRA -.2314 FC3-1.7623 89P 13691 SG1 4439.9 SG2 306.0 THA 178.08 -550 BOE 1.4119 BRA 1.8617 BC3 3.3646 FSP

FLIGHT TIME 142.00

ARRIVAL DATE DEC 23 1967

LAUNCH DATE JUL 26 1967

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HELIOCENTRIC CONIC
                                                                                  DISTANCE 445.585
    RL 151.94 LAL .00 LOL 302.34 VL 26.405 GAL -4.95 AZL 93.40 MCA 218.76 MA 126.43 ECC .21875 INC 5.4027 V1 29.322
RP 107.57 LAP - 3.38 LOP 160.98 VP 37.653 GAP 9.31 AZP 85.78 TAL 198.27 TAP 57.03 RCA 98.77 APO 154.09 V2 35.228
RC 150.615 GL -33.27 GP 21.99 ZAL 117.82 ZAP 152.38 ETS 49.76 ZAE 126.99 ETE 162.66 ZAC 82.25 ETC 11.51 CLP-162.86
    PLANETOCENTRIC CONIC
     C3 20.386 VHL 4.515 DLA -29.61 RAL 164.01 RAD 6567.8 VEL 11.907 PTH 2.12 VHP 6.744 DPA 23.71 RAP 189.27 ECC 1.3355
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RET -.4174 RRT -.5803 RTF .8856
SGB 4532.8 R23 .2299 R13 -.8861
SGI 4522.2 SGZ 309.8 THA 178.19
                                                                                                                                        ST 1900.2 SR 340.6 SS 631.2
CRT -.9161 CRS .9969 C*T -.9412
    TOE-1.3732 TRA-1.7150 TC3-3.6940 BAU 1.0068
    ROE .2684 RRA -.0020 RC3 .0190 FAU .04349
FDE -.8509 FRA -.1527 FC3-1.8471 BSP 13956
                                                                                                                                        LSA 2016.9 MSA 238.4 55A 12.3
                                                                                                                                        EL1 1925.8 EL2 134.7 ALE 170.63
    BOF 1.3992 BRA 1.7150 BC3 3.6940 FSP -548
                                                                                                                                                      ARRIVAL DATE DEC 25 1967
                                                                                   FLIGHT TIME 152.00
LAUNCH DATE JUL 26 1967
                                                                                   DISTANCE 451.376
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.339 GAL -4.55 AZL 95.07 MCA 221.99 SMA 126.01 ECC .21992 INC 5.7.14 V1 29.322 RP 107.59 LAP 3.39 LOP 164.22 VP 37.601 GAP 9.56 AZP 86.22 TAL 196.61 TAP 58.60 RCA 98.30 APO 153.73 V2 35.221 RC 152.696 GL -32.07 GP 20.32 ZAL 116.07 ZAP 154.20 ETS 49.08 ZAE 127.48 ETE 163.87 ZAC 80.45 ETC 10.84 CLP-163.75
   PLANETOCENTRIC CONIC
    C3 19.122 WHL 4.373 DLA -29.58 RAL 166.96 RAD 6567.8 VEL 11.853 PTH 2.10 VHP 6.792 DPA 21.23 RAP 30.59 ECC 1.3147 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.06 7 3 22 1118.32 20.73 341.33 35.13 111.59 7 22 0 518.3 23.48 333.63 98.94 9 29.55 645.16 20.74 306.57 35.14 111.58 9 40 40 45.2 23.49 298.68 100.00 9 1 52 734.89 17.85 311.93 33.84 114.38 9 14 7 134.9 20.99 304.54 100.00 10 14 6 5791.86 23.68 275.16 36.31 108.80 11 50 38 5191.9 26.02 267.14 110.00 8 33 25 824.59 9.62 314.06 29.21 122.96 8 47 9 224.6 13.90 307.57
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108.80 11 50 38
122.96 8 47 9
100.39 14 26 57
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       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4601.2 SGR 345.4 SG3 171.8
RRT -.4020 RRF -.5413 RTF .8835
SGB 4614.2 R23 .2013 R13 -.8840
SGI 4603.3 SG2 516.1 THA 178.26
                                                                                                                                        ST 1938.4 SR 345.3 SS 628.6
CRT -.9312 CR3 .9985 CST -.9425
    TOE-1.3751 TRA-1.5648 TC3-4.0210 BAU 1.0280
    RDE .2839 RRA .0036 RC3 .0012 FAU .04224
FDE -.8162 FRA -.0760 FC3-1.9122 BSP 14230
BDE 1.4001 BRA 1.5848 BC3 4.0210 FSP -546
                                                                                                                                         LSA 2053.9 MSA 230.8 SSA 13.6
                                                                                                                                        EL1 1965.0 EL2 124.2 ALF 170.54
                                                                                                                                                    ARRIVAL DATE DEC 27 1967
                                                                                  FLIGHT TIME 154.00
LAUNCH DATE JUL 26 1967
                                                                                  01STANCE 457.152
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.275 GAL -4.15 AZL 94.78 MCA 225.23 SMA 125.61 ECC .22125 INC 4.7832 V1 29.322 RP 107.62 LAP 3.39 LOP 167.47 VP 37.548 GAP 9.81 AZP 86.63 TAL 194.94 TAP 60.17 RCA 97.82 APO 153.40 V2 35.214
    RC 154.762 GL -30.94 GP 18.87 ZAL 114.04 ZAP 155.84 ETS 48.60 ZAE 127.88 ETE 164.93 ZAC 78.57 ETC 10.26 CLP-164.63
   PLANETOCENTRIC CONIC
    C3 18.059 VHL 4.250 DLA -29.70 RAL 170.06 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 6.857 DPA 18.96 RAP 192.04 ECC 1.2972
                                                                                                        111.36 7 31 8
111.35 9 55 47
113.60 9 33 25
109.11 11 55 35
122.77 9 0 51
100.05 14 37 31
                    10 18 52 5802.77
8 47 25 805.60
13 9 44 5267.08
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       110.00
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                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             RGT 4680.2 SGR 392.3 SG3 170.4
RRT -.3898 RRF -.5067 RTF .8823
SG8 4693.5 R23 .1750 R13 -.8827
SG1 4682.2 SG2 324.3 THA 178.31
                                                                                                                                        ST 1986.4 SR 351.9 SS 628.1

CRT -.9460 CRS .9980 CST -.9448

LSA 2101.1 MSA 222.1 SSA 14.9
     TDE-1.3881 TRA-1.4092 TC3-4.3418 BAU 1.0483
    RDE .2610 RRA .0089 RC3 -.0146 FAU .04084
FDE -.7855 FRA -.0066 FC3-1.9576 BSP 14504
BDE 1.4125 BRA 1.4092 BC3 4.3418 FSP -542
                                                                                                                                         EL1 2014.1 EL2 112.5 ALF 170.46
                                                                                                                                                     ARRIVAL DATE DEC 29 1967
                                                                                   FLIGHT TIME 156.00
LAUNCH DATE JUL 26 1967
                                                                                  DISTANCE 462.914
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.211 GAL -3.73 AZL 94.52 MCA 228.46 SMA 125.21 ECC .22275 INC 4.5239 V1 29.322
RP 107.64 LAP 3.38 LOP 170.71 VP 37.496 GAP 10.06 AZP 87.00 TAL 193.27 TAP 61.73 RCA 97.32 APO 153.10 V2 35.205
RC 156.813 GL -29.86 GP 17.61 ZAL 111.77 ZAP 157.34 ETS 48.32 ZAE 128.20 ETE 165.87 ZAC 76.60 ETC 9.75 CLP-165.50
   PLANETOCENTRIC CONIC
    C3 17.169 VHL 4.143 DLA -29.93 RAL 173.32 RAD 6567.7 VEL 11.771 PTH 2.08 VHP 6.935 DPA 16.85 RAP 193.59 ECC 1.2826
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 21.59 341.98 39.88 111.25 7 38 19 522.3 24.29 334.22
    LNOH AZHTH LNCH TIME L-I TIME
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        110.00
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                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 4749.0 SGR 360.7 SG3 168.2
RRT -.3790 RRF -.4756 RTF .8809
SG8 4762.7 R23 .1513 R13 -.8812
SG1 4751.0 SG2 333.7 THA 178.34
                                                                                                                                      ST 2038.3 SR 359.4 SS 626.8

CRT -.9595 CRS .9977 CST -.9474

LSA 2152.1 MSA 212.4 SSA 16.3

ELI 2067.3 EL2 99.8 ALF 170.38
     TOE-1.4072 TRA-1.2449 TC3-4.6456 BAU 1.0663
     ROE .2599 RRA .0133 RC3 -.0288 FAU .03924
FOE -.7553 FRA .0633 FC3-1.9789 BSP 14706
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FLIGHT TIME 150.00

BOE 1.4310 BRA 1.2450 BC3 4.6456 FSP -533

ARRIVAL DATE DEC 31 1967

LAUNCH DATE JUL 26 1967

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HELIOCENTRIC CONIC
                                                                          DISTANCE 468.660
     RL 151.94 LAL .00 LOL 302.34 VL 26.148 GAL -3.51 AZL 94.29 HCA 231.69 SMA 124.82 ECC .22443 INC 4.2895 V1 29.322 RP 107.67 LAP 3.36 LOP 173.96 VP 37.444 GAP 10.32 AZP 87.34 TAL 191.58 TAP 63.27 RCA 96.81 APO 152.84 V2 35.197 RC 158.850 GL -28.80 GP 16.52 ZAL 109.27 ZAP 158.70 ETS 48.23 ZAE 128.46 ETE 166.70 ZAC 74.58 ETC 9.31 CLP-166.37
    PLANETOCENTRIC CONIC
     C3 16.431 VHL 4.054 DLA -30.25 RAL 176.75 RAD 6567.7 VEL 11.739 PTH 2.07 VMP 7.026 DPA 14.89 RAP 195.23 ECC 1.2704
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 8 LAT INJ 2 LONG 78.89 7 25 53 1335.83 22.06 345.19 42.71 111.24 7 44 49 535.8 24.75 335.39 101.11 10 25 29 5845.18 22.07 278.49 42.72 111.23 12 2 54 5245.2 24.76 270.70
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                                                                                  46.12
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SCT 4821.2 SCR 370.7 SC3 166.1
RRT -.3732 RRF -.4508 RTF .8808
SCB 4835.4 R23 .1297 R13 -.8811
SC1 4823.2 SC2 343.7 THA 178.35
                                                                                                                            ST 2100.0 SR 366.3 SS 627.2

CRT -.9715 CRS .9953 CST -.9506

LSA 2213.1 MSA 201.8 SSA 17.7
     TOE-1.4354 TRA-1.0759 TC3-4.9383 BAU 1.0848
     RDE .2605 RRA .0172 RC3 -.0400 FAU .03768
FOE -.7288 FRA .1284 FC3-1.9852 BSP 14955
                                                                                                                            EL1 2130.3 EL2 86.0 ALF 170.31
     BOE 1.4588 BRA 1.0760 BC3 4.9385 FSP -527
                                                                                                                                       ARRIVAL DATE JAN 2 1968
                                                                           FLIGHT TIME 160.00
·LAUNCH DATE JUL 26 1967
                                                                           DISTANCE 474.389
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.085 GAL -2.86 AZL 94.08 MCA 234.92 SMA 124.44 ECC .22630 INC 4.0751 V1 29.322 RP 107.70 LAP 3.33 LOP 177.20 VP 37.391 GAP 10.58 AZP 87.66 TAL 189.89 TAP 64.82 RCA 96.28 APO 152.60 V2 35.187 RC 160.871 GL -27.73 GP 15.55 ZAL 106.55 ZAP 159.97 ETS 48.33 ZAE 128.68 ETE 167.42 ZAC 72.50 ETC 8.92 CLP-167.22
    PLANETOCENTRIC CONIC
     C3 15.835 WHL 3.979 DLA -30.63 RAL 180.36 RAD 6567.6 VEL 11.714 PTH 2.06 WHP 7.126 DPA 13.04 RAP 196.95 EEC 1.2606 LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     7 32 19
                                 1152.78
                                                     22.53
                                                                  344.65
                                                                                 45.86
                                                                                                111.32
                                                                                                              7 51 31
                                                                                                                                552.8
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        77.60
                                                                   276.17
                                                                                   45.87
                    10 47 53
                                                                                                  111.30
                                                                                                              12 24 45
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                                                                                                                                                               264.34
       102.20
                                    5811.41
                                                      22.55
                                                                                                            7 51 31
12 24 45
                      7 32 19 1152.78
                                                                                                  111.32
                                                                                                                                 552.8
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                                                                                                                                                               336.63
        77.80
                                                      22.53
                                                                   344.65
                                                                                    45.86
                                                      22.55
                                                                                   45.87
                                                                                                  111.30
                                                                                                                                5211.4
                                                                                                                                                25.24
                                                                                                                                                              268.34
       102.20
                    10 47 53 5811.41
                                                                   276.17
                                                                                                  121.84 9 54 50
100.78 15 4 45
                                                                                                                                128.2
                     9 42 42
                                                                                                                                                17.25
                                                                                                                                                               302.12
                                    728.23
                                                     13.14
                                                                   308.81
                                                                                   40.93
       110.00
                    13 36 41
                                    5283.96
                                                     32.64
                                                                   239.33
                                                                                   49.14
                                                                                                                                4684.0
                                                                                                                                                 33.78
                                                                                                                                                              230.28
    DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SGT 4891.0 SGR 361.5 SG3 163.9
RRT -.3707 RRF -.4315 RTF .8813
                                                                                                                            ST 2166.3 SR 378.2 SS 627.8
CRT -.9814 CRS .9915 CST -.9541
     TOE-1.4690 TRA -.899E TC3-5.2087 BAU 1.1027
     RDE .2625 RRA .0203 RC3 -.0482 FAU .03610
     FOE -.7043 FRA .1908 FC3-1.9737 BSP 15210
BOE 1.4923 BRA .8995 BC3 5.2089 FSP -521
                                                                       SGB 4905.9 R23 .1110 R13 -.8816
SG1 4893.1 SG2 354.2 THA 178.34
                                                                                                                            LSA 2278.9 MSA 191.1 SSA
                                                                                                                                                                  19.2
                                                                                                                            EL1 2197.9 EL2 71.5 ALF 170.27
                                                                                                                                      ARRIVAL DATE JAN 4 1968
 LAUNCH DATE JUL 26 1967
                                                                           FLIGHT TIME 162.00
                                                                          DISTANCE 480.100
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 26.024 GAL -2.41 AZL 93.88 HCA 238.15 SHA 124.07 ECC .22837 INC 3.8773 V1 29.322 RP 107.73 LAP 3.29 LOP 180.44 VP 37.339 GAP 10.85 AZP 87.95 TAL 188.20 TAP 66.35 RCA 95.73 APO 152.40 V2 35.178 RC 162.878 GL -26.64 GP 14.70 ZAL 103.63 ZAP 161,14 ETS 48.63 ZAE 128.87 ETE 168.07 ZAC NO.37 ETC 8.58 CLP-168.05
    PLANETOCENTRIC CONIC
     C3 15.374 WHL 3.921 OLA -31.05 RAL 184.16 RAD 6567.6 VEL 11.694 PTH 2.06 VHP 7.236 OPA 11.29 RAP 198.73 ECC 1.2530
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              49.33
                    7 39 35 1171.03
11 10 56 5779.80
7 39 35 1171.03
11 10 56 5779.80
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                                                                  346.22
         76.71
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       103.20
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101.47 15 13 14
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                                     504 .60
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       110.00
                    10 4 47
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                    13 44 54 5300.04
                                                                                   52.47
                                                                   240.53
       110.00
                                                     32.43
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4958.2 SCR 392.5 SC3 161.5
RRT -.3706 RRF -.4163 RTF .8826
SCB 4973.7 R23 .0942 R13 -.8829
SCI 4960.4 SG2 364.4 THA 178.31
                                                                                                                            ST 2233.6 SR +388.6 SS 627.0
     TOE-1.5054 TRA -.7146 TC3-5.4490 BAU 1.1200
                                                                                                                           CRT -.9891 CRS .9864 CST -.9575
LSA 2345.3 MSA 180.4 SSA 20.7
     ROE .2658 RRA .0225 RC3 -.0537 FAU .03452
FOE -.6799 FRA .2502 FC3-1.9437 B3P 15448
BOE 1.5287 BRA .7150 BC3 5.4493 FSP -514
                                                                                                                            EL1 2266.5 EL2 56.5 ALF 170.23
                                                                                                                                       ARRIVAL DATE JAN 6 1968
                                                                           FLIGHT TIME 164.00
 LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 485.791
    RL 151.94 LAL .00 LOL 302.34 VL 25.963 GAL -1.94 AZL 93.69 MCA 241.38 SMA 123.70 ECC .23066 INC 3.6929 V1 29.322
RP 107.76 LAP 3.24 LOP 183.67 VP 37.287 GAP 11.12 AZP 88.23 TAL 186.50 TAP 67.88 RCA 95.17 APO 152.23 VZ 35.167
RC 164.869 GL -25.52 GP 13.95 ZAL 100.52 ZAP 162.23 ETS 49.12 ZAE 129.03 ETE 168.64 ZAC 68.21 ETC 8.30 CLP-168.88
    PLANETOCENTRIC CONIC
     C3 15.045 WHL 3.879 DLA -31.47 RAL 188.14 RAD 6567.6 VEL 11.680 PTH 2.05 VMP 7.355 DPA
     LNOW AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                   347.78
                                                                                                                  7 '55
                                                                                                                                 589.3
                                                                                                                                                26.14
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                    7 46 6 1189.33
11 34 9 5751.80
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                                                     23.41
        75.67
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120.98 10 39 24
102.30 15 21 51
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                    11 34 9
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                                 5751.80
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                                     669.27
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                                                                   305.53
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       110.00
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       110.00
                    13 53 11
                                    5319.85
                                                     32.15
                                                                   242.01
                                                                                   56.11
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5011.6 SGR 403.3 SG3 158.5
RRT -.3704 RRF -.4034 RTF .8833
                                                                                                                           ST 2293.4 SR 399.0 SS 622.4

QRT -.9943 CRS .9798 CST -.9602
     TOE-1.5393 TRA -.5174 TC3-5.6401 BAU 1.1345
     ROE .2700 RRA .0231 RC3 -.0572 FAU .03281
FOE -.6533 FRA .5105 FC3-1.8879 BSP 15614
BOE 1.5628 BRA .5179 BC3 5.6404 FSP -504
                                                                                                                         LSA 2403.5 MSA 170.6 SSA 22.2
                                                                      SGB 5027.8 R23 .0801 R13 -.8834
                                                                       SG1 5013.9 SG2 374.4 THA 178.28
                                                                                                                            EL1 2327.5 EL2 41.8 ALF 170.18
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FLIGHT TIME 158.00

ARRIVAL DATE. JAN 8 1968

LAUNCH DATE JUL 26 1967

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DISTANCE 491.462
   HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.903 GAL -1.45 AZL 93.52 HCA 244.61 SMA 123.34 ECC .23317 INC 3.5196 V1 29.322
RP 107.79 LAP 3.18 LOP 186.91 VP 37.235 GAP 11.40 AZP 88.49 TAL 184.79 TAP 69.40 RCA 94.58 APO 152.10 V2 35.156
RC 166.846 GL -24.36 GP 13.28 ZAL 97.26 ZAP 163.24 ETS 49.82 ZAE 129.17 ETE 169.14 ZAC 66.01 ETC 8.06 CLP-169.69
    PLANETOCENTRIC CONIC
     C3 14.849 VHL 3.853 DLA -31.87 RAL 192.29 RAD 6567.6 VEL 11.672 PTH 2.05 VHP 7.484 DPA 8.05 RAP 202.44 ECC 1.2444 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           57.17
                                                                                                                                  111.88
                                                                                                                                                                               606.7
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                           7 58 11 1206.67
11 57 10 5728.61
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                                                                       23.77
          74.72
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                                                                       23.78
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         105.28
                                                                                                                                    111.88 8 18 17
111.87 13 32 39
120.51 11 3 19
103.23 15 30 55
                         7 58 11 1206.67
11 57 10 5728.61
10 52 38 641.04
14 1 53 5342.23
                                                                                                                                                                               606.7
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                                                                                                                                                                                                                       341.37
                                                                                                                 57.17
          74.72
                                                                        23.77
                                                                                          349.25
                                                                                                                                                                              5128.6
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         105.28
                                                                       23.78
                                                                                          270.45
                                                                                                                 57.18
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                                                                                                                                                                                                    20.14
                                                                                                                                                                                                                       297.01
                                               641.04
                                                                       16.21
                                                                                          303.93
                                                                                                                53.22
         110.00
                                                                                                                                                                             4742.2
                                                                                                                                                                                                    33.30
                                                                       31.81
                                                                                          243.67
                                                                                                                 60.04
         110.00
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                       ST 2351.4 SR 409.9 SS 617.1

CRT -.9973 CRS .9720 CST -.9628

LSA 2460.0 MSA 161.9 SSA 23.6

EL1 2386.7 EL2 29.4 ALF 170.13
                                                                                              SGT 5070.2 SGR 414.1 SG3 155.7
RRT -.3733 RRF -.3954 RTF .8853
SG8 5087.1 R23 .0678 R13 -.8855
SG1 5072.6 SG2 384.0 THA 178.24
     TDE-1.5750 TRA -.3146 TC3-5.7911 BAU 1.1497
     ROE .2756 RRA .0228 RC3 -.0575 FAU .03119
FDE -.6281 FRA .3662 FC3-1.8182 BSP 15834
BDE 1.5989 BRA .3154 BC3 5.7914 FSP -497
                                                                                                                                                                                        ARRIVAL DATE JAN 10 1958
                                                                                                     FLIGHT TIME 168.00
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 497.110
     RL 151.94 LAL .00 LOL 302.34 VL 25.843 GAL -.95 AZL 93.36 HCA 247.83 SMA 122.99 ECC .23593 INC 3.3555 VI 29.322 RP 107.83 LAP 3.11 LOP 190.14 VP 37.183 GAP 11.69 AZP 88.73 TAL 183.08 TAP 70.91 RCA 93.97 APO 152.01 V2 35.145 RC 168.808 GL -23.16 GP 12.68 ZAL 93.86 ZAP 164.20 ETS 50.73 ZAE 129.30 ETE 169.59 ZAC 63.78 ETC 7.86 CLP-170.49
   PLANETOCENTRIC CONIC
    C3 14.790 VHL 3.846 DLA -32.25 RAL 196.59 RAD 6567.6 VEL 11.669 PTH 2.05 VHP 7.621 DPA 6.53 RAP 204.37 ECC 1.2434 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.92 8 9 54 1222.70 24.05 350.60 61.52 112.14 8 30 17 622.7 26.84 342.71 106.08 12 19 44 5710.79 24.06 269.22 61.53 112.12 13 54 55 5110.8 26.85 261.33 110.00 12 19 44 5710.79 24.06 269.22 61.53 112.14 8 30 17 622.7 26.84 342.71 106.08 12 19 44 5710.79 24.06 269.22 61.53 112.12 13 54.55 5110.8 26.85 261.33 110.00 11 17 25 615.76 17.08 302.48 57.88 120.07 11 27 40 15.8 20.95 295.49 110.00 14 11-24 5365.73 31.43 245.40 64.25 104.18 15 40 50 4765.7 33.06 236.55
     C3 14.790 VHL 3.846 DLA -32.23 RAL 196.59 RAD 6567.6 VEL 11.669 PTH
                                                                                                                                                                                    6.53 RAP 204.37 ECC 1.2434
                                                                                                                                          2.05 VHP 7.621 DPA
                                                                                              "MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5123.8 SGR 424.4 SG3 152.8
RRT -.3775 RRF -.3901 RTF .8876
SGB 5141.3 R23 .0573 R13 -.8877
SGI 5126.3 SG2 392.8 THA 178.20
                                                                                                                                                                        ST 2397.4 SR 420.8 SS 608.7
CRT -.9982 CRS .9628 CST -.9649
     TOE-1.6062 TRA -.1012 TC3-5.8859 BAU 1.1638
     RDE .2823 RRA .0211 RC3 -.0552 FAU .02959
                                                                                                                                                                       LSA 2504.1 HSA 155.4 SSA 24.6
EL1 2434.0 EL2 24.8 ALF 170.06
     FOE -.6016 FRA .4211 FC3-1.7319 BSP 16025
BDE 1.6308 BRA .1034 BC3 5.8861 FSP -488
                                                                                                                                                                                       ARRIVAL DATE JAN 12 1968
                                                                                                     FLIGHT TIME 170.00
LAUNCH DATE JUL 26 1967
                                                                                                   DISTANCE 502.732
    HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.785 GAL -.43 A7L 93.20 MCA 251.05 SMA 122.65 ECC .23895 INC 3.1988 VI 29.322 RP 107.86 LAP 3.03 LOP 193.37 VP 37.132 GAP 11.99 A7P 88.96 TAL 181.37 TAP 72.42 RCA 93.34 APO 151.95 VZ 35.134 RC 170.755 GL -21.91 GP 12.14 7AL 90.35 ZAP 165.09 ETS 51.86 ZAE 129.41 ETE 169.99 ZAC 61.53 ETC 7.70 CLP-171.28
    PLANETOCENTRIC CONIC
                                                                                                                                                                                 5.08 RAP 206.34 ECC 1.2448
     C3 14.873 VHL 3.857 DLA -32.53 RAL 201.01 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 7.768 DPA
    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SCT 5171.4 SGR 434.1 SG3 149.8
RRT -.3825 RRF -.3874 RTF .8904
SGB 5189.6 R23 .0484 R13 -.8905
SGI 5174.1 SGZ 400.9 THA 178.15
                                                                                                                                                                       CRT - .9970 CRS .9518 CST - .9665
LSA 2531.9 MSA 151.2 SSA 25.7
EL1 2465.1 EL2 32.6 ALF 169.95
     TOE-1.6306 TRA .1231 TC3-5.9169 BAU 1.1765

RDE T2902 RRA .0181 RC3 -.0508 FAU .02800

FDE -.5738 FRA .4745 FC3-1.6301 BSP 16176

80E 1.6562 BRA .1244 BC3 5.9171 FSP > -480
                                                                                                                                                                                        ARRIVAL DATE JAN 14 1968
LAUNCH DATE JUL 26 1967
                                                                                                     FLIGHT TIME 172.00
                                                                                                     DISTANCE 508.327
    HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.727 GAL .11 AZL 93.05 HCA 254.27 SMA 122.31 ECC .24225 INC 3.0482 VI 29.322 RP 107.90 LAP 2.93 LOP 196.60 VP 37.080 GAP 12.31 AZP 89.17 TAL 179.66 TAP 73.93 RCA 92.68 APO 151.94 V2 35.122 RC 172.686 GL -20.61 GP 11.66 ZAL 86.77 ZAP 165.93 ETS 53.24 ZAE 129.51 ETE 170.34 ZAC 59.25 ETC 7.58 CLP-172.06
    PLANETOCENTRIC CONIC
     C3 17.100 VPL 3.887 DLA -32.74 RAL 205.51 RAD 6567.6 VEL 11.683 PTH 2.05 VPP 7.925 DPA 3.68 RAP 208.34 ECC 1.2486 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.65 8 38 28 1249.25 24.28 352.73 70.93 112.66 8 59 18 649.2 27.13 344.85 107.15 13 2 21 5693.71 24.29 268.02 70.93 112.65 14 37 15 5093.7 27.15 260.14 107.15 13 2 21 5603.71 24.28 352.73 70.93 112.66 8 59 18 649.2 27.13 344.85 107.15 13 2 21 5603.71 24.28 352.73 70.93 112.66 8 59 18 649.2 27.13 344.85
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112.65 14 37 15
119.45 13 42 47
105.87 16 5 12
                          13 2 21
12 4 56
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                                                5693.71
         107.15
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                                             5870.74
                                                                       18.20
                                                                                           278.48
                                                                                                                 67.74
         110.00
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                           14 35
                                                5406.24
                                                                       30.68
                                                                                           248.48
                                                                                                                 73.45
         110.00
                                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5212.4 SGR 442.0 SG3 146.5
RRT - .3869 RRF - .3826 RTF .8921
SG8 5231.1 R23 .0383 R13 - .8922
                                                                                                                                                                      ST 2435.0 SR 440.0 SS 577.0
CRT -.9939 CRS .9374 CST -.9665
      TDE-1.6442 TRA .3590 TC3-5.8811 BAU 1.1877
     ROE .2985 RRA .0133 RC3 -.0451 FAU .02638
FOE -.5390 FRA .5296 FC3-1.5120 BSP 16233
BOE 1.6711 BRA .3593 BC3 5.8812 FSP -460
                                                                                                                                                                       LSA 2536.2 MSA 151.3 SSA 26.0
                                                                                                                                                                       EL1 2474.0 EL2 47.8 ALF 169-81
                                                                                             SG1 5215.3 SG2 407.3 THA 178.11
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FLIGHT TIME 166.00

ARRIVAL DATE JAN 16 1968

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FLIGHT TIME 174.00
LAUNCH DATE JUL 26 1967
                                                                               DISTANCE 513.893
   HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 25.670 GAL .67 A7L 92.90 MCA 257.49 SMA 121.98 ECC .24586 INC 2.9024 VI 29.322 RP 107.94 LAP 2.83 LOP 199.82 VP 37.029 GAP 12.63 A7P 89.37 TAL 177.94 TAP 75.44 RCA 91.99 APO 151.97 V2 35.110 RC 174.603 GL -19.28 GP 11.22 TAL 83.14 ZAP 166.71 ETS 54.88 ZAE 129.61 ETE 170.66 ZAC 56.96 ETC 7.51 CLP-172.84
   PLANETOCENTRIC CONIC
                                                                                                                                             2.33 RAP 210.38 ECC 1.2551
    C3 15.501 VHL 3.937 DLA -32.84 RAL 210.06 RAD 6567.6 VEL 11.700 PTH
                                                                                                             2.06 VHP 8.093 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         27.09
                                                                                                         112.91
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                                                                                                                                           659.3
                     8 55 14 1259.32
13 21 53 5695.22
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                                      5695.22
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                                                                                          75.91
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106.43 16 20 49
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                    12 25 51
                                                                                         72.80
                                      5867.82
                                                         18.30
                                                                        278.31
       110.00
                                                                                                                                          4822.8
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                                                                                                                                                                           240.45
                                                                                         78.40
                     14 50 26
                                                         30.41
                                                                        249.52
       110.00
                                      5422.75
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RT - .3928 RF - .3642 RT - .8950
SGB 5274.6 R23 .0331 R13 -.8950
SGI 5258.3 SG2 413.8 THA 178.06
                                                                                                                                     ST 2428.0 SR 449.0 SS 559.6
CRT -. 9888 CRS .. 9220 CST -. 9671
    TOE-1.6518 TRA .6026 TC3-5.7851 BAU 1.1989
    ROE .3085 RRA .0075 RC3 -.0381 FAU .02480
FOE -.5089 FRA .3804 FC3-1.3850 BSP 16483
BOE 1.6803 BRA .6026 BC3 5.7852 FSP -458
                                                                                                                                     LSA 2526.9 MSA 153.9 SSA 26.0
                                                                                                                                     EL1 2468.2 EL2 66.0 ALF 169.63
                                                                                                                                                   ARRIVAL DATE JAN 18 1968
                                                                                 FLIGHT TIME 176,00
LAUNCH DATE JUL 26 1967
                                                                                 DISTANCE 519.424
   HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 25.814 GAL 1.25 A7L 92.76 HCA 260.71 SNA 121.66 ECC .24979 INC 2.7603 V1 29.322 RP 107.97 LAP 2.72 LOP 203.04 VP 36.978 GAP 12.97 A7P 89.55 TAL 176.23 TAP 76.94 RCA 91.27 APO 152.05 V2 35.097 RC 176.504 GL -17.92 GP 10.83 ZAL 79.51 ZAP 167.45 ET8 56.80 ZAE 129.69 ETE 170.95 ZAC 54.66 ETC 7.47 CLP-173.60
   PLANETOCENTRIC CONIC
                                                                                                                                               1.04 RAP 212.45 ECC 1.2645
                                                                                                             2.07 VHP 8.272 DPA
    C3 16.070 WHL 4.009 DLA -32.84 RAL 214.60 RAD 6567.6 VEL 11.724 PTH
    C3 16.070 VHL 4.009 DLA -32.84 RAL 214.60 RAD 6567.6 VEL 11.724 PTH 2.07 VHP 8.272 DPA 1.04 RAP 212.45 ECC 1.2645 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T2.64 9 13 25 1267.28 23.98 353.98 81.01 113.13 9 34 33 667.3 26.90 346.14 107.36 13 39 56 5703.60 23.99 268.64 81.02 113.12 15 15 0 5103.6 26.91 260.80 107.36 13 39 56 5703.60 23.99 268.64 81.02 113.13 13 9 34 33 667.3 26.90 346.14 107.36 13 39 56 5703.60 23.99 268.64 81.02 113.12 15 15 0 5103.6 26.91 260.80 110.00 12 43 49 5876.51 18.01 278.81 77.85 119.56 14 21 45 5276.5 21.80 271.74 110.00 15 8 44 5430.40 30.26 250.07 83.57 106.72 16 39 14 4830.4 32.25 241.42
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5295.9 SGR 457.3 SG3 140.1
RRT -.4000 RRF -.3872 RTF .8988
SG8 5315.6 R23 .0277 R13 -.8989
SG1 5299.1 SG2 418.9 THA 178.01
                                                                                                                                      ST 2401.0 SR 456.7 SS 539.5
CRT -.9815 CRS .9037 CST -.9671
    TOE-1.6491 TRA .8565 TC3-5.6292 BAU 1.2094
RDE .3195 RRA .0004 RC3 -.0295 FAU .02334
                                                                                                                                      LSA 2497.6 MSA 160.0 SSA 25.3
     FDE -.4774 FRA .6299 FC3-1.2574 BSP 16672
                                                                                                                                       EL1 2442.5 EL2 85.9 ALF 169.41
     BOE 1.6797 BRA .8565 BC3 5.6293 FSP
                                                           -453
                                                                                                                                                  ARRIVAL DATE JAN 20 1968
                                                                                 FLIGHT TIME 178.00
LAUNCH DATE JUL 26 1967
                                                                                DISTANCE 524.919
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 25.558 GAL 1.86 AZL 92.62 MCA 263.92 SMA 121.35 ECC .25408 INC 2.6208 VI 29.322 RP 108.01 LAP 2.61 LOP 206.26 VP 36.928 GAP 13.33 AZP 89.72 TAL 174.52 TAP 78.45 RCA 90.51 APO 152.18 V2 35.084 RC 178.389 GL -16.54 GP 10.47 ZAL 75.90 ZAP 168.13 ETS 59.02 ZAE 129.77 ETE 171.20 ZAC 52.34 ETC 7.49 CLP-174.37
   PLANETOCENTRIC CONIC
                                                                                                                                               -.21 RAP 214.54 ECC 1.2770
     C3 16.830 VHL 4.102 DLA -32.71 RAL-219.10 RAD 6567.7 VEL 11.756 PTH 2.08 VHP 8.463 DPA
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      113.33 9 54 11
113.33 15 31 34
113.33 9 54 11
113.31 15 31 34
113.31 15 31 34
119.95 13 8 43
106.74 17 0 20
                                                                                                                                        672.6
                                                                                       86.19
                                                          23.61
                                                                        354.23
         72.89
                        9 32 59 1272.61
                                                                                                                                           5119.2
                                                                                                                                                             26.57
                                                                                                                                                                            261.86
                                                          23.63
                                                                        269.66
                                                                                          86.20
                     13 56 15
                                       5719.19
        107.11
                                                                                                                                                             26.56
                                                                                                                                                                            346.43
                                                                                                                                            672.6
                                                                        354.23
                                                                                          86.19
                                      1272.81
                                                          23.61
         72.89
                       9 32 59
                                                                                                                                                             26.57
                                                                                                                                                                            261.86
                                                                                                                                           5119.2
                      13 56 15 5719.19
                                                          23.63
                                                                        269.66
                                                                                          86.20
        107.11
                                                                                                                                                             21.16
                                                                                                                                              9.0
                                                          17.31
                                                                         302.09
                                                                                          82.82
                      12 58 34
                                        609.00
        110.00
                                                                                                                                           4631.0
                                                                                                                                                             32.24
                                     5431.01
                                                                                          88.90
                     15 29 49
                                                                        250.11
                                                          30.25
        110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2347.8 SR 462.4 SS 515.8

CRT -.9715 CRS .8802 CST -.9662

LSA 2441.7 MSA 170.3 SSA 24.3
                                                                             SGT 5325.1 SGR 462.9 SG3 136.9
     TDE-1.6295 TRA 1.1271 TC3-5.4065 BAU 1.2165
     RDE .3311 RRA -.0086 RC3 -.0213 FAU .02183
FDE -.4423 FRA .6813 FC3-1.1230 BSP 16742
                                                                            RRT -.4063 RRF -.3896 RTF .9020
SGB 5345.2 R23 .0227 R13 -.9020
SGI 5328.5 SG2 422.7 THA 177.96
                                                                                                                                       EL1 2390.4 EL2 107.7 ALF 169.15
     BOE 1.6628 BRA 1.1271 BC3 5.4066 FSP -442
                                                                                                                                                   ARRIVAL DATE JAN 22 1968
                                                                                  FLIGHT TIME 180.00
LAUNCH DATE JUL 26 1967
                                                                                 DISTANCE 530.372
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 25.504 GAL 2.49 AZL 92.48 HCA 267.13 SMA 121.04 ECC .25876 INC 2.4831 VI 29.322 RP 108.05 LAP 2.48 LOP 209.48 VP 36.878 GAP 13.70 AZP 89.88 TAL 172.82 TAP 79.95 RCA 89.72 APO 152.36 V2 35.071 RC 180.257 GL -15.17 GP 10.14 ZAL 72.35 ZAP 168.76 ETS 61.57 ZAE 129.84 ETE 171.43 ZAC 50.02 ETC 7.55 CLP-175.12
    PLANETOCENTRIC CONIC
     C3 17.800 VHL 4.219 DLA -32.48 RAL 223.50 RAD 6567.7 VEL 11.798 PTH 2.09 VHP 8.668 DPA -1.41 RAP 216.66 ECC 1.2929
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.39 9 53 45 1275.81 23.10 354.22 91.40 113.49 10 15 1 675.8 26.08 346.47
                                                                                                        113.49 10 15 I
113.47 15 46 17
                                                                                                                                            5142.1
                                                                                                                                                              26.09
                                                                                                                                                                             263.43
        106.61
                      14 10 35
                                      5742.14
                                                          23.12
                                                                         271.18
                                                                                           91.40
                                                                                                           113,49 10 15 1
113,47 15 46 17
120.50 13 21 2
106.54 17 23 34
                                                                                                                                             675.8
                                                                                                                                                              26.08
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                       9 53 45
                                                                         354.22
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                                     1275.81
                                                          23.10
          73.39
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                      14 10 35
                                      5742.14
                                                          23.12
        106.61
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        110.00
                       13 10 22
                                                          16.24
                                                                         303.88
                                                                                           87.69
                                         640.18
                                                                                                                                           4825.8
                                                                                                                                                                            241.07
                       15 53 B
                                      5425.77
                                                          30.35
                                                                         249.74
                                                                                           94.35
        110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 2281.8 SR 466.6 SS 492.3
CRT -.9586 CRS .8530 CST -.9651
                                                                             SGT 5355.6 SGR 467.6 SG3 133.6
RRT -.4136 RRF -.3939 RTF .9056
SGB 5376.0 R23 .0187 R13 -.9057
     TOE-1.6012 TRA 1.4057 TC3-5.1429 BAU 1.2239
     RDE .3435 RRA -.0188 RC3 -.0129 FAU .02041
                                                                                                                                       LSA 2373.2 MSA 183.6 SSA 23.1
     FOE -.4080 FRA .7308 FC3 -.9927 BSP 16889
BDE 1.6377 BRA 1.4059 BC3 5.1430 FSP -434
                                                                                                                                       EL1 2325.3 EL2 130.4 ALF 168.88
                                                                             SG1 5359.1 SG2 425.4 THA 177.92
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LAUNCH DATE JUL 26 1967
                                                                                FLIGHT TIME 182.00
                                                                                                                                                 ARRIVAL DATE JAN 24 1968
   HELIOCENTRIC CONTC
                                                                                01STANCE 535.779
    RL 151.94 LAL .00 LOL 302.34 VL 25.450 GAL 3.15 AZL 92.35 HCA 270.34 SMA 120.74 ECC .26387 INC 2.3463 VI 29.322
RP 108.09 LAP 2.35 LOP 212.69 VP 36.828 GAP 14.10 AZP 90.01 TAL 171.12 TAP 81.46 RCA 88.88 APO 152.59 VZ 35.058
RC 182.108 GL -13.81 GP 9.85 ZAL 68.89 ZAP 169.33 ETS 64.48 ZAE 129.89 ETE 171.64 ZAC 47.69 ETC 7.66 CLP-175.88
   PLANETOCENTRIC CONIC
     C3 19.005 VHL 4.359 DLA -32.14 RAL 227.76 RAD 6567.8 VEL 11.848 PTH 2.10 VHP 8.888 DPA -2.57 RAP 218.81 ECC 1.3128 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    10 15 41 1275.83
14 22 41 5772.79
10 15 41 1275.83
14 22 41 5772.79
                                                                                                      113.61 10 36 57
113.60 15 58 53
                                                                                                                                                      25.46
                                                                                                                                                                      346.22
        74 - 13
                                                         22.46
                                                                                                                                           675.8
                                                                        353.92
                                                                                         96.60
                                                         22.47
                                                                                         96.60
        105.87
                                                                        273.22
                                                                                                                                         5172.6
                                                                                                                                                           25.47
                                                                                                                                                                          265.51
                                                                                                        113.61 10 36 57
113.60 15 58 53
121.15 13 31 1
106.19 17 48 7
         74.13
                                                                                         96.60
                                                        22.46
                                                                        353.92
                                                                                                                                          675.8
                                                                                                                                                           25.46
                                                                                                                                                                          346.22
       105.67
                                                        22.47
                                                                        273.22
                                                                                         96.60
                                                                                                                                         5172.8
                                                                                                                                                           25.47
                                                                                                                                                                        265.51
       110.00
                     13 19 42
                                      679.95
                                                         14.86
                                                                        306.13
                                                                                         92.44
                                                                                                                                           80.0
                                                                                                                                                           18.67
                                                                                                                                                                          200.31
                                    5416.67
       110.00
                     16 17 50
                                                        30.52
                                                                        249.09
                                                                                         99.85
                                                                                                                                         4816.7
                                                                                                                                                           32.44
                                                                                                                                                                          240.39
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 5380.8 8GR 471.0 8G3 130.4
RRT -.4209 RRF -.3989 RTF .9092
SGB 5401.4 R23 .0152 R13 -.9093
SGI 5384.5 SG2 426.9 THA 177.88
                                                                                                                                   ST 2201.6 SR 468.8 SS 469.0
CRT -.9419 CRS .8203 CST -.9636
    TDE-1.5604 TRA 1.6963 TC3-4.8368 BAU 1.2294
    RDE .3565 RRA -.0305 RC3 -.0052 FAU .01902
    FOE -.3730 FRA .7808 FC3 -.8663 BSP 17015
BDE 1.6006 BRA 1.6985 BC3 4.8388 FSP -426
                                                                                                                                    LSA 2290.5 MSA 199.9 SSA 21.8
                                                                                                                                     EL1 2245.7 EL2 154.3 ALF 168.61
LAUNCH DATE JUL 26 1967
                                                                                 FLIGHT TIME 184.00
                                                                                                                                                 ARRIVAL DATE JAN 26 1968
   HELIOCENTRIC CONIC
                                                                                DISTANCE 541.133
    RL 151.94 LAL .00 LOL 302.34 VL 25.397 GAL 3.85 AZL 92.21 MCA 273.55 SMA 120.44 ECC .26944 INC 2.2095 V1 29.322 RP 108.13 LAP 2.21 LOP 215.90 VP 36.779 GAP 14.51 AZP 90.14 TAL 169.43 TAP 82.98 RCA 87.99 APO 152.89 V2 35.045 RC 183.942 GL -12.47 GP 9.58 ZAL 65.53 ZAP 169.85 ETS 67.76 ZAE 129.94 ETE 171.83 ZAC 45.36 ETC 7.82 CLP-176.63
   PLANETOCENTRIC CONIC
    C3 20.472 WHL 4,525 DLA -31.70 RAL 231.86 RAD 6567.8 VEL 11.910 PTH
                                                                                                             2.12 VHP 9.124 DPA
                                                                                                                                            -3.69 RAP 220.98 ECC 1.3369
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.11 10 36 41 1272.66 21.69 353.32 101.75 113.70 10 59 54 672.7 24.71 345.67
                    10 36 41 1272.68
14 32 22 5811.25
                                                                                                        113.69 16 9 13
113.70 10 59 54
113.69 16 9 13
121.82 13 39 13
105.77 18 13 12
       104.89
                                                        21.71
                                                                        275.78
                                                                                       101.75
                                                                                                                                         5211.2
                                                                                                                                                           24.72
                                                                                                                                                                          266.13
        75.11
                    10 30 41 1272.66
14 32 22 5611.25
                                                        21.69
                                                                        353.32
                                                                                       101.75
                                                                                                                                           672.7
                                                                                                                                                           24.71
                                                                                                                                                                          345.67
                                                                                    101.75
       104.80
                                                        21.71
                                                                       275.78
                                                                                                                                         5211.2
                                                                                                                                                           24.72
                                                                                                                                                                          266.13
                    13 27 7
16 43 6
       110.00
                                      726.20
                                                        13.21
                                                                        308.70
                                                                                       97.07
                                                                                                                                          126.2
                                                                                                                                                           17.32
                                                                                                                                                                          302.00
                                    5405.72
                                                                       248.30
       110.00
                                                        30.73
                                                                                       105.35
                                                                                                                                         4805.7
                                                                                                                                                           32.58
                                                                                                                                                                          239.57
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                          SGT 5401.4 SGR 473.1 SG3 127.3 RRT -.4284 RRF -.4045 RTF .9129 SG8 5422.1 R23 .0122 R13 -.9129 SG1 5405.3 SG2 427.2 THA 177.84
    TOE-1.5083 TRA 2.0046 TC3-4.5058 BAU 1.2332
                                                                                                                                   ST 2112.9 SR 469.0 SS 447.2
CRT -.9208 CRS .7818 CST -.9621
    RDE .3701 RRA -.0436 RC3 .0017 FAU .01766
FDE -.3383 FRA .8314 FC3 -.7470 85P 17127
BDE 1.5530 BRA 2.0051 BC3 4.5058 FSP -418
                                                                                                                                    LSA 2199.1 MSA 218.5 SSA 20.5
                                                                                                                                    EL1 2156.9 EL2 179.2 ALF 168.37
                                                                               FLIGHT TIME 186.00
                                                                                                                                                ARRIVAL DATE JAN 28 1968
LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 546.427
    RL 151.94 LAL .00 LOL 302.34 VL 25.345 GAL 4.57 AZL 92.07 MCA 276.75 SMA 120.15 ECC .27552 INC 2.0718 V1 29.322 RP 108.18 LAP 2.06 LOP 219.10 VP 36.731 GAP 14.96 AZP 90.24 TAL 167.75 TAP 84.50 RCA 87.05 APO 153.26 V2 35.032 RC 185.758 GL -11.17 GP 9.33 ZAL 62.30 ZAP 170.31 ETS 71.43 ZAE 129.98 ETE 172.01 ZAC 43.03 ETC 8.05 CLP-177.39
   PLANETOCENTRIC CONIC
    C3 22.234 VHL 4.715 DLA -31.19 RAL 235.77 RAD 6567.9 VEL 11.984 PTH 2.14 VHP 9.378 DPA -4.76 RAP 223.17 ECC 1.3659
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.35 11 2 53 1265.48 20.82 352.36 106.83 113.76 11 23 58 665.5 23.85 344.77 103.65 14 39 19 5858.20 20.84 278.92 106.83 113.76 11 23 58 665.5 23.87 271.33 76.35 11 2 53 1265.48 20.82 352.36 106.83 113.76 11 23 58 665.5 23.87 271.33 103.65 14 39 19 5858.20 20.84 278.92 106.83 113.75 16 16 58 5258.2 23.87 271.33
                                                                                                    113.76 11 23 58
113.75 16 16 58
113.75 16 16 58
113.75 16 16 58
122.46 13 46 4
105.33 18 38 11
                                                                       311.49
                     13 33 7
                                       777.12
                                                        11.37
                                                                                      101.58
                                                                                                                                          177.1
                                                                                                                                                          15.57
                                                                                                                                                                         304.91
                    17 8 16 5394.55
                                                                       247.49
                                                                                                                                        4794.6
                                                                                                                                                         32.72
                                                                                                                                                                         238.73
                                                       30.93
                                                                                       110.81
   DIFFERENTIAL CORRECTIONS
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
    TDE-1.4417 TRA 2.3296 TC3-4.1473 BAU 1.2328
                                                                           SGT 5414.3 SGR 473.7 SG3 124.3
                                                                                                                                    ST 2016.9 SR 467.0 SS 427.0
    RDE .3838 RRA -.0583 RC3 .0069 FAU .01627
FDE -.3028 FRA .8843 FC3 -.6336 BSP 17141
                                                                           RRT -.4352 RRF -.4100 RTF .9163
SGB 5435.0 R23 .0097 R13 -.9163
SGI 5418.3 SG2 426.2 THA 177.81
                                                                                                                                    CRT -.8935 CRS .7353 CST -.9604
                                                                                                                                   LSA 2100.1 MSA 239.6 SSA 19.3
    BOE 1.4919 BRA 2.3303 BC3 4.1473 FSP
                                                                                                                                    EL1 2060.1 EL2 205.3 ALF 168.19
LAUNCH DATE JUL 26 1967
                                                                                FLIGHT TIME 188.00
                                                                                                                                                ARRIVAL DATE JAN 30 1968
                                                                               DISTANCE 551.653
   HELIOCENTRIC CONIC
   RL 151.94 LAL .00 LOL 302.34 VL 25.294 GAL 5.34 AZL 91.93 MCA 279.96 SMA 119.87 ECC .28217 INC 1.9324 V1 29.322 RP 108.22 LAP 1.90 LOP 222.31 VP 36.683 GAP 15.44 AZP 90.33 TAL 166.08 TAP 86.04 RCA 86.05 APO 153.69 V2 35.019 RC 187.557 GL -9.91 GP 9.11 ZAL 59.22 ZAP 170.71 ETS 75.51 ZAE 130.01 ETE 172.17 ZAC 40.70 ETC 8.34 CLP-176.14
   PLANETOCENTRIC CONIC
    C3 24.332 VHL 4.933 OLA -30.60 RAL 239.46 RAD 6566.0 VEL 12.071 PTH 2.16 VHP 9.652 DPA -5.78 RAP 225.38 ECC 1.4004
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.88 11 28 33 1252.93 19.86 350.96 111.81 113.78 11 49 26 652.9 22.90 343.43
                                                                                    111.81
                                                                       304.81
       102.12
                     14 43 8
                                      626.70
                                                        19.87
                                                                                      111.82
                                                                                                        113.77
                                                                                                                    14 53 34
                                                                                                                                           26.7
                                                                                                                                                          22.91
                                                                                                                                                                         297.26
                   11 26 33
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113.77 14 53 34
        77.88
                                   1252.93
                                                                       350.96
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                                                       19.86
                    14 43 8
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       102.12
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                                                                                                        123.02 13 51 52
104.93 19 2 34
                                                          9.37
                                                                       314.42
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                                                                                                                                          231.3
                                                                                                                                                           13.65
                                                                                                                                                                         307.94
       110.00
                                       831.33
       110.00
                     17 32 50
                                    5384.33
                                                        31.11
                                                                       246.75
                                                                                       116.18
                                                                                                                                         4784.3
                                                                                                                                                          32.85
                                                                                                                                                                         237.96
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                                    ST 1926.3 SR 463.4 SS 410.4
CRT -.8607 CRS .6852 CST -.9596
    TOE-1.3701 TRA 2.6663 TC3-3.7877 BAU 1.2321
                                                                           SGT 5426.2 SGR 473.2 SG3 121.3
    ROE .3001 RRA -.0740 RC3 .0113 FAU .01499
FDE -.2607 FRA .9365 FC5 -.5352 BSP 17235
                                                                          RRT -.4428 RRF -.4168 RTF .9202
3G8 5446.8 R23 .0076 R13 -.9202
                                                                                                                                   LSA 2006.4 MSA 260.8 SSA 18.2
                                                                         SG1 5430.3 SG2 424.0 THA 177.77
    BOE 1.4268 BRA 2.6673 BC3 3.7878 FSP -399
                                                                                                                                    ELI 1967.7 ELZ 230.9 ALF 168.14
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APRIVAL DATE FEB 1 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 26 1967
   HELIOCENTRIC CONIC
                                                                                                      DISTANCE 556.801
     RL 151.94 LAL .00 LOL 302.34 VL 25.244 GAL 6.15 AZL 91.79 HCA 283.16 SMA 119.60 ECC .28944 INC 1.7904 V1 29.322
RP 108.26 LAP 1.74 LOP 225.51 VP 36.635 GAP 15.94 AZP 90.41 TAL 164.43 TAP 87.59 RCA 84.98 APO 154.21 V2 35.005
RC 189.337 GL -8.71 GP 8.90 ZAL 56.29 ZAP 171.03 ETS 79.98 ZAE 130.02 ETE 172.32 ZAC 38.38 ETC 8.71 CLP-178.91
    PLANETOCENTRIC CONIC
     C3 26.813 VHL 5.178 OLA -29.97 RAL 242.93 RAD 6568.1 VEL 12.173 PTH 2.18 VHP 9.949 DPA -6.77 RAP 227.60 ECC 1.4413 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.74 11 56 19 1232.66 18.82 348.96 116.69 113.77 12 16 51 632.7 21.87 341.49 100.26 14 43 4 694.92 18.83 309.42 116.70 113.76 14 54 39 94.9 21.88 301.95
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113.76 14 54 39
123.49 13 56 53
104.59 19 26 4
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         110.00
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                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1841.0 SR 458.0 SS 397.1
CRT -.8213 CRS .6309 CST -.9599
                                                                                                 SGT 5432.9 SGR 471.4 SG3 118.4
RRT - .4503 RRF - .4240 RTF .9243
SGB 5453.3 R23 .0059 R13 - .9243
SG1 5437.1 SG2 420.6 THA 177.75
      TDE-1.2906 TRA 3.0194 TC3-3.4280 BAU 1.2288
     ROE .4127 RRA -.0909 RC3 .0145 FAU .01374
FDE -.2380 FRA .9898 FC3 -.4437 B3P 17322
BDE 1.3550 BRA 3.0208 BC3 3.4280 FSP -392
                                                                                                                                                                            LSA 1917.5 MSA 281.9 SSA 17.1
                                                                                                                                                                            EL1 1879.7 EL2 255.9 ALF 168.23
                                                                                                                                                                                            ARRIVAL DATE FEB 3 1968
                                                                                                        FLIGHT TIME 192.00
                                                                                                       DISTANCE 561.858
   HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.194 GAL 7.00 AZL 91.64 HCA 286.35 SMA 119.33 ECC .29741 INC 1.6447 V1 29.322
RP 108.30 LAP 1.58 LOP 228.70 VP 36.589 GAP 16.49 AZP 90.46 TAL 162.80 TAP 89.16 RCA 83.84 APO 154.82 VZ 34.992
RC 191.100 GL -7.56 GP 8.71 ZAL 53.53 ZAP 171.28 ETS 84.81 ZAE 130.02 ETE 172.45 ZAC 36.07 ETC 9.17 CLP-179.68
   PLANETOCENTRIC CONIC
                                                                                                                                                                                      -7.71 RAP 229.83 ECC 1.4894
     C3 29.736 VHL 5.453 OLA -29.30 RAL 246.18 RAD 6568.2 VEL 12.293 PTH 2.21 VHP 10.271 OPA -7.71 RAP 229.83 ECC 1.4894 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG 82.13 12 27 47 1199.21 17.72 345.98 121.45 113.72 12 47 46 599.2 20.78 338.56 97.87 14 37 30 779.99 17.74 315.22 121.46 113.71 14 50 30 180.0 20.79 307.80 100.00 14 4 6 887.10 13.35 320.98 119.30 117.00 14 18 53 287.1 16.86 313.96 100.00 15 43 52 5855.38 22.22 279.31 123.40 110.53 17 21 27 5255.4 24.81 271.48 110.00 13 45 29 945.69 5.08 320.49 114.39 123.85 14 1 15 345.7 9.49 314.18 110.00 18 18 58 5369.55 31.37 245.68 126.61 104.34 19 48 27 4769.6 33.02 236.84 DIFFERENTIAL CORRECTIONS.

MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ORBIT DETERMINATION ACCURACY AND ASS 387.1
      C3 29.736 VHL 5.453 DLA -29.30 RAL 246.18 RAD 6568.2 VEL 12.293 PTH
                                                                                                                                             2.21 VHP 10.271 DPA
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            CRT - 1764.1 SR 450.8 SS 387.1 CRT - .7750 CRS .5733 CST - .9613 LSA 1836.8 MSA 301.9 SSA 16.2 EL1 1799.2 EL2 279.3 ALF 168.52
                                                                                                 SGT 5434.2 SGR 468.2 SG3 115.6
RRT -.4577 RRF -.4314 RTF .9285
SGB 5454.4 R23 .0044 R13 -.9285
SGI 5438.5 SG2 416.0 THA 177.73
      TOE-1.2036 TRA 3.3907 TC3-3.0743 BAU 1.2222
     RDE .4274 RRA -.1090 RC3 .0164 FAU .01252
FDE -.2074 FRA 1.0451 FC3 -.3645 89P 17399
      BOE 1.2774 BRA 3.3924 BC3 3.0743 FSP -364
                                                                                                                                                                                            ARRIVAL DATE FEB 5 1968
                                                                                                        FEIGHT TIME 194.00
LAUNCH DATE JUL 26 1967
                                                                                                       DISTANCE 566.811
    HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.145 GAL 7.91 AZL 91.49 MCA 289.55 SMA 119.07 ECC .30615 INC 1.4943 VI 29.322 RP 108.34 LAP 1.41 LOP 231.90 VP 36.543 GAP 17.09 AZP 90.50 TAL 161.20 TAP 790.75 RCA 82.61 APO 155.52 VZ 34.979 RC 192.846 GL -6.48 GP 8.54 ZAL 50.93 ZAP 171.45 ETS 90.00 ZAE 130.01 ETE 172.58 ZAC 33.77 ETC 9.73 CLP 179.54
    PLANETOCENTRIC CONIC
      C3 33.171 VHL 5.759 DLA -28.61 RAL 249.20 RAD 6568.3 VEL 12.432 PTH 2.25 VHP 10.621 OPA -8.61 RAP 232.08 ECC 1.5459
     C3 33.171 VHL 5.759 DLA -28.61 RAL 249.20 RAD 6568.3 VEL 12.432 PTH 2.25 VHP 10.621 DPA -8.61 RAP 232.08 ECC 1.5459 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.75 13 9 7 1132.27 16.58 340.53 126.09 113.65 13 28 0 532.3 19.64 333.17 94.25 14 20 15 901.89 16.60 323.67 126.09 113.64 14 35 17 301.9 19.65 316.30 100.00 13 52 33 991.29 10.05 326.97 122.82 118.30 14 9 4 391.3 13.76 320.14 100.00 16 19 31 5806.14 23.36 276.10 128.91 109.20 17 56 17 5206.1 25.76 268.13 110.00 13 48 21 1004.46 2.84 323.57 118.43 124.08 14 5 6 404.5 7.29 317.32 110.00 18 40 12 5365.74 31.43 245.40 131.64 104.18 20 9 37 4765.7 33.06 236.55 DIFFFERENTIAL CORRECTIONS
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFFRENTIAL CORRECTIONS
                                                                                                                                                                            CRT - .7207 CRS .5117 CST - .9636
LSA 1764.8 MSA 320.5 SSA 15.4
EL1 1726.9 EL2 300.9 ALF 169.03
                                                                                                   SGT 5431.5 SGR 463.5 SG3 113.0
      TOE-1.1066 TRA 3.7863 TC3-2.7290 BAU 1.2102
      RDE .4420 RRA -.1282 RC3 .0170 FAU .01126
FDE -.1769 FRA 1.1039 FC3 -.2939 BSP 17335
                                                                                                  RRT -.4644 RRF -.4385 RTF .9327
SGB 5451.3 R23 .0032 R13 -.9327
SG1 5435.8 SG2 410.2 THA 177.72
      BOE 1.1916 BRA 3.7885 BC3 2.7290 FSP -373
                                                                                                                                                                                             ARRIVAL DATE FEB 7 1968
                                                                                                         FLIGHT TIME 196.00
LAUNCH DATE JUL 26 1967
                                                                                                        DISTANCE 571.640
    HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 25.098 GAL 8.87 AZL 91.34 HCA 292.74 SMA 118.81 ECC .31576 INC 1.3379 V1 29.322 RP 108.38 LAP 1.23 LOP 235.09 VP 36.497 GAP 17.73 AZP 90.52 TAL 159.63 TAP 92.37 RCA 81.29 APO 156.33 V2 34.966 RC 194.574 GL -5.45 GP 8.38 ZAL 48.50 ZAP 171.52 ETS 95.35 ZAE 129.97 ETE 172.70 ZAC 31.50 ETC 10.41 CLP 178.75
    PLANETOCENTRIC CONIC
      C3 37.202 VHL 6.099 DLA -27.90 RAL 252.00 RAD 6568.4 VEL 12.592 PTH 2.28 VHP 11.003 DPA -9.46 RAP 234.33 ECC 1.6123
                                                                        INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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108.35 18 24 52
124.18 14 8 30
104.13 20 29 31
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                                                                                                MID-COURSE EXECUTION ACCURACY
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     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                             ST 1642.9 SR 431.7 SS 377.2
CRT -.6625 CR6 .4538 CST -.9674
                                                                                                 SGT 5425.2 SGR 457.6 SG3 110.4
RRT -.4713 RRF -.4463 RTF .9373
SGB 5444.5 R23 .0024 R13 -.9373
SGI 5429.5 SG2 403.2 THA 177.71
      TOE-1.0086 TRA 4.1999 TC3-2.4048 BAU 1.1961
      RDE .4569 RRA -.1481 RC3 .0169 FAU .01009
FDE -.1493 FRA 1.1637 FC3 -.2349 BSP 17401
BDE 1.1072 BRA 4.2026 BC3 2.4049 FSP -366
                                                                                                                                                                            LSA 1707.4 MSA 335.1 SSA 14.6
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LAUNCH DATE JUL 26 1967
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     HELIOCENTRIC CONIC
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      RL 151.94 LAL .00 LOL 302.34 VL 25.051 GAL 9.90 A2L 91.17 HCA 295.93 SMA 118.56 ECC .32635 INC 1.1741 VI 29.322
RP 108.42 LAP 1.06 LOP 238.28 VP 36.453 GAP 18.43 AZP 90.51 TAL 158.10 TAP 94.03 RCA 79.87 APO 157.25 VZ 34.953
RC 196.285 GL -4.48 GP 8.24 ZAL 46.24 ZAP 171.51 ETS 100.90 ZAE 129.91 ETE 172.82 ZAC 29.25 ETC .11.23 CLP 177.93
     PLANETOCENTRIC CONIC
      C3 41.935 VHL 6.476 DLA -27.19 RAL 254.58 RAD 6568.6 VEL 12.779 PTH 2.32 VHP 11.421 DPA -10.26 RAP 236.58 ECC 1.6901 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LONG AZMTH INJ TIME PO CST TIM INJ 2 LONG AZMTH INJ TIME PO CST TIME TIME PO C
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107.78 18 49 48
124.15 14 11 30
104.18 20 48 8
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                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                       SGT 5414.3 SGR 450.2 SG3 107.8
RRT -,4779 RRF -.4541 RTF .9420
SGB 5433.0 R23 .0016 R13 -.9420
SGI 5418.6 SG2 395.2 THA 177.71
                                                                                                                                                                                      ST 1601.4 SR 420.3 SS 576.9

CRT -.6007 CRS .3980 CST -.9718

LSA 1662.3 MSA 345.8 SSA 13.9
      TOE -.9063 TRA 4.6370 TC3-2.1000 BAU 1.1774
      ROE .4716 RRA -.1687 RC3 .0161 FAU .00895
FOE -.1232 FRA 1.2265 FC3 -.1847 83P 17439
80E 1.0217 BRA 4.6400 BC3 2.1001 FSP -358
                                                                                                                                                                                      EL1 1622.0 EL2 331.8 ALF 170.65
LAUNCH DATE JUL 26 1967
                                                                                                              FLIGHT TIME 200.00
                                                                                                                                                                                                       ARRIVAL DATE FEB 11 1968
    HELIOCENTRIC CONIC
                                                                                                              DISTANCE 560.836
     RL 151.94 LAL
RP 108.46 LAP
                                      .00 LOL 302.34 VL 25.006 GAL 11.01 AZL 91.00 HCA 299.12 SMA 118.32 ECC .33804 INC 1.0013 V1 · 29.322 .67 LOP 241.46 VP 36.410 GAP 19.19 AZP 90.49 TAL 156.61 TAP 95.73 RCA 78.32 APO 158.32 V2 34.941 -3.57 GP 8.10 ZAL 44.14 ZAP 171.39 ETS 106.49 ZAE 129.62 ETE 172.93 ZAC 27.03 ETÉ 12.22 CLP 177.10
      RC 197.979 GL -3.57 GP
    PLANETOCENTRIC CONIC
      C3 47.498 VHL 6.892 DLA -26.48 RAL 256.95 RAD 6568.8 VEL 12.995 PTH
                                                                                                                                                      2.37 WHP 11.880 OPA -11.02 RAP 236.83 ECC 1.7817
     C3 47.498 WHL 6.892 DLA -26.48 RAL 256.95 RAO 6566.8 VEL 12.995 PTH 2.37 WHP 11.880 DPA -11.02 RAP 236.83 ECC 1.7817 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 46 21 1400.25 4.97 354.32 135.29 117.91 13 9 41 800.3 8.67 347.59 90.00 15 44 53 814.95 21.43 319.31 142.58 108.97 15 58 28 215.0 23.82 311.45 100.00 13 37 37 1234.67 1.96 340.50 133.63 119.83 13 58 12 634.7 5.91 333.94 100.00 17 36 18 5743.81 24.69 271.95 143.75 107.40 19 12 2 5143.8 26.84 263.81 110.00 13 54 26 1181.89 -3.94 332.84 129.96 123.98 14 14 8 581.9 .55 326.63 110.00 19 35 59 5369.35 31.37 245.66 145.90 104.33 21 5 28 4769.4 33.02 236.83
    DIFFERENTIAL CORRECTIONS
                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                       RRT - 4840 RRF - 4616 RTF . 9468
SGB 5416.7 R23 .0011 R13 - .9468
SGI 5402.9 SGZ 386.0 THA 177.72
                                                                                                                                                                                      ST 1570.9 SR 407.8 SS 379.3
CRT -.5370 CRS .3454 CST -.9765
      TOE -. 7995 TRA 5.1007 TC3-1.8148 BAU 1.1525
      RDE .4863 RRA -.1897 RC3 .0145 FAU .00779
FDE -.0981 FRA 1.2932 FC3 -.1420 BSP 17458
                                                                                                                                                                                      LSA 1629.0 MSA 352.1 SSA 13.2
      BOE .9358 BRA 5.1043 BC3 1.8149 FSP -351
                                                                                                                                                                                      EL1 1586.8 EL2 340.5 ALF 171.68
                                                                                                                                                                                                      ARRIVAL DATE FEB 13 1968
                                                                                                             FLIGHT TIME 202.00
LAUNCH DATE JUL 26 1967
    HELIOCENTRIC CONIC
                                                                                                             DISTANCE 585.147
     RL 151.94 LAL .00 LOL 302.34 VL 24.961 GAL 12.20 AZL 90.82 MCA 302.30 SMA 118.09 ECC .35098 INC .8176 V1 29.322
RP 108.50 LAP .69 LOP 244.65 VP 36.367 GAP 20.03 AZP 90.44 TAL 155.18 TAP 97.48 RCA 76.64 APO 159.53 VZ 34.929
RC 199.655 GL -2.71 GP 7.98 ZAL 42.21 ZAP 171.18 ETS 112.01 ZAE 129.70 ETE 173.05 ZAC 24.85 ETC 13.41 CLP 176.24
    PLANETOCENTRIC CONIC
   . C3 54.051 VHL 7.352 OLA -25.79 RAL 259.12 RAD 6569.0 VEL 13.244 PTH 2.42 VHP 12.387 DPA -11.73 RAP 241.07 ECC 1.8895
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 12 39 29 1484.72 2.26 359.05 138.65 118.23 13 4 14 884.7 6.02 352.39
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108.45 16 22 18
119.89 13 56 32
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13 55 45 1240.37
19 51 58 5375.21
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    DIFFERENTIAL CORRECTIONS
                                                                                                      MID-COURSE EXECUTION ACCURACY
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                                                                                                      SGT 5380.2 SGR 431.3 SG3 103.1
RRT -.4893 RRF -.4685 RTF .9516
SG8 5397.4 R23 .0006 R13 -.9516
SG1 5384.3 SG2 375.8 THA 177.74
      TOE -.6851 TRA 5.5965 TC3-1.5480 BAU 1.1186
                                                                                                                                                                                     ST 1550.1 SR 394.0 SS 384.4
      ROE .5007 RRA -.2112 RC3 .0123 FAU .00657
FOE -.0732 FRA 1.3654 FC3 -.1053 83P 17362
                                                                                                                                                                                      CRT -.4717 CRS .2947 CST -.9811
                                                                                                                                                                                     LSA 1606.3 MSA 354.3 SSA 12.6
EL1 1561.8 EL2 344.8 ALF 172.81
      BOE .8485 BRA 5.6024 BC3 1.5480 FSP -341
LAUNCH DATE JUL 26 1967
                                                                                                              FLIGHT TIME 204.00
                                                                                                                                                                                                       ARRIVAL DATE FEB 15 1968
                                                                                                             DISTANCE 589.209
    HELIOCENTRIC CONIC
     RL 151.94 LAL .00 LOL 302.34 VL 24.918 GAL 13.49 AZL 90.62 MCA 305.48 SMA 117.86 ECC .36534 INC .6206 V1 29.322
RP 108.53 LAP .51 LOP 247.83 VP 36.326 GAP 20.96 AZP 90.36 TAL 153.81 TAP 99.29 RCA 74.80 APO 160.92 V2 34.917
RC 201.315 GL -1.91 GP 7.87 ZAL 40.44 ZAP 170.86 ETS 117.39 ZAE 129.54 ETE 173.16 ZAC 22.71 ETC 14.85 CLP 175.35
    PLANETOCENTRIC CONIC
      C3 61.797 VHL 7.861 DLA -25.11 RAL 261.09 RAD 6569.2 VEL 13.533 PTH 2.47 VMP 12.949 DPA -12.40 RAP 243.29 ECC 2.0170
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
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                                                                             -2.79
                                                                                                  348.19
                                                                                                  271.26
                                                                                                                       152.64
                                                                                                                                                                                             5133.6
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          100.00
                                                                             24.90
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                                                                             -6.32
                                                                                                                       137.16
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                                                                                                  338.97
         110.00
          110.00
                                                                             31.14
                                                                                                  246.66
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                                                                                                                                                                                                                                         237.86
                                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                    ST 1537.7 SR 379.6 SS 391.6
CRT -.4107 CRS .2514 CST -.9853
LSA 1593.1 MSA 351.9 SSA 11.9
      TOE -.5727 TRA 6.1237 TC3-1.3067 BAU 1.0796
                                                                                                        SGT 5356.3 SGR 419.8 SG3 100.8
                                                                                                      RRT -.4942 RRF -.4753 RTF .9566
SGB 5372.7 R23 .0004 R13 -.9566
      RDE .5151 RRA -.2324 RC3 .0100 FAU .00540
      FDE -.0507 FRA 1.4411 FC3 -.0757 8SP 17383
      BOE .7703 BRA 6.1281 BC3 1.3067 FSP -334
                                                                                                        $G1 5360.3 SG2 364.6 THA 177.77
                                                                                                                                                                                      EL1 1546.0 EL2 344.3 ALF 173.91
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ARRIVAL DATE FEB 17 1968 FLIGHT TIME 206.00 LAUNCH DATE JUL 26 1967 HELIOCENTRIC CONIC DISTANCE 592.971 RL 151.94 LAL .00 LOL 302.34 VL 24.876 GAL 14.89 AZL 90.41 HCA 308.66 SMA 117.64 ECC .38133 INC .4075 V1 29.322 RP 108.57 LAP .32 LOP 251.01 VP 36.286 GAP 22.00 AZP 90.25 TAL 152.52 TAP 101.19 RCA 72.78 APO 162.50 V2 34.905 RC 202.957 GL -1.16 GP 7.76 ZAL 38.84 ZAP 170.44 ETS 122.54 ZAE 129.34 ETE 173.27 ZAC 20.64 ETC 16.60 CLP 174.41 PLANETOCENTRIC CONIC C3 70.988 VHL 8.425 DLA -24.45 RAL 262.87 RAD 6569.4 VEL 13.869 PTH 2.53 VHP 13.574 DPA -13.02 RAP 245.49 ECC 2.1683 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZNTH LNCH TIME L-I TIMF 118.21 12 56 59 107.96 17 1 41 119.51 13 54 4 107.11 20 6 41 122.74 14 20 0 105.26 21 50 7 1035.4 145.24 90.00 12 29 44 1635.42 -2.60 7.46 1.19 16 48 45 776.01 22.27 316.76 155.89 176.0 24.52 90.00 15 30 3 1440.69 18 31 7 5734.01 345.28 100.00 -5.01 351.82 143.91 640.7 -1.04 100.00 24.89 271.29 156.79 5134.0 27.00 263.12 13 57 25 1354.83 20 20 14 5392.63 140.61 754.8 -6.04 335.66 110.00 -10.43 342.02 236.59 158.78 4792.6 32.75 110.00 30.97 247.36 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL -CORRECTIONS SCT 5328.6 SCR 406.8 SC3 98.6 RRT -. 1981 RRF -. 4812 RTF .9614 SCB 5344.2 R23 .0002 R13 -. 9614 SCI 5332.5 SC2 352.5 THA 177.81 ST 1531.4 SR 364.4 SS 401.0 CRT -.3527 CRS .2124 CST -.9889 LSA 1587.1 MSA 345.7 SSA 11.4 TOE -.4566 TRA 6.6868 TC3-1.0857 BAU 1.0304 RDE .5294 RRA -.2532 RC3 .0075 FAU .00417 FDE -.0290 FRA 1.5231 FC3 -.0509 BSP 17370 BDE .6991 BRA 6.6916 BC3 1.0857 FSP -327 EL1 1537.0 EL2 339.7 ALF 174.95 ARRIVAL DATE FEB 19 1968 FLIGHT TIME 208.00 HELIOCENTRIC CONIC **DISTANCE 596.368** RL 151.94 LAL RP 108.50 LAP .00 LOL 302.34 VL 24.836 GAL 16.42 AZL 90.18 HCA 311.84 SMA 117.43 EEC .39918 INC .1740 V1 29.322 .13 LOP 254.18 VP 36.248 GAP 23.15 AZP 90.12 TAL 151.34 TAP 103.18 RCA 70.56 APO 164.31 V2 34.894 -.46 GP 7.67 ZAL 37.41 ZAP 169.92 ETS 127.42 ZAE 129.09 ETE 173.39 ZAC 18.64 ETC 18.74 CLP 173.43 RC 204.581 GL -.46 GP PLANETOCENTRIC CONIC C3 81.949 VHL 9.053 DLA -23.81 RAL 264.46 RAD 6569.6 VEL 14.258 PTH 2.60 VHP 14.272 UPA -13.59 RAP 247.65 ECC 2.3487 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.94 12 54 14 107.90 17 18 13 119.11 13 52 57 107.21 20 21 35 122.09 14 21 16 105.69 22 2 38 -4.81 11.32 148.42 1104.3 -1.03 4.68 12 25 50 1704.35 17 5 20 173.6 24.56 30A . 65 773.61 22.32 316.60 159.87 13 27 53 1504.05 18 45 58 5737.18 13 57 46 1410.35 20 32 35 5403.64 355.34 904.0 -3.19 348.76 100.00 -7.12 147.15 24.83 160.74 5137.2 26.95 263.34 100.00 271.50 -12.45 143.95 810.4 -8.13 338.62 110.00 345.04 162.72 4803.6 32.61 239.42 110.00 248.15 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5297.2 SGR 392.6 SG3 96.5 RRT -.5009 RRF -.4860 RTF .9662 ST 1529.2 SR 348.6 SS 412.6 CRT -.2989 CRS .1775 CST -.9918 TDE -.3377 TRA 7.2922 TC3 -.8847 BAU .9693 RDE .5434 RRA -.2732 RC3 .0050 FAU .00286 FOE -.0080 FRA 1.6122 FC3 -.0303 BSP 17342 SGB 5311.7 R23 .0001 R13 -.9662 LSA 1586.4 MSA 336.5 SSA 10.8 SG1 5300.8 SG2 339.5 THA 177.87 EL1 1532.9 EL2 331.8 ALF 175.91 BOE .6398 BRA 7.2973 BC3 .8847 FSP -320 ARRIVAL DATE FEB 21 1968 FLIGHT TIME 210.00 LAUNCH DATE JUL 26 1967 DISTANCE 599.312 HELIOCENTRIC CONIC RL 151.94 LAL .00 LOL 302.34 VL 24.797 GAL 18.10 A7L 89.92 MCA 315.01 SMA 117.24 ECC .41918 INC .0794 V1 29.322
RP 108.64 LAP -.06 LOP 257.36 VP 36.211 GAP 24.45 AZP 89.94 TAL 150.27 TAP 105.28 RCA 68.09 APO 166.38 VZ 34.863
RC 206.187 GL .20 GP 7.57 ZAL 36.15 ZAP 169.28 ETS 131.99 ZAE 128.77 ETE 173.52 ZAC 16.73 ETC 21.35 CLP 172.39 PLANETOCENTRIC CONIC C3 95.096 VHL 9.752 DLA -23.19 RAL 265.86 RAD 6569.9 VEL 14.712 PTH 2.66 VHP 15.056 DPA -14.11 RAP 249.77 ECC 2.5650 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 22 14 1769.75 -6.88 15.01 151.47 117.54 12 51 44 1169.8 -3.14 8.33
90.00 17 20 5 774.42 22.30 316.66 163.63 107.92 17 33 0 174.4 24.54 308.70
100.00 13 25 42 1564.91 -9.12 358.75 150.27 118.59 13 51 47 964.9 -5.24 352.12
100.00 18 59 19 5742.54 24.72 271.86 164.47 107.37 20 35 1 5142.5 26.86 263.72 13 25 42 1564.91 18 59 19 5742.54 13 57 45 1464.42 20 43 45 5415.79 121.35 14 22 9 106.16 22 14 1 864.4 -10.14 32.45 341.52 147.17 110.00 -14.39 348.04 4815.8 240.33 110.00 30.54 249.02 166.45 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5263.2 SCR 376.9 SC3 94.5 RRT -.5020 RRF -.4892 RTF .9708 SCB 5276.7 R23 -.0000 R13 -.9708 ST 1529.9 SR 332.1 SS 426.8 CRT -.2484 CRS .1449 CST -.9941 LSA 1589.8 MSA 324.8 SSA 10.2 TOE -.2124 TRA 7.9489 TC3 -.7012 BAU .8915 RDE .5572 RRA -.2920 RC3 .0024 FAU .00139 FDE .0134 FRA 1.7106 FC3 -.0127 BSP 17201 BDE .5963 BRA 7.9542 BC3 .7012 FSP -311 EL1 1532.2 EL2 321.2 ALF 176.77 SG1 5266.6 SG2 325.7 THA 177.93 ARRIVAL DATE FEB 23 1968 FLIGHT TIME 212,00 LAUNCH DATE JUL 26 1967 DISTANCE 601.694 HELIOCENTRIC CONIC .00 LOL 302.34 VL 24.760 GAL 19.96 AZL 89.63 HCA 318.19 SMA 117.05 ECC .44165 INC .3682 V1 29.322 .25 LOP 260.53 VP 36.176 GAP 25.91 AZP 89.73 TAL 149.34 TAP 107.53 RCA 65.35 APO 168.74 V2 34.872 .81 GP 7.49 ZAL 35.06 ZAP 168.52 ETS 136.26 ZAE 128.38 ETE 173.65 ZAC 14.94 ETC 24.54 CLP 171.27 RL 151.94 LAL RP 108.67 LAP RC 207.774 GL PLANETOCENTRIC CONIC C3 110.970 VHL 10.534 DLA -22.60 RAL 267.07 RAD 6570.1 VEL 15.242 PTH 2.73 VHP 15.942 DPA -14.59 RAP 251.83 ECC 2.8263 C3 110.970 VHL 10.534 DLA -22.60 RAL 267.D7 RAD 6570.1 VEL 13.242 PTM 2.75 VMP 13.942 DPA -14.59 RAP 251.65 ECC 2.0265 LNCA AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 18 45 1831.84 -8.82 18.54 154.39 117.02 12 49 17 1231.8 -5.13 11.81 90.00 17 33 11 777.68 22.23 316.87 167.14 108.00 17 46 9 177.7 24.49 308.92 100.00 13 23 23 1623.21 -11.00 2.06 153.24 117.97 13 50 27 1023.2 -7.18 355.36 107.58 20 47 3 120.51 14 22 37 106.66 22 24 15 5149.6 26.75 264.21 24.58 272.34 167.96 5749.59 100.00 19 11 14 13 57 20 1516.78 20 53 46 5426.78 -12.05 344.36 916.8 -16.22 350.99 150.24 110.00 32.27 4828.8 241.30 249.95 169.94 110.00 30.29 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1530.7 SR 315.4 SS 443.1 CRT -.2046 CRS .1182 CST .9959 LSA 1594.3 MSA 311.1 SSA 9.6 SGT 5223.2 SGR 359.9 SG3 92.5 RRT -.5012 RRF -.4905 RTF .9752 TDE -.0912 TRA 8.6536 TC3 -.5384 BAU .7988 RDE .5712 RRA -.3065 RC3 .0001 FAU-.00019 SGB 5235.6 R23 .0000 R13 -.9752 SGI 5226.3 SG2 311.2 THA 178.01 FOE .0327 FRA 1.8174 FC3 .0015 8SP 17179 BOE .5784 BRA 8.6591 BC3 .5384 FSP -306 EL1 1532.1 EL2 308.4 ALF 177.48

ARRIVAL DATE FEB 25 1968

LAUNCH DATE JUL 26 1967

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HELIOCENTRIC CONIC
                                                                                        DISTANCE 603.368
     RL 151.94 LAL .00 LOL 302.34 VL 24.726 GAL 22.03 AZL 89.31 HCA 321.36 SMA 116.67 ECC .46698 INC .6927 V1 29.322
RP 108.70 LAP -.43 LOP 263.70 VP 36.143 GAP 27.57 AZP 89.46 TAL 148.59 TAP 109.94 RCA 62.30 APO 171.45 V2 34.662
RC 209.341 GL 1.39 GP 7.40 ZAL 34.16 ZAP 167.64 ETS 140.23 ZAE 127.90 ETE 173.79 ZAC 13.28 ETC 28.46 CLP 170.07
   PLANETOCENTRIC CONIC
     C3 130.280 VHL 11.414 DLA -22.04 RAL 268.07 RAD 6570.4 VEL 15.862 PTH 2.81 VHP 16.947 OPA -15.02 RAP 253.80 ECC 3.1441
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             157.14
                                                                                                                116.40 12 46 45
108.14 17 57 44
                                                                                                                                                     1290.7
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                                                                                                                                                                                             15.13
         90.00 12 15 14 1890.68
                                                             -10.62
                                                                               21.93
                                                                               317.20
                                                                                                170.38
                                                                                                                                                        162.8
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          90.00
                       17 44 41
                                           782.76
                                                             22.12
                    17 44 41 782.76
13 20 53 1678.83
19 21 44 5757.88
13 56 30 1567.19
21 2 57 5442.29
                                                                                                                   117.26 13 48 51
107.82 20 57 42
119.60 14 22 37
107.17 22 33 19
                                                                                             156.04
171.19
        100.00
                                                             -12.76
                                                                                 5.25
                                                                                                                                                        1078.8
                                                                                                                                                                           -9.01
                                                                                                                                                                                           .35A.47
        100.00
                                                            24.40
                                                                               272.89
                                                                                                                                                        5157.9
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                                                                                                                                                        967.2
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                                                            -17.94
                                                                               353.88
                                                                                               153.13
        110.00
                                                                                                173.18
                                                                                                                                                        4842.3
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        110.00
                      21 2 57
                                         5442.29
                                                             30.02
                                                                               250.92
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5179.4 SGR 341.6 SG3 90.7
RRT -.4978 RRF -.4891 RTF ..9792
SGB 5190.7 R23 .0000 R13 -.9792
SGI 5182.2 SG2 296.1 THA 178.11
                                                                                                                                                  ST 1530.7 SR 298.4 SS 462.1

CRT -.1651 CRS .0939 CST -.9972

LSA 1599.4 MSA 296.1 SSA 9.1

EL1 1531.6 EL2 294.1 ALF 178.09
     TOE .0315 TRA 9.4199 TC3 -.3923 BAU .6833
     RDE .5852 RRA -.3220 RC3 -.0019 FAU-.00202
    FDE .0516 FRA 1.9360 FC3 .0134 BSP 17125
BDE .5861 BRA 9.4254 BC3 .3923 FSP -300
                                                                                                                                                                ARRIVAL DATE FEB 27 1968
LAUNCH DATE JUL 26 1967
                                                                                         FLIGHT TIME 216.00
                                                                                         DISTANCE 604.147
   HELIOCENTRIC CONIC
                                .00 LOL 302.34 VL 24.694 GAL 24.35 AZL 88.93 HCA 324.52 SMA 116.71 ECC .49561 INC 1.0653 V1 29.322 -.62 LOR 266.87 VP 36.112 GAP 29.47 AZP 89.13 TAL 148.05 TAP 112.57 RCA 58.87 APO 174.55 V2 34.853 1.93 GP 7.32 ZAL 33.46 ZAP 166.61 ETS 143.91 ZAE 127.30 ETE 173.95 ZAC 11.80 ETC 33.20 CLP 168.76
    RL 151.94 LAL
RP 108.73 LAP
                               1.93 GP
    RC 210.889 GL
   PLANETOCENTRIC CONIC
                                                                                                                         2.88 VHP 18.094 DPA -15.40 RAP 255.68 ECC 3.5338
    C3 153.960 VHL 12.408 OLA -21.51 RAL 268.86 RAD 6570.7 VEL 16.592 PTH
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 11 34 1946.22 -12.28 25.16 159.69 115.72 12 44 0 1346.2 -8.72 18.29
                                                                                                                   108.30 18 7 48
116.49 13 46 55
108.09 21 6 57
118.62 14 22 4
107.68 22 41 10
                     17 54 39 789.12
13 18 3 1731.63
19 30 50 5766.99
13 55 9 1615.30
21 10 14 5456.02
                                                                                                173.32
                                                                                                                                                         189.1
                                                                                                                                                                           24.29
                                                                                                                                                                                            309.70
         90.00
                                                             21.99
                                                                                  8.33
                                                                                                158.63
                                                                                                                                                        1131.6
                                                                                                                                                                          -10.71
                                                                                                                                                                                               1.46
        100.00
                                                             -14.39
                                                                                             174.11
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                                                            24.21
                                                                               273.50
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                                                                                                155.82
                                                            -19.54
                                                                               356.71
                                                                                                                                                        1015.3
                                                                                                                                                                         -15.57
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                                                                               251.89
                                                                                                176.12
                                                                                                                                                        4856.0
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                                                                                                                                                                                            243.32
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5131.3 SCR 322.1 SC3 88.9
RRT - .4908 RRF - .4840 RTF .9830
SCB 5141.4 R23 .0001 R13 - .9830
SCI 5133.7 SC2 280.5 THA 178.23
                                                                                                                                                  ST 1528.6 SR 281.2 SS 484.1

CRT -.1295 CRS .0719 CST -.9981

LSA 1603.5 MSA 280.2 SSA 8.5

EL1 1529.0 EL2 278.8 ALF 178.59
    TOE .1535 TRA10.2542 TC3 -.2622 BAU .5397
     ROE .5996 RRA -.3513 RC3 -.0036 FAU-.00418
    FOE .0699 FRA 2.0682 FC3 .0235 BSP 17048
BOE .6189 BRA10.2595 BC3 .2622 FSP -294
                                                                                                                                                                ARRIVAL DATE FEB 29 1968
                                                                                        FLIGHT TIME 218.00
LAUNCH DATE JUL 26 1967
                                                                                       DISTANCE 603.783
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 24.666 GAL 26.97 AZL 88.50 MCA 327.69 SMA 116.57 ECC .52803 INC 1.5004 VI 29.322 MP 108.76 LAP -.80 LOP 270.04 VP 36.084 GAP 31.66 AZP 88.73 TAL 147.78 TAP 115.46 RCA 55.02 APO 178.12 V2 34.844 RC 212.418 GL 2.44 GP 7.24 ZAL 32.98 ZAP 165.42 ETS 147.34 ZAE 126.57 ETE 174.13 ZAC 10.53 ETC 38.83 CLP 167.31
   PLANETOCENTRIC CONIC
     C3 183.259 VHL 13.537 DLA -21.01 RAL 269.41 RAD 6571.0 VEL 17.452 PTH 2.96 VHP 19.411 DPA -15.75 RAP 257.42 ECC 4.0160
    C3 183.259 VHL 13.537 DLA -21.01 RAL 269.41 RAD 6571.0 VEL 17.452 PTH 2.96 VHP 19.411 DPA -15.75 RAP 257.42 ECC 4.0160 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 3 2 796.33 21.83 318.09 175.92 108.49 18 16 18 196.3 24.16 310.19 100.00 13 14 49 1781.38 -15.88 11.27 160.97 115.67 13 44 30 1181.4 -12.29 4.32 100.00 19 38 29 5776.56 24.01 274.14 176.71 108.36 21 14 46 5176.6 26.29 266.09 110.00 13 53 13 1661.03 -21.00 359.44 158.26 117.61 14 20 54 1061.0 -17.14 352.44 110.00 21 16 35 5469.68 29.46 252.85 178.72 108.18 22 47 45 4869.7 31.65 244.33
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   RET -.4788 RRF -.4736 RTF ..9863
SGB 5089.3 R23 .0001 R13 -.9863
SGI 5082.4 SG2 264.5 THA 178.37
                                                                                                                                                  ST 1523.6 SR 264.0 S5 509.6

CRT -.0962 CRS .0502 CST -.9988

LSA 1606.6 MSA 263.8 SSA 8.0

EL1 1523.9 EL2 262.7 ALF 179.02
     TOE .2771 TRA11.1687 TC3 -.1461 BAU .3581
     RDE .6143 RRA -.3350 RC3 -.0050 FAU-.00685
     FOE .0883 FRA 2.2172 FC3 .0324 85P 16839
     BOE .6739 BRA11.1737 BC3 .1462 FSP
                                                                 -287
                                                                                         FLIGHT TIME 220.00
                                                                                                                                                                ARRIVAL DATE MAR 2 1968
LAUNCH DATE JUL 26 1967
                                                                                         DISTANCE 601.952
   HELIOCENTRIC CONIC
    RL 151.94 LAL .00 LOL 302.34 VL 24.642 GAL 29.95 AZL 87.98 HCA 330.85 SMA 116.44 ECC .56478 INC 2.0184 V1 29.322 RP 108.78 LAP -.98 LOP 273.20 VP 36.059 GAP 34.20 AZP 88.24 TAL 147.83 TAP 118.68 RCA 50.68 APO 182.21 V2 34.836 RC 213.927 GL 2.91 GP 7.15 ZAL 32.74 ZAP 164.05 ETS 150.54 ZAE 125.68 ETE 174.33 ZAC 9.50 ETC 45.25 CLP 165.71
   PLANETOCENTRIC CONIC
     C3 219.841 WHL 14.827 DLA -20.54 RAL 269.70 RAD 6571.3 VEL 18.470 PTH 3.04 VHP 20.930 DPA -16.05 RAP 259.01 ECC 4.6180
     C3 219.841 VML 14.827 DLA -20.74 RAL 269.70 RAD 6571.5 VEL 16.710 FM STATE PO C5T TIM INJ 2 LAT INJ 2 LONG 10.00 12 5 9 2046.91 -15.18 31.14 163.98 114.19 12 37 16 1446.9 -11.78 24.10 90.00 18 9 48 803.96 21.67 318.59 178.15 108.69 18 23 12 204.0 24.02 310.71
                                                                                                                   114.81 13 41 29
108.64 21 21 3
116.58 14 18 58
108.67 22 52 56
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                      13 11 1 1827.89
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                                         5786.25
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        100.00
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                                         1703.91
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        110.00
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                                          5482.98
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                                                                               253.78
                                                                                                 180.95
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5023.1 SG2 248.3 THA 178.53
                                                                                                                                                  ST 1512.7 SR 247.0 SS 538.5
CRT -.0672 CRS .0310 CST -.9992
     TOE .3879 TRA12.1389 TC3 -.0456 BAU .1353
RDE .6303 RRA -.3306 RC3 -.0059 FAU-.01010
FDE .1041 FRA 2.3834 FC3 .0398 BSP 16758
BDE .7401 BRA12.1634 BC3 .0460 FSP -282
                                                                                                                                                  LSA 1605.6 MSA 247.2 SSA 7.4
                                                                                                                                                   ELI 1512.8 EL2 246.4 ALF 179.35
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FLIGHT TIME 214.00

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ARRIVAL DATE OCT 5 1967
                                                                                             FLIGHT TIME 70.00
LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 200.309
     HELIOCENTRIC CONIC
      RL 151.93 LAL -.00 LOL 303.30 VL 28.424 GAL -14.17 AZL 92.32 MCA 90.02 SMA 141.31 ECC .25544 INC 2.3193 VI 29.325 RP 108.31 LAP -2.32 LOP 33.31 VP 38.679 GAP -6.11 AZP 90.00 TAL 239.26 TAP 329.27 RCA 105.21 APO 177.40 V2 34.990 RC 64.367 GL -9.04 GP -17.41 ZAL 162.73 ZAP 45.70 ETS 17.57 ZAE 158.87 ETE 333.17 ZAC 98.95 ETC 11.96 CLP -42.96
     PLANETOCENTRIC CONIC
                                                    6.80 RAL 137.73 RAD 6568.9 VEL 13.107 PTH 2.39 VHP 5.587 DPA
                                                                                                                                                                   -9.02 RAP 165.50 ECC 1.8299
       C3 50.426 VHL 7.101 DLA
       UNCH ATMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 22 8 2656.94 -27.27 71.46 18.05 97.92 24 6 25 2056.9 -25.90 63.07 90.00 13 6 8 4876.19 19.99 211.55 12.99 69.52 14 27 24 4276.2 17.02 204.13
                       23 22 8 2656.94
13 6 8 4876.19
                                                                                                                                                                                                      42.69
                                                                                                                                          1 30 23
                                                                                                                                                               1784.1
                                                                                                                                                                                  -27.16
                         0 50 39 2384.11
14 24 14 4624.25
                                                                                                                            98.83
                                                                                                        17.81
          100.00
                                                                 -28.67
                                                                                     51.17
                                                                                                                           98.83 1 30 23
68.53 15 41 18
                                                                                                                                                               4024.2
                                                                                                                                                                                  16.21
                                                                                                                                                                                                     185.07
          100.00
                                                                  21.31
                                                                                    192.49
                                                                                                        12.44
                                                                                                                          101.39 2 42 6
65.73 16 38 57
                                                                                                                                                                                                      23.71
                          2 6 19 2147.31
15 25 3 4433.82
                                                                                                        17.03
                                                                                                                                                               1547.3
                                                                                                                                                                                 -30.54
          110.00
                                                                 -32.45
                                                                                     32.40
                                                                                                                                                                                 21.36
                                                                                                                                                               3833.8
                                                                                                                                                                                                   169.00
                                                                  24.85
                                                                                    176.41
                                                                                                        10.63
          110.00
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                        SCT 450.3 SGR 476.6 SC3 185.5
RRT -.0412 RRF .5236 RTF -.0717
SGB 655.7 R23 -.1035 R13 .5157
                                                                                                                                                          ST 184.0 SR 370.7 SS 164.2
CRT -. 6820 CRS .2772 CST -. 8751
       TOE .1858 TRA .- .4369 TC3 .1640 BAU
                                                                       . 1407
       RDE -.4500 RRA -.3059 RC3 -.1290 FAU .07797
                                                                                                                                                          LSA 400.2 MSA 194.0 SSA 21.9
      FOE .1956 FRA-1.2133 FC3-1.3386 BSP 916
BOE .4869 BRA .5333 BC3 .2087 FSP -512
                                                                                                                                                          EL1 394.0 EL2 126.6 ALF 110.97
                                                                                         SG1 479.6 SG2 447.1 THA 107.96
                                                                                                                                                                        ARRIVAL DATE OCT 7 1967
                                                                                              FLIGHT TIME 72.00
                                                                                             DISTANCE 207.005
     HELIOCENTRIC CONIC
      RL 151.93 LAL -.00 LOL 303.30 VL 28.461 GAL -14.03 AZL 92.18 MCA 93.21 SMA 141.63 ECC .25241 INC 2.1808 V1 29.325 RP 108.27 LAP -2.18 LOP 36.51 VP 38.918 GAP -5.35 AZP 89.88 TAL .239.75 TAP 332.96 RCA 105.88 APO 177.38 V2 35.003 RC 66.356 GL -8.61 GP -18.46 ZAL 163.22 ZAP 50.19 ETS 15.99 ZAE 160.15 ETE 326.18 ZAC 100.46 ETC 11.49 CLP -47.55
     PLANETOCENTRIC CONIC
                                                                                                                                                                    -9.46 RAP 163.85 ECC 1.8107
                                                                                                                              2.38 VHP 5.300 DPA
       C3 49.259 VHL 7.018 OLA 7.30 RAL 137.55 RAD 6568.8 VEL 13.062 PTH 2.38 VHP 5.300 OPA -9.46 RAP 163.85 ECC 1.8107 NCM AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 17 33 2667.05 -27.37 72.19 17.67 97.57 24 2 0 2067.1 -26.04 63.77 90.00 13 9 17 4854.41 19.47 210.17 12.30 69.02 14 30 12 4254.4 16.44 202.80 100.00 0 46 19 2393.40 -28.77 51.84 17.44 98.49 1 26 13 1793.4 -27.30 43.35 100.00 14 27 8 4603.29 20.78 191.15 11.75 68.02 15 43 51 4003.3 17.62 183.79 110.00 2 2 34 2154.80 -32.55 32.97 16.69 101.07 2 38 29 1554.8 -30.68 24.25 110.00 15 27 23 4414.65 24.30 175.19 10.10 65.19 16 40 57 3814.7 20.75 167.84
       C3 49.259 VHL 7.018 OLA
                                                     7.30 RAL 137.55 RAD 6568.8 VEL 13.062 PTH
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                         SGT 455.8 SGR 495.9 SG3 205.4
RRT .0293 RRF .5727 RTF .0389
                                                                                                                                                          ST 188.4 SR 367.2 SS 178.1
CRT -.6390 CRS .3101 CST -.9145
       TOE .1824 TRA -.4670 TC3 .1386 BAU .1366
       RDE -.4390 RRA -.3227 RC3 -,1543 FAU .08515
                                                                                                                                                          LSA 398.5 MSA 206.6 SSA 22.0
EL1 389.4 EL2 136.7 ALF 110.84
                                                                                         SGB 673.5 R23 .0655 R13 .5694
SG1 497.0 SG2 454.6 THA 80.42
       FOE .2423 FRA-1.3315 FC3-1.4965 BSP 948
BOE .4753 BRA .5677 BC3 .2074 FSP -575
                                                                                                                                                                        ARRIVAL DATE OCT 9 1967
                                                                                              FLIGHT TIME 74.00
  LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 213.662
      RL 151.93 LAL -.00 LOL 303.30 VL 28.487 GAL -13.89 A7L 92.04 MCA 96.41 SMA 141.85 ECC .24970 INC 2.0414 VI 29.325 RP 108.22 LAP -2.03 LOP 39.71 VP 38.949 GAP -4.63 A7P 89.77 TAL 240.08 TAP 336.49 RCA 106.43 APO 177.27 V2 35.016 RC 68.382 GL -8.16 GP -19.53 7AL 163.64 ZAP 54.85 ETS 14.41 ZAE 161.31 ETE 317667 ZAC 102.15 ETC 10.91 CLP -52.35
                                                     7.80 RAL 137.47 RAD 6568.8 WEL 13.020 PTH 2.38 VHP 5.052 OPA -9.85 RAP 162.01 ECC 1.7925
       C3 48.157 VHL 6.940 DLA 7.80 RAL 137.47 RAD 6568.8 WEL 13.020 PTM 2.38 VHP 5.052 DPA -9.85 RAP 162.01 ECC 1.7925
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 13 21 2677.26 -27.46 72.92 17.39 97.21 23 57 58 2077.3 -26.17 64.49
90.00 13 12 49 4832.89 18.94 208.81 11.74 68.55 14 33 22 4232.9 15.86 201.49
100.00 0 42 23 2402.79 -28.86 52.52 17.18 98.14 1 22 26 1802.8 -27.44 44.01
100.00 14 30 24 4582.59 20.25 189.85 11.18 67.53 15 46 47 3982.6 17.03 182.53
110.00 1 59 12 2162.38 -32.65 33.54 16.44 100.75 2 35 15 1562.4 -30.82 24.79
110.00 15 30 4 4395.76 23.76 173.99 9.50 64.67 16 43 20 3795.8 20.15 166.71
       C3 48.157 VHL 6.940 DLA
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 195.8 SR 362.4 SS 191.8

CRT -.5935 CRS .3332 CST -.9432

LSA 397.1 MSA 219.7 SSA 22.1

EL1 384.1 EL2 148.7 ALF 111.08
                                                                                        SGT 469.3 SGR 518.0 SG3 225.8
RRT .1192 RRF .6209 RTF .1651
SGB 698.9 R23 .1466 R13 .6103
SG1 531.0 SG2 454.5 THA 64.83
       TOE .1815 TRA -.5036 TC3 .1061 BAU .1357
       RDE -.4265 RRA -.3402 RC3 -.1821 FAU .09243
       FDE .2901 FRA-1.4473 FC3-1.6616 BSP 1034
RDF .4635 BRA .6077 BC3 .2108 FSP -645
                                                                                                                                                                         ARRIVAL DATE OCT 11 1967
  LAUNCH DATE JUL 27 1967
                                                                                              FLIGHT TIME 76.00
                                                                                              DISTANCE 220.280
     HELIOCENTRIC CONIC
       RL 151.93 LAL -.00 LOL 303.30 VL 28.502 GAL -13.75 AZL 91.90 MCA 99.61 SMA 141.98 ECC .24724 INC 1.9000 V1 29.325 RP 108.18 LAP -1.87 LOP 42.92 VP 38.971 GAP -3.95 AZP 89.68 TAL 240.27 TAP 339.89 RCA 106.88 APO 177.08 V2 35.029 RC 70.443 GL -7.69 GP -20.63 ZAL 163.99 ZAP 59.65 ETS 12.78 ZAE 162.17 ETE 307.58 ZAC 103.99 ETC 10.24 CLP -57.33
     PLANETOCENTRIC CONIC
                                                     8.29 RAL 137.47 RAD 6568.8 VEL 12.979 PTH 2.37 VHP 4.840 DPA -10.20 RAP 160.01 ECC 1.7752
       C3 47.100 VHL 6.863 DLA
                                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                            96.85 23 54 18
68.09 14 36 54
                                                                                                     17.21
                                                                                                                                                                                   -26.31
                                                                                                                                                                2087.6
                                                                  -27.54
            90.00 23 9 31
                                              2687.58
                                                                                      73.67
                                                                                                                                                                 4211.5
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                          13 16 43
                                              4811.46
                                                                   18.40
                                                                                     207.47
                                                                                                         11.29
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15 50 4
                                                                                                                                                                                   -27.57
                                                                                                                                                                 1612.3
                            0 38 48
                                            2412.27
                                                                  -28.95
                                                                                      53.21
                                                                                                         17.01
                                                                                                                             97.79
                                                                                                                                                                 3962.0
                                                                                                                                                                                    16.43
                           14 34 2
                                              4562.00
                                                                    19.71
                                                                                     188.56
                                                                                                         10.72
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16 46 5
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                                                                                                                                                                 1570.0
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                             1 56 12 2170.05
                                                                  -32.74
                                                                                      34.11
                                                                                                         16.30
           110.00
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           110.00
                            15 33 8
                                             4376.99
                                                                   23.21
                                                                                     172.81
                                                                                                         9.01
                                                                                                                            64.17
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                        SGT 494.8 SGR 541.6 SG3 245.5
RRT .2287 RRF .6647 RTF .3024
SGB 733.6 R23 .1745 R13 .6598
SG1 578.8 SG2 450.7 THA 55.79
                                                                                                                                                           ST 205.6 SR 355.6 SS 205.9
CRT -.5421 CRS .3590 CST -.9671
        TOE .1817 TRA - .5481 TC3 .0649 BAU
        RDE -.4118 RRA -.3571 RC3 -.2116 FAU .09931
                                                                                                                                                          LSA 395.7 MSA 232.3 55A 22.2
       FOE .3448 FRA-1.5500 FC3-1.8255 BSP 1156
BDE .4501 BRA .6542 BC3 .2214 FSP -708
                                                                                                                                                            EL1 377.0 EL2 162.9 ALF 111.64
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ARRIVAL DATE OCT 13 1967

LAUNCH DATE JUL 27 1967

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DISTANCE 226.858
   MELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 28.507 GAL -13.62 AZL 91.76 MCA 102.82 SMA 142.02 ECC .24500 INC 1.7559 V1 29.325
RP 108.14 LAP -1.71 LOP 46.12 VP 38.987 GAP -3.29 AZP 89.61 TAL 240.33 TAP 343.14 RCA 107.23 APO 176.82 V2 35.042
RC 72.534 GL -7.18 GP -21.72 ZAL 164.28 ZAP 64.57 ETS 11.09 ZAE 162.56 ETE 296.15 ZAC 105.95 ETC 9.45 CLP -62.47
    PLANETOCENTRIC CONIC
     C3 46.076 VHL 6.788 DLA 8.79 RAL 137.57 RAD 6568.7 VEL 12.940 PTH 2.36 VHP 4.665 DPA -10.50 RAP 157.90 ECC 1.7583
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 5 58 2698.07 -27.63 74.42 17.13 96.48 23 50 57 2098.1 -26.44 65.96 90.00 13 21 0 4789.94 17.85 206.13 10.94 67.64 14 40 50 4189.9 14.66 198.91
                       23 5 58 2698.07
13 21 0 4789.94
                                                                                                                                                                                                45.37
                       0 35 32 2421.92
14 38 4 4541.33
                                                                                                                       97.43
                                                                                                                                     1 15 54
                                                                                                                                                          1821.9
                                                                                                                                                                            -27.71
                                                                                 53.92
                                                                                                    16.93
        100.00
                                                              -29.04
                                                                                                                       66.60 15 53 45
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        100.00
                                                               19.16
                                                                                187.27
                                                                                                    10.35
                                                                                                                                                          3941.3
                                                                                                                     100.08 2 29 49
63.68 16 49 12
                       1 53 31 2177.84
15 36 34 4358.17
                                                                                                                                                          1577.8
                                                                                                                                                                            -31.10
                                                                                                                                                                                                25.91
        110.00
                                                             -32.84
                                                                                  34.70
                                                                                                    16.25
                                                                                                                                                          3758.2
                                                                                                                                                                              18.92
        110.00
                                                              22.64
                                                                                171.64
                                                                                                     8.62
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 218.9 SR 347.5 S5 219.4

CRT -.4924 CRS .3770 CST -.9814

LSA 395.8 MSA 244.3 SSA 22.2
                                                                                    SCT 535.3 SGR 567.4 SG3 264.3
RRT .3416 RRF .7054 RTF .4337
SGB 780.1 R23 .1809 R13 .7120
SG1 639.9 SG2 446.1 THA 49.84
     TOE .1850 TRA -.5989 TC3 .0161 BAU .1500
     ROE -.3956 RRA -.3733 RC3 -.2430 FAU .10581
    FOE .3985 FRA-1.8405 FC3-1.9881 BBP 1342
BOE .4367 BRA .7057 BC3 .2435 FSP -776
                                                                                                                                                     EL1 369.6 EL2 179.2 ALF 112.91
                                                                                                                                                                   ARRIVAL DATE OCT 15 1967
LAUNCH DATE JUL 27 1967
                                                                                          FLIGHT TIME 80.00
                                                                                          DISTANCE 233.396
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 28.503 GAL -13.49 AZL 91.61 MCA 106.02 8MA 141.99 ECC .24292 INC 1.6078 V1 29.325
RP 108.10 LAP -1.55 LOP 49.33 VP 38.996 GAP -2.67 AZP 89.56 TAL 240.25 TAP 346.27 RCA 107.50 APO 176.48 V2 35.056
RC 74.652 GL -6.65 GP -22.79 ZAL 164.49 ZAP 69.54 ETS 9.32 ZAE 162.34 ETE 284.09 ZAC 107.98 ETC 8.57 CLP -67.71
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C5 45.071 VHL 6.714 DLA 9.29 RAL 137.75 RAD 6568.7 VEL 12.901 PTH 2.35 VHP 4.524 DPA -10.77 RAP 155.71 ECC 1.7418
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
90.00 23 2 42 2708.82 -27.71 75.20 17.13 96.10 23 47 51 2108.8 -26.57 66.72
90.00 13 25 42 4768.12 17.27 204.79 10.68 67.21 14 45 11 4168.1 14.04 197.60
100.00 0 32 31 2431.79 -29.12 54.64 16.94 97.06 1 13 3 1831.8 -27.84 46.07
100.00 14 42 30 4520.38 18.59 185.98 10.08 66.16 15 57 50 3920.4 15.21 178.81
                                                                                                                        63.20
                                                                                                                                  16 52 42
                                                                                                                                                           3739.1
                                                                                                                                                                              18.29
                                                                                                                                                                                                163.37
                                                                                170.47
        110.00
                       15 40 23
                                         4339.12
                                                              22.06
                                                                                                     8.33
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 593.3 SGR 593.2 SG3 280.9
RRT .4503 RRF .7406 RTF .5506
SG8 839.0 R23 .1812 R13 .7581
SG1 714.4 SG2 439.9 THA 45.00
                                                                                                                                                     ST 235.5 SR 337.3 SS 233.0
CRT -.4430 CRS .3973 CST -.9897
     TOE .1905 TRA -.6566 TC3 -.0416 BAU .1675
    ROE -.3771 RRA -.3873 RC3 -.2748 FAU .11130
                                                                                                                                                     LSA 398.2 MSA 254.0 SSA
    FOE .4565 FRA-1.7075 FC3-2.1379 BSP 1575
BDE .4225 BRA .7623 BC3 .2780 FSP -830
                                                                                                                                                                                                   22.3
                                                                                                                                                     EL1 361.0 EL2 197.3 ALF 115.17
                                                                                                                                                                  ARRIVAL DATE OCT 17 1967
                                                                                         FLIGHT TIME 82.00
LAUNCH DATE JUL 27 1967
                                                                                         DISTANCE 239.896
   HELIOCENTRIC CONIC
    RL 151.93 LAL / -.00 LOL 303.30 VL 28.491 GAL -13.35 AZL 91.45 MCA 109.23 SMA 141.89 ECC .24098 INC 1.4549 V1 29.325
RP 108.06 LAP -1.37 LOP 52.54 VP 38.999 GAP -2.08 AZP 89.52 TAL 240.05 TAP 349.28 RCA 107.70 APO 176.08 V2 35.069
RC 76.795 GL -6.09 GP -23.83 ZAL 164.63 ZAP 74.51 ETS 7.47 ZAE 161.46 ETE 272.36 ZAC 110.03 ETC 7.61 CLP -73.03
   PLANETOCENTRIC CONIC
     C3 44.079 VHL 6.639 DLA 9.81 RAL 138.01 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 4.417 OPA -11.01 RAP 153.49 ECC 1.7254
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 59 37 2719.96 -27.78 76.00 17.21 95.70 23 44 57 2120.0 -26.70 67.50 90.00 13 30 52 4745.78 16.68 203.42 10.51 66.78 14 49 57 4145.8 13.40 196.28 100.00 0 29 44 2442.02 -29.21 55.39 17.03 96.67 1 10 26 1842.0 -27.98 46.80 100.00 14 47 22 4498.95 17.99 184.66 9.90 65.72 16 2 21 3899.0 14.56 177.55
                                                                                                                       65.72 16 2 21
99.38 2 25 32
                         1 48 58 2194.08
15 44 38 4319.66
                                                                                                                                                                            -31.38
                                                                                                                                                          1594.1
        110.00
                                                              -33.02
                                                                                 35.93
                                                                                                  16.41
                                                                                                                       99.38
                                                                                                                       62.73 16 56 37
                                                                                                                                                          3719.7
                                                                                                                                                                             17.64
                      15 44 38
                                                                                169.28
                                                                                                    8.12
        110.00
                                                              21.46
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    RRT .5451 RRF .7719 RTF .6443
SGB 911.2 R23 .1797 R13 .7971
SG1 801.3 SG2 433.8 THA 41.06
                                                                                                                                                    ST 255.9 SR 326.0 SS 245.6

CRT -.3998 CRS .4110 CST -.9920

LSA 404.5 MSA 260.7 SSA 22.3

EL1 353.5 EL2 216.3 ALF 119.28
     TOE .2000 TRA -.7189 TC3 -.1067 BAU .1918
     ROE -.3573 RRA -.3994 RC3 -.3074 FAU .11588
     FDE .5098 FRA-1.7540 FC3-2.2759 8SP 1861
8DE .4095 BRA .8224 BC3 .3254 FSP -885
     BDE .4095 BRA .8224 BC3 .3254 FSP
                                                                                                                                                                   ARRIVAL DATE OCT 19 1967
LAUNCH DATE JUL 27 1967
                                                                                          FLIGHT TIME 84.00
                                                                                          DISTANCE 246.357
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 28.472 GAL -13.22 AZL 91.30 MCA 112.44 SMA 141.72 ECC .23915 INC 1.2957 VI 29.325
RP 108.02 LAP -1.20 LOP 55.75 VP 38.997 GAP -1.51 AZP 89.51 TAL 239.74 TAP 352.18 RCA 107.83 APO 175.61 V2 35.082
RC 78.958 GL -5.48 GP -24.83 ZAL 164.71 ZAP 79.44 ETS 5.52 ZAE 159.97 ETE 261.79 ZAC 112.06 ETC 6.58 CLP -78.35
   PLANETOCENTRIC CONIC
    C3 43.092 WHL 6.564 DLA 10.34 RAL 138.35 RAD 6568.6 VEL 12.824 PTH 2.33 VHP 4.342 DPA -11.23 RAP 151.29 ECC 1.7092
                                                           INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.86 76.85 17.37 95.28 23 42 13 2131.7 -26.84 68.34 16.06 202.01 10.42 66.36 14 55 14 4122.7 12.72 194.92
     LNCH AZHTH LNCH TIME L-I TIME
90.00 22 56 41 2731.66
90.00 13 36 31 4722.68
                                                                                                                                  1 7 59
16 7 20
                                                                                                                                                           1852.8
                                                                                                                                                                            -28.11
                                                                                                                                                                                                 47.57
                         0 27 6 2452.76
                                                              -29.29
                                                                                 56.18
                                                                                                    17.21
                                                                                                                       96.26
        100.00
                                                                                                                                                           3876.8
                                          4476.81
                                                               17.37
                                                                                 183.32
                                                                                                     9.80
                                                                                                                        65.28
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        100.00
                       14 52 43
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                                                                                                                                     2 23 42
                                                                                                                                                           1602.7
                                                                                                                       99.00
                         1 47 0
                                          2202.75
                                                              -33.12
                                                                                  36.59
                                                                                                    16.61
        110.00
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        110.00
                       15 49 19 4299.59
                                                               20.83
                                                                                168.06
                                                                                                    8.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 758.8 SGR 644.0 SG3 306.2
RRT .6195 RRF .7980 RTF .7163
SGB 995.3 R23 .1785 R13 .8276
SG1 899.2 SG2 426.6 THA 37.55
                                                                                                                                                    ST 279.8 SR . 312.4 S$ 258.2
CRT -.3613 CRS .4272 CST -.9905
     TDE .2128 TRA -.7855 TC3 -.1797 BAU .2211
     RDE -.3352 RRA -.4077 RC3 -.3392 FAU .11897
                                                                                                                                                    LSA 416.0 MSA 262.7 SSA 22.4
     FOE .5648 FRA-1.7700 FC3-2.3902 BSP 2182
BOE .3971 BRA .8850 BC3 .3838 FSP -922
                                                                                                                                                     EL1 347.8 EL2 234.3 ALF 126.50
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FLIGHT TIME 78.00

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ARRIVAL DATE OCT 21 1967
                                                                                              FLIGHT TIME 86.00
LAUNCH DATE JUL 27 1967
                                                                                              DISTANCE 252.781
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 28.446 GAL -13.08 AZL 91.13 HCA 115.65 SHA 141.50 ECC .23741 INC 1.1289 V1 29.325 RP 107.98 LAP -1.02 LOP 58.96 VP 38.989 GAP -.96 AZP 89.51 TAL 239.32 TAP 354.97 RCA 107.90 APO 175.09 V2 35.094 RC 81.139 GL -4.83 GP -25.80 ZAL 164.71 ZAP 84.26 ETS 3.49 ZAE 158.00 ETE 252.77 ZAC 114.00 ETC 5.50 CLP -83.62
    PLANETOCENTRIC CONIC

C3 42.108 VHL 6.489 DLA 10.89 RAL 138.77 RAD 6568.6 VEL 12.786 PTH 2.33 VHP 4.297 DPA -11.46 RAP 149.17 ECC 1.6930
LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 53 50 2744.17 -27.94 77.76 17.61 94.83 23 39 34 2144.2 -26.97 69.23
90.00 13 42 44 4698.52 15.39 200.55 10.41 65.93 15 1 2 4098.5 12.01 193.50
100.00 0 24 33 2464.24 -29.37 57.02 17.46 95.83 1 5 38 1864.2 -28.25 48.39
100.00 14 58 37 4453.68 16.70 181.92 9.79 64.84 16 12 51 3653.7 13.17 174.90
110.00 1 45 9 2212.02 -33.21 37.30 16.89 98.59 2 22 1 1612.0 -31.67 28.41
110.00 15 54 30 4278.67 20.16 166.81 7.96 61.79 17 5 49 3678.7 16.23 159.89
DIFFERENTIAL CORRECTIONS

MID-COMPRE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
   PLANETOCENTRIC CONIC
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         RRT .6790 RRT .8211 RTF .7691
SGB 1090.6 R23 .1790 R13 .8516
SGI 1006.6 SGZ 419.9 THA 34.54
                                                                                                                                                             ST 307.4 SR 297.7 SS 269.6
CRT -.3302 CRS .4377 CST -.9870
     TOE .2302 TRA -.8542 TC3 -.2589 BAU .2546
     RDE -.3122 RRA -.4130 RC3 -.3707 FAU .12086
                                                                                                                                                             LSA 433.0 MSA 260.5 SSA 22.4
     FDE .6121 FRA-1.7623 FC3-2.4849 BSP 2543
BDE .3879 BRA .9488 BC3 .4522 FSP -956
                                                                                                                                                             EL1 349.2 EL2 247.4 ALF 137.79
                                                                                                                                                                            ARRIVAL DATE OCT 23 1967
                                                                                               FLIGHT TIME 88.00
LAUNCH DATE JUL 27 1967
                                                                                               DISTANCE 259.169
    RL 151.93 LAL -.00 LOL 303.30 VL 28.414 GAL -12.94 A7L 90.95 MCA 118.87 SMA 141.22 ECC .23576 INC .9526 VI 29.325 RP 107.94 LAP -.83 LOP 62.17 VP 36.977 GAP -.44 A7P 89.54 TAL 238.80 TAP 357.67 RCA 107.93 APO 174.51 V2 35.107 RC 83.336 GL -4.12 GP -26.72 ZAL 164.63 ZAP 88.92 ETS 1.38 ZAE 155.69 ETE 245.35 ZAC 115.81 ETC 4.40 CLP -88.79
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 41.122 VHL 6.413 DLA 11.48 RAL 139.27 RAD 6568.6 VEL 12.747 PTH 2.32 VHP 4.280 DPA -11.70 RAP 147.16 ECC 1.6768 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 50 58 2757.76 -28.01 78.75 17.94 94.34 23 36 55 2157.8 -27.11 70.20 90.00 13 49 35 4672.97 14.67 199.01 10.49 65.51 15 7 28 4073.0 11.25 192.01
                                                                                                                               65.51 15 7 28
95.35 1 3 19
                                                                                                                                                                   1876.7
                                                                                                                                                                                       -28.40
                                                                                                                                                                                                           49.29
                         0 22 2 2476.72
15 5 8 4429.25
                                                                                       57.94
                                                                                                          17.80
                                                                                                                               95.35
                                                                   -29.45
         100.00
                                                                                                                               64.40 16 18 57
                                                                                                                                                                   3829.2
                                                                                                                                                                                        12.41
                                                                                                                                                                                                         173.49
                                                                                     180.46
                                                                                                            9.85
                                                                  15.99
         100.00
                                                                                                                               98.14 2 20 26
61.32 17 11 12
                                                                                                                                                                   1622.1
                                                                                                                                                                                     -31.83
                                                                                                                                                                                                          29.15
                                                                                       36.07
                                                                                                         17.26
                            1 43 24 2222.11
                                                                  -33.31
         110.00
                                                                                                                                                                                        15.47
                                                                                                                                                                   3656.6
                                                                                                           7.99
                          16 U 15
                                                                                     165.50
                                             4256.63
                                                                  19.45
         110.00
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 338.8 SR 281.4 SS 280.5
CRT -.3050 CRS .4464 CST -.9828
                                                                                          SGT 977.0 SGR 688.1 SG3 318.1
RRT .7249 RRF .8408 RTF .8074
SGB 1195.0 R23 .1814 R13 .8698
      TOE .2522 TRA -.9235 TC3 -.3441 BAU .2905
      RDE -.2877 RRA -.4145 RC3 -.4011 FAU .12133
FDE .6549 FRA-1.7284 FC3-2.5543 BSP 2930
                                                                                                                                                              LSA 455.6 MSA 254.1 SSA 22.5
                                                                                                                                                              EL1 362.0 EL2 250.7 ALF 150.73
      BDE .3826 BRA 1.0123 BC3 .5284 FSP -979
                                                                                          SG1 1121.3 SG2 413.0 THA 31.87
                                                                                                                                                                           ARRIVAL DATE OCT 25 1967
                                                                                               FLIGHT TIME 90.00
LAUNCH DATE JUL 27 1967
                                                                                               DISTANCE 265.521
     RL 151.93 LAL -.00 LOL 303.30 VL 28.376 GAL -12.79 AZL 90.77 MCA 122.09 SNA 140.90 ECC .23416 INC .7651 VI 29.325
RP 107.91 LAP -.65 LOP 65.39 VP 38.960 GAP .05 AZP 89.59 TAL 238.19 TAP .28 RCA 107.91 APO 173.89 V2 35.119
RC 85.546 GL -3.34 GP -27.63 ZAL 164.47 ZAP 93.37 ETS 359.19 ZAE 153.18 ETE 239.34 ZAC 117.45 ETC 3.28 CLP -93.81
    PLANETOCENTRIC CONIC
      C3 40.134 VHL 6.335 DLA 12.11 RAL 139.85 RAD 6568.5 VEL 12.708 PTH 2.31 VHP 4.288 DPA -12.00 RAP 145.31 ECC 1.6605
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 48 0 2772.81 -28.08 79.84 18.35 93.80 23 34 13 :2172.8 -27.26 71.27 90.00 13 57 11 4645.65 13.90 197.38 10.65 65.08 15 14 37 4045.6 10.42 190.43 100.00 11 10 27 2407.54 -20.54 58 06 18.23 94 82 1 0.58 1890.5 -28.56 50.20
                         0 19 27 2490.54
15 12 21 4403.16
1 41 40 2233.30
16 6 38 4233.15
                                                                                                                               94.82
                                                                                       58.96
                                                                                                          18.23
                                                                  -29.54
                                                                                                                                                                                                         171.99
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                                                                                                                               63.96 16 25 44
                                                                                                                                                                   3803.2
                                                                                    178.90
                                                                                                          10.00
                                                                   15.21
         100.00
                                                                                                                              97.65 2 18 53
60.84 17 17 11
                                                                                                                                                                                     -32.00
                                                                                                         17.73
                                                                                                                                                                   1633.3
                                                                                       38.93
                                                                  -33.42
                                                                                                                                                                                       14.64
                                                                                                                                                                   3633.2
                                                                                                           8.11
                                                                                     164.12
                                                                   18.67
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             TT 374.0 SR 262.3 SS 292.5

CRT -.2841 CRS .4587 CST -.9772

LSA 484.3 MSA 243.3 SSA 22.6

EL1 386.6 EL2 243.2 ALF 160.95
                                                                                          SGT 1099.3 SGR 703.6 SG3 317.9
RRT .7602 RRF .8569 RTF .8348
SG8 1305.2 R23 .1855 R13 .8829
      TOE .2793 TRA -.9921 TC3 -.4342 BAU .3274
      RDE -.2605 RRA -.4108 RC3 -.4288 FAU .12007
FOE .7000 FRA-1.6624 FC3-2.5900 BSP 3317
BOE .3819 BRA 1.0737 BC3 .6102 FSP -974
                                                                                          SG1 1240.8 SG2 405.0 THA 29.38
                                                                                                                                                                            ARRIVAL DATE OCT 27 1967
                                                                                                FLIGHT TIME 92.00
LAUNCH DATE JUL 27 1967
                                                                                               DISTANCE 271.841
     RL 151.93 LAL -.00 LOC 303.30 VL 28.333 GAL -12.64 AZL 90.56 MCA 125.31 SMA 140.54 ECC .23264 INC .5635 V1 29.325
RP 107.87 LAP -.46 LOP 68.61 VP 38.940 GAP .53 AZP 89.67 TAL 237.49 TAP 2.80 RCA 107.84 APO 173.23 V2 35.131
RC 87.767 GL -2.49 GP -28.52 ZAL 164.22 ZAP 97.58 ETS 356.91 ZAE 150.56 ETE 234.50 ZAC 118.89 ETC 2.18 CLP -98.63
     PLANETOCENTRIC CONIC
      C3 39.148 VHL 6.257 DLA 12.80 RAL 140.52 RAD 6568.5 VEL 12.669 PTH 2.30 VHP 4.321 DPA -12.36 RAP 143.64 ECC 1.6443
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 44 48 2789.83 -28.15 81.08 18.87 93.18 23 31 18 2189.8 -27.41 72.49
                                                                                                                           93.18 23 31 18
64.64 15 22 37
                                                                                                                                                                                          9.52
                         14 5 41 4616.05

0 16 42 2506.17

15 20 25 4374.95

1 39 51 2245.99

16 13 46 4207.89
                                                                                      195.63
                                                                                                           10.91
                                                                   13.04
                                                                                                                                           0 58 28
16 33 20
                                                                                                                                                                                       -28.72
                                                                                                                                                                                                             51.42
                                                                                                                                94.22
                                                                                                                                                                    1906.2
                                                                                                         18.76
                                                                   -29.62
                                                                                        60.11
                                                                                                                                63.50
                                                                                                                                                                    3775.0
                                                                                                                                                                                       10.69
                                                                                                           10.25
                                                                                      177.24
                                                                   14.36
                                                                                                                                                                                                             30.93
                                                                                                                                             2 17 17
                                                                                                                                                                    1646.0
                                                                                                                                                                                        -32.19
                                                                                                                                97.08
                                                                   -33.53
                                                                                        39.90
                                                                                           9.9U 18.30 97.08 2 17 17
2.64 8.32 60.34 17 23 54
HID-COURSE EXECUTION ACCURACY
                                                                                                         18.30
          110.00
                                                                                                                                                                                         13.75
                                                                                                                                                                   3607.9
                                                                                      162.64
                                                                   17.83
          110,00
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 413.2 SR 243.2 SS 302.3

CRT -.2666 CRS .4569 CST -.9740

LSA 517.1 MSA 231.2 SSA 22.7

EL1 7420.6 EL2 230.3 ALF 167.18
       TOE .3118 TRA-1.0580 TC3 -.5283 BAU .3656
                                                                                           SGT 1227.0 SGR 719.5 SG3 315.6
                                                                                           RRT .7871 RRF .8723 RTF .8547
SGB 1422.4 R23 .1925 R13 .8934
       ROE - 2338 RRA - .4050 RC3 - .4571 FAU .11808
       FOE .7297 FRA-1.5865 FC3-2.6114 BSP 3746
BDE .3898 BRA 1.1329 BC3 .6986 FSP -982
                                                                                           SG1 1365.3 SG2 398.9 THA 27.29
       BDE .3898 BRA 1.1329 BC3 .6986 FSP
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LAUNCH DATE JUL 27 1967
                                                                                                 FLIGHT TIME 94.00
                                                                                                                                                                              ARRIVAL DATE OCT 29 1967
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 278.128
      RL 151.93 LAL -.00 LOL 303.30 VL 28.286 GAL -12.48 AZL 90.35 MCA 128.53 SMA 140.14 ECC .23116 INC .3451 V1 29.325 RP 107.83 LAP -.27 LOP 71.83 VP 38.917 GAP .98 AZP 89.78 TAL 236.72 TAP 5.25 RCA 107.75 APO 172.54 V2 35.143 RC 89.996 GL -1.54 GP -29.44 ZAL 163.88 ZAP 101.51 ETS 354.56 ZAE 147.91 ETE 230.64 ZAC 120.11 ETC 1.09 CLP-103.24
     PLANETOCENTRIC CONIC
      C3 38.163 VHL 6.178 OLA 13.55 RAL 141.27 RAD 6568.5 VEL 12.631 PTH 2.29 VHP 4.375 DPA -12.82 RAP 142.15 ECC 1.6281 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
           90.00 22 41 15 2809.43
90.00 14 15 16 4583.58
                                                                                                      19.49
                                                                                                                           92.47 23 28 5
                                                                                                                                                                2209.4
                                                                                                                                                                                     -27.58
                                                                   -28.22
                                                                                      82.51
                                                                    12.09
                                                                                      193.72
                                                                                                           11.27
                                                                                                                                64.20
                                                                                                                                             15 31 40
                                                                                                                                                                     3983.6
                                                                                                                                                                                          8.52
                            0 13 38 2524.16
15 29 30 4344.08
         100.00
                                                                   -29.70
                                                                                        61.44
                                                                                                           19.40
                                                                                                                                93.52
                                                                                                                                              0 55 43
                                                                                                                                                                     1924.2
                                                                                                                                                                                         -28.90
         100.00
                         15 29 30
                                                                    13.42
                                                                                     175.44
                                                                                                           10.59
                                                                                                                                63.04 16 41 54
                                                                                                                                                                     3744.1
                                                                                                                                                                                            9.70
                                                                                                                                                                                                           164.63
                            1 37 52 2260.65
16 21 46 4180.36
                                                                  -33.65
                                                                                        41.03
                                                                                                         19.00
                                                                                                                                             2 15 32
         110.00
                                                                                                                                96.42
                                                                                                                                                                     1660.6
                                                                                                                                59.83 17 31 27
                          16 21 46
         110.00
                                                                                      161.06
                                                                                                             8.63
                                                                                                                                                                     3580.4
                                                                                                                                                                                          12.76
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                           SGT 1358.0 SGR 730.1 SG3 309.5
RRT .8078 RRF .8852 RTF .8689
SGB 1541.8 R23 .2013 R13 .9006
                                                                                                                                                               ST 457.2 SR 221.2 SS 314.1
CRT -.2480 CRS .4591 CST -.9702
LSA 556.3 MSA 216.0 SSA 22.8
      TOE .3508 TRA-1.1197 TC3 -.6255 BAU .4031
     RDE -.2043 RRA -.3940 RC3 -.4828 FAU .11466
FDE .7628 FRA-1.4850 FC3-2.6011 89P 4158
      BOE .4059 BRA 1.1870 BC3 .7902 FSP -963
                                                                                           SG1 1491.2 SG2 391.9 THA 25.35
                                                                                                                                                                EL1 461.4 EL2 212.4 ALF 171.30
                                                                                                 FLIGHT TIME 96.00
                                                                                                                                                                              ARRIVAL DATE OCT 31 1967
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 284.384
     RL 151.93 LAL -.00 LOL 303.30 VL 28.235 GAL -12.32 AZL 90.11 MCA 131.75 SMA 139.72 ECC .22974 INC .1056 V1 29.325 RP 107.80 LAP -.08 LOP 75.05 VP 38.890 GAP 1.42 AZP 89.93 TAL 235.88 TAP 7.62 RCA 107.62 APO 171.82 VZ 35.154 RC 92.232 GL -.48 GP -30.41 ZAL 163.42 ZAP 105.14 ETS 352.10 ZAE 145.27 ETE 227.56 ZAC 121.10 ETC .02 CLP-107.62
    PLANETOCENTRIC CONIC
     C3 37.187 VHL 6.098 DLA 14.40 RAL 142.12 RAD 6568.4 VEL 12.592 PTH 2.28 VHP 4.451 DPA -13.41 RAP 140.86 ECC 1.6120 LNCH AZMTH LNCH TIME L-I TIME INVLAT INV LONG INV RT ASC INV AZMTH INV TIME PO CST TIM INV 2 LAT INV 2 LONG
          90.00
                        22 37 9 2832.45
                                                                   -28.27
                                                                                       84.19
                                                                                                        20.24
                                                                                                                               91.63 23 24 21
                                                                                                                                                                    2232.5
                        14 26 11 4547.46
0 10 7 2545.31
15 39 50 4309.84
1 35 35 2277.90
16 30 51 4150.02
                                                                                                                                63.75 15 41 58
92.70 0 52 32
          90.00
                                                                    11.01
                                                                                      191.62
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         100.00
                                                                   -29.78
                                                                                        63.01
                                                                                                           20.17
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         100.00
                                                                   12.35
                                                                                     173.45
                                                                                                           11.05
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                                                                                                                                95.64 2 13 33
59.31 17 40 1
         110.00
                                                                   -33.77
                                                                                       42.36
                                                                                                          19.63
                                                                                                                                                                     1677.9
                                                                                                                                                                                        -32.62
        110.00
                                                                 15.85
                                                                                     159.33
                                                                                                            9.05
                                                                                                                                                                     3550.0
                                                                                                                                                                                       11.66
                                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           SGT 1491.1 SGR 739.7 SG3 301.5
RRT .8238 RRF .8975 RTF .8792
SGB 1664.5 R23 .2125 R13 .9062
SGI 1619.1 SG2 386.1 THA 23.66
                                                                                                                                                               ST 506.6 SR 198.2 SS 325.9
CRT -.2240 CRS .4468 CST -.9679
     TDE .3965 TRA-1.1760 TC3 -.7256 BAU .4404
     RDE -.1739 RRA -.3603 RC3 -.5083 FAU .11052
     FOE .7887 FRA-1.3744 FC3-2.5729 BSP 4589
BDE .4329 BWA 1.2360 BC3 .8859 FSP -945
                                                                                                                                                               LSA 601.4 MSA 199.7 SSA 23.0
                                                                                                                                                                EL1 508.8 EL2 192.3 ALF 174.15
LAUNCH DATE JUL 27 1967
                                                                                                FLIGHT TIME 98.00
                                                                                                                                                                             ARRIVAL DATE NOV 2 1967
                                                                                               DISTANCE 290.611
    HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 28.181 GAL -12.14 AZL 89.84 MCA 134.97 SMA 139.27 ECC .22837 INC .1575 V1 29.325
RP 107.77 LAP .11 LOP 78.27 VP 38.860 GAP 1.84 AZP 90.11 TAL 234.96 TAP 9.93 RCA 107.46 APO 171.08 V2 35.165
RC 94.474 GL .72 GP -31.46 ZAL 162.84 ZAP 108.44 ETS 349.54 ZAE 142.65 ETE 225.14 ZAC 121.85 ETC 358.96 CLP-111.77
    PLANETOCENTRIC CONIC
     C3 36.227 VHL 6.019 DLA 15.36 RAL 143.09 RAD 6568.4 VEL 12.554 PTH 2.27 VHP 4.548 DPA -14.15 RAP 139.75 ECC 1.5962
    C3 36.227 VML 6.019 DLA 13.36 RAL 143.09 RAD 6568.4 VEL 12.354 PTM 2.27 VMP 4.548 DPA -14.15 RAP 139.75 ECC 1.3962
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO-EST TIM INJ 2 LAT INJ 2 LONG
90.00 22 32 14 2860.03 -28.31 86.21 21.14 90.61 23 19 54 2260.0 -27.93 77.57
90.00 14 38 46 4506.66 9.77 189.26 12.37 63.29 15 53 53 3906.7 6.11 182.50
100.00 0 5 54 2570.62 -29.85 64.89 21.10 91.71 0 48 45 1970.6 -29.29 56.13
100.00 15 51 42 4271.30 11.13 171.24 11.66 62.08 17 2 54 3671.3 7.31 164.54
110.00 1 32 51 2298.57 -33.90 43.96 20.83 94.70 2 11 10 1698.6 -32.87 34.87
110.00 16 41 15 4116.12 14.66 157.42 9.60 58.77 17 49 51 3516.1 10.42 150.89
   DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         SCT 1624.5 SCR 746.1 SC3 290.8
RRT .8361 RRF .9085 RTF .8864
SCB 1787.6 R23 .2256 R13 .9099
SCI 1746.7 SC2 380.6 THA 22.11
                                                                                                                                                              ST 562.7 SR 172.8 SS 340.1

CRT -.1852 CRS .4193 CST -.9659

LSA 654.6 MSA 181.9 SSA 23.1
     TOE .4507 TRA-1.2252 TC3 -.8274 BAU .4765
     ROE -.1408 RRA -.3623 RC3 -.5324 FAU .10546
FOE .8161 FRA-1.2496 FC3-2.5203 BSP 5004
BOE .4722 BRA 1.2777 BC3 .9839 FSP -912
                                                                                                                                                              EL1 563.7 EL2 169.5 ALF 176.42
LAUNCH DATE JUL 27 1967
                                                                                                FLIGHT TIME 100.00
                                                                                                                                                                             ARRIVAL DATE NOV 4 1967
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 296.809
    RL 151.93 LAL -.00 LOL 303.30 VL 28.124 GAL -11.97 AZL 89.55 MCA 138.20 SMA 138.80 ECC .22705 INC .4542 V1 29.325 RP 107.73 LAP .30 LOP 81.50 VP 38.828 GAP 2.25 AZP 90.34 TAL 233.99 TAP 12.18 RCA 107.28 APO 170.31 V2 35.175 RC 96.719 GL 2.10 GP -32.64 ZAL 162.10 ZAP 111.40 ETS 346.83 ZAE 140.07 ETE 223.27 ZAC 122.36 ETC 357.90 CLP-115.67
   PLANETOCENTRIC CONIC
    C3 35.296 VHL 5.941 DLA- 16.47 RAL 144.17 RAD 6568.4 VEL 12.517 PTH 2.27 VHP 4.666 DPA -15.08 RAP 138.79 ECC 1.5809
    C3 35.296 WL 5.941 DLA: 16.47 RAL 144.17 RAD 6568.4 VEL 12.517 PTH 2.27 VMP 4.666 DPA -15.08 RAP 138.79 ECC 1.5809 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 53 31 4459.77 8.32 186.58 13.19 62.84 16 7 51 3859.8 4.61 179.86 100.00 0 0 41 2601.54 -29.89 67.19 22.22 90.50 0 44 3 2001.5 -29.50 58.40 100.00 16 5 35 4227.23 9.72 168.74 12.45 61.59 17 16 2 3627.2 5.85 162.09 110.00 1 29 27 2323.81 -34.02 45.92 22.05 93.55 2 8 11 1723.8 -33.15 36.79 110.00 16 53 18 4077.73 13.30 155.28 10.33 58.21 18 1 16 3477.7 9.00 148.82
                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                        SGT 1758.4 SGR 752.8 SG3 278.9
RRT .8454 RRF .9191 RTF .8918
SGB 1912.8 R23 .2407 R13 .9127
                                                                                                                                                            ST 626.8 SR 146.8 SS 355.2
CRT - .1176 CRS .3585 CST - .9654
     TOE .5140 TRA-1.2666 TC3 -.9310 BAU .5119
    ROE -.1064 RRA -.3418 RC3 -.5570 FAU .10000
FOE .8385 FRA-1.1217 FC3-2.4528 83P 5439
BOE .5249 BRA 1.3119 BC3 T.0849 FSP -880
                                                                                                                                                           LSA 716.3 MSA 164.0 SSA 23.3
EL1 627.0 EL2 145.8 ALF 178.33
                                                                                        SG1 1875.2 SG2 377.0 THA 20.77
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ARRIVAL DATE NOV 6 1967

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FLIGHT TIME 102.00
LAUNCH DATE JUL 27 1967
                                                                                              DISTANCE 302.980
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 28.063 GAL -11.78 A7L 89.21 HCA 141.42 SMA 138.31 ECC .22578 INC .7902 VI 29.325 RP 107.70 LAP .49 LOP 84.73 VP 38.793 GAP 2.63 A7P 90.62 TAL 232.95 TAP 14.37 RCA 107.08 APO 169.54 V2 35.185 RC 98.967 GL 3.70 GP -33.99 ZAŁ 161.17 ZAP 113.99 ETS 343.96 ZAE 137.52 ETE 221.86 ZAC 122.64 ETC 356.83 CLP-119.36
    PLANETOCENTRIC CONIC
     C3 34.411 VHL 5.866 DLA 17.75 RAL 145.40 RAD 6568.4 VEL 12.481 PTH 2.26 VHP 4.807 DPA -16.23 RAP 137.97 ECC 1.5663
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        23.52
                                                                                                                             87.83 23 7 15
                                                                                                                                                                 2336.0
                                                                                                                                                                                    -28.24
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                        22 18 19 2935.97
15 11 9 4404.76
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          90.00
                                                                 -28.24
                                                                                                                                        16 24 33
                                                                                                                                                                  3804.8
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                                                                                                                              62.40
                                                                                                         14.26
          90.00
                                                                   6.60
                                                                                    183.45
                                                                                                                                                                  2040.1
                         23 50 4 2640.09
16 22 5 4175.87
                                                                                                                             89.00
                                                                                                                                         24 34 4
                                                                                                                                                                                     -29.70
                                                                                                                                                                                                          61.25
                                                                                      70.05
                                                                                                         23.57
         100.00
                                                                 -29.88
                                                                                                                              61.11 17 31 40
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                                                                                                        13.47
         100.00
                                                                    8.04
                                                                                    165.85
                         1 25 4 2355.18
17 7 30 4033.54
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                                                                -34.13
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         110.00
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                                                                                                        11.28
         110.00
                                                                  11.70
                                                                                    152.86
                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 1891.9 SGR 758.9 SG3 265.5
RRT .8520 RRF .9292 RTF .8956
SGB 2038.4 R23 .2571 R13 .9147
SGI 2003.6 SG2 375.2 THA 19.58
                                                                                                                                                             ST 701.2 SR 120.8 SS 372.8
CRT .0083 CRS .2366 CST -.9659
     TOE .5889 TRA-1.2982 TC3-1.0354 BAU .5463
     RDE -.0696 RRA -.3177 RC3 -.5813 FAU .09405
                                                                                                                                                             LSA 789.5 MSA 146.2 SSA 23.3
     FDE .8602 FRA -.9891 FC3-2.3662 BSP 5873
BDE .5930 BRA 1.3365 BC3 1.1874 FSP -844
                                                                                                                                                             EL1 701.2 EL2 120.8 ALF
                                                                                                                                                                                                                .08
                                                                                                                                                                           ARRIVAL DATE NOV 8 1967
                                                                                               FLIGHT TIME 104.00
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 309.126
    RL 151.93 LAL -.00 LOL 303.30 VL 28.001 GAL -11.59 AZL 88.82 HCA 144.65 SMA 137.81 ECC .22457 INC 1.1780 V1 29.325 RP 107.67 LAP .68 LOP 87.96 VP 38.757 GAP 3.01 AZP 90.96 TAL 231.86 TAP 16.51 RCA 106.86 APO 168.75 V2 35.195 RC 101.218 GL 5.58 GP -35.55 ZAL 160.00 ZAP 116.18 ETS 340.88 ZAE 134.95 ETE 220.86 ZAC 122.71 ETC 355.72 CLP-122.84
    PLANETOCENTRIC CONIC
                                                                                                                                2.25 WHP 4.975 DPA -17.65 RAP 137.24 ECC 1.5530
     C3 33.601 VHL 5.797 DLA 19.28 RAL 146.81 RAD 6568.3 VEL 12.449 PTH
     S 35.001 VAL 5.797 DEA 19.22 RAE 146.51 RAE 0.00.5 VEL 12.00.5 VEL
                        22 7 55 2990.17
15 32 46 4338.53
23 41 13 2689.31
16 42 9 4114.63
                                                                                                                              62.01 16 45 5
87.08 24 26 3
60.66 17 50 44
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                                                                    4.50
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           90.00
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                                                                  -29.76
                                                                                      73.71
                                                                                                         25.21
         100.00
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                                                                    6.01
                                                                                     162.43
                                                                                                         14.84
         100.00
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                                                                                                                              90.27
                                                                                                                                           1 59 10
                                                                                                                                                                  1794.9
                                                                                                                                                                                      -33.77
                           1 19 15 2394.93
17 24 33 3981.77
                                                                                                         25.33
                                                                  -34.18
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         110,00
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                         17 24 33
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                                                                                                         12.53
         110.00
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                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         RRT .8560 RRF .9363 RTF .8961
SGB 2162.7 R23 .2747 R13 .9158
SGI 2130.0 SG2 374.8 THA 18.48
                                                                                                                                                             ST 789.9 SR 97.3 SS 395.1
CRT .2525 CRS -.0126 CST -.9668
     TOE .6796 TRA-1.3173 TC3-1.1382 BAU .5788
      RDE -.0286 RRA -.2888 RC3 -.6038 FAU .08752
                                                                                                                                                             LSA 878.8 MSA 129.5 SSA 23.0
     FDE .8863 FRA -.8496 FC3-2.2549 BSP 6280
BDE .6802 BRA 1.3486 BC3 1.2884 FSP -795
                                                                                                                                                             EL1 790.3 EL2 94.1 ALF
                                                                                                                                                                           ARRIVAL DATE NOV 10 1967
                                                                                               FLIGHT TIME 106.00
LAUNCH DATE JUL 27 1967
                                                                                               DISTANCE 315.246
    HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 27.936 GAL -11.39 AZL 88.37 HCA 147.88 SHA 137.29 ECC .22341 INC 1.6327 VI 29.325 RP 107.65 LAP .87 LOP 91.19 VP 38.718 GAP 3.37 AZP 91.38 TAL 230.72 TAP 18.60 RCA 106.62 APO 167.96 V2 35.204 RC 103.470 GL 7.82 GP -37.40 ZAL 158.53 ZAP 117.95 ETS 337.56 ZAE 132.33 ETE 220.20 ZAC 122.56 ETC 354.53 CLP-126.15
    PLANETOCENTRIC CONIC
     C3 32.909 VHL 5.737 DLA 21.10 RAL 148.44 RAD 6568.3 VEL 12.421 PTH 2.24 VHP 5.176 DPA -19.38 RAP 136.56 ECC 1.5416
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          83.28 22 44 27
61.74 17 11 13
84.57 24 14 54
60.29 18 14 42
                                                                                                     26.98
                                                                                                                                                              2462.3
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                        21 53 25 3062.34
16 0 17 4255.87
                                                                  -27.57
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           90.00
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                                                                                    175.10
                                                                     1.84
           90.00
                         23 29 0 2754.10
17 7 23 4039.34
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                                                                  -29.44
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         100.00
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                           1 11 16 2446.45
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                         17 45 32
                                            3919.75
         110.00
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 896.2 SR 86.4 SS 420.4
                                                                                         SCT 2155.9 SCR 768.9 SC3 234.3
RRT .8575 RRF .9469 RTF .9001
SCB 2288.9 R23 .2923 R13 .9168
SCI 2257.5 SC2 377.8 THA 17.51
     TOE .7889 TRA-1.3232 TC3-1.2389 BAU .6107
                                                                                                                                                             CRT .6200 CRS -.4235 CST -.9691
     RDE .0154 RRA -.2561 RC3 -.6260 FAU .08079
FDE .9100 FRA -.7123 FC3-2.1253 BSP 6713
                                                                                                                                                            LSA 986.7 MSA 115.3 SSA 22.3
EL1 897.8 EL2 67.7 ALF 3.44
      BOE .7890 BRA 1.3478 BC3 1.3880 FSP
                                                                                                                                                                            ARRIVAL DATE NOV 12 1967
                                                                                               FLIGHT TIME 108.00
LAUNCH DATE JUL 27 1967
                                                                                               DISTANCE 321.343
    HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 27.870 GAL -11.18 AZL 87.82 HCA 151.10 SMA 136.77 ECC .22230 INC 2.1774 V1 29.325 RP 107.82 LAP 1.05 LOP 94.42 VP 38.678 GAP 3.71 AZP 91.91 TAL 229.54 TAP 20.64 RCA 106.36 APO 167.17 V2 35.212 RC 105.723 GL 10.52 GP -39.60 ZAL 156.65 ZAP 119.23 ETS 333.96 ZAE 129.61 ETE 219.85 ZAC 122.21 ETC 353.23 CLP-129.32
    PLANETOCENTRIC CONIC
      C3 82.404 VHL 5.692 DLA 23.32 RAL 150.36 RAD 6568.3 VEL 12.401 PTH 2.24 VHP 5.419 DPA -21.47 RAP 135.84 ECC 1.5333
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              79.78 22 24 20
61.73 17 46 33
81.22 23 58 29
60.11 18 46 20
84.74 1 41 49
56.09 19 16 18
                                                                                                                                                                                     -27.69
           90.00 21 31 36 3164.05
90.00 16 37 26 4146.36
100.00 23 11 6 2843.25
                                                                                                                                                                   2564.1
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                                                                                     108.21
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                                                                    -1.69
                                                                                     168.99
                                                                                                          20.35
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                                                                                       85.01
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                                                                   -28.69
          100.00
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                          17 40 38
                                             3942.39
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                            0 59 54 2515.15
                                                                                       60.83
         110.00
                          18 12 15
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                                                                                     142.70
                                                                                                          16.56
                                             3643.25
         110.00
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 1027.7 SR 99.3 SS 452.0
CRT .9099 CRS -.8017 CST -.9718
      TOE .9259 TRA-1.3104 TC3-1.3306 BAU .6403
                                                                                           SGT 2286.1 SGR 772.7 SG3 216.6
                                                                                          RRT .8557 RRF .9542 RTF .9015
SGB 2413.2 R23 .3096 R13 .9174
SGI 2382.5 SG2 383.7 THA 16.57
      ROE .0692 RRA -.2165 RC3 -.6433 FAU .07352
                                                                                                                                                             LSA 1122.0 MSA 105.3 55A 20.4
      FOE .9384 FRA -.5709 FC3-1.9642 BSP 7108
BDE .9282 BRA 1.3282 BC3 1.4780 FSP -694
                                                                                                                                                              EL1 1031.7 EL2 41.0 ALF
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LAUNCH DATE JUL 27 1967
                                                                             FLIGHT TIME 110.00
                                                                                                                                           ARRIVAL CATE NOV 14 1967
                                                                             DISTANCE 327.415
   HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 27.802 GAL -10.96 APL 87.15 MCA 154.33 SMA 136.24 ECC .22125 INC 2.8464 V1 29.325 RP 107.60 LAP 1.23 LOP 97.66 VP 38.636 GAP 4.05 APP 92.57 TAL 228.31 TAP 22.64 RCA 106.10 APO 166.38 V2 35.220 RC 107.975 GL 13.82 GP -42.25 ZAL 154.21 ZAP 119.95 ETS 330.02 ZAE 126.68 ETE 219.73 ZAC 121.68 ETC 351.76 CLP-132.40
   PLANETOCENTRIC CONIC
    C3 32.206 VHL 5.675 DLA 26.05 RAL 152.68 RAD 6568.3 VEL 12.393 PTH 2.24 VHP 5.722 DPA -24.01 RAP 135.01 ECC 1.5300 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00. 20 53 6 3327.23
90.00 17 34 29 3980.09
                                                                                  31.54
                                                                                                      74.63 21 48 33
62.49 18 40 49
                                                                                                                                   2121.2
                                                                     119.52
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                                                     -24.GA
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                                                      -7.00
                                                                     159.65
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       100.00
                                                     -26.93
                                                                      94.53
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                    22 41 50 2976.67
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                                                                                                      60.41 19 31 51
                                   3605.88
       100.00
                    18 28 26
                                                      -4.42
                                                                     145.44
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                                                                                                                                                                   138.84
       110.00
                     0 42 44
                                   2610.72
                                                    -32.99
                                                                      66.17
                                                                                     33.76
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                    18 47 57
       110.00
                                    3744.59
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                                                                     137.54
                                                                                     19.94
                                                                                                      55.83
                                                                                                                                   3144.6
                                                                                                                                                   -3.66
                                                                                                                                                                   131.33
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT OFTERMINATION ACCURACY
                                                                        SCT 2417.8 SCR 776.6 SC3 197.8
RRT .8502 RRF .9601 RTF .9032
SCB 2539.4 R23 .3250 R13 .9184
SCI 2508.7 SC2 394.0 THA 15.67
                                                                                                                               ST 1191.4 SR 135.8 SS 488.1
CRT .9897 CRS -.9526 CST -.9755
     TOE 1.0994 TRA-1.2760 TC3-1.4090 BAU .6689
    RDE .1200 RRA -.1699 RC3 -.6545 FAU .06599
                                                                                                                               LSA 1290.6 MSA 100.5 SSA 17.5
    FOE .9653 FRA -.4324 FC3-1.7738 BBP
                                                        7536
-639
    BOE 1.1059 BRA 1.2873 BC3 1.5536 FSP
                                                                                                                               EL1 1198.9 EL2 19.3 ALF
LAUNCH DATE JUL 27 1967
                                                                             FLIGHT TIME 112.00
                                                                                                                                           ARRIVAL DATE NOV 16 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 333,464
    RL 151.93 LAL -.00 LOL 303.30 VL 27.733 GAL -10.74 AZL 86.31 MCA 157.55 SMA 135.70 ECC .22026 INC 3.6933 V1 29.325 RP 107.58 LAP 1.41 LOP 100.89 VP 38.593 GAP 4.57 AZP 93.41 TAL 227.04 TAP 24.59 RCA 105.81 APO 165.59 V2 35.227 RC 110.226 GL 17.92 GP -45.46 ZAL 151.03 ZAP 120.01 ETS 325.70 ZAE 123.45 ETE 219.77 ZAC 120.97 ETC 350.03 CLP-135.48
   PLANETOCENTRIC CONIC
    C3 32.331 VHL 5.704 OLA 29.44 RAL 155.58 RAO 6568.3 VEL 12.406 PTH 2.24 VHP 6.114 OPA -27.07 RAP 133.91 ECC 1.5354 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG 81.59 18 16 21 3879.08 -17.19 157.33 32.37 65.72 19 21 0 3279.1 -20.32 149.98
                   20 34 21 3433.31
21 30 18 3254.18
20 3 5 3533.44
0 13 41 2754.62
                                                                     124.59
        96.41
                                                     -17.17
                                                                                      32.36
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       100.00
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                                                     -21.17
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       100.00
                                                     -13.27
                                                                     130.07
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0 59 35
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       110.00
                                                     -30.86
                                                                                                      74.51
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                    19 40 8
       110.00
                                                                     130.29
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                                    3605.76
                                                      -4.47
                                                                                     25.16
                                                                                                      56.07
                                                                                                                                                     -8.89
                                                                                                                                                                   123.99
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 2550.4 SGR 776.3 SG3 177.3
RRT .8391 RRF .9653 RTF .9053
SGB 2665.9 R25 .3372 R13 .9198
SGI 2634.4 SG2 408.8 THA 14.69
     TOE 1.3284 TRA-1.2113 TC3-1.4595 BAU .6952
                                                                                                                               ST 1399.6 SR 187.1 SS 530.4
CRT .9921 CRS -.9919 CST -.9795
    ROE .1809 RRA -.1123 RC3 -.6518 FAU .05800
                                                                                                                               ESA 1504.9 MSA 101.1 SSA 13.9
EL1 1411.9 EL2 23.2 ALF 7.56
    FOE .9929 FRA - .2951 FC3-1 .5454 BSP
                                                         7966
-580
    BOE 1.3406 BRA 1.2164 BCS 1.5984 FSP
LAUNCH DATE JUL 27 1967
                                                                             FLIGHT TIME 114.00
                                                                                                                                          ARRIVAL DATE NOV 18 1967
                                                                            DISTANCE 339.489
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 27.663 GAL -10.50 AZL 85.19 MCA 160.77 SMA 135.17 ECC .21932 INC 4.8078 V1 29.325
RP 107.56 LAP 1.58 LOP 104.13 VP 38.548 GAP 4.68 AZP 94.54 TAL 225.73 TAP 26.50 RCA 105.52 APO 164.81 V2 35.233
RC 112.475 GL 23.09 GP -49.39 ZAL 146.81 ZAP 119.28 ETS 320.91 ZAE 119.77 ETE 219.82 ZAC 120.09 ETC 347.90 CLP-138.71
   PLANETOCENTRIC CONTC
    C3 33.884 VHL 5.814 DLA 33.68 RAL 159.36 RAD 6568.3 VEL 12.457 PTH 2.25 VHP 6.646 DPA -30.75 RAP 132.34 ECC 1.5563 LNCH AZHTH LNCH TIME L-I TIME TNU LAT INU LONG INU RT ASC INU AZHTH INU TIME PO CST TIM INU 2 LAT INU 2 LONG
                                                                                 37.94
                                                                    176.85
                                                                                                    61.76 18 25 23
                                                                                                                                  3524.1
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        70.95 17 16 39 4124.05
                                                    -19.16
                  22 4 10
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4124.05
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       109.05
                                                    -19.15
                                                                                                      61.76 18 25 23
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        70.95
                    17 16 39
                                                    -19.16
                                                                    176.85
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                                  3207.68
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58.83 22 21 9
       110.00
                   22 54 16 3054.50
21 25 44 3325.23
                    22 54 16
                                    3054.50
                                                    -23.62
                                                                      99.11
                                                                                     40.37
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                                                                                                                                                                    91.43
       110.00
                                                    -14.81
                                                                    115.15
                                                                                     35.35
                                                                                                                                   2725.2
                                                                                                                                                  -18.83
                                                                                                                                                                  108.34
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 2683.9 SGR 764.4 SG3 154.8
RRT .8180 RRF .9613 RTF .9084
SGB 2790.6 R23 .3455 R13 .9218
SG1 2757.6 SG2 427.9 THA 13.44
                                                                                                                               ST 1668.7 SR 244.5 SS 579.6
CRT .9818 CRS -.9990 CST -.9835
    TOE 1.6454 TRA-1.1006 TC3-1.4582 BAU .7164
    RDE .2468 RRA -.0372 RC3 -.6221 FAU .04938
    FOE 1.0217 FRA -.1570 FC3-1.2646 BSP 8354
BOE 1.6638 BRA 1.1013 BC3 1.5853 FSP -510
                                                                                                                              LSA 1780.1 MSA 107.0 SSA 10.1
EL1 1685.9 EL2 46.0 ALF 8.19
    BOE 1.6638 BRA 1.1013 BC3 1.5853 FSP
LAUNCH DATE JUL 27 1967
                                                                             FLIGHT TIME 116.00
                                                                                                                                          ARRIVAL DATE NOV 20 1967
   RELICCENTRIC CONIC
                                                                             DISTANCE 345.486
    RL 151.93 LAL -.00 LOL 303.30 VL 27.592 GAL -10.26 AZL 83.65 MCA 163.98 SMA 134.63 ECC .21843 INC 6.3506 V1 29.325 RP 107.54 LAP 1.75 LOP 107.37 VP 38.503 GAP 4.97 AZP 96.11 TAL 224.38 TAP 28.36 RCA 105.22 APO 164.04 V2 35.239 RC 114.720 GL 29.61 GP -54.20 ZAL 141.21 ZAP 117.60 ETS 315.49 ZAE 115.40 ETE 219.59 ZAC 119.07 ETC 345.09 CLP-142.39
   PLANETOCENTRIC CONIC
    C3 36.938 VHL 6.078 DLA 38.94 RAL 164.55 RAD 6568.4 VEL 12.582 PTH 2.28 VHP 7.411 DPA -35.13 RAP 129.94 ECC 1.6079
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  46.20
                                                                                                               18 0 33
24 4 40
                                                                                                                                   3690.2
                                                                                                                                                                184.38
                                   4290.23
                                                                                                     56.43
                                                                                                                                                  -25.26
                                                                    191.33
        62.OA
                    16 49 2
                                                     -21.00
                   23 13 14 3086.29
                                                    -20.99
                                                                    100.04
                                                                                     46.19
                                                                                                      56.42
                                                                                                                                    2486.3
                                                                                                                                                                    93.10
       117.92
                                                                                                                                                   -25.25
                                   4290.23
                                                                    191.33
                                                                                                                18 0 33
                                                                                                                                    3690.2
        62.08
                   10 49 2
23 13 14
                                                    -21.00
                                                                                     46.20
                                                                                                      56.43
                                                                                                                                                  -25.26
                                                                                                                                                                  184.38
       117.92
                                    3086.29
                                                    -20.99
                                                                    100.04
                                                                                     46.19
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                                    4290.23
                                                    -21.00
                                                                    191.33
                                                                                     46.20
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                                                                                                                                                   -25.26
        62.08
                    16 49 2
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                                                                    100.04
                    23 13 14
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       117.92
                                    3086.29
                                                    -20.99
                                                                                                                                                   -25.25
                                                                                                                                                                    93.10
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 2822.5 SGR 731.3 SG3 130.8
RRT .7757 RRF .9468 RTF .9139
SGB 2915.7 R23 .3471 R13 .9257
                                                                                                                               ST 2011.7 SR 287.0 SS 630.6
CRT .9692 CRS -.9956 CST -.9875
    TOE 2.1035 TRA -.9206 TC3-1.3741 BAU .7310
     ROE .3028 RRA .0611 RC3 -.5506 FAU .04035
    FDE 1.0440 FRA -.0243 FC3 -.9457 85P 8773
                                                                                                                               LSA 2124.5 MSA 115.6 SSA 7.0
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BOE 2.1252 BRA .9226 BC3 1.4803 FSP -438

5G1 2880.5 SG2 452.3 THA 11.66

EL1 2030.8 EL2 70.0 ALF 7.88

ARRIVAL DATE NOV 22 1967

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LAUNCH DATE JUL 27 1967
                                                                      DISTANCE 351.450
  HELIOCENTRIC CONIC
   RL 151.93 LAL -.00 LOL 303.30 VL 27.521 GAL -10.01 AZL 81.36 MCA 167.18 SMA 134.10 ECC .21757 INC 8.6409 VI 29.325
RP 107.52 LAP 1.91 LOP 110.62 VP 38.456 GAP 5.26 AZP 98.43 TAL 222.99 TAP 30.17 RCA 104.92 APO 163.27 V2 35.244
                       37.78 GP -60.12 ZAL 133.84 ZAP 114.78 ETS 308.96 ZAE 110.05 ETE 218.41 ZAC 117.98 ETC 340.97 CLP-147.29
   RC 116.961 GL
   PLANETOCENTRIC CONIC
                                                                                               2.34 VHP 8.605 DPA -40.26 RAP 126.04 ECC 1.7271
    C3 44.179 VHL 6.647 OLA 45.17 RAL 172.20 RAD 6568.7 VEL 12.866 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                -21.88
                                                              205.01
                                                                             58.69
                                                                                            49.43 17 55 50
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                  16 41 51 4438.72
0 25 20 3028.16
                                 4438.72
       53.20
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                                                                                                                        2428.2
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                                                -21.86
                                                                95.68
      126.60
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                                                               205.01
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                                                -21.88
       53.20
                   16 41 51
                                 4438.72
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                                                                                                                                      -26.92
                                                                                                                                                      89.29
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      126.60
                   0 25 20 3028.16
                                                -21.66
                                                                95.68
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                                                -21-86
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 2966.3 SGR 652.8 SG3 105.7
RRT .6663 RRF .8856 RTF .9237
SGB 3037.3 R23 .3398 R13 .9322
SGI 2998.9 SG2 481.5 THA 8.57
                                                                                                                    ST 2430.9 SR 265.0 SS 679.6
    TOE 2.8075 TRA -.6127 TC3-1.1607 BAU
                                                    .7281
   RDE .2955 RRA .1943 RC3 -.4153 FAU .03084
FDE 1.0590 FRA .1067 FC3 -.6043 BSP 9130
BDE 2.8230 BRA .6427 BC3 1.2328 FSP -357
                                                                                                                    CRT .9331 CRS -.9731 CST -.9908
                                                                                                                    LSA 2534.8 MSA 127.9 SSA
                                                                                                                                                         4.5
                                                                                                                    EL1 2443.5 EL2 94.8 ALF
                                                                                                                               ARRIVAL DATE NOV 24 1967
                                                                      FLIGHT TIME 120.00
LAUNCH DATE JUL 27 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 357.364
   RL 151.93 LAL -.00 LOL 303.30 VL 27.449 GAL -9.74 AZL 77.59 HCA 170.34 SMA 133.56 ECC .21671 INC12.4102 V1 29.325
RP 107.51 LAP 2.07 LOP 113.86 VP 38.409 GAP 5.52 AZP 102.24 TAL 221.56 TAP 31.90 RCA 104.62 APO 162.51 V2 35.248
RC 119.197 GL 47.51 GP -67.26 ZAL 124.49 ZAP 110.65 ETS 299.65 ZAE 103.22 ETE 214.28 ZAC 116.99 ETC 333.60 CLP-155.83
   PLANETOCENTRIC CONIC
   C3 62.161 VHL 7.884 DLA 51.67 RAL 184.13 RAD 6569.2 VEL 13.547 PTH 2.48 VHP 10.683 DPA -45.92 RAP 119.27 ECC 2.0230 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            77.36
                                                                                             41.32 18 17 25
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                  17 0 51 4593.32
                                                 -20.06
                                                              218.26
       44.79
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                                3042.68
                                                 -20.05
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                    1 41 31
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                                 3042.68
                                                                95.19
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 3105.8 SGR 531.4 SG3 81.5
RRT .2230 RRF .3239 RTF .9421
SGB 3151.0 R23 .3158 R13 .9442
SG1 3108.2 SG2 517.6 THA 2.25
                                                                                                                    ST 2841.2 SR 123.6 SS 715.1
CRT -.1137 CRS .0000 CST -.9935
    TDE 3.9092 TRA -. 0415 TC3 -. 7955 BAU . 6849
    RDE -.0187 RRA .3483 RC3 -.2156 FAU .02122
    FOE 1.0597 FRA .2394 FC3 -.2956 BSP 9551
                                                                                                                    LSA 2928.7 MSA 146.0 SSA 2.8
                                                                                                                    EL1 2841.2 EL2 122.8 ALF 179.72
                                                                                                                              ARRIVAL DATE NOV 26 1967
                                                                      FLIGHT TIME 122.00
LAUNCH DATE JUL 27 1967
                                                                     DISTANCE 363.181
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 27.377 GAL -9.44 AZL 70.27 HCA 173.42 SMA 133.03 ECC .21574 INC19.7509 V1 29.325 RP 107.50 LAP 2.22 LOP 117.11 VP 38.361 GAP 5.76 AZP 109.61 TAL 220.06 TAP 33.48 RCA 104.33 APO 161.73 V2 35.252 RC 121.426 GL 57.46 GP -74.83 ZAL 113.50 ZAP 105.17 ETS 279.71 ZAE 93.85 ETE 198.96 ZAC 116.73 ETC 314.67 CLP-178.68
   PLANETOCENTRIC CONIC
    C3 116.976 VHL 10.816 DLA 55.81 RAL 202.10 RAD 6570.2 VEL 15.437 PTH 2.76 VHP 14.932 DPA -51.03 RAP 106.64 ECC 2.9251
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      4167.4
                 17 57 36 4767.39
3 8 7 3151.64
17 57 36 4767.39
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                                                 -13.42
                                                              228.73
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       140.33
                                                 -13.41
                                                                98.44
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                                                                                                                                                     224.25
                                                                             102.78
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                                                -13.42
                                                               228.73
        39.67
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                   3 8 7 3151.64
17 57 36 4767.39
3 8 7 3151.64
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                                                -13.41
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                                                -13.41
                                                                98.44
                                                                             102.76
                                                                                             35.29
       140.33
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2812.9 SR 952.8 SS 745.8
CRT -.9842 CRS ..9654 CST -.9963
                                                                  SCT 3099.4 SCR 968.4 SC3 61.7
RRT -.8087 RRF -.6654 RTF ..9760
SGB 3243.3 R23 -.2543 R13 -.9655
    TDE 5.2698 TRA 1.2166 TC3 -.3177 BAU .4979
    RDE-1.7958 RRA .1865 RC3 -.0202 FAU .01104
FDE 1.0676 FRA .4229 FC3 -.0817 88P 9690
BDE 5.5674 BRA 1.2308 BC3 .3184 FSP -208
                                                                                                                    LSA 3057.0 MSA 176.9 SSA 1.5
                                                                  SG1 3196.1 SG2 551.7 THA 165.36
                                                                                                                    EL1 2965.6 ELZ 160.2 ALF 161.51
                                                                                                                               ARRIVAL DATE NOV 28 1967
                                                                       FLIGHT TIME 124,00
LAUNCH DATE JUL 27 1967
                                                                      DISTANCE 368.696
    RL 151.93 LAL -.00 LOL 303.30 VL 27.304 GAL -9.08 AZL 51.30 MCA 176.23 SMA 132.51 ECC .21414 INC38.6962 VI 29.325
RP 107.49 LAP 2.36 LOP 120.35 VP 38.312 GAP 5.91 AZP 128.64 TAL 218.40 TAP 34.63 RCA 104.13 APO 160.88 V2 35.255
RC 123.648 GL 61.23 GP -73.01 ZAL 102.41 ZAP 98.76 ETS 221.96 ZAE 78.32 ETE 145.17 ZAC 119.64 ETC 255.17 CLP 121.41
   PLANETOCENTRIC CONIC
    C3 369.796 VHL 19.230 DLA 51.41 RAL 219.99 RAD 6572.0 VEL 22.161 PTH 3.24 VHP 26.183 DPA -50.54 RAP 82.51 ECC 7.0859
    C3 369.796 VML 19.29 DLA 31.41 RAL 219.59 RAD 0512.6 TELL 19.101 STATE OF CST TIM INJ 2 LAT INJ 2 LONG 145.12 19 24 56 4906.98 -3.46 230.72 127.25 38.68 20 46 43 4307.0 -9.68 226.08 134.88 4 3 34 3360.98 -3.44 108.13 127.23 38.68 4 59 35 2761.0 -9.66 103.49
                                                                                                                                                     225.OA
                                                                                              38.58 20 46 43
                                                                                                                         4307.0
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                                                  -3.46
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                                  4906.98
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       134.88
                     4 3 34
                                  3360.98
                                                  -3.44
                                                               108.13
                                                                             127.23
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                                                                                              38.68
                                  4906.98
                                                  -3.46
                                                               230.72
                                                                             127.25
        45.12
                    19 24 56
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                                                                                                                         2761.0
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                                                                                              38.68
                                                                                                        4 59 35
                                                               108.13
       134.88
                     4 3 34
                                 3360.98
                                                  -3.44
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 1300.8 SGR 2945.9 SG3 49.5
RRT -.9036 RRF -.9769 RTF .9730
                                                                                                                     ST 725.8 SR 2405.3 SS 900.4
     TOE 2.1533 TRA 2.3688 TC3 -.0045 BAU
                                                     .5049
                                                                                                                     CRT -.9641 CRS .9939 CST -.9876
     RDE-7.8815 RRA-3.6321 RC3 -.1020 FAU-.00619
                                                                                                                 FOE 1.2642 FRA .8976 FC3 .0145 BSP 9592
BOE 8.1704 BRA 4.3363 BC3 .1021 FSP -160
                                                                  SGB 3220.3 R23 -.1451 R13 -.9888
                                                                                                                     EL1 2505.6 EL2 184.9 ALF 106.31
                                                                   SG1 3178.6 SG2 516.4 THA 112.38
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FLIGHT TIME 118.00

ARRIVAL DATE NOV 30 1967

EL1 2092.5 EL2 223.4 ALF 175.85

LAUNCH DATE JUL 27 1967

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DISTANCE 377.741
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 27.232 GAL -9.43 AZL 173.11 MCA 182.51 SMA 131.99 ECC .22154 INC83.1129 VI 29.325 RP 107.48 LAP 2.49 LOP 123.60 VP 38.262 GAP 7.07 AZP 6.89 TAL 218.29 TAP 40.80 RCA 102.75 APO 161.23 VZ 35.257 RC 125.861 GL -45.23 GP 51.73 ZAL 96.55 ZAP 95.70 ETS 177.12 ZAE 54.12 ETE 247.86 ZAC 104.45 ETC 136.96 CLP 99.22
   PLANETOCENTRIC CONIC
    C31411.027 VHL 37.564 DLA -49.93 RAL 178.23 RAD 6573.2 VEL 39.145 PTH
                                                                                                   3.55 VHP 47.742 DPA 59.75 RAP
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 46 6 2333.82
                                                   -1.03
                                                                  63.62
                                                                               89.08
                                                                                              139.92
                                                                                                             5 24 59
                                                                                                                            1733.6
                                                                                                                                              5.09
        46.99
                                                                 303.86
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139.92 13 22 46
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      133.01
                                   814.93
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  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 660.1 SR 2139.4 SS 1949.4
CRT -.9731 CRS -.9999 CST .9707
LSA 2964.8 MSA 152.2 SSA 1.8
    TOE 4.1635 TRA 2.5190 TC3 -. 0886 BAU 3.8326
                                                                     SGT 1096.8 SGR 2558.3 SG3 47.4
    RD-14.0111 RRA-1.2752 RC3 .1828 FAU-.05977
FDE-3.0963 FRA -.2145 FC3 .0367 BBP 8335
BDE14.6166 BRĀ 2.8233 BC3 .2032 FSP -149
                                                                     RRT -.8739 RRF .9988 RTF -.8530
                                                                     SGB 2783.5 R23 -.1113 R13 .9934
                                                                     SG1 2738.6 SG2 498.1 THA 111.28
                                                                                                                         EL1 2234.2 EL2 145.7 ALF 106.79
                                                                                                                                    ARRIVAL DATE DEC 2 1967
                                                                         FLIGHT TIME 128.00
LAUNCH DATE JUL 27 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 382.313
   RL 151.93 LAL -.00 LOL 303.30 VL 27.160 GAL -8.87 AZL 126.45 MCA 184.41 SNA 131.47 ECC .21773 INC36.4544 V1 29.325
RP 107.48 LAP 2.62 LOP 126.85 VP 38.212 GAP 6.94 AZP 53.63 TAL 216.22 TAP 40.63 RCA 102.65 APO 160.10 V2 35.258
RC 128.066 GL -61.33 GP 74.17 ZAL 102.75 ZAP 102.06 ETS 143.64 ZAE 82.40 ETE 218.53 ZAC 91.60 ETC 101.09 CLP 139.98
  PLANETOCENTRIC CONTC
    C3 330.236 WHL 18.172 DLA -55.55 RAL 147.52 RAD 6571.9 VEL 21.250 PTH 3.20 VHP 22.169 DPA 80.70 RAP 295.78 ECC 6.4348 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
39.98 2 22 37 2284.14
                                                                                 54.54
                                                                                                             3 0 41
                                                                 65.26
                                                                                              145.44
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      140.02
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                                   671.48
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                   11 27 42
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145.44 11 38 54
                    2 22 37
       30.08
                                                     4.31
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                                                                                 54.54
                                                                                                                             1684.1
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  DIFFERNTIAL CORRECTIONS
                                                     4.33
                                                                 295.37
                                                                                 54.56
                                                                                                                               71.5
                                                                                                                                             10.69
                                                                                                                                                           291.17
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 1006.7 SGR 3302.0 SG3 57.0
RRT .8639 RRF .9829 RTF .9404
SGB 3452.1 R23 -.1432 R13 .9891
                                                                                                                        ST 955.9 SR 2303.2 SS 1013.2
CRT .9755 CRS -.9960 CST -.9913
    TOE-3.0155 TRA -.5910 TC3 -.0088 BAU .4263
    ROE-6.9219 RRA-4.010 RC3 .0961 FAU-.00194
FOE-1.6313 FRA -.7390 FC3 .0051 88P 10217
BOE 7.9503 BRA 4.4405 BC3 .0966 FSP -175
                                                                                                                        LSA 2684.1 MSA 202.1 SSA
                                                                     SG1 3417.1 SG2 489.9 THA 74.93
                                                                                                                        EL1 2486.1 EL2 194.8 ALF 67.82
                                                                                                                                  ARRIVAL DATE DEC 4 1967
                                                                        FLIGHT TIME 130.00
LAUNCH DATE JUL 27 1967
                                                                        DISTANCE 387.903
  HELIOCENTRIC CONIC
   RL 151.93 LAL -.00 LOL 303.30 VL 27.087 GAL -8.51 AZL 111.99 MCA 187.33 SMA 130.96 ECC .21668 INC21.9889 V1 29.325
RP 107.48 LAP 2.74 LOP 130.10 VP 38.161 GAP 7.10 AZP 68.17 TAL 214.55 TAP 41.88 RCA 102.59 APO 159.34 VZ 35.259
RC 130.261 GL -59.55 GP 69.76 ZAL 109.22 ZAP 110.18 ETS 91.24 ZAE 95.96 ETE 168.47 ZAC 89.35 ETC 48.77 CLP-175.55
   PLANETOCENTRIC CONIC
    C3 135.387 VHL 11.636 DLA -49.96 RAL 141.41 RAO 6570.5 VEL 16.022 PTH 2.83 VHP 13.684 DPA 75.47 RAP 221.30 ECC 3.2281
    LNCH AZHTH LNCH TIME L-I TIME INJ. LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 3386.7 SGR 1327.2 SG3 75.5
RRT .9203 RRF .8364 RTF .9851
SGB 3637.5 R23 -.2232 R13 .9732
SGI 3604.6 SG2 487.9 THA 20.22
                                                                                                                        ST 2176.1 SR 513.4 SS 754.6
CRT .8917 CR5 -.8428 CST -.9952
    TOE-4.1102 TRA-3.4802 TC3 -.2259 BAU .4121
    ROE -.6913 RRA-1.6736 RC3 -.0281 FAU .01457
    FOE-1.2464 FRA -.7616 FC3 -.0932 BSP 11115
                                                                                                                       LSA 2347.2 MSA 243.0 SSA 1.6
                                                                                                                        EL1 2224.2 EL2 227.4 ALF 12.01
    BOE 4.1679 BRA 3.8617 BC3 .2277 FSP -240
                                                                                                                                   ARRIVAL DATE DEC 6 1967
                                                                         FLIGHT TIME 132.00
LAUNCH DATE JUL 27 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 393.681
   RL 151.93 LAL -.00 LOL 303.30 VL 27.015 GAL -8.18 AZL 105.90 HCA 190.44 SMA 130.46 ECC .21623 INC15.9039 V1 29.325 RP 107.48 LAP 2.85 LOP 133.35 VP 38.110 GAP 7.32 AZP 74.35 TAL 212.96 TAP 43.40 RCA 102.25 APO 158.67 V2 35.259 RC 132.447 GL -54.94 GP 60.72 ZAL 114.17 ZAP 117.94 ETS 73.24 ZAE 104.68 ETE 153.82 ZAC 89.35 ETC 31.00 CLP-163.34
   PLANETOCENTRIC CONIC
    C3 80.143 VHL 8.952 DLA -44.65 RAL 142.14 RAD 6569.6 VEL 14.195 PTH 2.59 VHP 10.339 DPA 66.43 RAP 201.23 ECC 2.3189
    ENCH AZHTH ENCH TIME E-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RIG-COURSE EXECUTION ACCORDE

SGT 3710.2 SGR 513.3 SG3 97.7

RRT .4758 RRF .2096 RTF .9561

SGB 3745.6 R23 -2866 R13 .9538

SGI 3718.4 SG2 450.5 THA 3.82
                                                                                                                        ST 2087.0 SR 269.4 SS 704.7
CRT -.5558 CRS .6984 CST -.9831
    TDE-2.9388 TRA-3.3484 TC3 -.5995 BAU .6426
    RDE .3625 RRA -.5077 RC3 .0175 FAU .02474
FDE-1.1896 FRA -.7624 FC3 -.2673 BSP 11468
                                                                                                                        LSA 2204.8 MSA 252.3 SSA 2.5
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FLIGHT TIME 126.00

BOE 2.9611 BRA 3.3867 BC3 .5998 FSP -313

ARRIVAL DATE DEC 8 1967

LAUNCH DATE JUL 27 1967 DISTANCE 399.510 'HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.944 GAL -7.85 AZL 102.61 HCA 193.62 SMA 129.97 ECC .21606 INC12.6121 V1 29.325
RP 107.48 LAP 2.95 LOP 136.60 VP 38.059 GAP 7.55 AZP 77.73 TAL 211.38 TAP 44.99 RCA 101.89 APO 158.05 V2 35.258 RC 134.624 GL -50.54 GP 52.58 ZAL 117.65 ZAP 124.78 ETS 66.17 ZAE 110.94 ETE 150.85 ZAC 89.57 ETC 24.24 CLP-159.82 PLANETOCENTRIC CONIC 2.44 VHP 8.725 DPA 58.27 RAP 193.24 ECC 1.9378 C3 56.984 VHL 7.549 DLA -40.45 RAL 144.27 RAD 6569.0 VEL 13.354 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 127.14 3 49 12 127.13 11 41 43 3 19 28 17.35 31.32 32.76 1184.9 22.05 24.86 1784.88 50.61 5208.7 22.06 266.42 17.36 272.87 32.78 5808.73 120.19 10 4 54 22.05 31.32 32.76 127.14 3 49 12 1184.9 24.86 1784.88 3 19 28 17.35 59.81 127.13 11 41 43 22.06 266.42 32.78 5208.7 5808.73 120.19 10 4 54 17.36 272.87 3 49 12 1184.9 22.05 24.86 32.76 127.14 3 49 12 127.13 11 41 43 59.81 3 19 28 1784.88 17.35 31.32 32.78 5208.7 22.06 266.42 272.87 120.19 10 4 54 5808.73 17.36 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RIG-COURSE EXECUTION ACCORD.

SCT 3618.2 SGR 416.5 SG3 118.6

RRT -.1028 RRF -.4223 RTF .9367

SGB 3640.9 R23 .3267 R13 -.9371

SGI 3818.5 SG2 414.3 THA 179.35 ST 1984.3 SR 356.3 SS 690.3 CRT -.7976 CRS .9161 CST -.9725 TOE-2.3195 TRA-3.0554 TC3 -.9805 BAU .7488 ROE .4627 RRA -.1996 RC3 .0679 FAU .03243 FDE-1.1705 FRA -.7389 FC3 -.4927 BSP 11792 BDE 2.3652 BRA 3.0619 BC3 .9829 FSP -380 LSA 2115.5 MSA 256.0 SSA 3.4 EL1 2004.7 EL2 212.7 ALF 171.76 ARRIVAL DATE DEC 10 1967 LAUNCH DATE JUL 27 1967 FLIGHT TIME 136,00 HELIOCENTRIC CONIC **DISTANCE 405.355** RL 191.93 LAL -.00 LOL 303.30 VL 26.873 GAL -7.53 AZL 100.55 HCA 196.82 SHA 129.48 ECC .21606 INC10.5514 VI 29.325
RP 107.48 LAP 3.04 LOP 139.85 VP 38.007 GAP 7.78 AZP 79.89 TAL 209.79 TAP 46.61 RCA 101.51 APO 157.46 VZ 35.256
RC 136.791 GL -46.80 GP 45.75 ZAL 119.95 ZAP 130.60 ETS 62.11 ZAE 115.53 ETE 151.22 ZAC 89.52 ETC 20.58 CLP-158.85 PLANETOCENTRIC CONIC 2.35 VHP 7.855 DPA 51.25 RAP 189.40 ECC 1.7371 C3 44.786 VHL 6.692 DLA -37.23 RAL 146.71 RAD 6568.7 VEL 12.890 PTH LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
64.74 3 52 59 1656.69 18.39 21.43 30.74 122.96 4 20 35 1056.7 22.60 14.58 122.95 11 27 48 122.96 4 20 35 122.95 11 27 48 122.96 4 20 35 122.95 11 27 48 274.34 30.75 5217.1 22.61 267.49 115.26 9 5/1 51 5817.06 18.41 1056.7 22.60 14.58 3 52 50 18.39 21.43 30.74 64.74 1656.69 9 50 51 3 52 59 274.34 30.75 5217.1 22.61 267.49 115.26 5817.06 18.41 18.39 30.74 1056.7 .22.60 14.58 21.43 64.74 1656.69 30.75 5217.1 22.61 267.49 274.34 115.26 9 50 51 5817.06 18.41 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3913.7 SGR 405.6 SG3 135.9 RRT -.3380 RRF -.6422 RTF .9228 SGB 3934.7 R23 .3477 R13 -.9240 SG1 3916.2 SG2 381.5 THA 177.97 ST 1915.7 SR 371.2 SS 680.2 CRT -.8361 CRS .9323 CST -.9636 TOE-1.9680 TRA-2.8205 TC3-1.3530 BAU .8122 RDE .4320 RRA -.0981 RC3 .0963 FAU .03804 FDE-1.1408 FRA -.6908 FC3 -.7352 BSP 12120 BDE 2.0148 BRA 2.8222 BC3 1.3565 FSP -437 LSA 2050.3 MSA 257.8 SSA ELI 1940.9 EL2 201.0 ALF 170.70 ARRIVAL DATE DEC 12 1967 FLIGHT TIME 138.00 LAUNCH DATE JUL 27 1967 DISTANCE 411.201 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.802 GAL -7.19 AZL 99.14 HCA 200.04 SHA 129.01 ECC .21621 INC 9.1356 VI 29.325 RP 107.49 LAP 3.12 LOP 143.10 VP 37.955 GAP 8.02 AZP 81.41 TAL 208.19 TAP 48.22 RCA 101.11 APO 156.90 V2 35.254 RC 138.949 GL -43.70 GP 40.13 ZAL 121.32 ZAP 135.49 ETS 59.22 ZAE 118.90 ETE 152.74 ZAC 89.12 ETC 18.14 CLP-158.86 PLANETOCENTRIC CONIC CS 37.350 VML 6.111 OLA -34.80 RAL 149.21 RAD 6568.5 VEL 12.598 PTH 2.29 VHP 7.358 DPA 45.28 RAP 187.54 ECC 1.6147 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.70 119.79 4 51 18 119.78 11 15 29 943.4 29.70 4 25 35 9 38 10 12.69 68.88 1543.41 18.88 5238.7 22.71 18.90 111.12 5838.71 276.39 29.71 119.79 4 51 18 119.78 11 15 29 22.70 943.4 4 25 35 1543.41 18.88 12.69 29.70 68.88 269.28 5238.7 22.71 9 38 10 111.12 5838.71 18.90 276.39 29.71 119.79 4 51 18 119.78 11 15 29 22.70 943.4 68.88 4 25 35 1543.41 18.88 12.69 29.70 5238.7 22.71 9 38 10 5838.71 18.90 276.39 29.71 111.12 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY SGT 4006.7 SGR 390.9 SG3 148.7 RRT -.4227 RRF -.7098 RTF ..9124 SGB 4025.7 R23 .3544 R13 -.9137 SG1 4010.2 SG2 354.0 THA 177.62 ST 1868.7 SR 363.8 SS 668.4 CRT -.8482 CRS .9662 CST -.9560 TOE-1.7456 TRA-2.6274 TC3-1.7118 BAU .8564 RDE .3674 RRA -.0586 RC3 .1049 FAU .04173 FDE-1.0975 FRA -.6236 FC3 -.9674 BSP 12415 LSA 2001.1 MSA 258.7 SSA ELI 1894.3 ELZ 190.1 ALF 170.53 BOE 1.7881 BRA 2.6280 BC3 1.7150 FSP -479 ARRIVAL DATE DEC 14 1967 LAUNCH DATE JUL 27 1967 FLIGHT TIME 140.00 DISTANCE 417.043 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.732 GAL -6.85 A7L 98.10 MCA 203.26 SMA 128.54 ECC .21650 INC 8.0986 VI 29.325 RP 107.50 LAP 3.19 LOP 146.35 VP 37.902 GAP 8.26 AZP 82.55 TAL 206.58 TAP 49.84 RCA 100.71 APO 156.36 V2 35.251 RC 141.095 GL -41.11 GP 35.51 ZAL 121.97 ZAP 139.60 ETS 56.92 ZAE 121.38 ETE 154.63 ZAC 88.37 ETC 16.31 CLP-159.31 PLANETOCENTRIC CONIC C3 32.335 VHL 5.686 DLA -32.98 RAL 151.71 RAD 6568.3 VEL 12.398 PTH 2.24 VHP 7.069 DPA 40.19 RAP 186.80 ECC 1.5322 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.38 5 20 47 117.37 11 4 48 842.3 357.68 4 56 45 1442.29 9 27 0 5867.05 29.37 72.35 19.13 4.96 5267.0 22.66 271.45 278.73 107.65 19:15 29.38 5 20 47 842.3 22.65 357.68 72.35 4 56 45 1442.29 19.13 4.96 29.37 117.36 117.38 5 20 47 117.37 11 4 48 122.07 6 45 20 112.97 12 23 33 5267.0 271.45 107.65 9 27 0 5867.05 19.15 278.73 29.38 303.11 145.5 16.67 25.45 110.00 8 32 55 745.46 12.52 309.76 262.50 5011.9 28.92 110.00 32.88 10 50 1 5611.68 26.04 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4102.0 SCR 373.3 SC3 157.7 RRT -.4515 RRF -.7225 RTF .9045 SCB 4118.9 R23 .3490 R13 -.9057 ST 1840.0 SR 352.5 SS 656.2 CRT -.8551 CRS .9743 CST -.9496 TDE-1.5985 TRA-2.4608 TC3-2.0614 BAU .8922 RDE .3495 RRA -.0403 RC3 .1002 FAU .04393 FDE-1.0475 FRA -.5459 FC3-1.1762 BSP 12729 LSA 1968.1 MSA 258.5 SSA 6.5 EL1 1864.7 EL2 180.3 ALF 170.61 SG1 4105.5 SG2 332.8 THA 177.63 BOE 1.6363 BRA 2.4611 BC3 2.0638 FSP -509

FLIGHT TIME 134.00

ARRIVAL DATE DEC 16 1967

EL1 1864.3 EL2 146.1 ALF 170.64

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LAUNCH DATE JUL 27 1967
                                                                     FLIGHT TIME 142.00
                                                                     DISTANCE 422.878
  HELIOCENTRIC CONIC
   RL 151.93 LAL -.00 LOL 303.30 VL 26.662 GAL -6.50 AZL 97.30 MCA 206.49 SMA 128.07 ECC .21692 INC 7.3021 V1 29.325 RP 107.51 LAP 3.25 LOP 149.60 VP 37.850 GAP 8.50 AZP 83.46 TAL 204.96 TAP 51.45 RCA 100.29 APO 155.86 V2 35.247
    RC 143.232 GL -38.94 GP 31.71 ZAL 122.02 ZAP 143.07 ETS 55.03 ZAE 123.22 ETE 156.55 ZAC 87.33 ETC 14.86 CLP-159.98
   PLANETOCENTRIC CONIC
    C3 28.700 VHL 5.357 DLA -31.64 RAL 154.24 RAD 6568.2 VEL 12.251 PTH 2.20 VHP 6.904 DPA 35.82 RAP 186.76 ECC 1.4723
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                RIGT 4200.3 SGR 358.5 SG3 164.1

RRI -.4587 RRF -.7109 RTF .8987

SGB 4215.6 R23 .3334 R13 -.8997

SGI 4203.5 SG2 318.3 THA 177.74
                                                                                                                  ST 1827.5 SR 344.1 SS 646.2
CRT -.8631 CRS .9806 CST -.9448
    TOE-1.5006 TRA-2.3099 TC3-2.4061 BAU .9238
   ROE .3216 RRA -.0289 RC3 .0884 FAU .04510
                                                                                                                  LSA 1951.8 MSA 257.3 SSA 7.7
    FDE -.9988 FRA -.4660 FC3-1.3604 BSP 13091
   BDE 1.5347 BRA 2.3101 BC3 2.4078 FSP -533
                                                                                                                  ELI 1851.6 ELZ 171.5 ALF 170.69
                                                                                                                             ARRIVAL DATE DEC 18 1967
                                                                     FLIGHT TIME 144.00
LAUNCH DATE JUL 27 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 428.672
   RL 151.93 LAL -.08 LOL 303.30 VL 26.593 CAL -6.15 AZL 96.67 HCA 209.72 SMA 127.62 ECC .21755 INC 6.6678 VI 29.325
RP 107.53 LAP 3.30 LOP 152.85 VP 37.797 CAP 8.74 AZP 84.20 TAL 203.35 TAP 55.07 RCA 99.86 APO 155.39 VZ 35.243
RC 145.356 GL -37.07 GP 28.53 ZAL 121.63 ZAP 146.06 ETS 53.47 ZAE 124.59 ETE 158.38 ZAC 86.08 ETC 13.67 CLP-160.78
  PLANETOCENTRIC CONIC
                                                                                              2.18 VHP 6.820 DPA 32.02 RAP 187.18 ECC 1.4270
   C3 25.945 VHL 5.094 DLA -30.66 RAL 156.79 RAD 6568.0 VEL 12.138 PTH
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      110.00
  DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SGT 5000.9 SGR 437.6 SG3 221.8
RRT -.6794 RRF -.8231 RTF .9352
                                                                                                                  ST 2185.9 SR 402.8 SS 828.7
CRT -.9113 CRS .9883 CST -.9630
    TOE-1.7392 TRA-2.4727 TC3-3.2150 BAU 1.1165
   ROE .3578 RRA .0381 RC3 .1614 FAU .05828
FOE-1.2273 FRA -.6662 FC3-1.9447 BSP 20863
BOE 1.7756 BRA 2.4730 BC3 3.2190 FSP -1113
                                                                 SGB 5020.1 R23 .2523 R13 -.9362
SG1 5009.8 SG2 320.6 THA 176.58
                                                                                                                  LSA 2358.0 MSA 258.7 SSA
                                                                                                                  EL1 2216.6 EL2 163.5 ALF 170.41
                                                                                                                            ARRIVAL DATE DEC 20 1967
LAUNCH DATE JUL 27 1967
                                                                     FLIGHT TIME 146.00
                                                                     DISTANCE 434.523
  HELIOCENTRIC CONIC
   RL 151.93 LAL -.00 LOL 303.30 VL 26.525 GAL -5.77 AFL 96.15 MCA 212.95 SMA 127.18 ECC .21819 INC 6.1479 VI 29.325
RP 107.54 LAP 3.34 LOP 156.10 VP 37.744 GAP 8.98 AZP 84.84 TAL 201.68 TAP 54.64 RCA 99.43 APO 154.93 V2 35.237
RC 147.469 GL -35.48 GP 25.90 ZAL 120.76 ZAP 148.60 ETS 52.15 ZAE 125.63 ETE 160.02 ZAC 84.60 ETC 12.66 CLP-161.60
   PLANETOCENTRIC CONIC
   C3 23.715 VHL 4.870 DLA -30.05 RAL 159.45 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 6.783 DPA 28.69 RAP 187.97 ECC 1.3903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      100.51
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                                  853.42
      110.00
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      110.00
                  12 18 17
                               5349.66
                                                31.69
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 4337.9 SCR 336.9 SC3 166.4

RRT -.4190 RRF -.6346 RTF .8859

SCB 4351.0 R23 .2881 R13 -.8866

SCI 4340.2 SC2 305.7 THA 178.13
                                                                                                                  ST 1811.2 SR 333.0 SS 616.9
CRT -.8820 CRS .9906 CST -.9369
LSA 1925.8 MSA 251.1 SSA 10.1
    TDE-1.3722 TRA-2.0015 TC3-3.0473 BAU .9663
    ROE .2829 RRA -.0170 RC3 .0476 FAU .04419
    FOE -.8883 FRA -.2845 FC3-1.6132 BSP 13240
                                                                                                                  EL1 1835.0 EL2 154.9 ALF 170.72
    BOE 1.4011 BRA 2.0016 BC3 3.0477 FSP
                                                   -518
                                                                                                                             ARRIVAL DATE DEC 22 1967
                                                                     FLIGHT TIME 148.00
LAUNCH DATE JUL 27 1967
                                                                     DISTANCE 440.328
  HELIOCENTRIC CONIC
   RL 151.93 LAL -.00 LOL 303.30 VL 26.457 GAL -5.40 AZL 95.71 HCA 216.19 SMA 126.74 ECC .21904 INC 5.7115 V1 29.325 RP 107.56 LAP 3.37 LOP 159.35 VP 37.691 GAP 9.22 AZP 85.39 TAL 200.03 TAP 56.22 RCA 98.98 APO 154.50 V2 35.231 RC 149.570 GL -34.05 GP 23.67 ZAL 119.57 ZAP 150.84 ETS 51.09 ZAE 126.43 ETE 161.51 ZAC 82.99 ETC 11.81 CLP-162.46
   PLANETOCENTRIC CONIC
                                                                                              2.13 VHP 6.785 DPA 25.71 RAP 188.99 ECC 1.3607
    C3 21.916 VHL 4.681 DLA -29.67 RAL 162.17 RAD 6567.9 VEL 11.971 PTH
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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   DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SGT 4442.7 SGR 337.0 SG3 168.4
RRT -.4115 RRF -.5998 RTF .8843
SG8 4455.4 R23 .2569 R13 -.8849
SG1 4444.8 SG2 307.0 THA 178.20
                                                                                                                  ST 1839.6 SR 335.6 SS 616.1
CRT -.8974 CRS .9944 CST -.9369
    TDE-1.3560 TRA-1.8647 TC3-3.3917 BAU
                                                    .9938
    ROE .2742 RRA -.0088 RC3 .0309 FAU .04373
                                                                                                                 LSA 1953.4 MSA 246.2 SSA 11.3
    FOE -.8546 FRA -.2125 FC3-1.7276 BSP 13713
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BOE 1.3834 BRA 1.8647 BC3 3.3918 FSP -535

ARRIVAL DATE DEC 24 1967

EL1 2034.1 EL2 100.9 ALF 170.21

LAUNCH DATE JUL 27 1967

HELIOCENTRIC CONIC DISTANCE 446.121 RL 151.93 LAL -.00 LOL 303.30 VL 28.390 GAL -5.01 AZL 95.34 HCA 219.42 SHA 126.32 ECC .22004 INC 5.3378 V1 29.325 RP 107.58 LAP 3.39 LOP 162.60 VP 37.637 GAP 9.46 AZP 85.87 TAL 198.37 TAP 57.79 RCA 98.52 APO 154.11 V2 35.225 RC 151.657 GL -32.77 GP 21.77 ZAL 118.07 ZAP 152.83 ETS 50.25 ZAE 127.04 ETE 162.83 ZAC 81.26 ETC 11.07 CLP-163.33 PLANETOCENTRIC CONIC C3 20.419 VHL 4.519 DLA -29.49 RAL 165.01 RAD 6567.8 VEL 11.908 PTH 2.12 VHP 6.814 DPA 23.04 RAP 190.20 ECC 1.3361 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.89 7 13 1 111.88 9 26 46 114.99 8 57 59 525.6 334.02 34.21 6 54 15 1125.61 20.28 341.67 23.07 308.15 34.22 69.1 23.08 300.50 98.61 9 15 37 669.05 20.29 306.53 8 45 13 766.38 16.95 313.84 32.69 166.4 20.18 114.99 8 57 59 108.79 11 43 52 123.15 8 34 30 100.88 14 16 43 100.00 10 7 20 5791.55 23.68 275.14 35.58 5191.5 26.03 267.12 8 20 26 8.88 28.10 244.5 13.18 306.67 844.48 315.13 230.45 4686.2 33.76 110.00 12 48 37 5286.21 32.61 239.50 38.25 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4523.7 SGR 339.2 SG3 168.0 RRT -.3961 RRF -.5597 RTF .8815 SGB 4536.4 R23 .2275 R13 -.8820 SG1 4525.7 SG2 311.3 THA 178.29 ST 1867.4 SR 339.0 SS 611.8 CRT -.9130 CRS .9971 CST -.9372 LSA 1979.6 MSA 239.7 SSA 12.6 TDE-1.3465 TRA-1.7160 TC3-3.7195 BAU 1.0154 RDE .2674 RRA -.0026 RC3 .0126 FAU .04263 FDE -.8173 FRA -.1356 FC3-1.8076 BSP 13971 BOE 1.3728 BRA 1.7160 BC3 3.7196 FSP -533 ELI 1893.1 ELZ 136.5 ALF 170.54 ARRIVAL DATE DEC 26 1967 LAUMON DATE JUL 27 1967 FLIGHT TIME 152.00 **DISTANCE 451.901** HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.324 GAL -4.61 AZL 95.01 MCA 222.66 SMA 125.90 ECC .22120 INC 5.0123 V1 29.325 RP 107.60 LAP 3.39 LOP 165.85 VP 37.584 GAP 9.70 AZP 86.31 TAL 196.70 TAP 59.35 RCA 98.05 APO 153.75 V2 35.217 RC 153.730 GL -51.58 GP 20.14 ZAL 116.28 ZAP 154.61 ETS 49.63 ZAE 127.53 ETE 164.00 ZAC 79.42 ETC 10.43 CLP-164.21 PLANETOCENTRIC CONIC C3 19.163 WHL 4.378 OLA -29.49 RAL 167.99 RAD 6567.8 VEL 11.855 PTH 2.10 VHP 6.863 DPA 20.60 RAP 191.56 ECC 1.3154 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 510.1 23.39 7 6 14 1110.10 340.68 36.17 111.53 7 24 44 332.99 81.41 20.65 9 38 15 9 27 21 307.22 54.4 23.41 299.53 96.59 654.38 20.67 36.17 111.52 17.36 312.97 114.72 9 9 23 152.0 20.55 305.63 100.00 8 56 51 752.03 34.68 108.34 11 55 41 123.01 8 46 3 100.22 14 28 23 10 19 25 5775.73 24.03 37.49 5175.7 26.31 266.03 100.00 274.09 9.43 229.6 13.72 307.45 110.00 8 32 13 829.60 314.33 30.19 13 0 32 5270.91 40.02 4670.9 33.86 229.27 110.00 32.80 238.34 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4604.7 SGR 344.7 SG3 167.2 RRT -.3842 RRF -.5233 RTF .8797 SGB 4617.6 R23 .1990 R13 -.8801 SGI 4606.6 SG2 318.1 THA 178.34 ST 1906.1 SR 344.6 SS 610.1 CRT -.9290 CRS .9986 CST -.9388 TDE-1.3504 TRA-1.5643 TC3-4.0458 BAU 1.0365 RDE .2633 RRA .0036 RC3 -.0038 FAU .04139 FOE -.7849 FRA -.0634 FC3-1.8699 BSP 14249 LSA 2017.5 MSA 231.9 SSA 13.9 EL1 1933.0 EL2 125.8 ALF 170.42 BOE 1.3759 BRA 1.5643 BC3 4.0458 FSP -531 ARRIVAL DATE DEC 28 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 27 1967 DISTANCE 457.667 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.258 GAL -4.20 AZL 94.72 MCA 225.89 SMA 125.49 ECC .22252 INC 4.7245 VI 29.325
RP 107.63 LAP 3.39 LOP 169.09 VP 37.531 GAP 9.95 AZP 86.71 TAL 195.02 TAP 60.91 RCA 97.56 APO 153.41 V2 35.210 RC 155.789 GL -30.46 GP 18.74 7AL 114.22 7AP 156.21 ETS 49.21 7AE 127.92 ETE 165.02 7AC 77.50 ETC 9.88 CLP-165.07 PLANETOCENTRIC CONIC C3 18.104 VHL 4.255 DLA -29.62 RAL 171.11 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 6.928 DPA 18.36 RAP 193.04 ECC 1.2979 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 33 20 9 54 7 9 28 48 23.78 38.42 111.31 509.0 333.06 80.92 7 14 51 1109.05 21.08 340.78 23.80 38.43 28.7 297.77 305.50 111.30 99.06 9 43 3A 62A . 73 21.09 303.23 18.43 310.66 37.25 113.96 114.2 21.51 9 16 54 714.24 100.00 5786.81 23.79 39.49 108.66 12 0 43 5186.8 26.11 266.80 274.82 100.00 10 24 17 122.81 9 0 5 209.8 14.42 306.75 8 46 35 313.26 32.65 809.82 10.17 110.00 14 38 49 5263.99 228.73 99.92 4664.0 33.90 13 11 5 237.82 42.12 110.00 32.88 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 4681.9 SGR 352.4 SG3 165.9 RRT -.3750 RRF -.4911 RTF .8785 SGB 4695.2 R23 .1727 R13 -.8788 SG1 4683.8 SG2 326.6 THA 178.38 ST 1953.5 SR 351.8 SS 609.8 CRT -.9445 CRS ..9987 CST -.9414 TDE-1.3646 TRA-1.4063 TC3-4.3652 BAU 1.0565 RDE .2613 RRA .0091 RC3 -.0184 FAU .04001 FOE -.7556 FRA .0062 FC3-1.9131 BSP 14512 LSA 2064.4 MSA 222.8 SSA 15.3 EL1 1981.6 EL2 113.9 ALF 170.31 BOE 1.3893 BRA 1.4063 BC3 4.3652 FSP -527 ARRIVAL DATE DEC 30 1967 FLIGHT TIME 156,00 LAUNCH DATE JUL 27 1967 **DISTANCE 463.419** HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 26.194 GAL -3.78 AZL 94.47 HCA 229.12 SMA 125.09 ECC .22402 INC 4.4668 V1 29.325 RP 107.65 LAP 3.38 LOP 172.34 VP 37.478 GAP 10.20 AZP 87.07 TAL 193.33 TAP 62.45 RCA 97.06 APO 153.11 V2 35.201 RC 157.834 GL -29.38 GP 17.51 ZAL 111.91 ZAP 157.67 ETS 48.98 ZAE 128.24 ETE 165.93 ZAC 75.51 ETC 9.40 CLP-165.93 PLANETOCENTRIC CONIC C3 17.215 VHL 4.149 DLA -29.87 RAL 174.40 RAD 6567.7 VEL 11.773 PTH 2.08 VHP 7.007 OPA 16.28 RAP 194.62 ECC 1.2833 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 40.98 111.22 7 40 7 111.20 11-41 19 21.53 341.65 518.1 24.22 333.88 80.07 7 21 29 1118.08 21.55 281.19 40.99 5284.3 24.24 273.43 10 3 14 5884.35 99.93 9 53 58 111.99 10 4 24 25.9 23.58 297.48 20.78 305.16 40.66 625.89 100.00 110.43 11 50 58 122.56 9 16 22 99.93 14 48 23 271.23 10 13 26 41.30 5251.8 24.69 5651.77 22.31 279.08 100.00 305.42 11.04 186.2 15.25 9 3 16 786.19 311.99 35.45 110.00 13 20 36 4664.2 33.90 228.75 32.68 237.84 44.53 110.00 5264.24 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2004.6 SR 359.8 SS 608.5 CRT -.9587 CRS .9973 CST -.9442 LSA 2114.8 MSA 212.7 SSA 16.7 TOE-1.3842 TRA-1.2398 TC3-4.6680 BAU 1.0743 SGT 4749.4 SGR 361.3 SG3 163.8 ROE .2605 RRA .0136 RC3 -.0315 FAU .03843 FOE -.7264 FRA .0743 FC3-1.9326 BSP 14704 BOE 1.4085 BRA 1.2399 BC3 4.6681 FSP -518 RRT -.3666 RRF -.4619 RTF .8772 SGB 4763.1 R23 .1491 R13 -.8775

FLIGHT TIME 150.00

SG1 4751.2 SG2 336.0 THA 178.39

ARRIVAL DATE JAN 1 1968

EL1 2292.0 EL2 41.7 ALF 169,98

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LAUNCH DATE JUL 27 1967
    HELIOCENTRIC CONIC
                                                                                                      DISTANCE 469.155
     RL 151.93 LAL -.00 LOL 303.30 VL 26.130 GAL -3.34 AZL 94.23 MCA 232.35 SMA 124.69 ECC .22570 INC 4.2332 V1 29.325
RP 107.68 LAP 3.35 LOP 175.58 VP 37.425 GAP 10.46 AZP 87.41 TAL 191.63 TAP 63.99 RCA 96.55 APO 152.84 VZ 35.192
RC 159.865 GL -28.32 GP 16.45 ZAL 109.37 ZAP 159.01 ETS 48.95 ZAE 128.50 ETE 186.73 ZAC 73.45 ETC 8.97 CLP-166.78
    PLANETOCENTRIC CONIC
      C3 16.479 VHL 4.059 DLA -30.20 RAL 177.86 RAD 6567.7 VEL 11.741 PTH 2.07 VHP 7.097 DPA 14.33 RAP 196.28 ECC 1.2712
                                                                   INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      THE AZMITH LNCH TIME L-I TIME
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    DIFFERENTIAL CORRECTIONS
                                                                                                 SCT 4822.1 SGR 371.8 SG3 161.9
RRT -.3636 RRF -.4397 RTF .8773
SGB 4836.4 R23 .1278 R13 -.8776
SGI 4824.0 SG2 346.2 THA 178.39
                                                                                                                                                                        ST 2066.8 SR 369.3 SS 609.4

CRT -.9711 CRS .9946 CST -.9479

LSA 2176.7 MSA 201.9 SSA 18.2
      TOE-1.4139 TRA-1.0690 TC3-4.9610 BAU 1.0930
     TOE .7017 FRA .0177 RC3 -.0414 FAU .03691
FDE -.7017 FRA .1374 FC3-1.9391 BSP 14969
BDE 1.4379 BRA 1.0691 BC3 4.9612 FSP -513
                                                                                                                                                                          EL1 2097.7 EL2 86.8 ALF 170.14
                                                                                                                                                                                          ARRIVAL DATE JAN 3 1968
                                                                                                       FLIGHT TIME 160,00
LAUNCH DATE JUL 27 1967
                                                                                                       DISTANCE 474.874
   HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 26.067 GAL -2.90 AZL 94.02 MCA 235.58 SMA 124.31 ECC .22757 INC 4.0191 V1 29.325
RP 107.71 LAP 3.31 LOP 178.82 VP 37.372 GAP 10.72 AZP 87.73 TAL 189.93 TAP 65.52 RCA 96.02 APO 152.60 V2 35.183
RC 161.876 GL -27.25 GP 15.51 ZAL 106.61 ZAP 160.25 ETS 49.10 ZAE 128.72 ETE 167.44 ŽAC 71.35 ETC 8.61 CLP-167.62
    PLANETOCENTRIC CONIC
     C3 15.885 VHL 3.986 DLA -30.59 RAL 181.51 RAD 6567.6 VEL 11.716 PTH 2.06 VHP 7.197 DPA 12.50 RAP 198.02 ECC 1.2614 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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    DIFFERENTIAL CORRECTIONS
                                                                                                SCT 4890.5 SCR 382.9 SC3 159.8
RRT - .3630 RRF - .4222 RTF .8781
SCB 4905.4 R23 .1092 R13 - .8783
SCI 4892.5 SC2 356.6 THA 178.36
                                                                                                                                                                          ST 2132.3 SR 379.5 SS 610.0
CRT -.9813 CRS .9905 CST -.9516
      TDE-1.4479 TRA -.8896 TC3-5.2296 BAU 1.1106
      ROE .2639 RRA .0207 RC3 -.0485 FAU .03536
                                                                                                                                                                        LSA 2241.9 MSA 190.8 SSA 19.7
      FOE -.6781 FRA .1983 FC3-1.9274 BSP 15211
      BDE 1.4717 BRA .8899 BC3 5.2298 FSP -508
                                                                                                                                                                          EL1 2164.6 EL2 71.9 ALF 170.08
                                                                                                                                                                                         ARRIVAL DATE JAN 5 1968
                                                                                                      FLIGHT TIME 162.00
LAUNCH DATE JUL 27 1967
                                                                                                      DISTANCE 480.575
    HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 26.004 GAL -2.43 AZL 93.82 MCA 238.81 SMA 123.93 ECC .22965 INC 3.8212 V1 29.325
RP 107.74 LAP 3.27 LOP 182.06 VP 37.319 GAP 10.98 AZP 88.02 TAL 188.22 TAP 67.04 RCA 95.47 APO 152.39 V2 35.172
RC 163.875 GL -26.16 GP 14.68 ZAL 103.65 ZAP 161.40 ETS 49.46 ZAE 128.91 ETE 168.06 ZAC 69.21 ETC 8.29 CLP-168.44
    PLANETOCENTRIC CONIC
      C3 15.427 VML 3.928 DLA -31.01 RAL 185.35 RAD 6567.6 VEL 11.697 PTH 2.06 VMP 7.307 OPA 10.77 RAP 199.81 ECC 1.2539
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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7 41 4 1169.61
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                                                                        32.44
                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                SCT 4955.3 SGR 394.0 SG3 157.5

RRT - .3641 RRF - .4084 RTF .8792

SGB 4970.9 R23 .0928 R13 -.8794

SGI 4957.4 SG2 366.8 THA 178.33
                                                                                                                                                                        ST 2198.0 SR 390.1 SS 608.9

CRT -.9891 CRS .9850 CST -.9552

LSA 2306.8 MSA 179.9 SSA 21.2
      TDE-1.4840 TRA -. 7020 TC3-5.4667 BAU 1.1275
      RDE .2673 RRA .0226 RC3 -.0531 FAU .03379
FDE -.6543 FRA .2571 FC3-1.8962 BSP 15437
                                                                                                                                                                          EL1 2231.6 EL2 56.7 ALF 170.04
      BDE 1.5079 BRA .7024 BC3 5.4670 FSP -500
                                                                                                      FLIGHT TIME 164.00
                                                                                                                                                                                          ARRIVAL DATE JAN 7 1968
LAUNCH DATE JUL 27 1967
                                                                                                      DISTANCE 486.257
    HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 25.943 GAL -1.96 AZL 93.64 MCA 242.04 SMA 123.56 ECC .23194 INC 3.6364 V1 29.325 RP 107.78 LAP 3.21 LOP 185.29 VP 37.266 GAP 11.26 AZP 88.29 TAL 186.51 TAP 68.55 RCA 94.90 APO 152.22 V2 35.162 RC 165.860 GL -25.03 GP 13.94 ZAL 100.51 ZAP 162.46 ETS 50.01 ZAE 129.08 ETE 168.61 ZAC 67.02 ETC 8.02 CLP-169.25
    PLANETOCENTRIC CONIC
      C3 15.103 VHL 3.886 DLA -31.43 RAL 189.37 RAD 6567.6 VEL 11.683 PTH 2.05 VHP 7.426 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.76 7 49 43 1188.10 23.36 347.67 54.37 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 13 10 22 5154.7 26.10 264.39 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 23.37 272.26 54.38 111.65 8 9 31 10.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 28.37 272.26 54.38 111.65 8 9 31 10.65 8 9 31 588.1 26.09 339.80 104.24 11 34 27 5754.75 28.37 272.26 54.38 111.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 8 9 31 10.65 
                                                                                                                                                                                    9.12 RAP 201.66 ECC 1.2486
                                                                        23.37
15.12
                                                                                                                                      111.63 13 10 22
121.03 10 39 41
102.24 15 23 30
                                                                                                                                                                                   72.5
                                                                                                                                                                                                       19.12
                                                                                            305.71
          110.00
                           10 28 28
                                                  672.48
                          13 54 52 5318.36
                                                                                            241.90
                                                                                                                  57.40
                                                                                                                                                                                4718.4
                                                                                                                                                                                                      33.52
                                                                                                                                                                                                                         232.93
          110.00
                                                                         32.17
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5007.9 SGR 404.9 SG3 154.6
RRT - .3653 RRF - .3969 RTF .8801
SGB 5024.3 R23 .0791 R13 - .8803
SG1 5010.1 SG2 376.8 THA 178.30
                                                                                                                                                                        ST 2257.1 SR 400.8 SS 604.5
CRT -.9944 CRS .9780 CST -.9581
      TDE-1.5180 TRA -.5030 TC3-5.6544 BAU 1.1417
      ROE .2717 RRA .0231 RC3 -.0558 FAU .03210
FOE -.6287 FRA .3153 FC3-1.8399 BSP 15591
BOE 1.5422 BRA .5036 BC3 5.6547 FSP -490
                                                                                                                                                                        LSA 2364.6 MSA 169.9 SSA 22.7
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FLIGHT TIME 158.00

ARRIVAL DATE JAN 9 1968

LAUNCH DATE JUL 27 1967

DISTANCE 491.917 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.882 GAL -1.47 AZL 93.46 MCA 245.27 SMA 123.20 ECC .23447 INC 3.4624 VI 29.325 RP 107.81 LAP 3.14 LOP 188.52 VP 37.213 GAP 11.54 AZP 88.55 TAL 184.80 TAP 70.06 RCA 94.31 APO 152.09 V2 35.151 RC 167.829 GL -23.87 GP 13.28 ZAL 97.20 ZAP 163.46 ETS 50.77 ZAE 129.22 ETE 169.10 ZAC 64.81 ETC 7.80 CLP-170.05 PLANETOCENTRIC CONIC 7.55 RAP 203.56 ECC 1.2454 C3 14.913 VHL 3.862 DLA -31.83 RAL 193.56 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 7.554 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.88 8 20 3 605.5 26.47 341.26 7 59 58 1205.54 11 57 37 5731.66 58.49 23.72 74.82 349.14 111.86 13 33 9 262.78 5131.7 26.48 11 57 37 23.73 270.66 58.49 105.18 1205.54 5731.66 26.47 8 20 3 605.5 341.26 111.88 58.49 74.82 7 59 58 23.72 349.14 111.86 13 33 9 5131.7 120.58 11 3 38 44.8 103.15 15 32 53 4740.4 262.78 105.18 11 57 37 23.73 270.66 58.49 297.23 10 52 53 644.80 14 3 52 5340.40 20.02 10 52 53 16.08 304.14 54.49 33.32 234.62 31.84 243.53 61.38 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5066.7 SCR 415.6 SC3 152.0 RRT -.3697 RRF -.3898 RTF .8824 SCB 5083.7 R23 .0664 R13 -.8826 SCI 5069.1 SCZ 386.0 THA 178.25 ST 2313.1 SR 411.8 SS 598.8 CRT -.9974 CRS .9698 CST -.9609 TOE-1.5529 TRA -. 2974 TC3-5.8038 BAU 1.1572 RDE .2774 RRA .0225 RC3 -.0549 FAU .03055 LSA 2419.1 MSA 161.3 SSA 24.1 FDE -.6038 FRA .3703 FC3-1.7735 BSP 15825 EL1 2349.3 EL2 29.4 ALF 169.93 BDE 1.5775 BRA .2982 BC3 5.8041 FSP -484 ARRIVAL DATE JAN 11 1968 FLIGHT TIME 168.00 DISTANCE 497.555 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.822 GAL -.96 AZL 93.30 HCA 248.49 SMA 122.85 ECC .23725 INC 3.2974 V1 29.325 RP 107.84 LAP 3.07 LOP 191.76 VP 37.161 GAP 11.83 AZP 88.79 TAL 183.08 TAP 71.57 RCA 93.70 APO 151.99 V2 35.139 RC 169.783 GL -22.66 GP 12.69 ZAL 93.77 ZAP 164.39 ETS 51.74 ZAE 129.36 ETE 169.54 ZAC 62.56 ETC 7.61 CLP-170.84 PLANETOCENTRIC CONIC 6.04 RAP 205.51 ECC 1.2446 C3 14.863 VHL 3.855 OLA -32.18 RAL 197.89 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 7.692 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.03 8 11 56 1221.42 23.98 350.47 62.88 112.13 8 32 17 621.4 26.77 342.58 8 11 56 1221.42 12 20 15 5714.26 8 11 56 1221.42 12 20 15 5714.26 11 17 33 620.45 14 13 48 5363.23 13 55 29 26.78 5114.3 261.57 24.00 269.45 62.89 112.12 26.77 342.58 8 32 17 621.4 23.98 350.47 62.88 112.13 74.03 112.12 13 55 29 120.15 11 27 54 104.08 15 43 11 5114.3 26.78 261.57 24.00 269.45 62.89 20.80 20.4 16.92 302.75 59.19 4763.2 33.09 236.36 245.21 65.65 31.47 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2358.4 SR 422.8 SS 591.1 CRT -.9981 CRS ..9602 CST -.9633 SGT 5121.2 SGR 426.1 SG3 149.3 RRT -.3751 RRF -.3862 RTF .8854 TOE-1.5839 TRA -. 0829 TC3-5.8956 BAU 1.1715 RDE .2844 RRA .0208 RC3 -.0519 FAU .02900 SGB 5138.9 R23 .0563 R13 -.8855 SGI 5123.7 SG2 394.8 THA 178.20 LSA 2462.8 MSA 154.5 SSA 25.3 FDE -.5788 FRA .4228 FC3-1.6890 8SP 16025 EL1 2395.8 EL2 25.4 ALF 169.85 BDE 176093 BRA .0855 BC3 5.8958 FSP ARRIVAL DATE JAN 13 1968 FLIGHT TIME 170.00 LAUNCH DATE JUL 27 1967 DISTANCE 503.167 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.763 GAL -.43 AZL 93.14 MCA 251.71 SMA 122.50 ECC .24029 INC 3.1396 V1 29.325
RP 107.88 LAP 2.98 LOP 194.98 VP 37.109 GAP 12.13 AZP 89.01 TAL 181.36 TAP 73.07 RCA 93.07 APO 151.94 V2 35.128
RC 171.722 GL -21.40 GP 12.16 ZAL 90.23 ZAP 165.27 ETS 52.95 ZAE 129.48 ETE 169.93 ZAC 60.30 ETC 7.47 CLP-171.62 PLANETOCENTRIC CONIC C3 14.957 VHL 3.867 DLA -32.46 RAL 202.35 RAD 6567.6 VEL 11.677 PTH 2.05 VHP 7.839 CPA 4.60 RAP 207.49 ECC 1.2462 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.39 8 46 14 112.37 14 17 8 112.39 8 46 14 26.97 8 25 39 1235.46 12 42 5 5703.05 8 25 39 1235.46 12 42 5 5703.05 635.5 351.61 67.53 73.42 24.15 5103.0 26.98 268.67 67.53 24.16 106.54 343.73 26.97 635.5 67.53 24.15 351.61 73.42 112.37 14 17 A 260.79 26.98 5103.0 24.16 268.67 67.53 106.5A 119.81 11.51.45 1.5 104.95 15.54.56 4785.0 294.63 21.40 11 41 43 601.54 14 25 11 5384.96 17.57 301.66 64.08 110.00 238.01 32.84 246.80 70.18 31.10 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2387.8 SR 433.2 SS 579.0 CRT - ,9968 CRS .9488 CST - .9649 LSA 2490.2 MSA 150.6 SSA 26.2 EL1 2426.6 EL2 34.0 ALF 169.75 TOE-1.6083 TRA ..1417 TC3-5.9255 BAU 1.1849 ROE .2923 RRA .0175 RC3 -.0467 FAU .02747 FOE -.5512 FRA .4744 FC3-1.5900 BSP 16241 BOE 1.6347 BRA .1428 BC3 5.9257 FSP -473 SGT 5171.6 SGR 435.7 SG3 146.5 RRT - .3811 RRF - .3841 RTF .8886 SGB 5189.9 R23 .0469 R13 - .8887 SGI 5174.3 SGZ 402.6 THA 178.15 ARRIVAL DATE JAN 15 1968 FLIGHT TIME 172.00 LAUNCH DATE 101 27 1967 DISTANCE 508.751 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.705 GAL .12 A7L 92.99 MCA 254.93 SMA 122.17 ECC .24362 INC 2.9877 V1 29.325 RP 107.92 LAP 2.88 LOP 198.21 VP 37.057 GAP 12.44 A7P 89.22 TAL 179.64 TAP 74.57 RCA 92.40 APO 151.93 V2 35.116 RC 173.647 GL -20.10 GP 11.69 ZAL 86.61 ZAP 166.08 ETS 54.40 ZAE 129.58 ETE 170.28 ZAC 58.01 ETC 7.37 CLP-172.40 PLANETOCENTRIC CONIC C3 15.205 VHL 3.899 OLA -32.66 RAL 206.88 RAD 6567.6 VEL 11.687 PTH 2.06 VHP 7.997 CPA 3.21 RAP 209.50 ECC 1.2502 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 647.3 112.64 27.04 72.38 8 41 6 1247.34 24.19 352.54 9 1 54 73.01 112.64 9 1 54 112.63 14 37 48 5098.5 27.05 13 2 49 5698.53 24.20 268.34 72.38 106.99 344.67 27.04 72.38 112.64 9 1 54 647.3 8 41 6 1247.34 24.19 352.54 73.01 14 37 48 13 2 49 12 4 29 72.38 112.63 5098.5 27,05 5698.53 24.20 268.34 106.99 119.60 13 42 27 105.68 16 8 41 271.86 5278.5 21.74 5878.52 69.10 17.94 278.93 110.00 239.40 4803.4 32.61 14 38 37 5403.38 248.13 74.95 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2393.0 SR 441.5 SS 558.1 CRT -.9934 CRS .9324 CST -.9639 LSA 2491.8 MSA 152.6 SSA 26.5 SGT 5215.0 SGR 443.0 SG3 143.5 RRT - .3860 RRF - .3768 RTF .8888 SGB 5233.8 R23 .0364 R13 - .8889 TOE-1.6202 TRA .3822 TC3-5.8879 BAU 1.1969 RDE .3004 RRA .0117 RC3 -.0406 FAU .02588 FDE -.5153 FRA .5332 FC3-1.4738 BSP 16334 BDE 1.6478 BRA .3824 BC3 5.8880 FSP -452 EL1 2432.9 EL2 49.6 ALF 169.61 SG1 5217.9 SG2 408.5 THA 178.11

FLIGHT TIME 166.00

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LAUNCH DATE JUL 27 1967
                                                                                   FLIGHT TIME 174.00
                                                                                                                                                      ARRIVAL DATE JAN 17 1968
                                                                                  DISTANCE 514.305
   HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 25.64P GAL .68 AZL 92.84 MCA 258.15 SMA 121.83 ECC .24726 INC 2.8404 VI 29.325
RP 107.96 LAP 2.78 LOP 201.43 VP 37.005 GAP 12.76 AZP 89.42 TAL 177.91 TAP 76.06 RCA 91.71 APO 151.96 V2 35.103
RC 175.555 GL -18.76 GP 11.26 ZAL 82.96 ZAP 166.85 ETS 56.11 ZAE 129.68 ETE 170.59 ZAC 55.71 ETC 7.31 CLP-173.16
    PLANETOCENTRIC CONIC
     C3 15.617 VHL 3.952 DLA -32.74 RAL 211.46 RAD 6567.6 VEL 11.705 PTH
                                                                                                                2.06 VHP 8.165 DPA
                                                                                                                                                 1.88 RAP' 211.56 ECC 1.2570
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM 'INJ Z LAT INJ Z LONG
                                                                          353.24
                                                                                                           112.88 9 19 8
112.87 14 57 16
                     8 58 11 1256.98
13 22 15 5700.94
                                      1256.98
                                                          24.09
                                                                                           77,40
                                                                                                                                               657.0
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                                                                                                                                              5100.9
        107.17
                                                           24.10
                                                                          268.48
                                                                                            77.40
                    8 58 11 1256.98
13 22 15 5700.94
12 24 57 5877.56
14 54 39 5416.40
                                                                                                           112.88 9 19 8
112.87 14 57 16
119.58 14 2 55
106.18 16 24 56
         72.83
                                                           24.09
                                                                          353.24
                                                                                            77,40
                                                                                                                                                657.0
                                                                                                                                                                26.97
        107.17
                                                          24.10
                                                                          268.48
                                                                                            77.40
                                                                                                                                              5100.9
                                                                                                                                                                21.77
       110.00
                                                           17.97
                                                                          278.87
                                                                                            74.17
                                                                                                                                              5277.6
                                                                                                                                                                                271.60
                                                                                          79.97
       110.00
                                                           30.53
                                                                          249.07
                                                                                                                                            4816.4
                                                                            MID-COURSE EXECUTION ACCURACY

SGT 5250.4 SGR 451.7 SG3 140.2

RRT -.3921 RRF -.3828 RTF .8934

SG8 5269.8 R23 .0329 R13 -.8935

SG1 5253.4 SG2 415.3 THA 178.06
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE-1.6244 TRA .6284 TC3-5.7768 BAU 1.2061

ROE .3109 RRA .0061 RC5 -.0334 FAU .02431

FDE -.4883 FRA .5795 FC3-1.3476 BSP 16506

BOE 1.6539 BRA .6284 BC3 5.7769 FSP -452
                                                                                                                                         ST 2381.4 SR 450.8 SS 542.8
CRT -.9879 CRS .9173 CST -.9655
                                                                                                                                        LSA 2478.8 MSA 154.3 SSA 26.3
EL1 2422.7 EL2 68.7 ALF 169.40
                                                                                   FLIGHT TIME 176.00
                                                                                                                                                      ARRIVAL DATE JAN 19 1968
LAUNCH DATE JUL 27 1967
                                                                                  DISTANCE 519.825
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 25.591 GAL 1.28 AZL 92.70 MCA 261.36 SMA 121.51 ECC .25123 INC 2.6967 V1 29.325
RP 107.99 LAP 2.67 LOP 204.65 VP 36.954 GAP 13.10 AZP 89.59 TAL 176.19 TAP 77.55-RCA 90.98 APO 152.04 VZ 35.091
RC 177.448 GL -17.40 GP 10.87 ZAL 79.30 ZAP 167.56 ETS 58.11 ZAE 129.77 ETE 170.47 ZAC 53.40 ETC 7.30 CLP-173.92
   PLANETOCENTRIC CONIC
                                                                                                                                                     .59 RAP 213.64 ECC 1.2667
    C3 16.208 WHL 4.026 DLA -32.72 RAL 216.03 RAD 6567.6 VEL 11.730 PTH
                                                                                                                2.07 WHP 8.345 DPA
    LNOM AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.88 9 16 45 1264.34 23.85 353.69 82.53 113.09 9 37 50 664.3 26.76 345.86 107.12 13 40 7 5710.44 23.86 269.10 82.54 113.08 15 15 17 5110.4 26.77 261.27
                                                                                                            113.08 15 15 17
113.09 9 37 50
113.08 15 15 17
119.78 12 52 29
106.42 16 43 56
                     9 16 45 1264.34
13 40 7 5710.44
12 42 29 600.11
15 13 34 5422.66
                                                                          353.69
                                                                                            82.53
                                                           23.85
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                                                                                                                                                                                345.86
                                                          23.86
                                                                          269.10
                                                                                            82.54
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                                                                                                                                                                                261.27
        107.12
                     12 42 29
                                                                          301.58
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                                        600.11
                                                          17.61
                                                                                           79.22
                                                                                                                                                                                294.54
                                                                          249.52
       110.00
                                                                                            85.18
                                                                                                                                              4822.7
                                                                                                                                                                 32.36
                                                                                                                                                                                240.84
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                            SCT 5287.3 SGR 458.3 SG3 137.2
RRT -.3990 RRF -.3848 RTF .8967
SG8 5307.1 R23 .0270 R13 -.8968
SG1 5290.5 SG2 420.0 THA 178.01
                                                                                                                                         ST 2348.7 SR 457.8 SS 521.4

CRT -.9801 CRS .8968 CST -.9650

LSA 2443.6 MSA 161.7 SSA 25.6
    TOE-1.6170 TRA .8870 TC3-5.6107 BAU 1.2158
    ROE .5217 RRA -.0017 RC3 -.0250 FAU .02284
    FOE -.4533 FRA .6301 FC3-1.2198 BSP 16646
BOE 1.6486 BRA .8870 BC3 5.6107 FSP -442
                                                                                                                                         EL1 2391.3 EL2 89.4 ALF 169.17
                                                                                                                                                     ARRIVAL DATE JAN 21 1968
                                                                                  FLIGHT TIME 178.00
LAUNCH DATE JUL 27 1967
                                                                                  DISTANCE 525.307
    RL 151.93 LAL -.00 LOL 303.30 VL 25.535 GAL 1.89 AZL 92.56 MCA 264.57 SMA 121.19 ECC .25557 INC 2.5555 V1 29.325 RP 108.03 LAP 2.54 LOP 207.87 VP 36.903 GAP 13.46 AZP 89.76 TAL 174.48 TAP 79.05 RCA 90.22 APO 152.17 V2 35.078 RC 179.325 GL -16.02 GP 10.52 ZAL 75.67 ZAP 168.22 ETS 60.41 ZAE 129.85 ETE 171.12 ZAC 51.07 ETC 7.33 CLP-174.67
   PLANETOCENTRIC CONIC
                                                                                                                                                -.64 RAP 215.75 ECC 1.2797
     C3 16.994 VHL 4.122 DLA -32.57 RAL 220.54 RAD 6567.7 VEL 11.763 PTH 2.08 VHP 8.537 DPA
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         113.28 9 57 52 669.1 26.40 346.09
113.26 15 31 36 5127.4 26.41 262.43
                                                                                      87.74
                       9 36 43 1269.12
13 56 9 5727.37
        73.19
                                                         23.46
                                                                         353.87
                     13 56 9
                                                          23.47
                                                                          270.22
                                                                                           87.75
        106.81
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113.26 15 31 36
120.19 13 7 16
106.41 17 5 30
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                       9 36 43 1269.12
                                                          23.46
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         73.19
                                                                                            87,75
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                     13 56 9 5727.37
                                                          23.47
                                                                          270.22
                                                                                                                                                                26.41
       106.81
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                     12 56 54
                                        622.27
                                                          16.86
                                                                          302.86
                                                                                            84.20
                                                                                                                                               22.3
                                                                                                                                                                20.74
       110.00
                                                          30.42
                                                                          249.49
                                                                                            90.55
                                                                                                                                             4822.2
                                                                                                                                                                32.36
                                                                                                                                                                               240.81
       110.00
                     15 35 8
                                      5422.22
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 5314.9 SCR 463.7 SC3 134.0
RRT -.4054 RRF -.3876 RTF ..9000
SCB 5335.1 R23 .0223 R13 -.9001
                                                                                                                                       ST 2292.7 SR 463.1 SS 498.1
CRT -.9693 CRS .8715 CST -.9639
LSA 2385.0 MSA 173.0 SSA 24.5
    TOE-1.5941 TRA 1.1603 TC3-5.3802 BAU 1.2224
    ROE .3332 RRA -.0111 RC3 -.0170 FAU .02134
FOE -.4206 FRA .6810 FC3-1.0872 BSP 16716
BOE 1.6286 BRA 1.1603 BC3 5.3802 FSP -432
                                                                              SG1 5318.2 SG2 423.6 THA 177.96
                                                                                                                                       EL1 2336.3 EL2 111.8 ALF 168.90
                                                                                                                                                      ARRIVAL DATE JAN 23 1968
                                                                                  FLIGHT TIME 180.00
LAUNCH DATE JUL 27 1967
                                                                                  DISTANCE 530.747
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 25,480 GAL 2.53 AZL 92.42 MCA 267.78 SMA 120.89 ECC. 26030 INC 2.4159 V1 29.325 RP 108.07 LAP 2.41 LOP 211.08 VP 36.855 GAP 13.83 AZP 89.91 TAL 172.76 TAP 80.55 RCA 89.42 APO 152.35 V2 35.065 RC IBI.185 GL -14.65 GP 10.20 ZAL 72.11 ZAP 168.83 ETS 63.05 ZAE 129.92 ETE 171.34 ZAC 48.74 ETC 7.41 CLP-175.42
   PLANETOCENTRIC CONIC
    C3 17,996 VHL 4.242 DLA -32.32 RAL 224.95 RAD 6567.7 VEL 11.806 PTH
                                                                                                                2.09 WHP 8.743 OPA
    LNCH AZETTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.74 9 57 56 1271.11 22.93 553.78 92.97 113.42 10 19 7 671.1 25.89 346.03
                   9 57 56 1271.11
14 10 6 5751.94
                                                                                                            113.41 15 45 58
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                                                          22.94
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                                                                                            92.98
       106.26
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113.41 15 45 58
120.74 13 19 22
106.18 17 29 2
                      9 57 56 1271.11
14 10 6 5751.94
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         75.74
                    14 10 6
                                                          22.94
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       106.26
                                                          15.74
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                     13 8 27
                                        654.67
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       110.00
                     15 58 45
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       110.00
                                       5416.38
                                                           30.53
   DIFFFRENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                            SGT 5344.6 SGR 466.1 SG3 131.0
RRT -.4129 RRF -.3921 RTF .9039
SGB 5365.1 R23 .0181 R13 -.9040
                                                                                                                                       ST 2224.4 SR 466.9 SS 475.3
CRT -.9553 CRS .8422 CST -.9626
LSA 2314.3 MSA 187.2 SSA 23.2
    TDE-1.5624 TRA 1.4418 TC3-5.1108 BAU 1.2296
    RDE .3456 RRA -.0217 RC3 -.0086 FAU .01996
FDE -.3867 FRA .7301 FC3 -.9603 83P 16660
BDE 1.6002 BRA 1.4420 BC3 5.1108 FSP -425
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SG1 5348.2 SG2 426.0 THA 177.92

EL1 2268.8 EL2 135.3 ALF 168.62

ARRIVAL DATE JAN 25 1968

JPL TM 33-99

LAUNCH DATE JUL 27 1967

DISTANCE 536.140 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.426 GAL 3.20 AZL 92.28 HCA 270.99 SMA 120.58 ECC .26547 INC 2.2770 V1 29.325
RP 108.11 LAP 2.28 LOP 214.29 VP 36.803 GAP 14.23 AZP 90.08 TAL 171.06 TAP 82.05 RCA 88.57 APO 152.59 V2 35.052 RC 183.028 GL -13.29 GP 9.91 TAL 68.63 TAP 169.39 ETS 66.03 TAE 129.98 ETE 171.55 TAC 46.41 ETC 7.54 CLP-176.17 PLANETOCENTRIC CONIC C3 19.239 VHL 4.386 DLA -31.95 RAL 229.22 RAD 6567.8 VEL 11.858 PTH 2.10 VHP 8.965 DPA -2.98 RAP 220.04 ECC 1.3166 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 98.18 113.54 10 41 28 113.53 15 58 11 25.25 10 20 18 1270.10 14 21 47 5764.29 670.1 345.69 74.54 22.26 353.39 105.46 5784.29 22.27 274.00 98.19 5184.3 25.26 266.30 113.54 10 41 26 113.53 15 58 11 121.38 13 29 15 105.82 17 53 43 1270.10 5784.29 10 20 18 345.69 74.54 22.26 353.39 98.18 670.1 25.25 105.46 14 21 47 22.27 274.00 98.19 5184.3 25.26 266.30 110.00 13 17 39 695.30 14.31 306.99 93.84 95.3 18.36 300.21 30.70 16 23 36 5407.08 248.40 101.55 4807.1 32.56 239.67 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5369.1 SGR 471.3 SG3 127.9 RRT -.4203 RRF -.3974 RTF .9077 SGB 5389.8 R25 .0148 R13 -.9078 ST 2143.2 SR 468.7 SS 453.1 CRT -.9373 CRS .8072 CST -.9611 TOE-1.5183 TRA 1.7372 TC3-4.8014 BAU 1.2349 RDE .3586 RRA -.0338 RC3 -.0012 FAU .01860 FDE -.3525 FRA .7798 FC3 -.8369 89P 16984 BDE 1.5600 BRA 1.7376 BC3 4.8014 FSP -418 LSA 2230.7 MSA 204.3 SSA 21.6 SG1 5372.8 SG2 427.3 THA 177.87 EL1 2188.0 EL2 159.9 ALF 168.35 FLIGHT TIME 184.00 ARRIVAL DATE JAN 27 1968 HELIOCENTRIC CONIC **DISTANCE 541.479** RL 151.93 LAL -.00 LOL 303.30 VL 25.373 GAL 3.90 AZL 92.14 HCA 274.20 SHA 120.29 ECC .27111 INC 2.1379 V1 29.325
RP 108.16 LAP 2.13 LOP 217.50 VP 36.754 GAP 14.65 AZP 90.16 TAL 169.36 TAP 83.56 RCA 87.68 APO 152.90 V2 35.039
RC 184.853 GL -11.97 GP 9.64 ZAL 65.27 ZAP 169.88 ETS 69.38 ZAE 130.03 ETE 171.74 ZAC 44.07 ETC %.73 CLP-176.92 PLANETOCENTRIC CONIC C3 20.750 VHL 4.555 OLA -31.50 RAL 233.31 RAD 6567.8 VEL 11.922 PTH 2.12 VHP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.60 10 43 52 1265.42 21.47 352.66 103.35 113.61 11 4 58 665.4 24.48 345.03 14 30 52 5824.96 21.49 276.71 103.36 113.60 16 7 57 5225.0 24.49 269.08 104.40 352.66 10 43 52 1265.42 21.47 103.35 113.61 11 4.58 665.4 24.48 345.03 75.60 113.60 16 7 57 14 30 52 5824.96 103.36 5225.0 269.08 104.40 21.49 276.71 24.49 122.03 13 37 24 105.40 18 18 50 309.58 13 25 2 742.15 12.64 302.92 110.00 98.48 142.1 16.78 16 48 53 5396.23 247.62 107.07 4796.2 32.70 110.00 238.86 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5388.3 SGR 473.1 SG3 124.9 RRT -.4277 RRF -.4030 RTF .9114 SGB 5409.0 R23 .0119 R13 -.9115 ST 2053.7 SR 468.3 SS 432.2 CRT -.9143 CRS .7654 CST -.9594 TDE-1.4621 TRA 2.0468 TC3-4.4633 BAU 1.2381 ROE .3720 RRA -.0473 RC3 .0051 FAU .01725 FOE -.3180 FRA .8305 FC3 -.7199 BSP 17092 LSA 2138.5 MSA 224.0 SSA 20.5 BOE 1.5087 BRA 2.0474 BC3 4.4633 FSP -410 SG1 5392.1 SG2 427.3 THA 177.84 EL1 2098.2 EL2 185.6 ALF 168.13 FLIGHT TIME 186.00 APRIVAL DATE JAN 29 1968 LAUNCH DATE JUL 27 1967 DISTANCE 546.757 RL 151.93 LAL -.00 LOL 303.30 VL 25.320 GAL 4.64 AZL 92.00 MCA 277.40 SMA 120.00 ECC .27727 INC 1.9978 V1 29.325 RP 108.20 LAP 1.98 LOP 220.71 VP 36.705 GAP 15.10 AZP 90.26 TAL 167.67 TAP 85.07 RCA 86.73 APO 153.27 V2 35.025 RC 186.660 GL -10.67 GP 9.40 ZAL 62.04 ZAP 170.32 ETS 73.12 ZAE 130.07 ETE 171.91 ZAC 41.73 ETC 7.98 CLP-177.67 PLANETOCENTRIC CONIC C3 22.565 VHL 4.750 DLA -30.96 RAL 237.20 RAD 6567.9 VEL 11.998 PTH 2.14 VHP 9.459 OPA -5.14 RAP 224.42 ECC 1.3714 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.66 11 29 42 113.64 16 14 58 11 8 46 1256.21 14 37 4 5874.63 351.55 108.44 656.2 23.60 76.92 20.58 14 37 4 108.44 5274.6 23.61 272.46 103.08 20.60 280.04 113.66 11 29 42 113.64 16 14 58 122.64 13 44 14 104.97 18 43 45 11 8 46 1256.21 14 37 4 5874.63 76.92 20.58 351.55 108.44 656.2 23.60 343.97 103.08 20.60 280.04 108.44 5274.6 23.61 272.46 13 31 0 793.48 10.77 312.30 102.99 193.5 15.00 305.83 110.00 17 13 59 5385.35 32.84 246.83 112.52 238.04 110.00 31.10 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 5400.4 SGR 473.4 SG3 122.0 RRT -.4345 RRF -.4084 RTF .9151 SGB 5421.1 R23 .0093 R13 -.9151 ST 1958.8 SR 465.8 \$5 413.1 CRT -.8847 CRS .7155 CST -.9576 TOE-1.3921 TRA 2.3745 TC3-4.1023 BAU 1.2375 ROE .3856 RRA -.0623 RC3 .0100 FAU .01590 FDE -.2829 FRA .8830 FC3 -.6100 BSP 17106 LSA 2040.6 MSA 245.9 SSA 19.2 BDE 1.4445 BRA 2.3753 BC3 4.1024 FSP -400 SG1 5404.4 SGZ 426.1 THA 177.81 EL1 2002.2 EL2 212.4 ALF 167.98 FLIGHT TIME 188.00 ARRIVAL DATE JAN 31 1968 LAUNCH DATE JUL 27 1967 HELIOCENTRIC CONIC DISTANCE 551.965 RL 151.93 LAL -.00 LOL 303.30 VL 25.269 GAL 5.42 AZL 91.86 MCA 280.60 SMA 119.72 ECC .28401 INC 1.8558 V1 29.325 RP 108.24 LAP 1.82 LOP 223.91 VP 36.657 GAP 15.58 AZP 90.34 TAL 166.00 TAP 86.60 RCA 85.72 APO 153.72 V2 35.012 RC 188.449 GL -9.43 GP 9.18 ZAL 58.96 ZAP 170.69 ETS 77.24 ZAE 130.10 ETE 172.07 ZAC 39.40 ETC 8.31 CLP-178.42 -9.43 GP PLANETOCENTRIC CONIC C3 24.724 VHL 4.972 DLA -30.36 RAL 240.88 RAD 6568.0-VEL 12.087 PTH 2.16 VHP 9.736 DPA -6.15 RAP 226.64 ECC 1.4069 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.56 11 35 20 1240.88 19.60 349.94 113.43 113.66 11 56 1 640.9 22.63 342.42 101.44 14 39 51 646.60 19.62 306.18 113.43 113.65 14 50 37 46.6 22.65 298.66 11 35 20 113.66 11 56 1 342.42 78.56 1240.88 19.60 349.94 113.43 640.9 22.63 14 50 37 46.6 101.44 14 39 51 646.60 19.62 306.18 113.43 113.65 22.65 298.66 123.18 13 50 3 104.58 19 8 1 308.86 8.75 248.0 13.06 847.98 315.31 107.39 5375.54 32.95 237.29 110.00 17 36 26 31.27 246.11 117.90 4775.5 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5411.0 SGR 472.6 SG3 119.2 RRT -.4419 RRF -.4153 RTF .9192 ST 1870.1 SR 461.7 SS 398.0 TOE-1.3168 TRA 2.7143 TC3-3.7405 BAU 1.2364 ROE .3998 RRA -.0784 RC3 .0140 FAU .01464 FOE -.2504 FRA .9351 FC3 -.5127 B3P 17208 B0E 1.3761 BRA 2.7154 BC3 3.7406 FSP -392 CRT -.8491 CRS .6623 CST -.9572 LSA 1948.5 MSA 267.7 SSA 18.1 EL1 1911.4 EL2 238.6 ALF 167.97 SG8 5431.6 R23 .0073 R13 -.9193 SG1 5415.0 SG2 423.6 THA 177.78

FLIGHT TIME 182.00

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ARRIVAL DATE FEB 2 1968
                                                                                             FLIGHT TIME 190.00
LAUNCH DATE JUL 27 1967
                                                                                            DISTANCE 557.092
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 25.218 GAL 6.24 A7L 91.71 MCA 283.80 SMA 119.44 ECC .29139 INC 1.7109 V1 29.325 RP 108.28 LAP 1.66 LOP 227.11 VP 36.609 GAP 16.09 A7P 90.41 TAL 164.34 TAP 88.15 RCA 84.64 APO 154.24 V2 34.999 RC 190.221 GL -8.24 GP 8.98 TAL 56.04 ZAP 170.99 ETS 81.73 ZAE 130.12 ETE 172.21 ZAC 37.08 ETC 8.71 CLP-179.18
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 27.279 VHL 5.223 DLA -29.71 RAL 244.34 RAD 6568.1 VEL 12.192 PTH 2.19 VHP 10.036 DPA -7.12 RAP 228.87 ECC 1.4489
LNCH AZHTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
80.60 12 4 31 1216.13 18.55 347.61 118.31 113.64 12 24 47 616.1 21.59 340.15
99.40 14 38 14 720.01 18.56 311.16 118.32 113.63 14 50 14 120.0 21.60 303.69
100.00 14 15 18 793.33 16.17 315.46 117.17 115.49 14 28 31 193.3 19.47 308.22
100.00 15 10 8 618.04 20.97 304.66 119.39 111.80 15 20 26 18.0 23.75 296.96
110.00 13 40 1 904.64 6.63 318.33 111.66 123.61 13 55 5 304.6 11.00 311.96
110.00 18 1 54 5367.54 31.40 245.53 123.16 104.26 19 31 22 4767.5 33.04 236.69
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 5417.0 SGR 470.5 SG3 116.4
RRT -.4493 RRF -.4224 RTF .9235
SGB 5457.4 R23 .0057 R13 -.9235
SGI 5421.2 SG2 420.0 THA 177.75
                                                                                                                                                          ST 1787.8 SR 455.8 SS 386.1

CRT -.8062 CRS .6047 CST -.9578

LSA 1862.6 MSA 289.3 SSA 17.0
     TOE-1.2334 TRA 3.0713 TC3-3.3797 BAU 1.2326
    RDE .4142 RRA - .0956 RC3 .0167 FAU .01341
FDE - .2190 FRA .9887 FC3 - .4257 BSP 17283
                                                                                                                                                           EL1 1826.0 EL2 264.0 ALF 168.13
     BOE 1.3011 BRA 3.0726 BC3 3.3796 FSP
                                                                    - 38 5
                                                                                                                                                                          ARRIVAL DATE FEB 4 1968
                                                                                              FLIGHT TIME 192.00
LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 562.127
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 25.168 GAL 7.10 AZL 91.56 HCA 287.00 SHA 119.17 ECC .29947 INC 1.5620 VI 29.325 RP 108.32 LAP 1.49 LOP 230.30 VP 36.562 GAP 16.65 AZP 90.46 TAL 162.71 TAP 89.71 RCA 83.48 APO 154.86 V2 34.986 RC 191.975 GL -7.11 GP 8.79 ZAL 53.28 ZAP 171.21 ETS 86.56 ZAE 130.12 ETE 172.35 ZAC 34.77 ETC 9.22 CLP-179.95
   PLANETOCENTRIC CONIC
     C3 30.289 VHL 5.504 DLA -29.03 RAL 247.57 RAD 6568.2 VEL 12.315 PTH 2.22 VHP 10.362 DPA -8.04 RAP 231.12 ECC 1.4985 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                    -8.04 RAP 231.12 ECC 1.4985
                                                                                                   123.07
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113.57 14 43 16
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          83.31 12 38 48 1173.55
                                                                17.44
                                                                                   343.96
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          96.69
                        14 29 41
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109.76 17 32 53
123.93 13 59 29
104.02 19 53 35
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                        18 24 13
                                           5361.78
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                                                                                                      124.31
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        RET -,4559 RRF -,4298 RTF ,9270
SGB 5447.3 R23 ,0052 R13 -,9271
SGI 5431.4 SG2 415.3 THA 177.74
                                                                                                                                                            ST 1715.1 SR 448.2 SS 377.6
CRT -.7562 CRS .5442 CST -.9596
     TOE-1.1429 TRA 3.4466 TC3-3.0402 BAU 1.2311
     ROE .4287 RRA -.1140 RC3 .0183 FAU .01221
FDE -.1887 FRA 1.0444 FC3 -.3490 BSP 17313
BOE 1.2207 BRA 3.4485 BC3 3.0402 FSP -377
                                                                                                                                                            LSA 1785.7 MSA 309.5 SSA 16.2
                                                                                                                                                            ELI 1749.2 ELZ 287.6 ALF 168.51
                                                                                                                                                                         ARRIVAL DATE FEB 6 1968
                                                                                             FLIGHT TIME 194.00
LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 567.055
     RL 151.93 LAL -.00 LOL 303.30 VL 25.120 GAL 8.02 A7L 91.41 MCA 290.19 SMA 118.91 ECC .30835 INC 1.4081 V1 29.325 RP 108.36 LAP 1.32 LOP 233.49 VP 36.516 GAP 17.25 A7P 90.49 TAL 161.11 TAP 91.30 RCA 82.24 APO 155.58 V2 34.973 RC 193.712 GL -6.03 GP 8.62 ZAL 50.69 ZAP 171.35 ETS 91.68 ZAE 130.10 ETE 172.48 ZAC 32.47 ETC 9.83 CLP 179.27
    PLANETOCENTRIC CONIC
     C3 33.826 VHL 5.816 DLA -28.33 RAL 250.56 RAD 6568.3 VEL 12.458 PTH 2.25 VHP 10.716 DPA
                                                                                                                                                                    -8.92 RAP 233.37 ECC 1.5567
     C3 33.826 VHL 5.816 DLA -28.33 RAL 250.56 RAO 6568.3 VEL 12.458 PTH 2.25 VHP 10.716 DPA -8.92 RAP 233.37 ECC 1.5367 ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 89.19 13 39 17 1044.42 16.30 333.96 127.70 113.50 13 56 42 444.4 19.34 326.61 90.81 13 53 7 999.60 16.31 330.69 127.71 113.49 14 9 47 399.6 19.35 323.34 100.00 13 46 29 1021.11 9.08 328.65 124.09 118.60 14 3 30 421.1 12.83 321.87 100.00 16 28 37 5786.19 23.80 274.78 130.78 108.64 18 5 3 5186.2 26.12 266.75 110.00 13 46 20 1021.55 2.19 324.47 119.87 124.12 14 3 22 421.6 6.65 318.22 110.00 18 45 15 5358.51 31.55 244.87 133.33 103.89 20 14 33 4758.5 33.14 236.00
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SCT 5413.5 SCR 461.9 SC3 111.2
RRT -.4629 RRF -.4567 RTF .9322
SCB 5433.1 R23 .0030 R13 -.9323
SC1 5417.7 SC2 409.1 THA 177.73
                                                                                                                                                          ST 1652.3 SR 438.9 SS 372.4

CRT -.6979 CRS .4805 CST -.9626

LSA 1718.7 MSA 327.7 SSA 15.3
      TOE-1.0421 TRA 3.8461 TC3-2.6808 BAU 1.2124
     RDE .4431 RRA -.1334 RC3 .0183 FAU .01097
FDE -.1586 FRA 1.1034 FC3 -.2809 BSP 17298
                                                                                                                                                            ELI 1681.5 ELZ 308.8 ALF 169.13
      BOE 1.1324 BRA 3.8484 BC3 2.6809 FSP -367
                                                                                                                                                                          ARRIVAL DATE FEB 8 1968
                                                                                              FLIGHT TIME 196.00
LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 571.855
     RL 151.93 LAL -.00 LOL 303.30 VL 25.072 GAL 9.00 AZL 91.25 MCA 293.38 SMA 118.65 ECC .31812 INC 1.2478 V1 29.325
RP 108.40 LAP 1.15 LOP 236.68 VP 36.471 GAP 17.90 AZP 90.50 TAL 159.53 TAP 92.91 RCA 80.91 APO 156.40 V2 34.960
RC 195.431 GL -5.02 GP 8.47 ZAL 48.27 ZAP 171.40 ETS 97.00 ZAE 130.07 ETE 172.60 ZAC 30.20 ETC 10.57 CLP 178.48
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 37.980 VHL 6.163 DLA -27.61 RAL 253.34 RAD 6568.5 VEL 12.623 PTH 2.29 VHP 11.104 DPA -9.75 RAP 235.63 ECC 1.6251
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
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124.18 14 6 47
103.86 20 34 15
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19 4 57 5357.79
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         110.00
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                                                                                    244.81
                                                                                                       138.21
         110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1604.0 SR 428.4 SS 370.5
CRT -.6360 CRS .4210 CST -.9670
                                                                                         SGT 5406.1 SGR 455.6 SG3 108.7
RRT -.4695 RRF -.4443 RTF .9370
      TOE -.9403 TRA 4.2635 TC3-2.3586 BAU 1.1976
      RDE .4578 RRA -.1534 RC3 .0179 FAU .00982
FDE -.1313 FRA 1.1638 FC3 -.2239 BSP 17357
                                                                                                                                                           LSA 1666.3 MSA 341.7 SSA 14.5
                                                                                        SG8 5425.3 R23 .0023 R13 -.9370
                                                                                                                                                         ELI 1627.9 ELZ 325.7 ALF 169.95
                                                                                         SG1 5410.4 SG2 401.9 THA 177.72
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- 360

BOE 1.0458 BRA 4.2663 BC3 2.3587 FSP

ARRIVAL DATE FEB 10 1968

FLIGHT TIME 198.00 LAUNCH DATE JUL 27 1967 DISTANCE 576.506 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 25.025 GAL 10.05 A7L 91.08 MCA 296.57 SMA 118.41 ECC .32889 INC 1.0798 V1 29.325
RP 108.44 LAP .97 LOP 239.87 VP 36.427 GAP 18.61 A7P 90.48 TAL 158.00 TAP 94.57 RCA 79.46 APO 157.35 V2 34.947
RC 197.134 GL -4.07 GP 8.32 TAL 46.02 TAP 171.36 ETS 102.44 TAE 130.00 ETE 172.72 TAC 27.95 ETC 11.47 CLP 177.67 PLANETOCENTRIC CONIC C3 42.859 VHL 6.547 DLA -26.90 RAL 255.90 RAD 6568.6 VEL 12.815 PTH 2.33 VHP 11.528 DPA -10.54 RAP 237.89 ECC 1.7053 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.53 13 11 11 109.21 15 39 50 119.69 13 56 36 107.38 18 56 29 124.11 14 9 49 103.93 20 52 39 738.9 133.19 10.55 350.86 90.00 12 48 52 1338.86 6.91 224.7 23.64 90.00 15 26 5 824.70 21.21 319.94 139.53 583.8 7.60 13 36 53 13 36 53 1183.77 17 20 46 5743.06 100.00 3.68 337.70 131.41 140.79 5143.1 26.85 100.00 24.71 271.90 324.44 110.00 1140.03 5359.57 540.0 2.15 13 50 48 -2.34 330.65 127.67 33.13 4759.6 236.08 19 23 19 31.53 244.95 142.96 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS CRT - 5707 CRS . 351.4 SS . 13.8 EL1 1586.7 EL2 . 338.1 ALF 170.96 SCT 5394.3 SCR 447.9 SC3 106.2 RRT -.4757 RRF -.4518 RTF .9419 SCB 5412.8 R23 .0015 R13 -.9419 SCI 5398.5 SC2 393.7 THA 177.73 TOE -.8340 TRA 4.7054 TC3-2.0554 BAU 1.1777 RDE .4724 RRA -.1740 RC3 .0167 FAU .00869 FDE -.1052 FRA 1.2272 FC3 -.1755 BSP 17390 BDE .9585 BRA 4.7087 BC3 2.0554 FSP -353 FLIGHT TIME 200.00 ARRIVAL DATE FEB 12 1968 DISTANCE 580.981 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 24.979 GAL 11.18 AZL 90.90 MCA 299.75 SMA 118.17 ECC .34079 INC .9022 V1 29.325 RP 108.48 LAP .78 LOP 243.06 VP 36.384 GAP 19.38 AZP 90.45 TAL 156.51 TAP 96.27 RCA 77.90 APO 158.43 V2 34.935 RC 198.819 GL -3.17 GP 8.19 ZAL 43.94 ZAP 171.22 ETS 107.91 ZAE 129.91 ETE 172.83 ZAC 25.74 ETC 12.55 CLP 176.84 PLANETOCENTRIC CONIC C3 48.398 VHL 6.971 DLA -26.19 RAL 258.24 RAD 6568.8 VEL 13.037 PTH 2.38 VHP 11.996 DPA -11.28 RAP 240.15 ECC 1.7998 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 829.3 12 40 36 1429.31 4.04 355.95 136.59 118.05 13 4 27 108.52 16 6 20 7.76 349.25 90.00 13 53 3 797.35 13 33 47 1257.64 17 42 35 5732.29 13 52 29 1196.97 19 40 23 5363.73 21.61 318.16 144.40 197.4 24.14 310.26 90.00 119.87 13 54 45 107.06 19 18 7 123.91 14 12 28 104.10 21 9 46 657.6 335.22 1.18 341.76 135.01 5.15 100.00 5132.3 27.02 263.00 100.00 24.93 271.17 145.49 599.0 327.52 -4.59 333.73 131.42 -.10 110.00 31.47 245.25 147.55 4763.7 33.08 236.40 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5378.0 SGR 438.8 SG3 103.9 RRT -.4814 RRF -.4590 RTF .9468 SG8 5395.9 R23 .0010 R13 -.9468 SG1 5382.1 SG2 384.3 THA 177.74 ST 1542.9 SR 403.8 SS 375.0 CRT -.5044 CRS .3113 CST -.9770 TOE -.7234 TRA 5.1743 TC3-1.7728 BAU 1.1518 ROE .4869 RRA -.1951 RC3 .0149 FAU .00755 FOE -.0803 FRA 1.2947 FC3 -.1345 BSP 17406 BOE .8720 BRA 5.1780 BC3 1.7728 FSP -346 LSA 1599.0 MSA 356.5 SSA 13.1 ELI 1556.9 ELZ 345.5 ALF 172.09 ARRIVAL DATE FEB 14 1968 FLIGHT TIME 202.00 LAUNCH DATE JUL 27 1967 DISTANCE 585.244 HELIOCENTRIC CONIC RL 151.93 LAL -.00 LOL 303.30 VL 24.935 GAL 12.39 AZL 90.71 MCA 302.94 SMA 117.93 ECC .35397 INC .7131 V1 29.325
RP 108.51 LAP .60 LOP 246.24 VP 36.341 GAP 20.24 AZP 90.39 TAL 155.08 TAP 98.02 RCA 76.19 APO 159.68 V2 34.923
RC 200.487 GL -2.34 GP 8.07 TAL 42.03 ZAP 170.99 ETS 113.29 ZAE 129.79 ETE 172.94 ZAC 23.56 ETC 13.87 CLP 175.97 PLANETOCENTRIC CONIC C3 55.364 VHL 7.441 DLA -25.49 RAL 260.39 RAD 6569.0 VEL 13.294 PTH 2.43 VHP 12.511 OPA -11.97 RAP 242.39 ECC 1.9112 CS 55.364 VHL 7.441 DLA -25.49 RAL 260.39 RAD 6569.0 VEL 13.294 PTH 2.43 VMP 12.511 DPA -11.97 RAP 242.39 ECC 1.9112 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 34 36 1511.05 1.41 .52 139.99 118.28 12 59 48 911.1 5.18 353.87 90.00 16 16 11 780.34 22.18 317.04 149.01 108.07 16 29 11 180.3 24.44 309.11 100.00 13 31 14 1328.20 -1.21 345.63 138.53 119.87 13 53 23 728.2 2.77 339.11 100.00 18 2 14 5726.47 25.04 270.78 149.99 106.88 19 37 41 5126.5 27.11 262.59 110.00 13 53 49 1257.36 -6.79 336.81 135.08 123.58 14 14 47 657.4 -2.33 330.56 110.00 19 56 9 5370.07 31.36 245.71 152.00 104.36 21 25 39 4770.1 33.01 236.88 DIEFFERNITAL CORRECTIONS DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1527.3 SR 389.9 SS 381.2
CRT -.4372 CRS .2608 CST -.9817
LSA 1581.9 MSA 357.2 SSA 12.5
EL1 1537.3 EL2 348.3 ALF 173.29 SCT 5358.6 SGR 428.2 SG3 101.7 RRT -.4862 RRF -.4656 RTF ..9518 SGB 5375.7 R23 .0006 R13 -.9518 SGI 5362.6 SG2 373.9 THA 177.76 TOE -.6052 TRA 5.6773 TC3-1.5088 BAU 1.1168 RDE .5011 RRA -.2164 RC3 .0125 FAU .00635 FDE -.0554 FRA 1.3677 FC3 -.0993 BSP 17313 BOE .7857 BRA 5.6814 BC3 1.5089 FSP -336 ARRIVAL DATE FEB 16 1968 LAUNCH DATE JUL 27 1967 FLIGHT TIME 204.00 HELIOCENTRIC CONIC DISTANCE 589.251 RL 151.93 LAL -.00 LOL 303.30 VL 24.892 GAL 13.70 A2L 90.51 HCA 306.12 SMA 117.71 ECC .36860 INC .5101 V1 29.325 RP 108.55 LAP .41 LOP 249.42 VP 36.300 GAP 21.19 AZP 90.30 TAL 153.72 TAP 99.84 RCA 74.32 APO 161.09 V2 34.911 RC 202.138 GL -1.55 GP 7.96 ZAL 40.28 ZAP 170.65 ETS 118.52 ZAE 129.63 ETE 173.06 ZAC 21.44 ETC 15.47 CLP 175.08 PLANETOCENTRIC CONIC C3 63.366 VHL 7.960 OLA -24.81 RAL 262.34 RAD 6569.2 VEL 13.591 PTH 2.48 VHP 13.084 DPA -12.62 RAP 244.62 ECC 2.0429 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 29 49 1587.01 -1.04 4.76 143.35 118.30 12 56 16 987.0 2.75 358.13 90.00 16 36 30 770.25 22.39 316.38 153.40 107.81 16 49 20 170.2 24.61 308.42 13 29 0 1395.93 18 20 0 5724.60 13 54 50 1314.93 20 10 40 5378.37 13 52 16 342.83 795.9 -3.51 349.35 141.98 119.71 .47 100.00 27.14 25.08 270.65 154.31 106.82 19 55 24 5124.6 262.46 100.00 123.13 14 16 45 104.69 21 40 18 714.9 -4.53 333.58 -8.95 339.87 138.64 110.00 32.92 4778.4 110.00 31.22 246.32 156.28 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1519.4 SR 375.3 SS 389.4 CRT -.3750 CRS .2178 CST -.9860 LSA 1573.6 MSA 353.3 SSA 11.9 EL1 1526.3 EL2 346.3 ALF 174.42 SGT 5333.9 SGR 416.3 SG3 99.5 RRT - 4905 RRF - 4718 RTF .9568 SGB 5350.1 RZ3 .0004 R13 - .9568 TOE -.4883 TRA 6.2089 TC3-1.2700 BAU 1.0760 RDE .5154 RRA -.2373 RC3 .0100 FAU .00518 FDE -.0328 FRA 1.4447 FC3 -.0707 BSP 17326

BOE .7100 BRA 6.2134 BC3 1.2701 FSP -330

SG1 5337.8 SG2 362.5 THA 177.80

ARRIVAL DATE FEB 18 1968

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LAUNCH DATE JUL 27 1967
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 592.947
     RL 151.93 LAL -.00 LOL 303.30 VL 24.850 GAL 15.13 AZL 90.29 MCA 309.30 SMA 117.49 ECC .38491 INC .2899 V1 29.325
RP 108.59 LAP .22 LOP 252.60 VP 36.261 GAP 22.24 AZP 90.18 TAL 152.44 TAP 101.74 RCA 72.27 APO 162.71 VZ 34.899
RC 203.771 GL -.82 GP 7.86 ZAL 38.70 ZAP 170.21 ETS 123.52 ZAE 129.43 ETE 173.17 ZAC 19.39 ETC 17.43 CLP 174.14
    PLANETOCENTRIC CONIC
     C3 72.877 VHL 8.537 DLA -24.15 RAL 264.09 RAD 6569.4 VEL 13.937 PTH 2.54 VMP 13.721 DPA -13.22 RAP 246.82 ECC 2.1994
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 25 46 1658.54 -3.34 8.75 146.62 118.14 12 53 24 1058.5 .44 2.12
                                                                                                                     118.14 12 53 24
107.67 17 7 18
119.39 13 51 17
106.87 20 11 29
122.56 14 18 22
105.09 21 53 46
                                                                                                 146.62
          90.00 12 25 46 1658.54
                       16 54 32 765.23
13 26 56 1461.08
                                                                                                    157.57
                                                                                                                                                                165.2
                                                                                                                                                                                    24.70
                                                                                                                                                                                                     308.07
          90.00
                                             765.23
                                                                 22.49
                                                                                   316.05
                                                                -5.69
                                                                                   352.95
                                                                                                   145.33
                                                                                                                                                                861.1
                                                                                                                                                                                    -1.74
                                                                                                                                                                                                     346.40
        100.00
                                                                25.05
                                                                                   270.74
                                                                                                    158.44
                                                                                                                                                               5126.0
                                                                                                                                                                                    27.12
                                                                                                                                                                                                     262.55
                      18 36 3
13 55 30
20 23 58
                                           5725.96
        100.00
                                                                                                                                                                771.5
                                                                                                                                                                                                     336.56
                                                                                   342.92
                                                                                                  142.09
                                                                                                                                                                                    -6.67
                                                                -11.04
                                           1371.46
        110.00
                                                                                                                                                               4788.3
                                                                                                                                                                                   32.80
                                                                                                                                                                                                     238.26
                                                                 31.04
                                                                                   247.04
                                                                                                     160.38
        110.00
                                           53AA.35
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SCT 5305.4 SGR 403.0 SG3 97.3
RRT -.4937 RRF -.4771 RTF .9618
SGB 5320.7 R23 .0002 R13 -.9618
SGI 5309.2 SG2 350.2 THA 177.84
                                                                                                                                                        ST 1517.0 SR 359.9 SS 599.8

CRT -.3164 CRS .1793 CST -.9896

LSA 1571.9 MSA 345.9 SSA 11.3
     TOE -.3676 TRA 6.7789 TC3-1.0519 BAU 1.0249
     ROE .5299 RRA -.2577 RC3 .0074 FAU .00395
FDE -.0109 FRA 1.5279 FC3 -.0470 BSP 17312
BOE .6446 BRA 6.7838 BC3 1.0519 FSP -323
                                                                                                                                                          EL1 1521.5 EL2 340.4 ALF 175.48
                                                                                                                                                                         ARRIVAL DATE FEB 20 1968
                                                                                             FLIGHT TIME 208.00
LAUNCH DATE JUL 27 1967
                                                                                             DISTANCE 596.263
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 24.809 GAL 16.69 A7L 90.05 MCA 312.47 SMA 117.28 ECC .40314 INC .0469 V1 29.325
RP 108.62 LAP .04 LOP 253.77 VP 36.222 GAP 23.42 A7P 90.03 TAL 151.27 TAP 103.74 RCA 70.00 APO 164.56 V2 34.888
RC 205.386 GL -.13 GP 7.76 ZAL 37.29 ZAP 169.66 ETS 128.26 ZAE 129.16 ETE 173.30 ZAC 17.41 ETC 19.83 CLP 173.15
    PLANETOCENTRIC CONIC

C3 84.229 VHL 9.178 OLA -23.51 RAL 265.65 RAD 8569.6 VEL 14.338 PTH 2.61 VHP 14.434 OPA -13.77 RAP 248.98 ECC 2.3862
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 12 22 8 1726.32 -5.51 12.56 149.80 117.62 12 50 55 1126.3 -1.7A 5.90

90.00 17 10 37 764.07 22.52 315.97 161.52 107.64 17 23 21 164.1 24.72 307.99

100.00 13 24 54 1523.75 -7.77 356.44 148.57 118.95 13 50 18 923.7 -3.85 349.85

100.00 18 50 33 5729.92 24.97 271.01 162.35 106.99 20 26 3 5129.9 27.06 262.83

110.00 13 55 51 1426.70 -13.04 345.94 145.43 121.88 14 19 37 826.7 -8.74 339.49

110.00 20 36 5 5399.73 30.84 247.87 164.29 105.54 22 6 5 4799.7 32.66 275.12
   PLANETOCENTRIC CONIC
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 5273.0 SGR 388.3 SG3 95.3

RRT -.4956 RRF -.4812 RTF .9666

SG8 5287.2 R23 .0002 R13 -.9666

SG1 5276.5 SG2 337.1 THA 177.90
                                                                                                                                                          ST 1518.1 SR 344.0 SS 412.3
CRT -.2626 CRS .1450 CST -.9924
     TOE -.2439 TRA 7.3918 TC3 -.8537 BAU .9613
     RDE .5435 RRA - .2771 RC3 .0048 FAU .00264
     FOE .0105 FRA 1.6186 FC3 -.0271 BSP 17282
                                                                                                                                                         LSA 1574.9 MSA 335.5 SSA 10.7
                                                                                                                                                          ELI 1520.9 EL2 331.3 ALF 176.43
     BOE .5957 BRA 7.3970 BC3 .8537 FSP -316
                                                                                                                                                                       ARRIVAL DATE FEB 22 1968
                                                                                            FLIGHT TIME 210.00
LAUNCH DATE JUL 27 1967
                                                                                            DISTANCE 599.108
   HELIOCENTRIC CONIC
     RL 151.93 LAL -.00 LOL 303.30 VL 24.771 GAL 18.40 AZL 89.78 HCA 315.65 SMA 117.08 ECC .42357 INC .2164 V1 29.325
RP 108.65 LAP -.15 LOP 258.94 VP 36.186 GAP 24.74 AZP 89.84 TAL 150.21 TAP 105.86 RCA 67.49 APO 166.68 V2 34.878
RC 206.983 GL .52 GP 7.67 ZAL 36.05 ZAP 169.01 ETS 132.71 ZAE 128.84 ETE 173.42 ZAC 15.53 ETC 22.79 CLP 172.10
REARETOCEMERIC CONT.
    PLANETOCENTRIC CONIC
     C3 97.864 VHL 9.893 DLA -22.90 RAL 267.02 RAD 6569.9 VEL 14.806 PTH 2.68 VHP 15.235 DPA -14.27 RAP 251.09 ECC 2.6106 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        117.37 12 48 36
107.69 17 37 42
118.40 13 49 13
107.17 20 39 9
                                                                                                 152.86
165.23
                                                                                                                                                           1190.7
                                                                                   16.20
                                                                 -7.54
          90.00 12 18 45 1790.70
                                                                                                                                                               165.9
                                                                                                                                                                                   24.59
                                                                                                                                                                                                     308.12
          90.00
                                                                                   316.09
                        17 24 56
                                             765.89
                                                                 22.48
                                                                                                                                                                 983.9
                                                                                                                                                                                   -5.87
                                                                                                                                                                                                     353.17
                      13 22 49 1583.92
19 3 33 5735.94
                                                                 -9.74
                                                                                   359.82
                                                                                                    151.69
         100.00
                                                                                                  166.05
                                                                                                                                                              5135.9
                                                                                                                                                                                 26.97
                                                                                                                                                                                                   263.26
                                                                                   271.42
                                                                 24.85
         100.00
                                                                                                 148.64
                                                                                                                         121.10 14 20 30
106.02 22 17 14
                       13 55 49 1480.42
20 47 2 5412.20
                                                                                                                                                                880.4
                                                                                                                                                                                 -10.72
                                                                                                                                                                                                     342.38
                                                                                   348.93
                                                               -14.96
         110.00
                                                                                                                                                              4612.2
                                                                                                                                                                                 32.50
                                                                                                                                                                                                     240.06
                                                                                   248.77
                                                                                                     167.98
         110.00
                                                                 30.61
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 5238.4 SGR 372.3 SG3 93.4

RRT -.4958 RRF -.4855 RTF .9713

SG8 5251.6 R23 .0001 R13 -.9713

SG1 5241.6 SG2 323.1 THA 177.97
                                                                                                                                                        ST 1521.7 SR 327.5 SS 427.5
CRT -.2124 CRS .1131 CST -.9946
      TOE -.1137 TRA 8.0574 TC3 -.6730 BAU .8805
     RDE .5572 RRA -.2951 RC3 .0022 FAU .00115
FDE .0322 FRA 1.7189 FC3 -.0102 BSP 17139
                                                                                                                                                        LSA 1581.5 MSA 322.9 SSA 10.1
EL1 1523.4 EL2 319.7 ALF 177.26
     BDE .5687 BRA 8.0628 BC3 .6730 FSP -308
                                                                                             FLIGHT TIME 212.00
                                                                                                                                                                        ARRIVAL DATE FEB 24 1968
LAUNCH DATE JUL 27 1967
                                                                                            DISTANCE 601.366
    HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 24.734 GAL 20.30 AZL 89.48 MCA 318.82 SMA 116.90 ECC .44654 INC .5151 VI 29.325
RP 108.69 LAP -.34 LOP 262.12 VP 36.151 GAP 26.24 AZP 89.61 TAL 149.31 TAP 108.12 RCA 64.70 APO 169.10 V2 34.867
RC 208.560 GL 1.12 GP 7.58 ZAL 34.99 ZAP 168.23 ETS 136.87 ZAE 128.43 ETE 173.56 ZAC 13.78 ETC 26.47 CLP 170.97
    PLANETOCENTRIC CONIC
     C3 114.351 VHL 10.694 OLA -22.32 RAL 268.19 RAD 6570.2 VEL 15.352 PTH 2.75 VHP 16.141 DPA -14.72 RAP 253.14 ECC 2.8819
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 15 26 1851.85 -9.44 19.69 155.78 116.82 12 46 18 1251.8 -5.76 12.93
                                                                                                                      116.82 12 46 18

107.80 17 50 27

117.75 13 47 57

107.40 20 50 52

120.24 14 20 57

106.53 22 27 14
                                                                                                 155.78
                        12 15 26 1851.83
                                                                                   316.36
                                                                                                      168.70
                                                                                                                                                                170.0
                                                                                                                                                                                    24.62
                                                                                                                                                                                                      308.40
                                                                 22.39
                                            769.97
          90.00
                        17 37 37
                                                                                                                                                               1041.5
                                                                                                                                                                                    -7.78
                                                                                                                                                                                                     356.38
                                                                                                      154.65
                                                               -11.59
                                                                                      3.10
         100.00
                         13 20 35
                                           1641.50
                                                                24.70
-16.76
                                                                                                                                                                5143.6
                                                                                                                                                                                    26.85
                                                                                                                                                                                                     263.79
                                                                                   271.93
                                                                                                      169.49
                        19 15 8 5743.56
         100.00
                                                                                                                                                                932.4
                                                                                                                                                                                 -12.62
                                                                                                                                                                                                     345.22
                                                                                                      151.69
                         13 55 24 1532.37
                                                                                   351.88
         110.00
                       20 56 49 5425.47
                                                                                   249.72
                                                                                                      171.44
                                                                                                                                                               4825.5
                                                                                                                                                                                   32.32
                                                                                                                                                                                                     241.05
                                                                 30.35
         110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SCT 5197.7 SCR 355.0 SC3 91.5
RRT -.4938 RRF -.4836 RTF .9757
SCB 5209.8 R23 .0001 R13 -.9757
                                                                                                                                                      ST 1524.6 SR 310.8 SS 444.6

CRT -.1689 CRS .0866 CST -.9963

LSA 1588.5 MSA 308.5 SSA 9.5

EL1 1525.5 EL2 306.1 ALF 177.94
      TOE .0133 TRA 8.7723 TC3 -.5127 BAU .7839
ROE .5712 RRA -.3105 RC3 -.0001 FAU-.00046
     FOE .0521 FRA 1.8279 FC3 .0035 BSP 17106
BDE .5714 BRA 8.7778 BC3 .5127 FSP -302
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FLIGHT TIME 206.00

SG1 5200.7 SG2 308.5 THA 178.06

ARRIVAL DATE FEB 26 1968

EL1 1508.9 EL2 242.7 ALF 179.69

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LAUNCH DATE JUL 27 1967
                                                                              DISTANCE 602.884
    RL 151.93 LAL -.00 LOL 303.30 VL 24.700 GAL 22.42 AZL 89.15 MCA 321.98 SMA 116.72 ECC .47245 INC .8534 VI 29.325
RP 108.72 LAP -.53 LOP 265.29 VP 36.118 GAP 27.94 AZP 89.33 TAL 148.59 TAP 110.57 RCA 61.58 APO 171.87 VZ 34.858
RC 210.118 GL 1.68 GP 7.50 ZAL 34.12 ZAP 167.33 ETS 140.75 ZAE 127.93 ETE 173.71 ZAC 12.18 ETC 31.00 CLP 169.76
   PLANETOCENTRIC CONIC
    C3 134.439 VHL 11.595 OLA -21.76 RAL 269.16 RAD 6570.4 VEL 15.993 PTH 2.02 VHP 17.171 OPA -15.13 RAP 255.11 ECC 3.2125
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      116.18 12 43 52
107.95 18 1 39
                    12 12 2 1909.71
17 48 43 775.75
                                                      -11.20
                                                                       23.03
                                                                                    158.51
                                                                                                                                     1309.7
                                                                                                                                                     -7.59
                                                                                                                                                                       16.21
        90.00
                                                                                                                                       175.7
                                                                                                                                                       24.52
                                                                                                                                                                      308.79
        90.00
                                                      22.27
                                                                      316.74
                                                                                     171.89
                                                                                                      117.02 13 46 25
107.66 21 1 11
119.30 14 20 55
107.05 22 36 3
                    13 18 8 1696.38
19 25 19 5752.34
                                                                        6.27
                                                                                     157.43
                                                                                                                                      1096.4
                                                                                                                                                       -9.58
                                                                                                                                                                      359.46
       100.00
                                                      -13.31
                                                                                                                                                       26.70
                                                                                                                                                                      264.40
                                                                                     172.67
                                                                                                                                      5152.3
                                                                      272.52
       100.00
                                                      24.52
                                                                                                                                                    -14.40
32.12
                                                                                                                                                                      347.98
                    13 54 32 1582.28
                                                     -18.45
                                                                      354.76
                                                                                     154.57
                                                                                                                                       982.3
       110.00
                    21 5 24
                                                                     250.70
                                                                                                                                                                      242.08
                                                                                     174.63
                                                                                                                                     4839.2
       110.00
                                                       30.06
                                    5439.22
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                         SCT 5153.0 SGR 336.4 SG3 89.7
RRT - 4889 RRF - 4807 RTF . .9798
SGB 5164.0 R23 .0002 R13 - .9798
SG1 5155.6 SG2 293.3 THA 178.17
                                                                                                                                 ST 1526.1 SR 293.8 S9 464.5
CRT -.1299 CRS .0627 CST -.9975
    TOE .1415 TRA 9.5494 TC3 -.3692 BAU .6637
    RDE .5853 RRA -.3225 RC3 -.0021 FAU-.00233
    FDE .0717 FRA 1.9490 FC3 .0150 BSP 17049
BDE .6022 BRA 9.5548 BC3 .3692 FSP -297
                                                                                                                                 LSA 1595.3 HSA 293.0 SSA 9.0
                                                                                                                                  EL1 1526.6 EL2 291.2 ALF 178.51
                                                                                                                                              ARRIVAL DATE FEB 28 1968
                                                                              FLIGHT TIME 216.00
LAUNCH DATE JUL 27 1967
                                                                              DISTANCE 603.466
  HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 24.669 GAL 24.80 A7L 88.76 MCA 325.15 SMA 116.57 ECC .50176 INC 1.2433 V1 29.325 RP 108.74 LAP -.71 LOP 268.45 VP 36.088 GAP 29.89 AZP 88.98 TAL 148.09 TAP 113.23 RCA 58.08 APO 175.05 V2 34.848 RC 211.656 GL 2.21 GP 7.41 ZAL 33.45 ZAP 166.28 ETS 144.37 ZAE 127.32 ETE 173.88 ZAC 10.77 ETC 36.53 CLP 168.42
   PLANETOCENTRIC CONIC
    C3 159.116 VHL 12.614 DLA -21.24 RAL 269.91 RAD 6570.7 VEL 16.746 PTH 2.90 VHP 18.348 DPA -15.5Q RAP 256.96 ECC 3.6187 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 8 27 1964.26 -12.81 26.22 161.03 115.47 12 41 12 1364.3 -9.28 19.32
        90.00 12 8 27 1964.26
                                                                                                      108.14 18 11 20
116.22 13 44 30
107.94 21 10 6
118.31 14 20 20
107.58 22 43 38
                    17 58 17
                                      782.72
                                                                                                                                       162.7
                                                                                                                                                       24.40
                                                                                                                                                                      309.27
        90.00
                                                       22.13
                                                                      317,20
                                                                                     174.77
                    13 15 21 1748.35
19 34 4 5761.90
13 53 10 1629.68
                                                                                                                                      1148.3
                                                                                                                                                      -11.25
                                                                                     159.99
       100.00
                                                      -14.59
                                                                        9.31
       100.00
                                                      24.32
                                                                      273.16
                                                                                     175.55
                                                                                                                                      5161.9
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                                                      -20.01
                                                                      357.57
                                                                                     157.23
                                                                                                                                      1029.7
                                                                                                                                                     -16.07
       110.00
                                                                                                                                      4853.2
                                                                                                                                                       31.91
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                                                                                     177.52
       110.00
                    21 12 45
                                    5453.16
                                                       29.80
                                                                      251.68
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .2692 TRA10.3957 TC3 -.2417 BAU .5142
                                                                         SGT 5103.9 SGR 316.5 SG3 88.0
RRT -.4800.RRF -.4737 RTF .9835
                                                                                                                                 ST 1524.8 SR 276.7 SS 487.4
CRT -.0948 CRS .0408 CST -.9984
    RDE .5999 RRA -.3300 RC3 -.0036 FAU-.00456
    FOE .0907 FRA 2.0840 FC3 .0248 BSP 16975
BOE .6575 BRA10.4009 BC3 .2417 FSP -291
                                                                         SG8 5113.7 R23 .0002 R13 -.9835
SG1 5106.2 SG2 277.6 THA 178.29
                                                                                                                                 LSA 1600.8 MSA 276.7 SSA
                                                                                                                                                                           8.4
                                                                                                                                  EL1 1525.0 EL2 275.4 ALF 178.98
                                                                                                                                             ARRIVAL DATE MAR I 1968
                                                                              FLIGHT TIME 218.00
LAUNCH DATE JUL 27 1967
                                                                              DISTANCE 602.850
   HELIOCENTRIC CONIC
    RL 151.93 LAL -.00 LOL 303.30 VL 24.641 GAL 27.49 A7L 88.30 MCA 328.31 SMA 116.43 ECC .53496 INC 1.7000 VI 29.325
RP 108.77 LAP -.89 LOP 271.62 VP 36.060 GAP 32.14 AZP 88.55 TAL 147.86 TAP 116.17 RCA 54.14 APO 178.71 VZ 34.840
RC 213.175 GL 2.70 GP 7.33 ZAL 33.01 ZAP 165.07 ETS 147.74 ZAE 126.56 ETE 174.06 ZAC 9.59 ETC 43.10 CLP 166.95
   PLANETOCENTRIC CONIC
    C3 189.704 VHL 13.773 OLA -20.74 RAL 270.42 RAD 6571.0 VEL 17.636 PTH 2.98 VHP 19.701 OPA -15.83 RAP 258.69 ECC 4.1220
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     114.71 12 36 8
108.34 18 19 26
115.38 13 42 5
                                                                                                                                   1415.4
                                                                                                                                                    -10.84
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                    12 4 33 2015.36
                                                      -14.29
                                                                      29.25
                                                                                  163.29
                   18 6 16 790.45
13 12 8 1797.23
19 41 22 5771.85
13 51 11 1674.85
21 18 48 5466.99
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        90.00
                                                       21.96
                                                                     317.71
                                                                                     177.31
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117.29 14 19 6
108.09 22 49 55
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       100.00
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       110.00
                                                      -21.44
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                                                                     252.66
                                                                                     180.07
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       110.00
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION -ACCURACY
                                                                                                                                 CRT - .0618 CR3 .0190 CST -.9990
LSA 1604.6 MSA 260.0 SSA 7.9
EL1 1520.3 EL2 259.1 ALF 179.38
                                                                         SGT 5052.0 SGR 295.6 SG3 86.4
RRT - .4654 RRF - .4607 RTF .9868
    TOE .3986 TRA11.3232 TC3 -.1282 BAU .3253
    ROE .6150 RRA -.3313 RC3 -.0051 FAU-.00732
                                                                         SG8 5060.6 R23 .0003 R13 -.9868
SG1 5053.8 SG2 _261.5 THA 178.44
    FOE. .1100 FRA 2.2364 FC3 .0334 BSP 16772
BOE .7329 BRA11.3280 BC3 .1283 FSP -284
                                                                                                                                              ARRIVAL DATE MAR 3 1968
LAUNCH DATE JUL 27 1967
                                                                              FLIGHT TIME 220.00
                                                                              DISTANCE 600.695
    RL 151.93 LAL -.00 LOL 303.30 VL 24.617 GAL 30.55 AZL 87.75 HCA 331.47 SMA 116.31 ECC .57260 INC 2.2462 VI 29.325 RP 108.80 LAP -1.07 LOP 274.79 VP 36.036 GAP 34.76 AZP 88.03 TAL 147.97 TAP 119.44 RCA 49.71 APO 182.90 VZ 34.832 RC 214.674 GL 3.15 GP 7.24 ZAL 32.81 ZAP 163.66 ETS 150.90 ZAE 125.64 ETE 174.27 ZAC 8.69 ETC 50.52 CLP 165.32
   PLANETOCENTRIC CONIC
    C3 227.965 VHL 15.099 DLA -20.29 RAL 270.66 RAD 6571.3 VEL 18.689 PTH 3.06 VHP 21.264 DPA -16.12 RAP 260.24 ECC 4.7517
    LNCH AZMTH LNCH TIME L-I TIME INV LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 0 9 2052.80 -15.62 32.09 165.23 113.92 12 34 32 1462.8 -12.26 25.03 90.00 18 12 35 798.56 21.79 318.24 179.46 108.55 18 25 54 198.6 24.12 310.34
                                                                                                      114.53 13 39 3
108.52 21 23 27
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       100.00
                    13 8 20 1842.75
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                                                                       14.97
                                                                                     164.28
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       100,00
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                                     5781.89
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                    13 48 29 1716.94
21 23 26 5480.46
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31.48
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108.58 22 54 46
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       110.00
                                                       29.22
                                                                      253.60
                                                                                     182.23
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4991.8 SGR 273.7 SG3 84.9
RRT -.4429 RRF -.4396 RTF .9897
SGB 4999.3 R23 .0003 R13 -.9897
                                                                                                                                  ST 1508.9 SR 242.8 SS 543.6
    TOE .5151 TRA12,3268 TC3 -.0301 BAU- .0934
    RDE .6314 RRA -.3239 RC3 -.0058 FAU-.01069
FDE .1268 FRA 2.4063 FC3 .0406 BSP 16690
                                                                                                                                CRT -.0327 CRS -.0006 CST -.9993
                                                                                                                                LSA 1603.8 MSA 243.3 SSA
                                                                                                                                                                          7.3
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FLIGHT TIME 214.00

BDE .8149 BRA12.3311 BC3 .0307 FSP -280

SG1 4993.3 SGZ 245.3 THA 178.61

ARRIVAL DATE OCT 6 1967

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LAUNCH DATE JUL 28 1967
                                                                                               DISTANCE 201.509
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 28.554 GAL -14.48 AZL 92.25 MCA 90.66 SMA 142.41 ECC .25828 INC 2.2494 V1 29.328

RP 108.29 LAP -2.25 LOP 34.91 VP 38.978 GAP -5.70 AZP 89.97 TAL 241.03 TAP 331.69 RCA 105.63 APO 179.19 V2 34.996

RC 65.357 GL -8.62 GP -18.06 ZAL 163.82 ZAP 48.59 ETS 16.55 ZAE 160.02 ETE 328.46 ZAC 100.35 ETC 11.57 CLP -45.92
   PLANETOCENTRIC CONIC
                                                                                                                                2.41 VHP 5.494 OPA -9.10 RAP 164.04 ECC 1.8631
     C3 52.447 VHL 7.242 DLA 7.22 RAL 137.79 RAD 6568.9 VEL 13.184 PTH 2.41 VHP 5.494 DPA -9.10 RAP 164.04 ECC 1.8631 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                    7.22 RAL 137.79 RAD 6568.9 VEL 13.184 PTH
                        23 15 11 2680.08
13 5 41 4872.59
                                                                                      73.13
                                                                                                         19.05
                                                                                                                              97.11 23 59 51
                                                                                                                                                                   2080.1
                                                                                                                                                                                     -26.21
                                                                                                                                                                                                            64.69
                                                                  -27.48
          90.00
                                                                                                                               69.43 14 26 53
                                                                                                                                                                    4272.6
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                                                                  19.91
                                                                                     211.32
          90.00
                           0 43 55 2406.57
14 23 34 4621.33
                                                                                       52.80
                                                                                                          18.84
                                                                                                                               98.00
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                                                                                                                                                                   1806.6
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                                                                 -28.90
        100.00
                                                                                                                               68.46 15 40 35
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                                                                  21.24
        100.00
                        14 23 34
                                                                                                                            100.50 2 36 12
65.69 16 37 46
                                                                                                                                                                   1568.3
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                       2 0 4 2168.25
15 23 54 4432.41
                                                                                       33.96
                                                                                                          18.11
        110.00
                                                                 -32.72
                                                                                     176.32
                                                                                                                                                                   3832.4
                                                                                                                                                                                       21.31
                                                                                                          11.43
                                                                                                                                                                                                          168.92
        110.00
                                                                   24.81
                                                                                         MID-COURSE EXECUTION ACCURACY

SGT: 448.7 SGR 482.0 SG3 188.8

RRT .0129 RRF .5398 RTF .0170

SGB 658.5 R23 .0345 R13 .5388
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 185.7 SR 367.2 SS 169.8
CRT -.6542 CRS .3275 CST -.9137
                                                    .1377 BAU
     TOE .1870 TRA -.4686 TC3
                                                                        .1355
     ROE - .4539 RRA - .3191 RC3 - .1356 FAU .0808Z
                                                                                                                                                              LSA 398.2 MSA 197.8 SSA 21.6
     FOE .2334 FRA-1.2572 FC3-1.3340 BSP 897
                                                                                          SG1 482.2 SG2 448.4 THA 84.91
                                                                                                                                                              EL1. 389.6 EL2 132.4, ALF 110.82
     BDE .4909 BRA .5669 BC3 .1933 FSP
                                                                      - 526
                                                                                                                                                                             ARRIVAL DATE OCT 8 1967
                                                                                               FLIGHT TIME 72.00
                                                                                               DISTANCE 208.188
   HELIOCENTRIC CONIC
    RL 151,91 LAL -.00 LOL 304.25 VL 28.583 GAL -14.33 A7L 92.11 MCA 93.86 SMA 142.66 ECC .25537 INC 2.1086 V1 29.328 RP 108.25 LAP -2.10 LOP 38.11 VP 39.010 GAP -4.95 A7P 89.86 TAL 241.42 TAP 335.28 RCA 106.23 APO 179.09 V2 35.009 RC 67.565 GL -8.18 GP -19.10 7AL 164.26 ZAP 53.18 ETS 14.96 ZAE 161.22 ETE 320.46 ZAC 101.98 ETC 11.03 CLP -50.64
   PLANETOCENTRIC CONIC
                                                     7.71 RAL 137.67 RAD 6568.9 VEL 13.137 PTH
                                                                                                                                 2.40 WHP 5.226 OPA
                                                                                                                                                                       -9.49 RAP 162.27 ECC 1.8431
    C3 51.230 VHL 7.158 DLA 7.71 RAL 137.67 RAD 6568.9 VEL 13.137 PTH 2.40 VHP 5.26 DPA -9.49 RAP 162.27 ECC 1.8431 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 10 56 2689.86 -27.56 73.83 18.73 96.77 23 55 46 2089.9 -26.34 65.38 90.00 13 9 1 4851.15 19.39 209.96 13.00 68.95 14 29 52 4251.1 16.35 202.60 100.00 0 39 55 2415.53 -28.98 53.45 18.53 97.66 1 20 11 1815.5 -27.62 44.91 100.00 14 26 39 4600.70 20.72 190.99 12.44 67.96 15 43 20 4000.7 17.55 183.63 110.00 1 56 36 2175.45 -32.81 34.52 17.83 100.19 2 32 54 1575.4 -31.05 25.74 110.00 15 26 25 4413.55 24.27 175.12 10.78 65.16 16 39 59 3613.6 20.72 167.78
     C3 51.230 VHL 7.158 DLA
        110.00
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 460.2 SGR 501.6 SG3 207.9

RRT .0952 RRF .5870 RTF .1366

SGB 680.8 R23 .1377 R13 .5764

SG1 511.2 SG2 449.5 THA 66.09
                                                                                                                                                               ST 192.0 SR 363.1 SS 183.6

CRT -.6098 CRS .3563 CST -.9442

LSA 397.2 MSA 210.3 SSA 21.7
     TOE .1850 TRA -.5035 TC3 .1092 BAU .1330
     ROE -.4420 RRA -.3358 RC3 -.1606 FAU .08786
     FDE .2827 FRA-1.3694 FC3-1.4847 85P 953
8DE .4791 BRA .6052 BC3 _1942 FSP -586
                                                                                                                                                               ELI 384.8 ELZ 143.5 ALF 110.91
                                                                                                                                                                            ARRIVAL DATE OCT 10 1967
                                                                                               FLIGHT TIME 74.00
LAUNCH DATE JUL 28 1967
                                                                                               DISTANCE 214.827
    HELIOCENTRIC CONIC
     RL 151.91 LAL -.00 LOL 304.25 VL 28.600 GAL -14.19 AZL 91.97 MCA 97.06 SMA 142.81 ECC .25274 INC 1.9666 V1 29.328 RP 108.20 LAP -1.95 LOP 41.32 VP 39.035 GAP -4.25 AZP 89.76 TAL 241.66 TAP 338.72 RCA 106.72 APO 178.90 V2 35.023 RC 69.409 GL -7.73 GP -20.16 TAL 164.63 ZAP 57.93 ETS 13.34 ZAE 162.19 ETE 310.85 ZAC 103.76 ETC 10.39 CLP -55.56
    PLANETOCENTRIC CONIC
      C3 50.073 VHL 7.076 DLA 8.20 RAL 137.65 RAD 6568.8 VEL 13.093 PTH 2.39 VHP 4.996 DPA -9.83 RAP 160.35 ECC 1.8241
     C3 50.073 VHL 7.076 OLA 8.20 RAL 137.65 RAO 6568.8 VEL 13.093 PTH 2.39 VHP 4.996 OPA -9.83 RAP 160.35 ECC 1.8241 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 7 3 2699.72 -27.64 74.54 18.51 96.42 23 52 3 2099.7 -26.46 66.07 90.00 13 12 43 4829.91 18.86 208.63 12.50 68.48 14 33 13 4229.9 15.77 201.31 100.00 0 36 18 2424.58 -29.06 54.11 18.32 97.33 1 16 42 1824.6 -27.74 45.56 100.00 14 30 6 4580.28 20.19 189.70 11.93 67.48 15 46 26 3980.3 16.96 182.39 170.00 15 23 18 4394.91 23.73 173.94 10.24 64.65 16 42 33 3794.9 20.12 166.66
                       23 7 3 2699.72
13 12 43 4829.91
0 36 18 2424.58
14 30 6 4580.28
1 53 35 2182.72
15 29 18 4394.91
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 201.2 SR 357.8 SS 197.2

CRT -.5644 CRS .3766 CST -.9652

LSA 396.5 MSA 223.0 SSA 21.8

EL1 379.4 EL2 156.6 ALF 111.44
                                                                                         SGT 481.8 SGR 523.8 SG3 227.3
RRT .1925 RRF .6330 RTF .2650
SGB 711.7 R23 .1675 R13 .6276
SG1 553.4 SG2 447.5 THA 56.76
      TOE .1857 TRA -.5447 TC3 .0740 BAU .1351
      ROE - .4286 RRA - .3527 RC3 - .1878 FAU .09487
      FOE .3327 FRA-1.4769 FC3-1.6403 85P 1068
      BOE .4671 BRA .6489 BC3 .2019 FSP
                                                                        -654
                                                                                                                                                                             ARRIVAL DATE OCT 12 1967
LAUNCH DATE JUL 28 1967
                                                                                                FLIGHT TIME 76.00
                                                                                                DISTANCE 221.425
     RL 151.91 LAL -.00 LOL 304.25 VL 28.607 GAL -14.04 A7L 91.82 MCA 100.26 SMA 142.87 ECC .25032 INC 1.8226 VI 29.328 RP 108.16 LAP -1.79 LOP 44.52 VP 39.052 GAP -3.57 A7P 89.68 TAL 241.76 TAP 342.02 RCA 107.11 APO 178.63 V2 35.036 RC 71.485 GL -7.25 GP -21.23 7AL 164.94 7AP 62.80 ETS 11.67 7AE 162.74 ETE 299.76 7AC 105.66 ETC 9.65 CLP -60.63
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 48.958 VHL 6.997 DLA 8.68 RAL 137.72 RAD 6568.8 VEL 13.051 PTH 2.38 VHP 4.803 DPA -10.13 RAP 158.29 ECC 1.8057 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 3 30 2709.69 -27.71 75.26 18.38 96.07 23 48 40 2109.7 -26.58 66.78 90.00 13 16 47 4808.70 18.33 207.30 12.11 68.03 14 36 56 4208.7 15.19 200.03
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                          15 32 32
                                             4376.33
                                                                    23.19
                                                                                      172.77
          110.00
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 517.0 SGR 546.9 SG3 245.5
RRT .3018 RRF .6742 RTF .3957
SGB 752.6 R23 .1766 R13 .6812
SG1 608.3 SG2 443.2 THA 50.28
                                                                                                                                                              ST 213.1 SR 350.5 SS 211.0
CRT -.5153 CRS .3992 CST -.9808
      TOE .1877 TRA -.5938 TC3 .0303 BAU .1429
      ROE -.4130 RRA -.3685 RC3 -.2162 FAU .10133
      FOE .3882 FRA-1.5682 FC3-1.7918 BSP 1225
BOE .4537 BRA .6988 BC3 .2184 FSP -713
                                                                                                                                                              LSA 396.4 MSA 234.9 SSA 21.8
                                                                                                                                                               EL1 372.4 EL2 171.8 ALF 112.41
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FLIGHT TIME 70.00

ARRIVAL DATE OCT 14 1967 LAUNCH DATE JUL 28 1967 FLIGHT TIME 78.00 DISTANCE 227.983 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 28.604 GAL -13.91 AZL 91.68 MCA 103.46 SMA 142.85 ECC .24809 INC 1.6755 V1 29.328
RP 108.12 LAP -1.63 LOP 47.72 VP 39.062 GAP -2.93 AZP 89.61 TAL 241.72 TAP 345.18 RCA 107.41 APO 178.29 V2 35.049
RC 73.590 GL -6.74 GP -22.27 ZAL 165.17 ZAP 67.74 ETS 9.94 ZAE 162.74 ETE 287.76 ZAC 107.65 ETC 8.81 CLP -65.83 PLANETOCENTRIC CONIC C3 47.873 VHL 6.919 DLA 9.17 RAL 137.86 RAD 6568.8 VEL 13.009 PTH 2.37 VHP 4.646 DPA -10.39 RAP 156.15 ECC 1.7879 UNION AZMITH LINCH TIME L-I TIME INI LAT INI LONG INI RT ASC INI AZMITH INI TIME PO CST TIM INI 2 LAT INI 2 LONG 90.00 23 0 14 2719.85 -27.78 76.00 18.34 95.70 23 45 34 2119.9 -26.70 67.50 18.34 2119.9 90.00 23 0 14 2719.85 90.00 13 21 14 4787.33 100.00 0 30 0 2443.05 14 41 2 205.97 67.59 4187.3 14.59 198.75 17.78 11.81 1843.0 46.87 96.63 -27.99 100.00 -29.21 55.46 18.17 15 53 45 14 38 6 4539.37 1 48 27 2197.55 15 36 8 4357.63 3939.4 66.56 179.94 100.00 19.10 187.15 11.22 15.77 2 25 4 1597.6 27.35 110.00 -33.06 36.20 17.54 99.23 -31.43 16 48 46 18.91 3757.6 110.00 22.63 171.61 9.47 63.67 164.45 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 567.8 SGR 571.7 SG3 262.6 RRT .4071 RRF .7121 RTF .5131 SGB 805.7 R23 .1771 R13 .7318 SGI 675.8 SG2 438.6 THA 45.48 ST 228.5 SR 341.9 SS 224.1 CRT -.4696 CRS .4148 CST -.9888 LSA 398.1 MSA 245.8 SSA 21.9 EL1 365.4 EL2 188.8 ALF 114.30 TDE .1932 TRA -.6486 TC3 -.0206 BAU .1580 ROE -.3960 RRA -.3833 RC3 -.2461 FAU .10723 FOE .4417 FRA-1.6451 FC3-1.9392 BSP 1441 BOE .4406 BRA .7534 BC3 .2469 FSP -776 BOE .4406 BRA .7534 BC3 .2469 FSP LAUNCH DATE JUL 28 1967 FLIGHT TIME 80.00 ARRIVAL DATE OCT 16 1967 HELIOCENTRIC CONIC **DISTANCE 234.500** RL 151.91 LAL -.00 LOL 304.25 VL 28.593 GAL -13.77 AZL 91.52 MCA 106.67 SMA 142.75 ECC .24600 INC 1.5242 V1 29.328
RP 108.08 LAP -1.46 LOP 50.93 VP 39.066 GAP -2.32 AZP 89.56 TAL 241.56 TAP 348.23 RCA 107.63 APO 177.87 V2 35.062
RC 75.721 GL -6.20 GP -23.30 ZAL 165.34 ZAP 72.70 ETS 8.12 ZAE 162.08 ETE 275.77 ZAC 109.69 ETC 7.89 CLP -71.11 PLANETOCENTRIC CONIC C3 46.806 VML 6.841 OLA 9.66 RAL 138.09 RAD 6568.7 VEL 12.968 PTH 2.36 VMP 4.524 OPA -10.62 RAP 153.96 ECC 1.7703 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22 57 12 2730.30 13 26 7 4765.60 18.38 95.33 23 42 42 67.16 14 45 32 2130.3 -26.82 -27.85 76.75 90.00 68.24 90.00 17.21 204.63 11.60 4165.6 13.97 197.45 0 27 14 2452.62 100.00 -29.29 56.16 18.21 96.27 1 8 6 66.12 15 58 0 98.89 2 23 2 63.19 16 52 27 96.27 186 1852.6 -28.11 47.56 100.00 14 42 42 4518.51 18.53 185.86 11.00 3918.5 15.15 178.70 1 46 17 110.00 2205.23 -33.14 36.78 17.61 1605.2 -31.56 27.91 18.28 110.00 15 40 8 4336.66 22.05 170.44 9.22 3738.7 163.34 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 635.3 SGR 595.6 SG3 277.1 RRT .5033 RRF .7446 RTF .6124 SGB 870.9 R23 .1755 R13 .7741 ST 247.2 SR 331.3 SS 237.2 CRT -.4258 CRS .4332 CST -.9917 TOE .2011 TRA -.7096 TC3 -.0796 BAU .1797 ROE -.3766 RRA -.3953 RC3 -.2759 FAU .11201 FOE .4983 FRA-1.6964 FC3-2.0718 BSP 1699 BDE .4269 BRA .8123 BC3 .2872 FSP -824 LSA 402.7 MSA 253.9 SSA 21.9 SG1 755.8 SGZ 432.7 THA 41.35 EL1 357.7 EL2 207.1 ALF 117.54 LAUNCH DATE JUL 28 1967 FLIGHT TIME 82.00 ARRIVAL DATE OCT 18 1967 **DISTANCE 240.978** RL 151.91 LAL -.00 LOL 304.25 VL 28.574 GAL -13.63 AZL 91.37 MCA 109.88 SMA 142.59 ECC .24403 INC 1.3677 V1 29.328 RP 108.04 LAP -1.29 LOP 54.14 VP 39.064 GAP -1.73 AZP 89.53 TAL 241.27 TAP 351.16 RCA 107.79 APO 177.38 V2 35.075 RC 77.874 GL -5.62 GP -24.28 ZAL 165.44 ZAP 77.64 ETS 6.22 ZAE 160.79 ETE 264.72 ZAC 111.71 ETC 6.90 CLP -76.42 PLANETOCENTRIC CONIC C3 45.751 VML 6.764 OLA 10.17 RAL 138.40 RAD 6568.7 VEL 12.927 PTH 2.36 VMP 4.434 OPA -10.82 RAP 151.77 ECC 1.7529 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 54 21 2741.18 -27.92 77.54 18.50 94.94 23 40 2 2141.2 -26.94 69.01 94.94 23 40 2 66.73 14 50 29 13 31 26 4143.3 90.00 4743.28 16.61 203.26 11.47 13.32 196.13 0 24 39 2462.59 14 47 44 4497.10 -29.36 56.90 18.34 95.89 1 5 42 1862.6 48.27 16 2 41 3897.1 14 47 44 17.94 184.55 10.86 65.68 14.51 177.44 1 44 20 2213.23 15 44 33 4319.22 98.54 2 21 14 62.72 16 56 32 -33.23 37.39 17.77 1613.2 28.50 15 44 33 21.45 169.25 9.06 3719.2 17.62 162.21 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION, ACCURACY SGT 717.9 SGR 619.7 SG3 289.3 RRT .5827 RRF .7737 RTF .6894 SGB 948.4 R23 .1743 R13 .8089 ST 269.5 SR 319.5 SS 249.1 CRT -.3891 CRS .4454 CST -.9908 LSA 411.5 MSA 258.8 SSA 22.0 TOE .2132 TRA -.7744 TC3 -.1453 BAU .2073 TOE .2132 TRA -.7744 IC3 -.1493 UND
RDE -.3561 RRA -.4050 RC3 -.3061 FAU .11580
FDE .5490 FRA-1.7270 FC3-2.1913 BSP .2004
RDE .4151 RRA .8739 BC3 .3389 FSP .871 SG1 846.8 SG2 426.9 THA 37.89 EL1 352.1 EL2 225.3 ALF 123.12 LAUNCH DATE JUL 28 1967 FLIGHT TIME 84.00 ARRIVAL DATE OCT 20 1967 **DISTANCE 247.417** RL 151.91 LAL -.00 LOL 304.25 VL 28.549 GAL -13.49 APL 91.20 MCA 113.09 SMA 142.36 ECC .24216 INC 1.2046 V1 29.328 RP 108.00 LAP -1.11 LOP 57.35 VP 39.056 GAP -1.17 APP 89.53 TAL 240.88 TAP 353.98 RCA 107.89 APO 176.83 V2 35.088 RC 80.046 GL -5.01 GP -25.22 ZAL 165.47 ZAP 82.49 ETS 4.24 ZAE 158.98 ETE 255.15 ZAC 113.66 ETC 5.86 CLP -81.70 PLANETOCENTRIC CONIC C3 44.700 VHL 6.686 DLA 10.69 RAL 138.79 RAD 6568.7 VEL 12.887 PTH 2.35 VMP 4.375 DPA -11.02 RAP 149.65 ECC 1.7357 C3 44.700 WL 6.686 OLA 10.69 RAL 138.79 RAD 6568.7 VEL 12.887 PTH 2.35 VMP 4.375 DPA -11.02 RAP 149.55 ECC 1.7357
LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 51 36 2752.68 -27.98 78.38 18.69 94.53 23 37 29 2152.7 -27.06 69.83
90.00 13 37 16 4720.10 15.98 201.85 11.42 66.31 14 55 56 4120.1 12.65 194.76
100.00 0 22 13 2473.12 -29.43 57.67 18.55 95.49 1 3 26 1873.1 -28.36 49.03
100.00 14 53 16 4474.89 17.31 183.20 10.80 65.24 16 7 51 3874.9 13.83 176.14
110.00 1 42 34 2221.68 -33.31 38.04 18.01 98.16 2 19 35 1621.7 -31.82 29.12
110.00 15 49 24 4299.09 20.81 168.03 8.97 62.25 17 1 3 3699.1 16.94 161.05 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 814.5 SGR 641.0 SG3 297.9 RRT .6471 RRF .7979 RTF .7477 SGB 1036.5 R23 .1739 R13 .8357 ST 295.2 SR 305.6 SS 261.1 CRT -.3573 CRS .4603 CST -.9872 TOE .2289 TRA -.8426 TC3 -.2180 BAU .2390 RDE -.3335 RRA -.4108 RC3 -.3352 FAU .11807 FOE .6002 FRA-1.7274 FC3-2.2868 BSP 2338 LSA 425.7 MSA 259.0 SSA 22.1

SGI 947.6 SG2 420.1 THA 34.75

EL1 350.2 EL2 240.6 ALF 132.22

ARRIVAL DATE OCT 22 1967

LAUNCH DATE JUL 28 1967

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DISTANCE 253.819 HELIOCENTRIC CONIC . RL 151.91 LAL -.00 LOL 304.25 VL 28.516 GAL -13.34 AZL 91.03 HCA 116.31 SHA 142.08 ECC .24037 INC 1.0334 VI 29.328 RP 107.96 LAP -.93 LOP 60.56 VP 39.044 GAP -.64 AZP 89.54 TAL 240.39 TAP 356.70 RCA 107.93 APO 176.23 V2 35.101 RC 82.236 GL -4.34 GP -26.12 TAL 165.43 ZAP 87.21 ETS 2.18 ZAE 156.78 ETE 247.20 ZAC 115.51 ETC 4.79 CLP -86.89 PLANETOCENTRIC CONIC C3 43.652 VHL 6.607 DLA 11.25 RAL 139.25 RAD 6568.7 VEL 12.846 PTH 2,34 VHP 4.344 DPA -11.23 RAP 147.63 ECC 1.7184 UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 48 54 2765.05 -28.05 79.28 18.97 94.08 23 34 59 2165.0 -27.18 70.72 90.00 13 43 40 4695.79 15.31 200.38 11.46 65.89 15 1 55 4095.8 11.93 193.34 65.89 15 1 55 95.05 1 1 15 0 19 50 2484.45 14 59 20 4451.62 49.85 -29.50 58.51 18.84 95.05 1884.4 -28.49 100.00 13.11 174.79 64.80 16 13 32 3851.6 14 59 20 16.64 181.80 10.82 100.00 18.32 1 40 54 2230.79 15 54 46 4278.05 29.80 -33.40 38.73 97.76 2 18 5 1630.8 -31.96 110.00 61.78 17 6 4 159.85 166.77 8.97 367A.O 16.21 20.14 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 324.6 SR 290.7 SS 271.8 CRT -.5327 CRS .4699 CST -.9830 LSA 445.0 MSA 255.4 SSA 22.1 EL1 357.8 EL2 248.7 ALF 144.18 SGT 922.0 SGR 661.0 SG3 303.5 RRT .6970 RRF .8194 RTF .7902 SG8 1134.5 R23 .1758 R13 .8566 TDE .2492 TRA -.9119 TC3 -.2962 BAU .2738 RDE -.3100 RRA -.4135 RC3 -.3637 FAU .11916 FDE .6429 FRA-1.7057 FC3-2.3632 BSP 2706 SG1 1056.3 SG2 413.7 THA 32.03 BDE .3977 BRA 1.0013 BC3 .4691 FSP -927 ARRIVAL DATE OCT 24 1967 FLIGHT TIME 88.00 LAUNCH DATE JUL 28 1967 DISTANCE 260.185 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 28.478 GAL -13.19 AZL 90.85 HCA 119.52 SMA 141.75 ECC .23865 INC .8521 V1 29.328 RP 107.92 LAP -.74 LOP 63.78 VP 39.028 GAP -.13 AZP 89.58 TAL 239.81 TAP 359.33 RCA 107.92 APO 175.58 V2 35.113 RC 84.440 GL -3.62 GP -26.99 ZAL 165.31 ZAP 91.73 ETS .05 ZAE 154.35 ETE 240.73 ZAC 117.20 ETC 3.70 CLP -91.94 PLANETOCENTRIC CONIC C3 42.604 VHL 6.527 DLA 11.84 RAL 139.80 RAD 6568.6 VEL 12.805 PTH 2.33 VHP 4.340 DPA -11.47 RAP 145.75 ECC 1.7012 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 46 10 2778.59 -28.11 80.26 19.33 93.59 23 32 29 2178.6 -27.31 71.69 90.00 13 50 43 4670.00 14.59 198.83 11.57 65.46 15 8 33 4070.0 11.16 191.84 13 50 43 4670.00 0 17 27 2496.86 50.75 -29.57 59.42 19.21 94.58 0 59 4 1896.9 -28.62 100.00 180.32 64.36 . 16 19 50 3827.0 12.34 173.36 15.92 10.93 15 6 3 1 39 18 4426.97 100.00 39.50 18.73 97.31 2 16 38 61.30 17 11 38 1640.8 -32.11 30.54 2240.78 -33.48 110.00 15.44 158.59 19.42 3655.8 165.45 9.04 16 0 42 4255.82 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1038.1 SGR 677.6 SG3 305.5 RRT .7358 RRF .8376 RTF .8210 SGB 1239.7 R23 .1795 R13 .8722 ST 357.6 SR 273.8 SS 282.5 CRT -.3133 CRS .4801 CST -.9782 TOE .2742 TRA -.9812 TC3 -.3794 BAU .3102 ROE -. 2847 RRA -. 4119 RC3 -. 3907 FAU .11879 LSA 469.9 MSA 247.8 55A 22.2 FOE .6834 FRA-1.6576 FC3-2.4139 BSP 3089 -939 EL1 376.7 EL2 246.8 ALF 155.38 BDE .3953 BRA 1.0641 BC3 .5446 FSP SG1 1171.0 SG2 406.7 THA 29.57 ARRIVAL DATE OCT 26 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 28 1967 **DISTANCE 266.515** HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 28.435 GAL -13.04 AZL 90.66 MCA 122.74 SMA 141.38 ECC .23699 INC .6590 V1 29.328 RP 107.89 LAP -.55 LOP 67.00 VP 39.007 GAP .36 AZP 89.64 TAL 239.13 TAP 1.87 RCA 107.88 APO 174.89 V2 35.125 RC 86.655 GL -2.83 GP -27.84 ZAL 165.10 ZAP 96.03 ETS 357.84 ZAE 151.78 ETE 235.51 ZAC 118.70 ETC 2.63 CLP -96.82 PLANETOCENTRIC CONIC C3 41.556 VHL 6.446 DLA 12.47 RAL 140.42 RAC 6568.6 VEL 12.764 PTH 2.32 VHP 4.360 DPA -11.77 RAP 144.04 ECC 1.6839 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.45 19.77 93.04 23 29 51 65.03 15 15 56 2193.7 81.37 -28.17 22 43 18 2793.72 10.32 4042.3 11.77 13 58 34 4642.32 0 14 58 2510.72 15 13 30 4400.54 197.18 90.00 13.80 51.75 -28.77 0 56 49 1910.7 60.45 19.67 94.04 -29.64 100.00 171.84 16 26 50 11.51 3A00.5 63.91 178.75 11.11 15.14 31.37 96.81 2 15 12 60.81 17 17 50 1652.0 -32.27 1 37 40 2251.97 16 7 18 4232.06 19.23 - 33, 58 40.36 110.00 3632.1 14 61 157.26 9.20 164.05 18.64 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 394.4 SR 255.6 SS 292.7 CRT -.2978 CRS .4867 CST -.9740 LSA 499.7 MSA 237.3 SSA 22.3 SCT 1160.4 SGR 691.7 SC3 374.4 RRT .7658 RRF .8538 RTF .8434 SGB 1350.9 R23 .1855 R13 .8840 TDE .3044 TRA-1.0486 TC3 -.4668 BAU .3476 RDE -.2584 RRA -.4068 RC3 -.4167 FAU .11724 FDE .7173 FRA-1.5892 FC3-2.4425 BSP 3492 BDE .3992 BRA 1.1248 BC3 .6257 FSP -942 EL1 405.7 EL2 237.2 ALF 163.17 SG1 1290.3 SG2 400.0 THA 27.39 ARRIVAL DATE OCT 28 1967 FLIGHT TIME 92.00 LAUNCH DATE JUL 28 1967 DISTANCE 272.812 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 28.388 GAL -12.88 AZL 90.45 HCA 125.96 SHA 140.97 ECC .23538 INC .4511 V1 29.328 RP 107.85 LAP -.37 LOP 70.22 VP 38.983 GAP .83 AZP 89.73 TAL 238.38 TAP 4.34 RCA 107.79 APO 174.16 V2 35.137 RC 88.880 GL -1.96 GP -28.70 ZAL 164.80 ZAP 100.07 ETS 355.56 ZAE 149.16 ETE 231.33 ZAC 119.99 ETC 1.57 CLP-101.50 PLANETOCENTRIC CONIC C3 40.510 VHL 6.365 DLA 13.16 RAL 141.13 RAD 6568.6 VEL 12.723 PTH 2.31 VHP 4.403 DPA -12.16 RAP 142.52 ECC 1.6667 C3 40.510 VHL 6.365 0LA 13.16 RAL 141.15 RAU 6506.0 SEC. 12.45 C INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 40 10 2810.94 -28.22 82.62 20.32 92.41 23 27 1 2210.9 -27.59 74.01 90.00 14 7 19 4612.23 12.93 195.40 12.06 64.59 15 24 12 4012.2 9.40 188.50 14 7 19 4612.23 52.97 0 54 24 1926.5 -28.92 0 12 17 2526.51 15 21 49 4371.89 20.23 93.43 61.62 -29.71 170.20 63.45 16 34 41 3771.9 10.59 11.39 14.27 177.06 100.00 15 21 49 32.33 19.83 96.24 2 13 41 1664.7 -32.45 1 35 57 2264.75 16 14 39 4206.42 41.34 -33.68 110.00 60.31 17 24 45 36/16 . 4 13.70 155.83 9.44 162.56 16 14 39 110.00 17.78 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 435.4 SR 235.1 SS 303.9 CRT - 2842 CRS .4925 CST - .9699 LSA 535.3 MSA 223.9 SSA 22.4 SCT 1286.5 SCR 701.8 SG3 300.1 TOE .3405 TRA-1.1126 TC3 -.5573 BAU .3848 RRT .7889 RRF .8678 RTF .8594 SGB 1465.5 R23 .1936 R13 .8925 ROE - 2299 RRA - 3972 RC3 - 4408 FAU .11440 FOE .7504 FRA-1.4987 FC3-2.4449 BSP 3889 BOE .4108 BRA 1.1814 BC3 .7105 FSP -929 SGI 1411.8 SG2 392.9 THA 25.39 EL1 442.3 EL2 221.9 ALF 168.29

FLIGHT TIME 86.00

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LAUNCH DATE JUL 28 1967
                                                                       FLIGHT TIME 94.00
                                                                                                                                ARRIVAL DATE OCT 30 1967
                                                                       DISTANCE 279.077
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 28.336 GAL -12.71 AZL 90.23 MCA 129.18 SMA 140.54 ECC .23383 INC .2248 VI 29.328 RP 107.82 LAP -.17 LOP 73.44 VP 38.956 GAP 1.27 AZP 89.86 TAL 237.55 TAP 6.73 RCA 107.67 APO 173.40 V2 35.149 RC 91.113 GL -.99 GP -29.59 ZAL 164.39 ZAP 103.82 ETS 353.20 ZAE 146.54 ETE 228.00 ZAC 121.06 ETC .53 CLP-105.94
   PLANETOCENTRIC CONIC
     C3 39.470 VML 6.283 OLA 13.93 RAL 141.92 RAD 6568.5 VEL 12.682 PTH 2.30 VMP 4.468 DPA -12.65 RAP 141.19 ECC 1.6496
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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64.14 15 33 32
92.72 0 51 40
        90.00
                   22 36 37 2830.93
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        90.00
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                                                               175.22
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16 22 55 4178.40
       110.00
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59.80 17 32 34
       110.00
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   DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1415.5 SGR 710.9 SG3 293.8
RRT .8070 RRF .8811 RTF .8712
SGB 1584.0 R23 .2042 R13 .8990
                                                                                                                     ST 481.2 SR 213.7 SS 314.5
CRT -.2688 CRS .4890 CST -.9674
    TOE .3826 TRA-1.1722 TC3 -.6509 BAU .4220
    ROE -.2009 RRA -.3851 RC3 -.4647 FAU .11085
    FOE .7753 FRA-1.3989 FC3-2.4313 BSP 4307
BOE .4321 BRA 1.2338 BC3 .7997 FSP -916
                                                                                                                      LSA 576.0 MSA 209.2 SSA
                                                                                                                                                          22.6
    BOE .4321 BRA 1.2338 BC3 .7997 FSP
                                                                   SG1 1536.0 SG2 386.9 THA 23.66
                                                                                                                      EL1 485.3 EL2 204.1 ALF 171.72
LAUNCH DATE JUL 28 1967
                                                                       FLIGHT TIME 96.00
                                                                                                                                 ARRIVAL DATE NOV 1 1967
   HELIOCENTRIC CONIC
                                                                       DISTANCE 285.312
                       -.00 LOL 304.25 VL 28.280 GAL -12.54 A7L 89.98 MCA 132.41 SMA 140.07 ECC .23233 INC .0171 VI 29.328 .02 LOP 76.66 VP 38.925 GAP 1.70 A7P 90.01 TAL 236.65 TAP 9.06 RCA 107.53 APO 172.61 VZ 35.160 .10 GP -30.55 ZAL 163.87 ZAP 107.26 ETS 350.73 ZAE 143.96 ETE 225.35 ZAC 121.89 ETC 359.52 CLP-110.16
    RL 151.91 LAL
        107.78 LAP
    RC 93.352 GL
   PLANETOCENTRIC CONIC
    C3 38.443 VHL 6.200 DLA 14.79 RAL 142.81 RAD 6568.5 VEL 12.642 PTH 2.29 VHP 4.552 DPA -13.28 RAP 140.05 ECC 1.6327 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                  22 32 28 2854.58
14 28 30 4542.12
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16 53 38
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       110.00
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16 32 18 4147.42
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                                                                                              59.27
                                                                                                                          3547.4
                                                                                                                                         11.57
                                                                                                                                                       152.58
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1545.9 SGR 718.1 SG3 285.3
RRT .8211 RRF .8934 RTF .8797
SGB 1704.5 R23 .2168 R13 .9037
                                                                                                                     ST 532.4 SR 190.6 SS 326.0

CRT -.2467 CRS .4761 CST -.9656

LSA 623.1 MSA 193.1 SSA 22.7
    TDE .4317 TRA-1.2260 TC3 -.7468 BAU .4585
    RDE -.1703 RRA -.3696 RC3 -.4880 FAU .10651
    FOE .7973 FRA-1.2876 FC3-2.3985 BSP 4732
BDE .4641 BRA 1.2804 BC3 .8921 FSP -896
                                                                   SG1 1661.3 SG2 381.5 THA 22.10
                                                                                                                      EL1 534.8 EL2 183.9 ALF 174.27
LAUNCH DATE JUL 28 1967
                                                                       FLIGHT TIME 98.00
                                                                                                                                ARRIVAL DATE NOV 3 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 291.517
    RL 151.91 LAL -.00 LOL 304.25 VL 28.222 GAL -12.37 AZL 89.70 MCA 135.63 SMA 139.58 ECC .23087 INC .2960 V1 29.328
RP 107.75 LAP .21 LOP 79.88 VP 38.892 GAP 2.12 AZP 90.21 TAL 235.69 TAP 11.32 RCA 107.36 APO 171.81 V2- 35.170
RC 95.596 GL 1.34 GP -31.61 ZAL 163.22 ZAP 110.38 ETS 348.15 ZAE 141.41 ETE 223.29 ZAC 122.48 ETG 358.51 CLP-114.13
   PLANETOCENTRIC CONIC
    C3 37.437 VHL 6.119 DLA 15.77 RAL 143.82 RAD 6568.5 VEL 12.602 PTH 2.29 VHP 4.657 DPA -14.08 RAP 139.07 ECC 1.6161
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 22 27 25 2883.12
                                                -28.32
                                                               87.90
                                                                             22.70
                                                                                             89.77 23 15 28
                                                                                                                        2283.1
                                                                                                                                      -28.05
                                                                                                                                                       79.24
                  14 41 34
                                  4500.18
        90.00
                                                   9.57
                                                               188.89
                                                                               13.66
                                                                                              63.22
                                                                                                       15 56 34
                                                                                                                         3900.2
                                                                                                                                          5.90
                                                                                                                                                      182.13
                    0 1 24 2592.69
       100.00
                                                 -29.88
                                                                 66.53
                                                                               22.69
                                                                                              90.85
                                                                                                         0 44 37
                                                                                                                         1992.7
                                                                                                                                        -29.44
                                                                                                                                                       57.75
                                                                                              62.01 17 5 17
93.79 2 7 39
                   15 54 11 4265.84
      100.00
                                                  10.96
                                                               170.93
                                                                               12.93
                                                                                                                         3665.8
                                                                                                                                          7.13
                                                                                                                                                      164.23
                   1 29 U 2318.59
16 43 4 4112.71
                                                                              22.49
      110.00
                                                -34.00
                                                                45.52
                                                                                                                         1718.6
                                                                                                                                        -33.10
                                                                                                                                                       36.39
      110.00
                                                               157.23
                                                                               10.84
                                                                                              58.72 17 51 37
                                                                                                                         3512.7
                                                                                                                                        10.29
                                                                                                                                                      150.70
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 1675.9 SGR 722.6 SG3 274.7

RRT .8318 RRF .9046 RTF .8856

SGB 1825.0 R23 .2314 R13 .9068

SGI 1785.8 SG2 376.4 THA 20.69
    TDE ..4898 TRA-1.2719 TC3 -.8440 BAU .4936
                                                                                                                     ST 590.9 SR 165.1 SS 340.1

CRT -.2086 CRS .4469 CST -.9643

LSA 678.8 MSA 175.6 SSA 22.9
   RDE -.1371 RRA -.3500 RC3 -.5101 FAU .10138
FDE .8214 FRA-1.1646 FC3-2.3443 BSP 5135
    BDE .5086 BRA 1.3192 BC3 .9861 FSP -862
                                                                                                                     EL1 592.0 EL2 161.2 ALF 176.40
LAUNCH DATE JUL 28 1967
                                                                       FLIGHT TIME 100.00
                                                                                                                                ARRIVAL DATE NOV 5 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 297.694
   RL 151.91 LAL -.00 LOL 304.25 VL 28.160 GAL -12.18 AZL 89.40 MCA 138.86 SMA 139.07 ECC .22948 INC .6047 V1 29.328
RP 107.72 LAP .40 LOP 83.11 VP 38.857 GAP 2.51 AZP 90.46 TAL 234.67 TAP 13.52 RCA 107.16 APO 170.99 VZ 35.180
RC 97.843 GL 2.76 GP -32.80 ZAL 162.40 ZAP 113.14 ETS 345.42 ZAE 138.90 ETE 221.71 ZAC 122.85 ETC 357.50 CLP-117.88
  PLANETOCENTRIC CONIC
   C3 36.466 VML 6.039 DLA 16.90 RAL 144.95 RAD 6568.4 VEL 12.563 PTH 2.28 VMP 4.782 DPA -15.07 RAP 138.25 ECC 1.6001
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   22 21 4 2918.26
                                                 -28.28
                                                                90.47
                                                                              23.83
                                                                                             88.48 23 9 42
                                                                                                                        2318.3
                                                                                                                                        -28.19
                                                                                                                                                       81.81
       90.00
                   14 56 55
                                4451.76
                                                  8.07
                                                                                              62.77
                                                                                                        16 11 7
                                                               186.12
                                                                               14.54
                                                                                                                         3851.8
                                                                                                                                          4.36
                                                                                                                                                      179.41
      100.00
                   23 52 3
                                2624.85
                                                 -29.89
                                                                68.92
                                                                              23.86
                                                                                              89.59
                                                                                                       24 35 48
                                                                                                                         2024.8
                                                                                                                                        -29.63
                                                                                                                                                        60.12
                                                                                              61.52 17 18 57
      100.00
                  16 8 37
                                4220.41
                                                  9.50
                                                               168.35
                                                                              13.78
                                                                                                                         3620.4
                                                                                                                                          5.62
                                                                                                                                                      161.71
                  1 25 31 2344.76
16 55 35 4073.26
      110.00
                                                 -34.10
                                                                47.55
                                                                              23.76
                                                                                              92.59
                                                                                                         2 4 35
                                                                                                                         1744.8
                                                                                                                                       -33.36
                                                                                                                                                        38.39
                                                                                              58.15 18 3 28
      110.00
                                                 13.14
                                                                               11.62
                                                                                                                         3473.3
                                                                                                                                                      148.58
                                                                                                                                          8.83
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 1806.6 SGR 727.6 SG3 263.0
RRT .8400 RRF .9156 RTF .8900
SGB 1947.6 R23 .2478 R13 .9092
                                                                                                                     ST 657.6 SR 139.1 SS 355.2
CRT -.1390 CRS .3829 CST -.9643
   TDE .5571 TRA-1.3098 TC3 -.9431 BAU .5281
   RDE -.1025 RRA -.3281 RC3 -.5328 FAU .09592
   FDE .84D9 FRA-1.0401 FC3-2.2773 BSP 5563
BDE .5665 BRA 1.3503 BC3 1.0832 FSP -831
                                                                                                                     LSA 743.2 MSA 158.2 SSA
                                                                                                                                                         23.0
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SG1 1911.5 SG2 373.2 THA 19.46

EL1 657.9 EL2 137.7 ALF 178.24

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ARRIVAL DATE NOV 7 1967
                                                                                     FI IGHT TIME 102.00
LAUNCH DATE JUL 28 1967
                                                                                     DISTANCE 303.845
    RL 151.91 LAL -.00 LOL 304.25 VL 28.096 GAL -11.99 A7L 89.04 MCA 142.08 SMA 138.55 ECC .22813 INC .9556 V1 29.328 RP 107.69 LAP .59 LOP 86.34 VP 38.819 GAP 2.89 A7P 90.75 TAL 233.59 TAP 15.67 RCA 106.94 APO 170.16 V2 35.190 RC 100.092 GL 4.41 GP -34.18 7AL 161.38 7AP 115.54 ETS 342.51 7AE 136.40 ETE 220.55 7AC 122.99 ETC 356.47 CLP-121.42
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 35.553 VHL 5.963 DLA 18.23 RAL 146.23 RAD 6568.4 VEL 12.527 PTH 2.27 VHP 4.931 DPA -16.30 RAP 137.55 ECC 1.5851
    C3 35.553 VHL 5.963 OLA 18.23 RAL 146.23 RAO 6568.4 VEL 12.527 PTH 2.27 VMP 4.931 OPA -16.30 RAP 137.55 ECC 1.5851 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 12 51 2962.54 -28.16 93.70 25.18 86.86 25 2 13 2362.5 -28.30 85.04 90.00 15 15 22 4394.66 6.28 182.88 15.69 62.33 16 28 36 3794.7 2.53 176.21 100.00 23 45 3 2665.20 -29.83 71.92 25.27 88.01 24 29 28 2065.2 -29.79 63.11 100.00 16 25 50 4167.23 7.76 165.36 14.88 61.04 17 35 18 3567.2 3.84 158.77 110.00 1 20 57 2377.48 -34.17 50.11 25.31 91.08 2 0 34 1777.5 -33.64 40.90 110.00 17 10 22 4027.72 11.49 152.54 12.64 57.58 18 17 30 3427.7 7.13 146.16
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RRT .8455 RRF .9260 RTF .8931
SGB 2070.6 R23 .2655 R13 .9108
                                                                                                                                             ST 735.4 SR 113.1 SS 373.0
CRT -.0050 CRS .2522 CST -.9651
    TOE .6369 TRA-1.3375 TC3-1.0424 BAU .5614
ROE -.0654 RRA -.3027 RC3 -.5554 FAU .09006
                                                                                                                                             LSA 819.9 MSA 141.0 SSA 22.9
    FOE .8605 FRA -.9119 FC3-2.1930 BSP 5986
BDE .6403 BRA 1.3713 BC3 1.1811 FSP -796
                                                              5986
                                                                                 SG1 2036.9 SG2 371.8 THA 18.36
                                                                                                                                             EL! 735.4 EL2 113.1 ALF 179.95
                                                                                                                                                            ARRIVAL DATE NOV 9 1967
                                                                                      FLIGHT TIME 104.00
LAUNCH DATE JUL 28 1967
                                                                                      01STANCE 309.970
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 28.030 GAL -11.79 AZL 88.64 HCA 145.31 SHA 138.02 ECC .22683 INC 1.3619 V1 29.328
RP 107.66 LAP .78 LOP 89.57 VP 38.780 GAP 3.26 AZP 91.12 TAL 232.46 TAP 17.77 RCA 106.71 APO 169.32 V2 35.199
RC 102.344 GL 6.35 GP -35.80 ZAL 160.11 ZAP 117.55 ETS 339.38 ZAE 133.89 ETE 219.75 ZAC 122.93 ETC 355.39 CLP-124.76
   PLANETOCENTRIC CONIC
    C3 34.726 VHL 5.893 DLA 19.80 RAL 147.69 RAD 6568.4 VEL 12.494 PTH 2.26 VHP 5.107 DPA -17.80 RAP 136.92 ECC 1.5715

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 Z2 1 46 3019.89 -27.87 97.88 26.81 84.79 22.52 6 2419.9 -28.30 89.24

90.00 15 38 8 4325.43 4.08 178.99 17.21 61.95 16.50 14 3725.4 .29 172.35
                                                                                                               84.79 22 52 6
61.95 16 50 14
86.00 24 20 57
60.60 17 55 19
89.15 1 55 8
57.01 18 34 26
                     23 35 40 2717.11
16 46 56 4103.45
1 14 49 2419.19
17 28 11 3974.13
                                                                                                                                                    2117.1
                                                                                                                                                                     -29.89
                                                                                                26.98
                                                            -29.65
                                                                              75.76
        100.00
                                                                                                                                                    3503.4
                                                                                                                                                                        1.68
                                                                                                                                                                                       155.26
                                                                                                16.35
                                                              5.64
                                                                             161.81
        100.00
                                                                                                                                                    1819.2
                                                                                                                                                                     -33.91
                                                                                                                                                                                        44.13
                                                                                                27.20
                                                            -34.17
                                                                              53.36
        110.00
                                                                                                                                                                                       143.33
                                                                                                                                                    3374.1
                                                                                                                                                                       5.10
                                                              9.51
                                                                             149.64
                                                                                                13.99
        110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RET .8485 RRF .935.5 RTF .8951
SGB 2192.4 R23 .2841 R13 .9117
SGI 2160.6 SG2 372.1 THA 17.34
                                                                                                                                            ST 828.2 SR 90.0 SS 395.5
CRT .2614 CRS -.0207 CST -.9665
     TOE .7535 TRA-1.3522 TC3-1.1398 BAU .5929
     ROE -.0241 RRA -.2724 RC3 -.5761 FAU .08366
                                                                                                                                              LSA 913.4 MSA 125.2 SSA 22.6
EL1 828.5 EL2 86.8 ALF 1.64
     FOE .8847 FRA -.7780 FC3-2.0856 BSP 6383
BDE .7339 BRA 1.3794 BC3 1.2771 FSP -749
     BDE .7339 BRA 1.3794 BC3.1.2771 FSP
                                                                                                                                                           ARRIVAL DATE NOV 11 1967
                                                                                      FLIGHT TIME 106.00
LAUNCH DATE JUL 28 1967
                                                                                      01STANCE 316.071
    HELIOCENTRIC CONIC
     RL 151.91 LAL -.00 LOL 304.25 VL 27.962 GAL -11.58 AZL 88.16 MCA 148.54 SMA 137.47 ECC .22560 INC 1.8402 VI 29.328
RP 107.63 LAP .96 LOP 92.80 VP 38.738 GAP 3.61 AZP 91.57 TAL 231.28 TAP 19.82 RCA 106.46 APO 168.49 VZ 55.208
RC 104.596 GL 8.67 GP -37.71 7AL 158.50 ZAP 119.11 ETS 336.01 ZAE 131.32 ETE 219.28 ZAC 122.66 ETC 354.23 CLP-12 .95
    PLANETOCENTRIC CONIC
     C3 34.038 VHL 5.834 DLA 21.68 RAL 149.40 RAD 6568.5 VEL 12.466 PTH 2.25 VHP 5.317 DPA -19.63 RAP 136.31 ECC 1.5602
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                82.06 22 37 40
61.71 17 18 4
83.36 24 8 57
60.24 18 20 43
86.64 1 47 33
56.48 18 55 25
                                                                                                                                                                  -28.09
                                                                                              28.77
                     21 46 3 3097.13
16 7 26 4238.08
                                                            -27.27
                                                                            103.45
          90.00
                                                                                                                                                                     -2.52
                                                                                                                                                    3638.1
                                                                                                19.31
                                                              1.27
                                                                             174.10
          90.00
                                                                                                                                                                                        72.09
                                                                                                                                                                    -29.82
                                                                                                                                                    2186.1
                                                                                                29.05
                                                            -29.21
                                                                              80.84
                       23 22 31 2786.08
         100.00
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                     17 13 39 4024.37
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                                                              2.98
                                                                             157.45
         100.00
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                                                                                                                                                    1873.6
                                                                                                29.55
                                                            -34.04
                                                                              57.61
                               6 19 2473.61
                     1 6 19 2473.61
17 50 15 3909.60
         110.00
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                                                                                                                                                    3309.6
                                                                                                15.61
                                                                             146.20
                                                             7.10
         110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 RRT .8487 RRF .9444 RTF .8968
SGB 2315.8 R23 .3026 R13 .9126
SGI 2285.1 SG2 .375.8 THA 16.43
                                                                                                                                               ST 939.6 SR 80.8 SS 421.1
CRT .6557 CRS -.4658 CST -.9690
      TDE .8501 TRA-1.3529 TC3-1.2342 BAU .6237
      RDE .0201 RRA -.2382 RC3 -.5961 FAU .07707
                                                                                                                                               LSA 1026.5 MSA 112.2 SSA 21.6
EL1 941.1 EL2 60.9 ALF 3.24
     FDE .9071 FRA -.6463 FC3-1.9601 BSP 6805
BDF .8503 BRA 1.3737 BC3 1.3706 FSP -706
      BDE .8503 BRA_1.3737 BC3 1.3706 FSP
                                                                                                                                                            ARRIVAL DATE NOV 13 1967
                                                                                       FLIGHT TIME 108.00
 LAUNCH DATE JUL 28 1967
                                                                                      DISTANCE 322.149
     RL 151.91 LAL -.00 LOL 304.25 VL 27.893 GAL -11.37 AZL 87.58 MCA 151.76 SMA 136.92 ECC .22441 INC 2.4158 V1 29.328 RP 107.61 LAP 1.14 LOP 96.04 VP 38.696 GAP 3.95 AZP 92.13 TAL 230.06 TAP 21.83 RCA 106.20 APO 167.65 V2 35.216 RC 106.849 GL 11.48 GP -40.00 ZAL 156.46 ZAP 120.18 ETS 332.33 ZAE 128.61 ETE 219.07 ZAC 122.21 ETC 352.94 CLP-131.02
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 33.567 VHL 5.794 DLA 23.98 RAL 151.41 RAD 6568.3 VEL 12.447 PTH 2.25 VHP 5.574 DPA -21.84 RAP 135.64 ECC 1.5524
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 21 47 3208.28 -25.98 111.32 31.03 78.32 22 15 15 2608.3 -27.33 102.92
                                                                                                                    61.79
                                                                                                                               17 56 25
                                                                                                                                                     3519.9
                                                                             167.51
                                                                                                 22.33
                                                              -2.54
                        16 47 45
                                          4119.92
          90.00
                                                                                                                                                                      -29.37
                                                                                                                               23 50 54
                                                                                                                                                     2282.4
                                                                                                 31.52
                                                                                                                    79.80
                                                                               87.84
                                                             -28.25
                        23 2 52 2882.38
         100.00
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                                                                                                                    60.11 18 54 42
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                                         3921.05
          100.00
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                                                                               63.28
                          0 54 4
                                                             -33.60
                                        2546.78
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         110.00
                                                                                                                    56.03 19 22 24
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                                                                                                                                                     3229.4
                                                                              141.97
                                                                                                 18.34
                        18 18 34
                                          3829.42
                                                               4.07
         110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 1077.5 SR 96.6 SS 453.0
CRT .9309 CRS -.8352 CST -.9720
                                                                                  SGT 2322.2 SGR 742.7 SG3 203.3
RRT .8455 RRF .9517 RTF .8981
SGB 2438.0 R23 .3203 R13 .9132
      TOE .9965 TRA-1.3341 TC3-1.3191 BAU .6524
      ROE .0700 RRA -.1968 RC3 -.6111 FAU .06999
                                                                                                                                             LSA 1168.0 MSA 103.6 SSA 19.6
ELI 1081.2 EL2 35.2 ALF 4.77
       FOE .9341 FRA -.5114 FC3-1.8050 BSP 7198
BDE .9990 BRA 1.3486 BC3 1.4537 FSP -653
                                                                                   SG1 2407.9 SG2 382.5 THA 15.53
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ARRIVAL DATE NOV 15 1967

LAUNCH DATE JUL 28 1967

DISTANCE 328.202 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 27.822 CAL -11.14 AZL 86.87 MCA 154.99 SMA 136.37 ECC .22329 INC 3.1267 VI 29.328 RP 107.59 LAP 1.32 LOP 99.28 VP 38.651 CAP 4.28 AZP 92.83 TAL 228.80 TAP 23.79 RCA 105.92 APO 166.82 VZ 35.223 RC 109.101 GL 14.92 CP -42.77 ZAL 153.84 ZAP 120.68 ETS 328.31 ZAE 125.69 ETE 219.07 ZAC 121.59 ETC 351.46 CLP-134.02 PLANETOCENTRIC CONIC 2.25 VHP 5.895 DPA -24.50 RAP 134.82 ECC 1.5506 C3 33.456 VHL 5.784 OLA 26.82 RAL 153.85 RAD 6568.3 VEL 12.443 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-22.70 124.32 33.17 72.61 21 31 57 2798.9 -24.67 116.32
-8.64 156.67 27.22 62.93 18 59 10 3327.6 -12.20 149.80
-26.00 98.35 34.23 74.71 23 19 48 2431.5 -27.85 90.03
-5.61 143.47 25.58 60.59 19 45 16 3170.2 -9.49 136.83 LNCH AZMTH LNCH TIME L-I TIME 20 35 18 3398.92 90.00 17 53 43 90.00 3927.59 100.00 22 29 16 3031.51 18 42 26 100.00 3770.23 1 19 20 2049.9 62.09 2649.86 -32.51 71.12 35.98 78.80 1 19 20 55.82 19 59 2 -33.71 110.00 0 35 10 22.05 3124.6 -4.41 130.29 18 56 57 .07 136.50 110.00 3724.65 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 2451.2 SGR 744.8 SG3 185.2 RRT .8378 RRF .9573 RTF .8998 SGB 2561.8 R23 .3357 R13 .9142 ST 1249.3 SR 134.4 SS 489.4 CRT .9922 CRS -.9647 CST -.9758 TOE 1.1830 TRA-1.2920 TC3-1.3881 BAU .5798 RDE .1244 RRA -.1479 RC3 -.6189 FAU .06262 FDE .9599 FRA -.3793 FC3-1.6204 BSP 7613 LSA 1344.6 MSA 100.1 SSA 16.5 EL1 1256.4 EL2 16.7 ALF 6.10 SG1 2531.4 SG2 393.8 THA 14.64 BOE 1.1895 BRA 1.3004 BC3 1.5198 FSP -600 ARRIVAL DATE NOV 17 1967 FLIGHT TIME 112.00 LAUNCH DATE JUL 28 1967 **DISTANCE 334.232** HELIOCENTRIC CÓNIC RL 151.91 LAL -.00 LOL 304.25 VL 27.750 GAL -10.91 AZL 85.97 MCA 158.21 SMA 135.81 ECC .22223 INC 4.0333 VI 29.328 RP 107.57 LAP 1.50 LOP 102.51 VP 38.606 GAP 4.59 AZP 93.75 TAL 227.50 TAP 25.71 RCA 105.63 APO 165.99 VZ 35.230 RC 111.351 GL 19.20 GP -46.12 ZAL 150.41 ZAP 120.49 ETS 323.89 ZAE 122.42 ETE 219.18 ZAC 120.80 ETC 349.69 CLP-137.06 PLANETOCENTRIC CONIC C3 33.959 VHL 5.827 OLA 30.34 RAL 156.92 RAD 6568.3 VEL 12.463 PTH 2.25 VHP 6.315 DPA -27.70 RAP 133.69 ECC 1.5589 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.61 17 55 3 3962.38 -17.37 163.61 34.64 64.72 19 1 6 3362.4 -20.63 156.30 2.25 VHP 6.315 DPA -27.70 RAP 133.69 ECC 1.5589 21 54 38 20 58 27 3371.66 -17.35 120.10 34.64 64.71 2771.7 -20.62 112.79 101.39 64.72 19 1 6 64.71 21 54 38 17 55 3 3362.4 78.61 3962.36 -17.37 163.61 34.64 101.39 20 58 27 3371.66 -17.35 120.10 34.64 2771.7 -20.62 112.79 -29.79 39.95 2209.8 -31.90 0 1 48 2809.84 82.78 110.00 2972.2 -10.14 122.19 19 54 48 128.52 110.00 3572.20 -5.74 27.94 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2581.7 SGR 741.9 SG3 165.6 RRT .8232 RRF .9594 RTF .9022 SGB 2686.2 R23 .3476 R13 .9159 SGI 2654.8 SGZ 409.6 THA 13.64 ST 1467.6 SR 184.5 SS 531.8 CRT .9889 CRS -.9950 CST -.9799 TOE 1.4306 TRA-1.2169 TC3-1.4266 BAU .7047 RDE .1840 RRA -.0870 RC3 -.6115 FAU .05480 FOE .9862 FRA -.2482 FC3-1.3971 BSP 8041 BOE 1.4424 BRA 1.2200 BC3 1.5521 FSP -543 LSA 1568.5 MSA 101.8 SSA 12.9 EL1 1478.9 EL2 27.2 ALF 7.09 ARRIVAL DATE NOV 19 1967 FLIGHT TIME 114.00 LAUNCH DATE JUL 28 1967 DISTANCE 340.238 HELTOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 27.677 GAL -10.67 AZL 84.76 HCA 161.43 SMA 135.25 ECC .22121 INC 5.2372 V1 29.328 RP 107.55 LAP 1.67 LOP 105.75 VP 38.559 GAP 4.89 AZP 94.97 TAL 226.16 TAP 27.58 RCA 105.33 APO 165.17 V2 35.236 RC 113.598 GL 24.59 GP -50.23 ZAL 145.89 ZAP 119.49 ETS 318.98 ZAE 118.65 ETE 219.25 ZAC 119.87 ETC 347.47 CLP-140.30 PLANETOCENTRIC CONIC C3 35.587 VHL 5.966 DLA 34.74 RAL 160.95 RAD 6568.4 VEL 12.528 PTH 2.27 VHP 6.891 DPA -31.54 RAP 132.01 ECC 1.5857 C3 35.587 VHL 5.966 DLA 34.74 RAL 160.95 RAD 6568.4 VEL 12.528 PTH 2.27 VMP 6.891 DPA -31.54 RAP 132.01 ECC 1.3857 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.97 17 7 15 4173.09 -19.28 180.75 40.68 60.52 18 16 48 3573.1 -23.06 173.60 111.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 11.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 11.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 11.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 11.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 11.03 22 18 26 3184.61 -19.27 106.86 40.67 60.51 23 11 30 2584.6 -23.04 99.71 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET .7957 RRF .9544 RTF .9060 SGB 2809.0 R23 .3547 R13 .9185 SGI 2775.9 SGZ 429.8 THA 12.32 ST 1749.0 SR 236.7 SS 580.5 CRT .9765 CRS -.9985 CST -.9840 TDE 1.7761 TRA-1.0914 TC3-1.4090 BAU .7241 .2455 RRA -.0075 RC3 -.5754 FAU .04637 LSA 1854.8 MSA 108.3 SSA 9.3 FOE 1.0134 FRA -.1167 FC3-1.1281 BSP 8426 BDF 1.7930 BRA 1.0914 BC3 1.5220 FSP -476 ELI 1764.2 ELZ 50.6 ALF 7.53 BOE 1.7930 BRA 1.0914 BC3 1.5220 FSP ARRIVAL DATE NOV 21 1967 LAUNCH DATE JUL 28 1967 FLIGHT TIME 116,00 DISTANCE 346.215 RL 151.91 LAL -.00 LOL 304.25 VL 27.604 GAL -10.42 AZL 83.08 MCA 164.63 SMA 134.70 ECC .22025 INC 6.9243 V1 29.328
RP 107.53 LAP 1.83 LOP 109.00 VP 38.511 GAP 5.19 AZP 96.68 TAL 224.78 TAP 29.41 RCA 105.03 APO 164.35 V2 35.241
RC 115.842 GL 31.40 GP -55.27 ZAL 139.92 ZAP 117.49 ETS 313.37 ZAE 114.14 ETE 218.93 ZAC 118.82 ETC 344.48 CLP-144.12 PLANETOCENTRIC CONIC C3 39.467 VHL 6.282 DLA 40.16 RAL 166.57 RAD 6568.5 VEL 12.682 PTH 2.30 VHP 7.733 DPA -36.09 RAP 129.38 ECC 1.6495 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 16 44 35 4331.6~ 24 52 3078.75 54.91 17 56 47 54.90 24 17 11 49.63 3731.2 -25.37 194.73 60.25 -20.92 2478.8 92.53 99.35 49.62 119.75 -20.91 17 56 47 24 17 11 3731.2 -25.37 187.90 54.91 60.25 16 44 35 4331.24 -20.92 194.73 49.63 2478.8 92.53 119.75 23 25 52 3078.75 -20.91 99.35 49.62 54.90 17 56 47 24 17 11 3731.2 187.90 194.73 49.63 54.91 60.25 16 44 35 4331.24 -20.92 54.90 2478.8 92.53 23 25 52 99.35 49.62 119.75 3078.75 -20.91 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2850.3 SGR 685.5 SG3 120.9 RRT .7381 RRF .9305 RTF .9128 SGB 2931.6 R23 .3543 R13 .9233 ST 2104.9 SR 265.4 SS 630.6 CRT .9592 CRS -.9912 CST -.9879 TOE 2.2809 TRA -.8869 TC3-1.3021 BAU .7351 RDE .2878 RRA .0970 RC3 -.4956 FAU .03753 FDE 1.0342 FRA .0099 FC3 -.8232 BSP 8829 LSA 2210.2 MSA 117.5 SSA 6.3 EL1 2120.3 EL2 74.5 ALF 6.90 SG1 2896.0 SG2 455.2 THA 10.32 BDE 2.2990 BRA .8922 BC3 1.3932 FSP -407

FLIGHT TIME 110,00

ARRIVAL DATE NOV 23 1967

LAUNCH DATE JUL 28 1967

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HELIOCENTRIC CONIC
                                                                       DISTANCE 352.156
    RL 151.91 LAL -.00 LOL 304.25 VL 27.530 GAL -10.16 A7L 80.53 HCA 167.82 SMA 134.14 ECC .21932 INC 9.4730 V1 29.328
RP 107.52 LAP 1.99 LOP 112.24 VP 38.463 GAP 5.46 A7P 99.26 TAL 223.36 TAP 31.19 RCA 104.72 APO 163.56 V2 35.246
RC 118.080 GL 39.85 GP -61.44 ZAL 132.13 ZAP 114.32 ETS 306.45 ZAE 108.55 ETE 217.37 ZAC 117.74 ETC 339.92 CLP-149.48
   PLANETOCENTRIC CONIC
    C3 48.445 VHL 6.960 DLA 46.46 RAL 174.92 RAD 6568.8 VEL 13.031 PTH 2.38 VHP 9.075 DPA -31.36 RAP 125.01 ECC 1.7973
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       CH AZNTH LNCH TIME L-1 TIME

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51.49 16 42 28 4478.03

128.51 0 38 34 3035.10

51.49 16 42 28 4478.03

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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2990.7 SGR 598.2 SG3 97.1
RRT .5761 RRF .8278 RTF .9247
SGB 3050.0 R23 .3433 R13 .9314
                                                                                                                     ST 2528.2 SR 210.9 SS 677.8
CRT .8809 CRS -.9355 CST -.9913
    TOE 3.0620 TRA -.5329 TC3-1.0620 BAU .7248
    ROE .2338 RRA .2366 RC3 -.3526 FAU .02823
FDE 1.0481 FRA .1362 FC3 -.5044 BSP 9164
BDE 3.0709 BRA .5830 BC3 1.1190 FSP -330
                                                                                                                     LSA 2622.7 MSA 130.5 SSA 4.1
                                                                   SG1 3011.1 SG2 485.7 THA
                                                                                                       6.75
                                                                                                                     EL1 2535.0 EL2 99.5 ALF 4.21
                                                                       FLIGHT TIME 120.00
                                                                                                                                ARRIVAL DATE NOV 25 1967
LAUNCH DATE JUL 28 1967
                                                                       DISTANCE 358.041
  HELIOCENTRIC CONIC
   RL 151.91 LAL -.00 LOL 304.25 VL 27.456 GAL -9.88 AZL 76.22 MCA 170.97 SMA 133.59 ECC .21837 INC13.7814 V1 29.328 RP 107.50 LAP 2.14 LOP 115.48 VP 38.413 GAP 5.72 AZP 103.62 TAL 221.90 TAP 32.87 RCA 104.42 APO 162.76 VZ 35.250
                      49.72 GP -68.79 ZAL 122.39 ZAP 109.83 ETS 295.92 ZAE 101.33 ETE 211.93 ZAC 116.88 ETC 331.20 CLP-159.63
   RC 120.312 GL
   PLANETOCENTRIC CONIC
    C3 71.339 VHL 8.446 DLA 52.66 RAL 187.98 RAD 6569.4 VEL 13.881 PTH
                                                                                                 2.53 VHP 11.474 OPA -47.02 RAP 117.32 ECC 2.1741
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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      136.45
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   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2893.9 SR 217.1 65 712.8

CRT -.8037 CRS .7335 CST -.9939

LSA 2984.5 MSA 150.6 SSA 2.5

EL1 2899.2 EL2 128.9 ALF 176,54
                                                                   SGT 3115.0 SGR 525.3 SG3 74.8
RRT -. 0886 RRF . 2243 RTF . 9469
    TDE 4.2652 TRA .1422 TC3 -.6767 BAU .6621
RDE -.2604 RRA .3753 RC3 -.1551 FAU .01882
    FOE 1.0514 FRA .2704 FC3 -.2284 BSP 9545
BOE 4.2731 BRA .4013 BC3 .6942 FSP -258
                                                                   SGB 3159.0 R23 -.3119 R13 -.9461
                                                                   SG1 3115.4 SG2 523.2 THA 179.12
                                                                                                                               ARRIVAL DATE NOV 27 1967
                                                                      FLIGHT TIME 122.00
LAUNCH DATE JUL 28 1967
                                                                      DISTANCE 363.808
   RL 151.91 LAL -.00 LOL 304.25 VL 27.3A2 GAL -9.57 A7L 67.47 MCA 174.02 SMA 133.04 ECC .21725 INC22.5337 V1 29.328
RP 107.49 LAP 2.29 LOP 118.73 VP 38.363 GAP 5.94 AZP 112.42 TAL 220.36 TAP 34.38 RCA 104.14 APO 161.95 V2 35.253
RC 122.538 GL 59.11 GP -75.79 7AL 111.23 ZAP 104.02 ETS 270.67 ZAE 91.15 ETE 191.15 ZAC 117.08 ETC 306.64 CLP 170.79
   PLANETOCENTRIC CONIC
    C3 145.393 VHL 12.058 DLA 55.58 RAL 206.78 RAD 6570.6 VEL 16.332 PTH 2.86 VMP 16.593 DPA -51.55 RAP 102.80 ECC 3.3928
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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3 22 6 3195.10
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   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
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                                                                                                                     ST 2594.7 SR 1329.3 SS 755.9
                                                                   SGT 2946.3 SGR 1331.4 SG3 57.3
    TOE 5.3924 TRA 1.6196 TC3 -.2121 BAU .4122
    ROE-2.7971 RRA -.0932 RC3 .0008 FAU .00848
FOE 1.0801 FRA .4787 FC3 -.0505 BSP 9874
                                                                  RRT -.8956 RRF -.8082 RTF .9849
SG8 3233.1 R23 -.2364 R13 -.9704
                                                                                                                     CRT -.9901 CRS .9773 CST -.9973
                                                                                                                     LSA 3006.3 MSA 181.9 SSA
                                                                                                                                                           1.3
                                                                                                                     EL1 2910.7 EL2 165.9 ALF 153.01
                                                                  SG1 3186.4 SG2 547.6 THA 157.26
    BOE 6.0747 BRA 1.6223 BC3 .2121 FSP
                                                      -196
                                                                       FLIGHT TIME 124.00
                                                                                                                                ARRIVAL DATE NOV 29 1967
LAUNCH DATE JUL 28 1967
                                                                      DISTANCE 369.154
   HELIOCENTRIC CONIC
   RL 151.91 LAL -.00 LOL 304.25 VL 27.307 GAL -9.17 AZL 43.17 MCA 176.67 SMA 132.50 ECC .21521 INC46.8246 V1 29.328
RP 107.49 LAP 2.43 LOP 121.98 VP 38.313 GAP 6.04 AZP 136.78 TAL 218.62 TAP 35.29 RCA 103.99 APO 161.02 V2 35.256
RC 124.755 GL 59.34 GP -68.92 ZAL 100.51 ZAP 97.57 ETS 209.34 ZAE 73.14 ETE 133.82 ZAC 121.69 ETC 242.18 CLP 111.48
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 49.54 19 44 11 4903.94 -1.70 228.35 130.68 42.07 21 5 65 130.69
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                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 728.1 SGR 3068.0 SG3 47.8
RRT -.6916 RRF -.9873 RTF .7953
                                                                                                                     5T 229.6 SR 2340.4 55 989.0
    TDE .3056 TRA 1.9275 TC3 -.0133 BAU 1.0293
                                                                                                                     CRT -.5594 CRS .9959 CST -.6319
LSA 2542.9 MSA 205.5 SSA 1.3
    ROE-9.0362 RRA-5.2282 RC3 -.1468 FAU-.01417
    FOE 1.3916 FRA 1.1125 FC3 .0235 BSP 9032
BOE 9.0414 BRA 5.5722 BC3 .1474 FSP -148
                                                                   SGB 3153.2 R23 -.1279 R13 -.9913
                                                                   5G1 3110.2 5G2 518.7 THA 99.59
                                                                                                                     EL1 2343.9 EL2 190.0 ALF 93.16
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FLIGHT TIME 118.00

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LAUNCH DATE JUL 28 1967
                                                                     FLIGHT TIME 126.00
                                                                                                                            ARRIVAL DATE DEC 1 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 377.956
    RL 151.91 LAL -.00 LOL 304.25 VL 27.233 GAL -9.47 A7L 159.24 MCA 182.73 SMA 131.97 ECC .22203 INC69.2370 V1 29.328
RP 107.48 LAP 2.56 LOP 125.22 VP 38.261 GAP 7.13 AZP 20.78 TAL 218.36 TAP 41.10 RCA 102.67 APO 161.27 V2 35.258
RC 126.964 GL -51.10 GP 59.04 ZAL 97.65 ZAP 96.72 ETS 174.23 ZAE 61.82 ETE 246.14 ZAC 100.82 ETC 131.96 CLP 103.16
   PLANETOCENTRIC CONIC
    C31041.564 VHL 32:273 DLA -53.87 RAL 170.86 RAD 6573.0 VEL 34.101 PTH 3.51 VHP 40.748 DPA 67.02 RAP
                                                                                                                                      1.08 ECC18.1415
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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        42.05
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                                2356.53
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   DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
    TOE 2.8460 TRA 2.2913 TC3 -.0754 BAU 2.8345
                                                                SGT 984.0 SGR 2834.8 SG3 48.3
RRT -.8533 RRF .9979 RTF -.8217
SGB 3000.7 R23 -.1076 R13 .9937
                                                                                                                 ST 546.2 SR 2438.9 SS 1752.6
    RO-13.6676 RRA-2.6963 RC3 .1891 FAU-.04059
FDE-2.7939 FRA -.4594 FC3 .0337 85P 8570
BDE13.9608 BRA 3.5363 BC3 .2036 FSP -144
                                                                                                                 CRT -.9586 CRS -.9999 CST .9537
LSA 3048.5 MSA 158.0 SSA 1.7
                                                                 SG1 2960.2 SG2 491.4 THA 106.98
                                                                                                                 EL1 2494.7 EL2 152.1 ALF 102.16
LAUNCH DATE JUL 28 1967
                                                                    FLIGHT TIME 128.00
                                                                                                                            ARRIVAL DATE DEC 3 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 382.884
   RL 151.91 LAL -.00 LOL 304.25 VL 27.159 GAL -8.98 AZL 122.46 HCA 185.00 SMA 131.44 ECC .21910 INC32.4573 V1 29.328 RP 107.48 LAP 2.68 LOP 128.47 VP 38.210 GAP 7.10 AZP 57.64 TAL 216.43 TAP 41.43 RCA 102.64 APO 160.24 VZ 35.259
   RC 129.165 GL -61.48 GP 74.34 ZAL 104.32 ZAP 103.79 ETS 131.26 ZAE 85.73 ETE 206.21 ZAC 90.91 ETC 87.70 CLP 152.03
   PLANETOCENTRIC CONIC
    C3 268.469 VHL 16.385 DLA -54.71 RAL 145.62 RAD 6571.6 VEL 19.743 PTH
                                                                                             3.12 WHP 19.851 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 13 59 2253.15
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   DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
    TDE-3.9357 TRA-1.5936 TC3 -.0172 BAU .1995
                                                                SCT 1681.6 SCR 3061.6 SC3 59.4
RRT .9425 RRF .9714 RTF .9940
SCB 3493.1 R23 -.1601 R13 .9865
                                                                                                                 ST 1406.4 SR 1948.8 SS 915.9
    RDE-5.1550 RRA-4.0783 RC3 .0529 FAU .00259
                                                                                                                 CRT .9834 CRS -.9912 CST -.9987
   FOE-1.4768 FRA -.7488 FC3 -.0084 BSP 10634
BDE 6.4857 BRA 4.3786 BC3 .0556 FSP '-188
                                                                                                                 LSA 2562.8 MSA 216.3 SSA
                                                                                                                                                     1.2
                                                                SGI 3457.4 SGZ 497.6 THA 62.00
                                                                                                                 EL1 2394.3 EL2 207.9 ALF 54.33
LAUNCH DATE JUL 28 1967
                                                                    FLIGHT TIME 130.00
                                                                                                                           ARRIVAL DATE DEC 5 1967
   HELIOCENTRIC CONTC
                                                                    DISTANCE 388.521
   RL 151.91 LAL -.00 LOL 304.25 VL 27.085 GAL -8.82 AZL 110.57 MCA 187.97 SMA 130.92 ECC .21815 INC20.5705 V1 29.328
RP 107.48 LAP 2.79 LOP 131.72 VP 38.157 GAP 7.27 AZP 69.61 TAL 214.78 TAP 42.75 RCA 102.36 APO 159.48 V2 35.259
RC 131.355 GL -58.55 GP 67.88 ZAL 110.57 ZAP 111.92 ETS 86.51 ZAE 97.88 ETE 163.99 ZAC 89.26 ETC 43.08 CLP-172.40
   PLANETOCENTRIC CONIC
   C3 121.655 VML 11.030 OLA -48.90 RAL 141.81 RAD 6570.3 VEL 15.588 PTH 2.78 VMP 12.936 DPA 73.54 RAP 215.07 ECC 3.0021
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG
                  2 21 12 2072.44
10 35 39 5862.27
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  DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                ST 2147.4 SR 357.6 SS 727.4
CRT .7635 CRS -.6794 CST -.9026
                                                               SCT 3486.2 SCR 1078.0 SC3 78.2
RRT .8871 RRF .7725 RTF .9769
SC8 3649.1 R23 -.2401 R13 .9687
SC1 3617.5 SC2 479.5 THA 15.62
   TDE-3.8045 TRA-3.5422 TC3 -.2915 BAU .4759
   ROE -.3098 RRA-1.3471 RC3 -.0259 FAU .01672
                                                                                                                       .7635 CRS -.6794 CST -.9926
   FOE-1.2039 FRA -.7588 FC3 -.1190 BSP 11189
                                                                                                                LSA 2281.9 MSA 247.3 SSA
                                                                                                                                                     1.8
   BDE 3.8171 BRA 3.7897 BC3 .2926 FSP
                                                    -250
                                                                                                                 ELI 2164.9 EL2 229.1 ALF 7.33
LAUNCH DATE JUL 28 1967
                                                                    FLIGHT TIME 132.00
                                                                                                                           ARRIVAL DATE DEC 7 1967
                                                                   DISTANCE 394.301
   RL 151.91 LAL -.00 LOL 304.25 VL 27.011 GAL -8.29 ATL 105.22 MCA 191.10 SMA 130.41 ECC .21771 INC15.2237 VI 29.328
RP 107.48 LAP 2.90 LOP 134.97 VP 38.105 GAP 7.49 AZP 75.05 TAL 213.18 TAP 44.28 RCA 102.02 APO 158.80 V2 35.259
RC 133.537 GL -53.87 GP 58.98 ZAL 115.26 ZAP 119.51 ETS 72.02 ZAE 105.99 ETE 153.00 ZAC 89.24 ETC 28.84 CLP-162.88
  PLANETOCENTRIC CONIC
   C3 75.521 VHL 8.690 DLA -43.77 RAL 142.98 RAD 6569.5 VEL 14.031 PTH
                                                                                            2.56 WHP 10.054 DPA 64.55 RAP 199.34 ECC 2.2429
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       55.11
                   2 50 33 1906.51
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  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SCT 3724.1 SCR 483.0 SC3 99.6
RRT .4001 RRF .1111 RTF .9509
SCB 3755.3 R23 -.2998 R13 .9490
SCI 3729.2 SC2 442.0 THA 3.01
                                                                                                               ST 2038.0 SR 284.2 SS 687.9

CRT -.6158 CRS .7599 CST -.9801

LSA 2154.6 MSA 255.0 SSA 2.6
   TOE-2.7650 TRA-3.3239 TC3 -.6649 BAU .6717
   RDE .3892 RRA -.4458 RC3 .0239 FAU .02617
   FDE-1.1595 FRA -.7524 FC3 -.3000 BSP 11552
BDE 2.7922 BRA 3.3537 BC3 .6653 FSP -320
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EL1 2045.6 EL2 223.1 ALF 175.03

ARRIVAL DATE DEC 9 1967

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FLIGHT TIME 134.00
LAUNCH DATE JUL 28 1967
                                                                                        DISTANCE 400.124
    RL 151.91 LAL -.00 LOL 304.25 VL 26.938 GAL -7.96 A7L 102.22 MCA 194.28 SMA 129.91 ECC .21751 INC12.2209 V1 29.328 RP 107.48 LAP 2.99 LOP 138.22 VP 38.052 GAP 7.72 A7P 78.15 TAL 211.58 TAP 45.86 RCA 101.65 APO 158.16 V2 35.257 RC 135.709 GL -49.57 GP 51.14 ZAL 118.54 ZAP 126.13 ETS 65.80 ZAE 111.86 ETE 150.94 ZAC 89.31 ETC 22.96 CLP-160.02
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 55.040 VML 7.419 DLA -39.75 RAL 145.21 RAD 6569.0 VEL 13.282 PTH 2.43 VMP 8.618 DPA 56.62 RAP 192.67 ECC 1.9058
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
60.85 3 23 58 1763.11 17.43 29.54 33.01 126.31 3 53 21 1163.1 22.04 23.00
119.15 10 0 1 5813.43 17.45 273.34 33.02 126.30 11 36 55 5213.4 22.06 266.81
60.85 3 23 58 1763.11 17.43 29.54 33.01 126.31 3 53 21 1163.1 22.04 23.00
119.15 10 0 1 5813.43 17.45 273.34 33.02 126.30 11 36 55 5213.4 22.06 266.81
60.85 3 23 58 1763.11 17.43 29.54 33.01 126.31 3 53 21 1163.1 22.04 23.00
119.15 10 0 1 5813.43 17.45 273.34 33.02 126.30 11 36 55 5213.4 22.06 266.81
60.85 3 23 58 1763.11 17.43 29.54 33.01 126.31 3 53 21 1163.1 22.04 23.00
119.15 10 0 1 5813.43 17.45 273.34 33.02 126.30 11 36 55 5213.4 22.06 266.81
    PLANETOCENTRIC CONIC
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 1940.3 SR 351.0 S5 672.9
CRT -.7918 CRS .9179 CST -.9691
                                                                                    SCT 3824.4 SGZ 408.6 SG3 118.9

RRT -.1030 RRF -.4322 RTF .9318

SG8 3845.9 R23 .3369 R13 -.9322

SG1 3824.4 SGZ 406.6 THA 179.36
     TOE-2.2138 TRA-3.0405 TC3-1.0380 BAU .7654
    ROE .4483 RRA -.1914 RC3 .0684 FAU .03322
FOE-1.1354 FRA -.7204 FC3 -.5225 BSP 11799
BOE 2.2588 BRA 3.0466 BC3 1.0402 FSP -381
                                                                                                                                                    LSA 2067.4 MSA 258.4 SSA 3.6
                                                                                                                                                    EL1 1960.4 EL2 212.2 ALF 171.75
                                                                                                                                                                  ARRIVAL DATE DEC 11 1967
                                                                                          FLIGHT TIME 136.00
LAUNCH DATE JUL 28 1967
                                                                                          DISTANCE 405.959
    RL 151.91 LAL -.00 LOL 304.25 VL 26.866 GAL -7.63 AZL 100.30 MCA 197.49 SMA 129.41 ECC .21748 INC10.2977 VI 29.328 RP 107.49 LAP 3.08 LOP 141.48 VP 37.999 GAP 7.95 AZP 80.17 TAL 209.98 TAP 47.46 RCA 101.27 APO 157.56 V2 35.255 RC 137.871 GL -45.95 GP 44.60 ZAL 120.68 ZAP 131.75 ETS 62:04 ZAE 116.17 ETE 151.58 ZAC 89.11 ETC 19.63 CLP-159.27
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                          2.34 WHP 7.831 OPA 49.82 RAP 189.43 ECC 1.7219
     C3 43.866 VML 6.623 DLA -36.68 RAL 147.67 RAD 6568.7 VEL 12.854 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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9 46 3 5825.64
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                                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 3918.2 SGR 394.7 SG3 134.6
RRT -.3102 RRF -.6253 RTF .9181
SG8 3938.1 R23 .3554 R13 -.9191
SG1 3920.2 SG2 375.0 THA 178.19
                                                                                                                                                   ST 1875.1 SR 360.6 SS 661.1
CRT -.8257 CRS .9508 CST -.9598
      TOE-1.8935 TRA-2.8147 TC3-1.4024 BAU .8242
     ROE .4151 RRA -.1020 RC3 .0916 FAU .03829
FOE-1.1010 FRA -.6667 FC3 -.7556 BSP 12104
                                                                                                                                                    LSA 2003.8 MSA 260.3 SSA
                                                                                                                                                                                                    4.6
                                                                                                                                                   EL1 1898.9 EL2 200.9 ALF 170.87
      30E 1.9385 BRA 2.8165 BC3 1.4053 FSP -432
                                                                                                                                                                  ARRIVAL DATE DEC 13 1967
                                                                                          FLIGHT TIME 138.00
 LAUNCH DATE JUL 28 1967
                                                                                         DISTANCE 411.795
     MELIOCENTRIC CONIC

RL 151.91 LAL -.00 LOL 304.25 VL 26.794 GAL -7.29 A7L 98.96 MCA 200.70 SMA 128.93 ECC .21761 INC 8.9562 V1 29.328

RP 107.50 LAP 3.16 LOP 144.73 VP 37.945 GAP 8.19 A7P 81.61 TAL 208.36 TAP 49.06 RCA 100.87 APO 156.98 V2 35.253

RC 140.023 GL -42.94 GP 39.22 ZAL 121.93 ZAP 136.47 ETS 59.29 ZAE 119.35 ETE 153.17 ZAC 88.56 ETC 17.34 CLP-159.35
    PLANETOCENTRIC CONIC
      C3 36.890 VHL 6.074 DLA -34.36 RAL 150.16 RAD 6568.4 VEL 12.580 PTH 2.28 VMP 7.376 DPA 44.04 RAP 187.89 ECC 1.6071
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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9 33 24 5849.71
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                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    SGT 4013.9 SGR 379.2 SG3 146.3
RRT -.3898 RRF -.6875 RTF .9079
SG8 4031.8 R23 .3593 R13 -.9091
SG1 4016.7 SG2 349.0 TMA 177.87
                                                                                                                                                    ST 1831.9 SR 353.5 S5 648.7

CRT -.8379 CRS .9647 CST -.9519

LSA 1957.9 MSA 261.0 SSA 5.6
       TOE-1.6894 TRA-2.6284 TC3-1.7560 BAU .8674
      ROE .3740 RRA -.0644 RC3 .0973 FAU .04161
FOE-1.0562 FRA -.5978 FC3 -.9765 BSP 12431
                                                                                                                                                     EL1 1855.9 EL2 190.5 ALF 170.72
       BOE 1.7303 BRA 2.6292 BC3 1.7587 FSP -471
                                                                                                                                                                   ARRIVAL DATE DEC 15 1967
                                                                                           FLIGHT TIME 140.00
 LAUNCH DATE JUL 28 1967
      RL 151.91 LAL -.00 LOL 304.25 VL 26.722 GAL -6.94 AZL 97.96 HCA 203.93 SMA 128.45 ECC .21787 INC 7.9626 V1 29.328
RP 107.51 LAP 3.22 LOP 147.98 VP 37.891 GAP 8.42 AZP 82.71 TAL 206.74 TAP 50.67 RCA 100.46 APO 156.44 V2 35.249
RC 142.165 GL -40.43 GP 34.79 ZAL 122.48 ZAP 140.43 ETS 57.09 ZAE 121.69 ETE 155.03 ZAC 87.70 ETC 15.62 CLP-159.83
                                                                                          DISTANCE 417.627
     PLANETOCENTRIC CONIC
       C3 32.105 VHL 5.666 DLA -32.63 RAL 152.67 RAD 6568.3 VEL 12.389 PTH 2.24 VHP 7.110 DPA 39.11 RAP 187.35 ECC 1.5284
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.07 5 1 16 1426.16 19.00 3.65 30.11 117.04 5 25 3 826.2 22.48 356.36
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117.03 11 0 16
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112.01 12 32 6
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                         10 59 5 5581.24
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                                                                                                     33.99
                                                                 25.84
                                                                                                                                                  ST 1804.8 SR 344.1 SS 636.3

CRT -.8458 CRS ..9734 CST -.9453

LSA 1926.8 MSA 260.8 SSA 6.8

ELI 1828.3 Ft 2 144 2 ...
          110.00
                                                                                    HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                   SGT 4109.0 SGR 363.0 SG3 154.5

RRT -.4188 RRF -.6988 RTF .9001

SGB 4125.0 R23 .3517 R13 -.9012

SGI 4111.9 SGZ 329.4 THA 177.87
        TOE-1.5524 TRA-2.4643 TC3-2.1002 BAU .9023
       ROE .3399 RRA -.0453 RC3 .0913 FAU .04353
FDE-1.0066 FRA -.5201 FC3-1.1739 BSP 12752
BDE 1.5892 BRA 2.4647 BC3 2.1022 FSP -498
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ARRIVAL DATE DEC 17 1967 FLIGHT TIME 142.00 DISTANCE 423.451 HELIOCENTRIC, CONIC RL 151.91 LAL -.00 LOL 304.25 VL 26.651 GAL -6.58 AZL 97.19 MCA 207.16 SMA 127.98 ECC .21828 INC 7.1931 V1 29.328 RP 107.52 LAP 3.28 LOP 151.23 VP 37.838 GAP 8.66 AZP 83.59 TAL 205.10 TAP 52.26 RCA 100.05 APO 155.92 V2 35.245 RC 144.295 GL -38.31 GP 31.14 ZAL 122.46 ZAP 143.79 ETS 55.28 ZAE 123.44 ETE 156.91 ZAC 86.56 ETC 14.24 CLP-160.50 PLANETOCENTRIC CONIC C3 28.592 VHL 5.347 DLA -31.36 RAL 155.20 RAD 6568.1 VEL 12.246 PTH - 2.20 VHP 6.958 DPA 34.86 RAP 187.44 ECC 1.4706 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1337.01 737.0 22.42 5 52 53 115.31 5 30 36 19.17 356.96 30.40 75.92 296.76 9 23 30 22.6 22.44 304.17 30.41 115.29 622.57 19.19 9 13 8 104.08 349.55 5 52 53 737.0 22.42 5 30 36 1337.01 19.17 356.96 30.40 115.31 75.92 9 23 30 22.6 22.44 296.76 115.29 304.17 30.41 622.57 19.19 9 13 8 104.08 307.80 8 20 51 228.8 13.74 8 7 2 314.29 24.82 123.00 828.82 9.46 110.00 244.12 13 6 59 4866.8 31.70 108.08 34.91 11 35 52 5466.80 29.52 252.64 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1793.4 SR 337.4 SS 626.2 CRT -.8549 CRS .9801 CST -.9403 SGT 4206.9 SGR 350.1 SG3 160.2 RRT - 4270 RRF - .6863 RTF .8944 TOE-1.4611 TRA-2.3144 TC3-2.4406 BAU .9334 RDE .3147 RRA -.0328 RC3 .0790 FAU .04449 FDE -.9588 FRA -.4410 FC3-1.3470 89P 13110 SGB 4221.4 R23 .3342 R13 -.8953 SGI 4209.5 SGZ 316.4 THA 177.95 LSA 1911.8 MSA 259.5 SSA 47.9 EL1 1816.7 EL2 172.8 ALF 170.78 BOE 1.4946 BRA 2.3146 BC3 2.4418 FSP ARRIVAL DATE DEC 19 1967 FLIGHT TIME 144.00 LAUNCH DATE JUL 28 1967 DISTANCE 429.285 HELIOCENTRIC CONIC ŘL 151.91 LAL -.00 LOL 304.25 VL 26.581 GAL -6.22 AZL 96.58 MCA 210.39 SMA 127.52 ECC .21878 INC 6.5764 V1 29.328 RP 107.53 LAP 3.32 LOP 154.48 VP 37.784 GAP 8.89 AZP 84.32 TAL 203.44 TAP 53.83 RCA 99.62 APO 155.42 V2 35.240 RC 146.414 GL -36.51 GP 28.10 ZAL 121.96 ZAP 146.65 ETS 53.76 ZAE 124.75 ETE 158.66 ZAC 85.21 ETC 13.10 CLP-161.26 PLANETOCENTRIC CONIC C3 25.871 VHL 5.086 DLA -30.48 RAL 157.79 RAD 6568.0 VEL 12.135 PTH 2.17 VHP 6.877 DPA 31.17 RAP 187.98 ECC 1.4258 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.21 5 57 24 1260.10 19.37 351.27 31.11 114.01 6 18 24 660.1 22.45 343.78 49.7 22.46 9 17 48 114.00 9 6 59 649.74 19.30 306.30 31.11 101-79 6 18 24 22.45 343.78 6 18 24 9 17 48 8 16 38 660.1 19.37 114.01 5 57 24 1260.10 351.27 31.11 78.21 49.7 22.46 9 6 59 8 2 25 306,30 31.11 114.00 649.74 19.36 101.79 309.13 252.9 12.88 8.57 25.05 123.22 852.88 315.50 15 31 1 110.00 32.74 4793.0 5393.00 30.96 247.38 35.67 105.27 110.00 12 1 8 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1599.3 SR 301.4 SS 516.4 CRT -.8333 CRS .9853 CST -.9141 LSA 1688.4 MSA 253.8 SSA 9.2 SCT 3920.4 SCR 309.2 SC3 136.1 RRT -.2282 RRF -.5372 RTF .8470 SCB 3932.6 R23 .3520 R13 -.8475 SCI 3921.0 SC2 301.0 THA 178.96 TOE-1.2349 TRA-2.0029 TC3-2.5217 BAU .8722 RDE .2669 RRA -.0538 RC3 .0163 FAU .03784 FOE -.7673 FRA -.2121 FC3-1.2662 BSP 9443 BDE 1.2694 BRA 2.0036 BC3 2.5217 FSP -235 EL1 1619.1 EL2 164.6 ALF 170.98 ARRIVAL DATE DEC 21 1967 FLIGHT TIME 146.00 LAUNCH DATE JUL 28 1967 DISTANCE 435.075 RL 151.91 LAL -.00 LOL 304.25 VL 26.512 GAL -5.85 A7L 96.07 MCA 213.62 SMA 127.07 ECC .21950 INC 6.0681 V1 29.328 RP 107.55 LAP 3.36 LOP 157.73 VP 37.730 GAP 9.13 A7P 84.94 TAL 201.80 TAP 55.42 RCA 99.18 APO 154.97 V2 35.234 RC 148.521 GL -34.93 GP 25.54 ZAL 121.09 ZAP 149.15 ETS 52.53 ZAE 125.74 ETE 160.27 ZAC 83.69 ETC 12.16 CLP-162.09 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 23.714 VML 4.870 DLA -29.87 RAL 160.43 RAD 6568.0 VEL 12.045 PTH 2.15 VMP 6.849 OPA 27.90 RAP 188.81 ECC 1.3903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.02 6 41 43 113.01 9 14 50 32.16 346.48 6 21 48 1194.52 19.58 80.07 72.5 22.54 308.10 32.16 19.59 9 3 37 99.93 672.50 302.34 21.85 31.80 113.67 9 6 34 100.4 309.81 8 54 53 700.39 18.81 100.00 23.22 112.37 9 23 55 41.9 32.51 306.16 20.36 100.00 9 13 13 641.86 309.66 8 18 1 123.30 262.4 12.54 25.91 316.06 110.00 8 3 39 862.38 8.21 123.30 8 18 1 103.16 13 49 58 4740.7 33.32 234.64 243.55 12 20 57 5340.67 36.59 31.84 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1785.0 SR 330.6 SS 601.0 CRT -.8772 CRS .9907 CST -.9328 SGT 4356.1 SGR 333.9 SG3 162.9 RRT -.3975 RRF -.6144 RTF .8827 TOE-1.3461 TRA-2.0101 TC3-3.0851 BAU .9782 RDE .2810 RRA -.0178 RC3 .0411 FAU .04363 FOE -.8574 FRA -.2684 FC3-1.5929 BSP 13389 SGB 4368.9 R23 .2852 R13 -.8834 SGI 4358.1 SG2 306.2 THA 178.25 LSA 1895.4 MSA 253.0 SSA 10.4 EL1 1808.6 EL2 156.7 ALF 170.70 BOE 1.3751 BRA 2.0102 BC3 3.0854 FSP -513 ARRIVAL DATE DEC 23 1967 FLIGHT TIME 148.00 LAUNCH DATE JUL 28 1967 DISTANCE 440.869 RL 151.91 LAL -.00 LOL 304.25 VL 26.443 GAL -5.46 AZL 91.64 HCA 216.85 SMA 126.63 ECC .22034 INC 5.6396 V1 29.328 RP 107.57 LAP 3.38 LOP 160.98 VP 37.676 GAP 9.37 AZP 85.48 TAL 200.13 TAP 56.99 RCA 98.73 APO 154.53 V2 35.228 RC 150.615 GL -33.53 GP 23.39 ZAL 119.86 ZAP 151.34 ETS 51.53 ZAE 126.51 ETE 161.71 ZAC 82.03 ETC 11.34 CLP-162.94 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.13 VHP 6.854 DPA 24.99 RAP 189.88 ECC 1.3610 C3 21.936 VHL 4.684 DLA -29.52 RAL 163.17 RAD 6567.9 VEL 11.971 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.28 6 42 7 1145.59 19.85 342.97 33.54 112.31 7 1 12 545.6 22.71 335.36 81.28 22.72 301.43 9 16 35 83.5 33.54 112.30 19.87 309.04 665.-51 98.72 9 5 12 178.6 19.86 307.30 115.22 A 4A 2A 314.57 32.03 778.60 16.60 100.00 8 35 29 5213.8 25.62 109.41 11 31 24 276.60 34.90 100.00 9 54 30 5813.77 23.19 309.54 123.28 8 23 54 101.67 14 5 20 260.3 12.61 315.97 27,27 860.29 8.29 110.00 8 9 34 231.89 4704.8 33.63 37.78 32.36 240.89 110.00 12 36 55 5304.84 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4445.2 SGR 334.3 SG3 163.8 RRT -.3875 RRF -.5775 RTF .8799 SGB 4457.7 R23 .2548 R13 -.8805 SG1 4447.1 SG2 308.1 THA 178.32 ST 1806.0 SR 333.3 SS 596.8 CRT -.8931 CRS .9946 CST -.9323 TDE-1.3264 TRA-1.8657 TC3-3.4173 BAU 1.0022 RDE .2724 RRA -.0099 RC3 .0239 FAU .04290 FDE -.8202 FRA -.1932 FC3-1.6930 BSP 13709 LSA 1915.0 MSA 247.8 SSA 11.7 EL1 1830.5 EL2 147.9 ALF 170.58 BDE 1.3541 BRA 1.8657 BC3 3.4174 FSP -519

LAUNCH DATE JUL 28 1967

ARRIVAL DATE DEC 25 1967

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HELIOCENTRIC CONIC
                                                                             DISTANCE 446.652
     RL 151.91 LAL -.00 LOL 304.25 VL 26.375 GAL -5.07 AZL 95.27 MCA 220.09 SNA 126.20 ECC .22133 INC 5.2713 VI 29.328 RP 107.59 LAP 3.39 LOP 164.22 VP 37.621 GAP 9.61 AZP 85.96 TAL 198.46 TAP 58.55 RCA 98.27 APO 154.13 VZ 35.221 RC 152.696 GL -32.26 GP 21.55 ZAL 118.31 ZAP 153.27 ETS 50.75 ZAE 127.11 ETE 162.99 ZAC 80.25 ETC 10.64 CLP-163.80
    PLANETOCENTRIC CONIC
     C3 20.452 VHL .4.522 DLA -29.37 RAL 166.03 RAD 6567.8 VEL 11.909 PTH
                                                                                                        2.12 VHP 6.884 DPA 22.36 RAP 191.13 ECC 1.3366
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.80
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       100.00
                                      785.01
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                      8 39 40
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123.20 8 33 5
100.65 14 18 24
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       100.00
                                  5773.67
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       110.00
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                      8 18 54
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                                                                     315.44
                                                                                     29.04
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                    12 50 23
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       110.00
                                    5281.04
                                                       32.67
                                                                     239.11
                                                                                     39.27
                                                                                                                                                    33.60
                                                                                                                                                                   230.05
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SCT 4526.7 SCR 337.9 SC3 163.5

RRT -.3760 RRF -.5399 RTF .8774

SCB 4539.2 R23 .2250 R13 -.8778

SCI 4528.4 SC2 312.9 THA 178.38
                                                                                                                              ST 1834.4 SR 337.8 SS 593.3
CRT -.9098 CRS ..9973 CST -.9329
LSA 1942.4 MSA 241.1 SSA 13.0
EL1 1860.1 EL2 138.3 ALF 170.44
     TOE-1.3194 TRA-1.7161 TC3-3.7446 BAU 1.0239
    ROE .2666 RRA -.0029 RC3 .0068 FAU .04181
FDE -.7853 FRA -.1192 FC3-1.7696 BSP 13977
BDE 1.3461 BRA 1.7161 BC3 3.7446 FSP -518
                                                                             FLIGHT TIME 152.00
LAUNCH DATE JUL 28 1967
                                                                                                                                           ARRIVAL DATE DEC 27 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 452.422
    RL 151.91 LAL -.00 LOL 304.25 VL 26.308 GAL -4.66 AZL 94.95 MCA 223.32 SMA 125.78 ECC .22248 INC 4.9494 V1 29.328 RP 107.68 LAP 3.39 LOP 167.47 VP 37.567 GAP 9.85 AZP 86.40 TAL 196.77 TAP 60.10 RCA 97.80 APO 153.76 V2 35.214 RC 154.762 GL -31.08 GP 19.97 ZAL 116.48 ZAP 155.01 ETS 50.18 ZAE 127.58 ETE 164.12 ZAC 78.37 ETC 10.04 CLP-164.66
   PLANETOCENTRIC CONIC
    C3 19.202 VHL 4.382 DLA -29.39 RAL 169.02 RAD 6567.8 VEL 11.857 PTH
                                                                                                        2.10 VHP 6.934 OPA 19.96 RAP 192.53 ECC 1.3160
    B1.77 7 9 18 1101.43 20.58 340.01 37.21 111.46 7 27 40 501.4 23.31 332.32
        81.77
                      7 9 18 1101.43
        98.23
                     9 24 42
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123.06 8 45 1
100.05 14 29 51
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13 2 4
       110.00
                                     834.57
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       110.00
                                    5266.90
                                                                     238.04
                                                      32.85
                                                                                     41.08
                                                                                                                                    4666.9
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                                                                                                                                                                   228.96
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 1873.5 SR 344.2 SS 592.1

CRT -.9268 CRS ..9986 CST -.9349

LSA 1981.1 MSA 233.0 SSA 14.3

EL1 1900.6 EL2 127.4 ALF 170.29
     TOE-1.3255 TRA-1.5625 TC3-4.0702 BAU 1.0449
                                                                       SGT 4607.2 SGR 344.3 SG3 162.8
RRT -.3673 RRF -.5060 RTF .8757
    ROE .2632 RRA .0036 RC3 -.0085 FAU .04056
    FOE -.7548 FRA -.0489 FC3-1.8289 BSP 14258
BOE 1.3514 BRA 1.5625 BC3 4.0702 FSP -516
                                                                        SGB 4620.1 R23 .1965 R13 -.8761
SG1 4609.0 SG2 320.1 THA 178.42
                                                                            FLIGHT TIME 154.00
                                                                                                                                          ARRIVAL DATE DEC 29 1967
LAUNCH DATE JUL 28 1967
   HELIOCENTRIC CONIC
                                                                            DISTANCE 458.179
    RL 151.91 LAL -.00 LOL 304.25 VL 26.242 GAL -4.25 AZL 94.66 MCA 226.55 SMA 125.36 ECC .22380 INC 4.6641 V1 29.328
RP 107.64 LAP 3.38 LOP 170.71 VP 37.513 GAP 10.09 AZP 86.79 TAL 195.08 TAP 61.64 RCA 97.31 APO 153.42 V2 35.205
RC 156.813 GL -29.97 GP 18.60 ZAL 114.38 ZAP 156.58 ETS 49.81 ZAE 127.97 ETE 165.11 ZAC 76.42 ETC 9.51 CLP-165.51
   PLANETOCENTRIC CONIC
    C3 18.146 VHL 4.260 DLA -29.55 RAL 172.17 RAD 6567.7 VEL 11.812 PTH
                                                                                                       2.09 VHP 7.000 DPA 17.75 RAP 194.04 ECC 1.2986
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
81.19 7 17 20 1102.67 21.01 340.28 39.50 111.26 7 35 43 502.7 23.71 332.56
                   7 17 20 1102.67
9 41 48 636.21
9 12 42 729.33
10 29 7 5772.82
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98.81
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                                   5260.86
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       110.00
                    13 12 29
                                                      32.92
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 4683.6 SCR 352.8 SC3 161.5
RRT -.3608 RRF -.4760 RTF .8746
SCB 4696.8 R23 .1704 R13 -.8749
SCI 4685.3 SC2 328.9 THA 178.44
                                                                                                                             ST 1920.7 SR 352.0 SS 592.0 CRT -.9431 CRS ..9985 CST -.9378 LSA 2028.1 MSA 223.6 SSA 15.7 EL1 1949.3 EL2 115.4 ALF 170.16
    TOE-1.3410 TRA-1.4027 TC3-4.3886 BAU 1.0647
    ROE .2617 RRA .0093 RC3 -.0220 FAU .03919
FOE -.7269 FRA .0186 FC3-1.8695 BSP 14519
BOE 1.3663 BRA 1.4027 BC3 4.3887 FSP -512
                                                                                                                                          ARRIVAL DATE DEC 31 1967
                                                                            FLIGHT TIME 156.00
LAUNCH DATE JUL 28 1967
  HELIOCENTRIC CONIC
                                                                            DISTANCE 463.921
    RL 151.91 LAL -.00 LOL 304.25 VL 26.176 GAL -3.82 AZL 94.41 MCA 229.79 SMA 124.96 ECC .22529 INC 4.4079 V1 29.328 RP 107.67 LAP 3.36 LOP 173.96 VP 37.459 GAP 10.34 AZP 87.15 TAL 193.38 TAP 63.17 RCA 96.81 APO 153.11 V2 35.197 RC 158.850 GL -28.89 GP 17.41 ZAL 112.03 ZAP 158.01 ETS 49.64 ZAE 128.28 ETE 165.99 ZAC 74.40 ETC 9.05 CLP-166.35
   PLANETOCENTRIC CONIC
    C3 17.280 VHL 4.154 DLA -29.81 RAL 175.49 RAD 6567.7 VEL 11.775 PTH 2.08 VHP 7.078 DPA 15.69 RAP 195.64 ECC 1.2840
   UNCH AZHTH LNCH TINE L-1 TIME 80.28- 7 23 32 1113.58.
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.17 10 12 6
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                                   5261.75
                                                      32.91
      110.00
   DIFFFRENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SGT 4750.3 SGR 362.2 SG3 159.5
RRT -.3553 RRF -.4493 RTF .8734
SG8 4764.1 R23 .1470 R13 -.8737
SG1 4752.0 SG2 338.5 THA 178.44
                                                                                                                             ST 1971.7 SR 360.5 SS 590.9
CRT -.9578 CRS .9969 CST -.9410
    TDE-1.3619 TRA-1.2339 TC3-4.6909 BAU 1.0824
    RDE .2614 RRA .0140 RC3 -.0338 FAU .03765
FDE -.6992 FRA .0850 FC3-1.8883 BSP 14712
                                                                                                                             LSA 2078.7 MSA 213.1 SSA 17.1
                                                                                                                             EL1 2001.8 EL2 102.0 ALF 170.04
    BDE 1.3868 BRA 1.2340 BC3 4.6910 FSP -504
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FLIGHT TIME 150.00

ARRIVAL DATE JAN 2 1968 FLIGHT TIME 158.00 LAUNCH DATE JUL 28 1967 DISTANCE 469.647 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 26.112 GAL -3.38 AZL 94.18 MCA 233.02 SMA 124.56 ECC .22697 INC 4.1751 V1 29.328
RP 107.70 LAP 3.33 LOP 177.20 VP 37.405 GAP 10.59 AZP 87.49 TAL 191.68 TAP 64.69 RCA 96.29 APO 152.83 V2 35.187
RC 160.871 GL -27.83 GP 16.37 ZAL 109.45 ZAP 159.32 ETS 49.66 ZAE 128.54 ETE 166.76 ZAC 72.32 ETC 8.65 CLP-167.19 PLANETOCENTRIC CONIC 2.07 VHP 7.168 DPA 13.77 RAP 197.33 ECC 1.2720 C3 16.526 VHL 4.065 DLA -30.15 RAL 178.99 RAD 6567.7 VEL 11.743 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.64 7 29 15 1129.82 10 24 16 5853.82 7 29 15 1129.82 10 24 16 5853.82 9 21 47 763.01 529.8 45.01 7 48 5 79.20 21.95 342.70 111.20 12 1 49 271.30 24.65 100.80 21.97 279.09 45.02 111.18 5253.8 7 48 5 24.64 79.20 21.95 342.70 45.01 111.20 529.8 111.18 12 1 49 122.29 9 34 30 100.80 5253.8 24.65 271.30 21.97 279.09 45.02 304.11 163.0 16.06 110.00 11.88 310.72 39.72 13 30 54 5268.63 100.12 14 58 43 33.67 224.04 4668.6 110.00 32.83 236.17 48.44 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4821.1 SGR 373.1 SG3 157.8 RRT -.3544 RRF -.4291 RTF .8737 SG8 4835.5 R23 .1260 R13 -.8740 SG1 4822.9 SG2 348.7 THA 178.42 ST 2032.8 SR 370.4 SS 592.0 CRT -.9707 CRS .9938 CST -.9450 TOE-1.3919 TRA-1.0603 TC3-4.9820 BAU 1.1007 RDE .2627 RRA .0181 RC3 -.0425 FAU .03615 FDE -.6755 FRA .1466 FC3-1.8939 BSP 14962 LSA 2139.8 MSA 201.9 SSA 18.6 EL1 2064.4 EL2 87.6 ALF 169.95 BOE 1.4165 BRA 1.0605 BC3 4.9622 FSP -499 ARRIVAL DATE JAN 4 1968 FLIGHT TIME 160.00 LAUNCH DATE JUL 28 1967 DISTANCE 475.356 HELIOCENTRIC CONIC RL 151.91 LAL -.00 LOL 304.25 VL 26.048 GAL -2.93 AZL 93.96 MCA 236.25 SMA 124.17 ECC .22885 INC 3.9614 V1 29.328 RP 107.73 LAP 3.29 LOP 180.44 VP 37.352 GAP 10.85 AZP 87.80 TAL 189.96 TAP 66.21 RCA 95.76 APO 152.59 V2 35.178 RC 162.878 GL -26.76 GP 15.45 ZAL 106.66 ZAP 160.53 ETS 49.87 ZAE 128.77 ETE 167.45 ZAC 70.20 ETC 8.30 CLP-168.01 PLANETOCENTRIC CONIC C3 15.934 VHL 3.992 DLA -30.54 RAL 182.68 RAD 6567.6 VEL 11.718 PTH 2.06 VHP 7.268 DPA 11.95 RAP 199.09 ECC 1.2622 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 35 28 1148.50 10 47 27 5818.52 7 35 28 1148.50 10 47 27 5818.52 111.28 7 54 36 54A . 5 25.13 336.48 78.05 22.44 344.29 48.25 268.84 101.95 22.45 276.66 48.25 111.27 12 24 26 521A.5 25.14 78.05 336.48 22.44 344.29 48.25 111.28 7 54 36 548.5 25.13 111.28 7 54 36 111.27 12 24 26 268.84 101.95 22.45 276.66 48.25 5218.5 25.14 9 42° 37 734.37 13 39 28 5280.66 110.00 121.93 9 54 52 100.64 15 7 29 12.92 309.15 43.25 134.4 17.04 302.47 110.00 230.02 32.60 239.08 51.55 4680.7 33.80 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4888.7 SGR 384.2 SG3 155.8 RRT -.3554 RRF -.4130 RTF .8745 ST 2097.3 SR 380.8 SS 592.3 CRT -.9812 CRS .9893 CST -.9490 TOE-1.4260 TRA -.8787 TC3-5.2498 BAU 1.1184 RDE .2652 RRA .0210 RC3 -.0486 FAU .03463 FOE -.6524 FRA .2063 FC3-1.8815 BSP 15202 BOE 1.4505 BRA .8789 BC3 5.2500 FSP -494 SGB 4903.8 R23 .1075 R13 -.8747 SG1 4890.7 SG2 359.0 THA 178.39 LSA 2204.0 MSA 190.5 SSA 20.1 EL1 2130.3 EL2 72.4 ALF 169.89 ARRIVAL DATE JAN 6 1968 LAUNCH DATE JUL 28 1967 FLIGHT TIME 162.00 DISTANCE 481.047 RL 151.91 LAL -.00 LOL 304.25 VL 25.985 GAL -2.46 AZL 93.76 MCA 239.47 SMA 123.80 ECC .23093 INC 3.7634 V1 29.328
RP 107.76 LAP 3.24 LOP 183.67 VP 37.298 GAP 11.12 AZP 88.09 TAL 188.25 TAP 67.72 RCA 95.21 APO 152.38 V2 35.167
RC 164.869 GL -25.66 GP 14.64 ZAL 103.66 ZAP 161.65 ETS 50.29 ZAE 128.96 ETE 168.05 ZAC 68.03 ETC 8.00 CLP-168.82 PLANETOCENTRIC CONIC C3 15.480 VML 3.934 DLA -30.96 RAL 186.55 RAD 6567.6 VEL 11.699 PTH 2.06 VMP 7.378 DPA 10.24 RAP 200.90 ECC 1.2548 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 42 45 1167.82 11 11 5 5786.11 7 42 45 1167.82 11 11 5 5786.11 10 5 2 704.97 25.60 51.80 8 2 13 567.8 338.10 22.89 345.94 103.08 22.91 274.42 51.80 5186.1 25.61 266.58 111.44 8 2 13 111.42 12 47 31 76.92 22.89 345.94 51.80 567.8 25.60 338.10 5186.1 25.61 266.5A 103.08 22.91 274.42 51.80 121.52 10 16 47 101.33 15 16 15 10 5 2 307.52 105.0 18.04 300.77 110.00 704.97 13.97 47.12 13 47 58 54.97 4697.0 33.69 231.28 110.00 5296.96 32.47 240.30 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4951.9 SCR 395.7 SC3 153.5 RRT -.3580 RRF -.4009 RTF .8759 SCB 4967.7 R23 .0917 R13 -.8761 SCI 4953.9 SCZ 369.3 THA 178.35 ST 2162.6 SR 391.8 SS 591.5 CRT -. 9891 CRS .. 9835 CST -. 9528 TOE-1.4626 TRA -.6891 TC3-5.4830 BAU 1.1348 RDE .2689 RRA .0228 RC3 -.0524 FAU .03306 FDE -.6299 FRA .2653 FC3-1.8489 BSP 15432 BDE 1.4871 BRA .6895 BC3 5.4832 FSP -488 LSA 2268.8 MSA 179.4 SSA 21.7 ELT 2197.1 EL2 56.8 ALF 169.83 ARRIVAL DATE JAN 8 1968 LAUNCH DATE JUL 28 1967 -FLIGHT TIME 164.00 HELIOCENTRIC CONIC DISTANCE 486.719 RL 151.91 LAL -.00 LOL 304.25 VL 25.923 GAL -1.98 AZL 93.58 MCA 242.70 SMA 123.42 ECC .23324 INC 3.5782 V1 29.328 RP 107.79 LAP 3.18 LOP 186.91 VP 37.245 GAP 11.39 AZP 88.36 TAL 186.52 TAP 69.22 RCA 94.64 APO 152.21 V2 35.156 RC 186.846 GL -24.54 GP 13.92 ZAL 100.48 ZAP 182.70 ETS 50.90 ZAE 129.13 ETE 188.59 ZAC 65.83 ETC 7.75 CLP-189.62 PLANETOCENTRIC CONIC C3 15.161 VHL 3.894 DLA -31.38 RAL 190.61 RAD 6567.6 VEL 11.685 PTH 2.06 VHP 7.497 DPA 8.60 RAP 202.77 ECC 1.2495 LNCH AZHTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.87 7 51 30 1186.55 23.31 347.53 55.66 111.63 8 11 17 586.5 26.04 339.67 104.13 11 34 42 5758.02 23.32 272.48 55.66 111.62 13 10 40 5158.0 26.05 264.62 7 51 30 23.31 347.53 55.66 586.5 26.04 339.67 75.87 1186.55 11 34 42 5,758.02 23.32 272.48 55.66 5158.0 26.05 264.62 10 28 40 676.01 14.99 305.91 51.30 76.0 19.00 299.08 110.00 4716.6 13 56 43 5516.55 58.71 33.53 232.79 110.00 241.77 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 5005.9 SGR 406.6 SG3 151.0 RRT -.3610 RRF -.3911 RTF .8773 SGB 5022.4 R23 .0778 R13 -.8774 SG1 5008.1 SG2 379.0 THA 178.31 ST 2220.8 SR 402.7 SS 587.4 CRT -.9945 CRS .9761 CST -.9560 TDE-1.4967 TRA -.4878 TC3-5.6708 BAU 1.1494 RDE .2735 RRA .0231 RC3 -.0538 FAU .03145 FOE -.6053 FRA .3201 FC3-1.7961 BSP 15599 BOE 1.5215 BRA .4883 BC3 5.6711 FSP -479 LSA 2325.9 MSA 169.2 SSA 23.3

EL1 2256.6 EL2 41.6 ALF 169.78

ARRIVAL DATE JAN 10 1968

LAUNCH DATE JUL 28 1967

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DISTANCE 492.369
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.862 GAL -1.48 AZL 93.40 MCA 245.92 SMA 123.06 ECC .23578 INC 3.4036 VI 29.328 RP 107.83 LAP 3.11 LOP 190.14 VP 37.191 GAP 11.67 AZP 86.61 TAL 184.80 TAP 70.72 RCA 94.05 APO 152.08 VZ 35.145 RC 168.808 GL -23.36 GP 13.28 ZAL 97.14 ZAP 163.67 ETS 51.72 ZAE 129.28 ETE 169.07 ZAC 63.60 ETC 7.54 CLP-170.41
   PLANETOCENTRIC CONIC
     C3 14.978 VHL 3.870 DLA -31.78 RAL 194.84 RAD 6567.6 VEL 11.677 PTH 2.05 VHP 7.625 DPA
                                                                                                                                                       7.04 RAP 204.69 ECC 1.2465
     C3 14.978 VML 3.870 DLA -31.78 RAL 194.84 RAD 6567.6 VEL 11.677 PTM Z.D5 VMP 7.625 DPA 7.04 RAP 204.69 ECC 1.2465 LNCM AZANTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZANTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 74.93 8 1 54 1204.11 23.65 349.01 59.82 111.87 8 21 59 604.1 26.41 341.13 105.07 11 58 2 5735.04 23.67 270.89 59.83 111.85 13 33 37 5135.0 26.42 263.02 105.07 11 58 2 5735.04 23.67 270.89 59.83 111.85 13 33 37 5135.0 26.42 263.02 110.00 10 53 4 648.97 15.94 304.38 55.78 120.65 11 3 53 49.0 19.89 297.48
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120.65 11 3 53
103.06 15 35 1
                      14 6 3 5338.17
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                                                                             243.37
                                                                                                62.74
                                                              31.87
        110.00
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5063.1 SGR 417.3 SG3 148.5
RRT -.3663 RRF -.3650 RTF .8796
SGB 5080.3 R23 .0654 R13 -.8798
SGI 5065.4 SG2 388.2 THA 178.26
                                                                                                                                               ST 2275.1 SR 413.7 SS 581.5
CRT -.9974 CRS .9674 CST -.9589
     TOE-1.5309 TRA -.2797 TC3-5.8153 BAU 1.1645
     RDE .2794 RRA .0223 RC3 -.0523 FAU .02992
                                                                                                                                               LSA 2378.8 MSA 160.6 SSA 24.7
    FDE -.5809 FRA .3741 FC3-1.7293 BSP 15809
BDE 1.5561 BRA .2806 BC3 5.8155 FSP -472
                                                                                                                                               EL1 2312.2 EL2 29.3 ALF 169.72
                                                                                                                                                             ARRIVAL DATE JAN 12 1968
                                                                                       FLIGHT TIME 168.00
LAUNCH DATE JUL 28 1967
                                                                                     DISTANCE 497.996
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.801 GAL -.96 AZL 93.24 MCA 249.15 SMA 122.71 ECC .23857 INC 3.2377 VI 29.328 RP 107.86 LAP 3.03 LOP 193.37 VP 37.136 GAP 11.96 AZP 88.85 TAL 183.07 TAP 72.22 RCA 93.43 APQ 151.98 V2 35.134 RC 170.755 GL -22.15 GP 12.70 ZAL 93.67 ZAP 164.58 ETS 52.77 ZAE 129.42 ETE 169.49 ZAC 61.35 ETC 7.38 CLP-171.19
   PLANETOCENTRIC CONIC
    C3 14.937 VHL 3.865 DLA -32.12 RAL 199.21 RAD 6567.6 VEL 11.676 PTH 2.05 VHP 7.762 DPA 5.55 RAP 206.64 ECC 1.2458
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 14 8 1219.82
12 20 42 5718.09
8 14 8 1219.82
12 20 42 5718.09
11 17 36 625.69
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         74.16
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        74.16
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120.25 11 28 2
103.96 15 45 45
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                                                                                                64.27
        105.84
                                                            23.93
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        110.00
                                                             16.74
                                                                             303.05
                                                                                                60.51
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                                        5360.27
                                                                             245.00
                                                                                                67.06
        110.00
                       14 16 24
                                                              31.52
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5115.7 SGR 427.5 SG3 145.9
RRT -: 3721 RRF -: 3613 RTF : .8824
SGB 5133.6 R23 : .0549 R13 -: .8825
                                                                                                                                               ST 2316.5 SR 424.6 SS 572.6

CRT -.9980 CRS .9570 CST -.9611

LSA 2418.7 MSA 154.2 SSA 25.9
     TDE-1.5597 TRA -.0614 TC3-5.9020 BAU 1.1786
    RDE .2863 RRA .0200 RC3 - .0486 FAU .02839
FDE - .5551 FRA .4269 FC3-1.6454 BSP 16011
                                                                                  5G1 5118.2 SG2 396.6 THA 178.21
                                                                                                                                               EL1 2355.0 EL2 26.2 ALF 169.63
     BOE 1.5858 BRA .0646 BC3 5.9022 FSP -466
                                                                                                                                                           ARRIVAL DATE JAN 14 1968
                                                                                      FLIGHT TIME 170.00
LAUNCH DATE JUL 28 1967
                                                                                     DISTANCE 503.597
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.741 GAL -.43 A7L 93.08 MCA 252.37 SMA 122.36 ECC .24164 INC 3.0788 VI 29.328 RP 107.90 LAP 2.93 LOP 196.60 VP 37.086 GAP 12.25 A7P 89.07 TAL 181.34 TAP 73.71 RCA 92.79 APO 151.92 VZ 35.122 RC 172.686 GL -20.88 GP 12.18 TAL 90.09 ZAP 165.44 ETS 54.04 ZAE 129.54 ETE 169.87 ZAC 59.07 ETC 7.25 CLP-171.96
   PLANETOCENTRIC CONIC
     C3 15,043 VHL 3.879 DLA -32.39 RAL 203.70 RAD 6567.6 VEL 11.680 PTH 2.05 VMP 7.910 DPA
                                                                                                                                                        4.12 RAP 208.64 ECC 1.2476
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      8 28 9 1233.55
12 42 32 5707.53
8 28 9 1233.55
12 42 32 5707.53
11 41 31 608.16
                                                                                           68.95
                                                                                                              112.37
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                                                            24.06
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         73.57
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119.93 11 51 39
104.79 15 58 1
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        106.43
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                                                             17.34
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        110.00
                      11 41 31
                                          608.16
                                                                                 6.51 71.64 104.79 15.58 1
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      32.89
                                      5380.92
                                                                                                                                                    4780.9
                                                                             246.51
                       14 28 20
                                                             31.17
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SCT 5166.4 SCR 437.4 SC3 143.3
RRT - .3793 RRF - .3613 RTF .8864
SCB 5184.9 R23 .0465 R13 - .8865
                                                                                                                                              ST 2345.3 SR 435.2 SS 562.1
CRT -.9965 CRS .9453 CST -.9632
     TOE-1.5838 TRA .1643 TC3-5.9265 BAU 1.1919
     RDE .2946 RRA .0166 RC3 -.0428 FAU .02691
FDE -.5299 FRA .4761 FC3-1.5485 BSP 16237
BDE 1.6110 BRA .1651 BC3 5.9266 FSP -461
                                                                                                                                              LSA 2445.9 MSA 150.2 SSA 26.7
                                                                                                                                               EL1 2385.1 EL2
                                                                                                                                                                         35.7 ALF 169.52
                                                                                  SG1 5169.1 SG2 404.5 THA 178.15
                                                                                                                                                            ARRIVAL DATE JAN 16 1968
                                                                                      FLIGHT TIME 172.00
                                                                                     DISTANCE 509.171
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.683 GAL .13 AZL 92.93 MCA 255.58 SMA 122.02 ECC .24500 INC 2.9256 V1 29.32R
RP 107.94 LAP 2.83 LOP 199.82 VP 37.033 GAP 12.57 AZP 89.27 TAL 179.61 TAP 75.19 RCA 92.12 APO 151.91 V2 35.110
RC 174.603 GL -19.58 GP 11.72 ZAL 86.45 ZAP 166.24 ETS 55.56 ZAE 129.65 ETE 170.21 ZAC 56.77 ETC 7.17 CLP-172.72
   PLANETOCENTRIC CONIC
                                                                                                                                                        2.75 RAP 210.67 ECC 1.2519
     C3 15.306 VHL 3.912 DLA -32.57 RAL 208.27 RAD 6567.6 VEL 11.691 PTH
                                                                                                                    2.06 VHP 8.068 DPA
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 13.20 8 43 55 1245.07 24.09 352.32 73.84 112.61 9 4 40 645.1 26.94 344.45 106.80 13 3 13 5703.78 24.10 268.70 73.85 112.60 14 38 16 5103.8 26.95 260.83
                                      1245.07
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5397.98
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119.76 13 42 1
105.47 16 12 22
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                                                                             247.74
                       14 42 24
                                                              30.87
                                                                                                76.46
        110.00
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RRT - .3836 RRF - .3762 RTF . .8865
SGB 5215.5 R23 .0360 R13 - .8866
SGI 5199.4 SGZ 410.4 THA 178.11
                                                                                                                                               ST 2338.7 SR 443.3 SS 540.5
CRT -.9927 CRS .9284 CST -.9629
     TOE-1.5874 TRA .4105 TC3-5.8692 BAU 1.2010
RDE .3027 RRA .0109 RC3 -.0363 FAU .02534
                                                                                                                                              LSA 2436.1 MSA 151.3 SSA 26.9
EL1 2379.7 EL2 52.6 ALF 169.34
     FOE -.4941 FRA .5306 FC3-1.4330 BSP 16222
BOE 1.6160 BRA .4107 BC3 5.8694 FSP -445
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FLIGHT TIME 166.00

ARRIVAL DATE JAN 18 1968

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LAUNCH DATE JUL 28 1967
                                                                             DISTANCE 514.713
    RL 151.91 LAL -.00 LOL 304.25 VL 25.625 GAL .70 AZL 92.78 HCA 258.80 SMA 121.69 ECC .24867 INC 2.7769 V1 29.328 RP 107.97 LAP 2.72 LOP 203.04 VP 36.981 GAP 12.89 AZP 89.46 TAL 177.88 TAP 76.68 RCA 91.43 APO 151.95 V2 35.097 RC 176.504 GL -18.24 GP 11.29 ZAL 82.77 ZAP 166.98 ETS 57.35 ZAE 129.76 ETE 170.51 ZAC 54.46 ETC 7.13 CLP-173.48.
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                        2.06 WHP 8.236 OPA
                                                                                                                                        1.42 RAP 212.74 ECC 1.2590
    C3 15.737 VHL 3.967 OLA -32.64 RAL 212.88 RAD 6567.6 VEL 11.710 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   112.84 9 22 15
112.83 14 57 38
112.84 9 22 15
112.83 14 57 38
112.84 9 22 15
112.83 14 57 38
119.78 14 2 4
105.92 16 29 15
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                                                                     352.97
                                                                                     78.90
                    9 1 21 1254.23
13 22 30 5707.15
        73.05
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                    9 1 21 1254.23
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12 23 56 5887.89
14 59 6 5409.53
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                                                                                                                                                                    239.86
                                                                     248.57
                                                                                      81.54
                                                      30.66
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5241.3 SGR 452.7 SG3 137.3
RRT -.3907 RRF -.3798 RTF .8911
SGB 5260.8 R23 .0320 R13 -.8912
SG1 5244.3 SG2 416.5 THA 178.05
                                                                                                                                ST 2330.4 SR 452.1 SS 524.6
CRT -. 9869 CRS .9111 CST -. 9632
     TOE-1.5936 TRA .6575 TC3-5.7624 BAU 1.2124
    RDE .3130 RRA .0042 RC3 -.0290 FAU .02379
FDE -.4661 FRA .5808 FC3-1.3088 BSP 16467
BDE 1.6240 BRA .6575 BC3 5.7625 FSP -441
                                                                                                                                LSA 2426.0 MSA 155.5 SSA 26.7
                                                                                                                                EL1 2378.7 EL2 71.8 ALF 169.15
                                                                                                                                            ARRIVAL DATE JAN 20 1968
                                                                              FLIGHT TIME 176.00
                                                                             DISTANCE 520.221
    RL 151.91 LAL -.00 LOL 304.25 VL 25.566 GAL 1.30 AZL 92.63 MCA 262.01 SNA 121.36 ECC .25269 INC 2.6316 VI 29.326 RP 108.01 LAP 2.61 LOP 206.26 VP 36.930 GAP 13.23 AZP 89.63 TAL 176.15 TAP 78.16 RCA 90.69 APO 152.03 V2 35.084 RC 178.369 GL -16.87 GP 10.91 ZAL 79.09 ZAP 167.67 ETS 59.43 ZAE 129.85 ETE 170.79 ZAC 52.14 ETC 7.13 CLP-174.23
  HELIOCENTRIC CONIC
    LNCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.16 9 20 18 1260.92 23.70 353.36 84.06 113.05 9 41 10 440 A
   PLANETOCENTRIC CONIC
                                                       23.72
                                                                                      84.07
                    13 40 9 5717.87
                                                                                                     113.05 9 41 19
113.03 15 15 27
120.01 12 51 15
106.11 16 48 50
                                                                                                                                                                     345.54
                                                                                                                                       660.9
                                                                                                                                                       26.61
                    9 20 18 1260.92
13 40 9 5717.87
12 41 3 612.31
15 18 35 5414.47
                                                                      353.36
                                                                                      84.06
                                                        23.70
         73.16
                                                                                                                                                       26.63
                                                                                                                                     5117.9
                                                       23.72
                                                                      269.60
                                                                                      84.07
        106.64
                                                                                                                                                       21.06
                                                                                       60.60
                                                                                                                                       12.3
                                                       17.20
                                                                      302.28
        110.00
                                                                                                                                                       32.47
                                                                                                                                     4814.5
                                                                      248.93
                                                                                      86.80
                                                        30.56
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2295.9 SR 459.0 SS 504.3
                                                                          SGT 5278.4 SGR 459.4 SG3 134.3
RRT -.3982 RRF -.3831 RTF .8951
     TOE-1.5841 TRA .9175 TC3-5.5908 BAU 1.2221
                                                                                                                                 CRT -.9784 CRS .8898 CST -.9630
LSA 2389.3 MSA 163.3 55A 25.8
     RDE .3239 RRA -.0038 RC3 -.0204 FAU .02237
                                                                          SG8 5298.4 R23 .0266 R13 -.8952
SG1 5281.6 SG2 421.1 THA 178.00
     FDE -.4346 FRA .6296 FC3-1.1843 BSP 16624
BDE 1.6169 BRA .9175 BC3 5.5908 FSP -434
                                                                                                                                 EL1 2339.4 EL2 93.0 ALF 168.91
                                                                                                                                            ARRIVAL DATE JAN 22 1968
                                                                              FLIGHT TIME 178.00
 LAUNCH DATE JUL 28 1967
                                                                             DISTANCE 525.691
     RL 151.91 LAL -.00 LOL 304.25 VL 25.512 GAL 1.92 A7L 92.49 MCA 265.23 SMA 121.04 ECC .25707 INC 2.4886 Vl 29.328
RP 108.05 LAP 2.48 LOP 209.48 VP 36.879 GAP 13.59 A7P 89.79 TAL 174.42 TAP 79.65 RCA 89.93 APO 152.16 V2 35.071
RC 180.257 GL -15.50 GP 10.57 ZAL 75.44 ZAP 168.31 ETS 61.81 ZAE 129.93 ETE 171.03 ZAC 49.80 ETC 7.18 CLP-174.98
    PLANETOCENTRIC CONIC
     C3 17.165 VHL 4.143 DLA -32.42 RAL 221.99 RAD 6567.7 VEL 11.771 PTH 2.08 VHP 8.611 DPA -1.07 RAP 216.95 ECC 1.2825
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  26.23
                                                                                                   113.22 10 1 45
113.20 15 31 29
113.22 10 1 45
113.20 15 31 29
                                                                                   89.30
                       9 40 41 1264.84
13 55 53 5736.25
9 40 41 1264.84
13 55 53 5736.25
                                                        23.29
                                                                     353.47
         73.51
                                                                                       89.30
                                                                                                                                      5136.2
                                                                                                                                                       26.24
                     13 55 53
                                                        23.30
                                                                      270.82
         106.49
                                                                                                                                                                     345.69
                                                                                       89.30
                                                                                                                                       664.8
                                                                                                                                                       26.23
                                                        23.29
                                                                      353.47
         73.51
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                                                                      270.62
                     13 55 53
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        106.49
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106.06 17 10 49
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                      12 55 B
                                       636.01
                                                        16.39
                                                                      303.64
        110.00
        110.00 12 55 8 636.01
110.00 15 40 36 5413.07
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                                                                                                                                                      32.49
                                                       30.59
                                                                      248.83
                                                                                       92.22
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 5309.9 SGR 464.6 SG3 131.4

RRT -.4054 RRF -.3663 RTF .8988

SGB 5330.2 R23 .0215 R13 -.8989

SGI 5313.2 SG2 424.4 THA 177.96
                                                                                                                                 ST 2240.2 SR 464.0 SS 481.7
CRT -.9670 CRS .8632 CST -.9617
      TDE-1.5607 TRA 1.1905 TC3-5.3609 BAU 1.2302
      RDE .3355 RRA -.0134 RC3 -.0120 FAU .02096
                                                                                                                                 LSA 2331.2 MSA 175.2 SSA 24.6
     FDE - .4008 FRA .6790 FC3-1.0571 BSP 16763
                                                                                                                                  EL1 2284.8 EL2 .115.9 ALF 168.64
      BOE 1.5963 BRA 1.1906 BC3 5.3609 FSP -426
                                                                                                                                              ARRIVAL DATE JAN 24 1968
                                                                               FLIGHT TIME 180.00
 LAUNCH DATE JUL 28 1967
     RL 151.91 LAL -.00 LOL 304.25 VL 25.456 GAL 2.57 A7L 92.35 MCA 268.43 SNA 120.73 ECC .26186 INC 2.3472 V1 29.328
RP 108.09 LAP 2.35 LOP 212.69 VP 36.828 GAP 13.97 A7P 89.94 TAL 172.70 TAP 81.14 RCA 89.12 APO 152.35 V2 35.058
RC 182.108 GL -14.13 GP 10.25 ZAL 71.86 ZAP 168.90 E1S 64.52 ZAE 130.01 ETE 171.26 ZAC 47.47 ETC. 7.28 CLP-175.72
                                                                               DISTANCE 531.118
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                           2.09 WHP 8.818 OPA -2.25 RAP 219.10 ECC 1.2995
      C3 18.199 VHL 4.266 DLA -32.14 RAL 226.40 RAD 6567.7 VEL 11.814 PTH
      UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.12 10 2 21 1265.81 22.74 353.29 94.55 113.35 10 23 27 665.8 25.70 345.55
                                                                                                       113.34 15 45 29
113.35 10 23 27
                                                                                        94.55
                                                         22.75
                                                                       272.56
         105.88
                      14 9 26
                                     5762.47
                                                                                                                                                        25.70
                                                                                                                                        665.8
                                                                                        94.55
                                                                       353.29
                     10 2 21
                                     1265.81
                                                         22.74
          74.12
                                                                                                       113.34 15 45 29
120.98 13 17 38
105.81 17 34 36
                                                                                                                                                        25.71
                                                                                                                                                                      264.83
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                                     5762.47
                                                        22.75
                                                                       272.56
                                                                                        94.55
         105.68
                      14 9 26
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                                                                                                                                        69.6
                                                                                        90.47
                                                                       305.54
                      13 6 29
                                        669.56
                                                        15.22
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                                                                                        97.72
                                                                                                                                       4806.7
                                                                       248.37
                                                        30.71
                      16 4 29
                                      5406.73
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                          SGT 5333.2 SGR 468.6 SG3 128.4

RRT -.4121 RRF -.3903 RTF .9022

SGB 5353.8 R23 .0177 R13 -.9023

SGI 5336.7 SG2 426.6 THA 177.91
                                                                                                                                 ST 2166.4 SR 467.1 SS 458.9
CRT -.9518 CRS .8305 CST -.9600
      TOE-1.5226 TRA 1.4784 TC3-5.0767 BAU 1.2352
      ROE .3476 RRA -.0247 RC3 -.0045 FAU .01952
                                                                                                                                LSA 2255.0 MSA 190.9 SSA 23.2
EL1 2211.8 EL2 140.4 ALF 168.36
      FOE -.3661 FRA .7294 FC3 -.9285 BSP 16829
      BOE 1.5618 BRA 1.4787 BC3 5.0767 FSP -417
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FLIGHT TIME 174.00

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LAUNCH DATE JUL 28 1967
                                                                                               FLIGHT TIME 182.00
                                                                                                                                                                          ARRIVAL DATE JAN 25 1968
     HELIOCENTRIC CONIC
                                                                                              DISTANCE 536.496
      RL 151.91 LAL -. ON LOL 304.25 VL 25.402 CAL 3.25 A7L 92.21 MCA 271.64 SMA 120.43 ECC .26708 INC 2.2062 V1 29.328
RP 108.13 LAP 2.21 LOP 215.90 VP 36.778 CAP 14.36 AZP 90.06 TAL 170.99 TAP 82.63 RCA 88.27 APO 152.59 VZ 35.045
RC 183.942 GL -12.78 CP 9.97 ZAL 68.38 ZAP 169.43 ETS 67.58 ZAE 130.07 ETE 171.46 ZAC 45.12 ETC 7.43 CLP-176.46
     PLANETOCENTRIC CONIC
      C3 19.480 VHL 4.414 DLA -31.76 RAL 230.67 RAD 6567.8 VEL 11.869 PTH 2.11 VHP 9.041 DPA -3.38 RAP 221.27 ECC 1.3206
      CHICH APATHT LUCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.99 10 25 14 1263.52 22.05 352.79 99.78 113.45 10 46 17 663.5 25.03 345.11 105.01 14 20 36 5796.78 22.06 274.85 99.79 113.44 15 57 13 5196.8 25.04 267.16
          74.99
                         10 25 14 1263.52
14 20 36 5796.78
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113.44 15 57 13
121.61 13 27 25
105.44 17 59 24
                                                                   22.05
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         105.01
                                                                   22.06
                                                                                    274.85
                                                                                                        99.79
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         110.00
                                               711.00
                                                                   13.76
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                                                                                                        95.24
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                         16 29 27 5397.29
         110.00
                                                                   30.88
                                                                                    247.69
                                                                                                      103.26
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                                                                                                                                                                                                       23A.94
    DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                        RID-COURSE EXECUTION ACCORACY
SGT 5356.7 SGR 471.4 SG3 125.5
RRT -.4196 RRF -.3956 RTF ..9063
SGB 5377.4 R23 ..0142 R13 -.9063
SGI 5360.4 SGZ 427.6 THA 177.87
      TOE-1.4746 TRA 1.7767 TC3-4.7624 BAU 1.2403
                                                                                                                                                           ST 2083.9 SR 468.3 SS 437.4
CRT -.9322 CRS .7924 CST -.9582
LSA 2170.0 MSA 209.2 SSA 21.8
      RDE .3605 RRA -.0372 RC3 .0026 FAU .01819
FOE -.3320 FRA .7791 FC3 -.8084 BSP 16954
      BCE 1.5181 BRA 1.7771 BC3 4.7624 FSP -410
                                                                                                                                                           EL1 2129.4 EL2 165.9 ALF 168.10
LAUNCH DATE JUL 28 1967
                                                                                              FLIGHT TIME 184,00
                                                                                                                                                                          ARRIVAL CATE JAN 28 1968
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 541.820
     RL 151.91 LAL -.00 LOL 304.25 VL 25.348 CAL 3.96 A7L 92.06 MCA 274.85 SMA 120.13 ECC .27279 INC 2.0649 V1 29.328 RP 108.18 LAP 2.06 LOP 219.10 VP 36.728 GAP 14.79 A7P 90.17 TAL 169.29 TAP 84.13 RCA 87.36 APO 152.90 V2 35.032 RC 185.758 GL -11.46 GP 9.70 ZAL 65.01 ZAP 169.90 ETS 71.00 ZAE 130.13 ETE 171.64 ZAC 42.78 ETC 7.65 CLP-177.21
    PLANETOCENTRIC CONIC
     C3 21.037 VHL 4.587 DLA -31.28 RAL 234.76 RAD 6567.9 VEL 11.934 PTH
                                                                                                                               2.12 VHP 9.281 DPA -4.47 RAP 223.47 ECC 1.3462
     LNCH APMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.12 10 49 24 1257.17 21.24 351.93 104.96 113.52 11 10 21 657.2 24.24 344.30
                                                                                                                        113.52 11 10 21
         103.88
                          14 29 3
                                           5839.82
                                                                   21.26
                                                                                    277.73
                                                                                                       104.96
                                                                                                                           113.50 16 6 23
                                                                                                                                                                 5239.8
                                                                                                                                                                                     24.25
                                                                                                                                                                                                       270.10
          76.12
                        10 49 24 1257.17
                                                                   21.24
                                                                                    351.93
                                                                                                                          113.52 11 10 21
                                                                                                       104.96
                                                                                                                                                                  657.2
                                                                                                                                                                                     24.24
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         103.88
                         14 29 3
                                           5839.82
                                                                  21.26
                                                                                   277.73
                                                                                                      104.96
                                                                                                                          113.50
                                                                                                                                         16 6 23
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         110.00
                        13 22 53
                                            758.40
                                                                                                                          122.23 13 35 32
                                                                 12.05
                                                                                    310.47
                                                                                                       99.89
                                                                                                                                                                 158.4
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         110.00
                         16 54 44
                                           5386.57
                                                                  31.07
                                                                                   246.92
                                                                                                                          105.02 18 24 31
                                                                                                      108.78
                                                                                                                                                               4786.6
                                                                                                                                                                                     32.82
                                                                                                                                                                                                       238.13
    DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5374.7 SGR 473.0 SG3 122.6

RRT -.4268 RRF -.4013 RTF ...9102

SGB 5395.5 R23 ...0115 R13 -...9102

SGI 5378.5 SG2 427.4 THA 177.84
      TOE-1.4148 TRA 2.0892 TC3-4.4200 BAU 1.2431
                                                                                                                                                           ST 1994.4 SR 467.5 SS 417.6
CRT -.9072 CRS .7476 CST -.9565
     ROE .3738 RRA -.0510 RC3 .0086 FAU .01687
FDE -.2981 FRA .8293 FC3 -.6942 BSP 17059
                                                                                                                                                           LSA 2077.8 MSA 229.8 SSA 20.4
     BOE 1.4634 BRA 2.0898 BC3 4.4200 FSP -403
                                                                                                                                                           EL1 2039.4 EL2 192.4 ALF 167.89
LAUNCH DATE JUL 28 1967
                                                                                             FLIGHT TIME 186,00
                                                                                                                                                                        ARRIVAL CATE JAN 30 1968
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 547.081
     RL 151.91 LAL -.00 LOL 304.25 VL 25.296 GAL 4.71 A7L 91.92 MCA 278.05 SMA 119.84 ECC .27904 INC 1.9223 V1 29.328
RP 108.22 LAP 1.90 LOP 222.31 VP 36.679 GAP 15.24 A7P 90.27 TAL 167.59 TAP 85.64 RCA 86.40 APO 153.28 V2 35.019
RC 187.557 GL -10.18 GP 9.47 TAL 61.78 ZAP 170.32 ETS 74.79 ZAE 130.17 ETE 171.81 ZAC 40.44 ETC 7.93 CLP-177.95
    PLANETOCENTRIC CONIC
     C3 22.906 VHL 4.786 OLA -30.73 RAL 238.64 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 9.540 DPA -5.51 RAP 225.68 ECC 1.3770
    C3 22.906 VML 4,786 OLA -30.73 RAL 238.64 RAD 0507.9 VEL 12.012 PTH 2.14 VMP 9.540 DPA -5.51 RAP 225.68 ECC 1.3770 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.55 11 15 4 1245.67 20.33 350.64 110.05 113.54 11 35 49 645.7 23.34 343.07 102.45 14 34 23 604.44 20.35 303.36 110.06 113.53 14 44 27 4.4 23.36 295.79 102.45 14 34 23 604.44 20.35 303.36 110.06 113.53 14 44 27 4.4 23.36 295.79 110.00 13 28 52 810.13 10.16 313.28 104.41 122.82 13 42 22 210.1 14.41 306.76 110.00 17 19 45 5376.02 31.26 246.15 114.24 104.60 18 49 21 4776.0 32.94 237.33
                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       RRT -.4336 RRF -.4068 RTF ..9139

SGB 5406.6 R23 ..0089 R13 -.9140

SGI 5389.8 SGZ 425.9 THA 177.81
     TOE-1.3412 TRA 2.4202 TC3-4.0556 BAU 1.2420
                                                                                                                                                        ST 1901.0 SR 464.5 SS 400.0
CRT -.8749 CRS .6941 CST -.9548
    RDE .3873 RRA -.0664 RC3 .0130 FAU .01553
FDE -.2634 FRA .8818 FC3 -.5870 BSP 17067
                                                                                                                                                        LSA 1981.3 MSA 252.5 SSA 19.1
ELI 1944.5 EL2 219.9 ALF 167.77
     BOE 1.3960 BRA 2.4211 BC3 4.0556 FSP -392
LAUNCH DATE JUL 28 1967
                                                                                             FLIGHT TIME 188.00
                                                                                                                                                                        ARRIVAL DATE FEB 1 1968
                                                                                            DISTANCE 552.271
    RL 15T.91 LAL -.00 LOL 304.25 VL 25.244 GAL 5.50 AZL 91.78 HCA 281.25 SMA 119.56 ECC .28587 INC 1.7776 V1 29.328
RP 108.26 LAP 1.74 LOP 225.51 VP 36.631 GAP 15.72 AZP 90.35 TAL 165.91 TAP 87.16 RCA 85.38 APO 153.74 V2 35.005
RC 189.337 GL -8.95 GP 9.25 ZAL 58.70 ZAP 170.66 ETS 78.95 ZAE 130.20 ETE 171.97 ZAC 38.11 ETC 8.29 CLP-178.70
   PLANETOCENTRIC CONIC
    C3 25.130 VHL 5.013 OLA -30.11 RAL 242.31 RAO 6568.0 VEL 12.104 PTH
                                                                                                                             2.17 VHP 9.820 DPA -6.51 RAP 227.91 FCC 1.4136
    C3 25.130 VML 3.013 OLA -30.11 RAL 242.31 RAO 6568.0 VEL 12.104 PTH 2.17 VMP 9.820 DPA -6.51 RAP 227.91 ECC 1.4136 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.32 11 42 44 1226.92 19.34 348.78 115.05 113.54 12 3 11 626.9 22.36 341.27 100.68 14 35 57 668.59 19.35 307.70 115.05 113.53 14 47 5 68.6 22.37 300.18 79.32 11 42 44 1226.92 19.34 348.78 115.05 113.54 12 3 11 626.9 22.36 341.27 100.68 14 35 57 668.59 19.35 307.70 115.05 113.54 12 3 11 626.9 22.36 341.27 100.68 14 35 57 668.59 19.35 307.70 115.05 113.53 14 47 5 68.6 22.37 300.18 110.00 13 33 47 864.90 8.12 316.22 108.81 123.32 13 48 12 264.9 12.45 309.80 110.00 17 44 4 5366.64 31.42 245.46 119.61 104.22 19 13 31 4766.6 33.05 236.62
   DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    TOE-1.2625 TRA 2.7628 TC3-3.6927 BAU 1.2407
                                                                                        SGT 5395.7 SGR 471.9 SG3 117.1
                                                                                                                                                       ST 1814.8 SR 459.9 SS 386.2
CRT -.8362 CRS .6378 CST -.9547
    ROE .4014 RRA -.0828 RC3 .0165 FAU .01430
FOE -.2315 FRA .9339 FC3 -.4927 BSP 17171
                                                                                      RRT -.4409 RRF -.4137 RTF .9183
SGB 5416.3 R23 .0070 R13 -.9183
SGI 5399.7 SGZ 423.2 THA 177.78
                                                                                                                                                        LSA 1891.7 MSA 275.0 55A 18.0
    BDE 1.3248 BRA 2.7640 BC3 3.6928 FSP -386
                                                                                                                                                        EL1 1855.9 EL2 246.7 ALF 167.82
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ARRIVAL DATE FEB 3 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 28 1967
                                                                              DISTANCE 557.378
    RL 151.91 LAL -.00 LOL 304.25 VL 25.193 GAL 6.33 AZL 91.63 MCA 284.44 SNA 119.29 ECC .29335 INC 1.6297 V1 29.328 RP 108.30 LAP 1.58 LOP 228.70 VP 36.583 GAP 16.24 AZP 90.41 TAL 164.26 TAP 88.70 RCA 84.29 APO 154.28 V2 34.992 RC 191.100 GL -7.77 GP 9.05 ZAL 55.78 ZAP 170.93 ETS 83.45 ZAE 130.22 ETE 172.11 ZAC 35.78 ETC 8.73 CLP-179.45
   PLANETOCENTRIC CONIC
    C3 27.761 VHL 5.269 DLA -29.45 RAL 245.74 RAD 6568.1 VEL 12.212 PTH 2.19 VHP 10.124 DPA -7.46 RAP 230.15 ECC 1.4569
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
81.57 12 13 44 1196.31 18.27 346.02 119.93 113.50 12 33 40 596.3 21.30 338.56
                     12 13 44 1196.31
                                                                                                                                                                         305.69
                                                                                                                    14 44 50
                                                                                                                                          148.5
                                                                       313.14
                                                                                       119.93
                                                                                                        113.49
                    14 32 21
                                      748.54
                                                        18.29
         98.43
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       100.00
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123.72 13 53 16
103.92 19 36 41
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                    15 27 45 5859.26
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                                                        22.13
       100.00
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                                                                                       113.09
                     13 37 54
                                       921.75
                                                          5.98
                                                                       319.23
       110.00
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                                     5359.14
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5400.8 SGR 469.4 SG3 114.4

RRT -.4481 RRF -.4207 RTF .9227

SGB 5421.1 R23 .0053 R13 -.9227

SGI 5404.9 SG2 419.3 THA 177.76
                                                                                                                                   ST 1736.2 SR 453.5 SS 375.8
CRT -. 7896 CRS .5766 CST -. 9557
    TDE-1.1754 TRA 3.1241 TC3-3.3302 BAU 1.2360
    RDE .4156 RRA -.1004 RC3 .0187 FAU .01309
FDE -.2002 FRA .9880 FC3 -.4082 BSP 17234
                                                                                                                                   LSA 1809.1 MSA 297.0 SSA 17.0
                                                                                                                                    EL1 1773.7 EL2 272.4 ALF 168.06
    BDE 1.2467 BRA 3.1257 BC3 3.3302 FSP -378
                                                                                                                                                ARRIVAL DATE FEB 5 1968
                                                                                FLIGHT TIME 192.00
LAUNCH DATE JUL 28 1967
                                                                               DISTANCE 562.390
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.143 GAL 7.21 AZL 91.48 MCA 287.64 SMA 119.02 ECC .30156 INC 1.4777 V1 29.328
RP 108.34 LAP 1.41 LOP 231.90 VP 36.536 GAP 16.80 AZP 90.45 TAL 162.62 TAP 90.26 RCA 83.13 APO 154.91 V2 34.979
RC 192.846 GL -6.65 GP 8.87 ZAL 53.03 ZAP 171.13 ETS 88.27 ZAE 130.22 ETE 172.25 ZAC 33.47 ETC 9.28 CLP 179.78
   PLANETOCENTRIC CONIC
    C3 30.860 WHL 5.555 DLA -28.75 RAL 248.95 RAD 6568.2 VEL 12.338 PTH 2.22 VMP 10.453 DPA -8.37 RAP 232.41 ECC 1.5079
LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.42 14 33 34
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103.71 19 58 43
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14 19 16 858.32
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         95.20
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   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ST 1667.1 SR 445.4 SS 368.7
CRT -.7350 CRS .5133 CST -.9583
LSA 1735.7 MSA 317.4 SSA 16.0
                                                                           SGT 5401.2 SGR 465.5 SG3 111.9
RRT -.4547 RRF -.4278 RTF .9272
    TOE-1.0797 TRA 3.5036 TC3-2.9773 BAU 1.2284
    ROE .4300 RRA -.1190 RC3 .0198 FAU .01190
FOE -.1703 FRA 1.0439 FC3 -.3336 85P 17267
BOE 1.1622 BRA 3.5058 BC3 2.9774 FSP -371
                                                                           SG8 5421.3 R23 .0042 R13 -.9272
                                                                           SG1 5405.4 SG2 414.3 THA 177.74
                                                                                                                                  ELI 1700.0 EL2 296.2 ALF 168.54
                                                                                                                                                ARRIVAL DATE FEB 7 1968
                                                                                FLIGHT TIME 194.00
LAUNCH DATE JUL 28 1967
                                                                               DISTANCE 567.292
   HELIOCENTRIC CONIC
    RL 151.91 LAL -.00 LOL 304.25 VL 25.094 GAL 8.14 AZL 91.32 MCA 290.83 SMA 118.75 ECC .31058 INC 1.3202 V1 29.328 RP 108.38 LAP 1.23 LOP 235.09 VP 36.490 GAP 17.41 AZP 90.47 TAL 161.01 TAP 91.84 RCA 81.87 APO 155.64 V2 34.966 RC 194.574 GL -5.59 GP 8.70 ZAL 50.45 ZAP 171.24 ETS 93.34 ZAE 130.20 ETE 172.37 ZAC 31.17 ETC 9.95 CLP 179.01
    PLANETOCENTRIC CONIC
     C3 34.504 VHL 5.874 OLA -28.04 RAL 251.93 RAD 6568.4 VEL 12.485 PTH 2.26 VHP 10.813 OPA -9.23 RAP 234.67 ECC 1.5678
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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124.15 14 1 36

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        110.00
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                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5395.6 SGR 460.1 SGS 109.4
RRT -.4611 RRF -.4347 RTF .9318
SGB 5415.2 R23 .0029 R13 -.9318
SGI 5399.8 SG2 408.0 THA 177.74
                                                                                                                                    ST 1610.1 SR 435.7 SS 365.0
CRT -.6729 CRS .4477 CST -.9619
     TDE -.9760 TRA 3.9065 TC3-2.6331 BAU 1.2146
     ROE .4442 RRA -.1366 RC3 .0195 FAU .01069
FOE -.1406 FRA 1.1032 FC3 -.2682 BSP 17253
BOE 1.0723 BRA 3.9090 BC3 2.6331 FSP -361
                                                                                                                                    LSA 1674.2 MSA 335.1 SSA 15.2
                                                                                                                                     EL1 1637.6 EL2 316.9 ALF 169.27
                                                                                                                                                 ARRIVAL DATE FEB 9 1968
                                                                                FLIGHT TIME 196.00
                                                                                DISTANCE 572.062
   HELIOCENTRIC CONIC
   RL 151.91 LAL -.00 LOL 304.25 VL 25.046 GAL 9.14 A7L 91.16 HCA 294.02 SMA 118.50 ECC .32051 INC 1.1561 VI 29.328 RP 108.42 LAP 1.06 LOP 236.28 VP 36.445 GAP 18.07 AZP 90.47 TAL 159.43 TAP 93.45 RCA 80.52 APO 156.48 V2 34.953 RC 196.285 GL -4.60 GP 8.55 ZAL 48.05 ZAP 171.27 ETS 98.59 ZAE 130.16 ETE 172.50 ZAC 28.90 ETC 10.76 CLP 178.22
    PLANETOCENTRIC CONIC
                                                                                                            2.30 VHP 11.206 DPA -10.04 RAP 236.94 ECC 1.6383
     C3 38.785 VHL 6.228 DLA -27.32 RAL 254.68 RAD 6568.5 VEL 12.655 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 52 40 1271.88 9.00 347.05 131.03 116.96 13 13 52 671.9 12.55 340.16
                                                                                     131.03
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109.62 15 18 42
119.44 13 55 1
107.44 18 39 38
124.18 14 5 2
103.59 20 38 58
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                      19 9 47
                                      5351.05
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1567.6 SR 424.9 SS 364.5

CRT -.6073 CRS .3870 CST -.9668

LSA 1627.6 MSA 348.2 SSA 14.4

EL1 1589.6 EL2 332.9 ALF 170.22
                                                                            SGT 5387.1 SGR 453.5 SG3 107.0
      TOE -.8709 TRA 4.3283 TC3-2.3119 BAU 1.1988
                                                                            RRT -.4674 RRF -.4421 RTF .9368
SGB 5406.1 R23 .0021 R13 -.9368
SGI 5391.3 SG2 400.6 THA 177.73
     RDE .4587 RRA -.1587 RC3 .0187 FAU .00956
FDE -.1135 FRA 1.1640 FC3 -.2153 BSP 17300
BDE .9843 BRA 4.3312 BC3 2.3119 FSP -355
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LAUNCH CATE JUL 28 1967

ARRIVAL DATE FEB 11 1968

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HELIOCENTRIC CONIC
                                                                                                                                                          DISTANCE 576.680
         RL 151.91 LAL -.00 LOL 304.25 VL 24.999 GAL 10.20 AZL 90.98 MCA 297.21 SMA 118.25 ECC .33146 INC .9836 V1 29.328
RP 108.46 LAP .87 LOP 241.46 VP 36.401 GAP 18.79 AZP 90.45 TAL 157.90 TAP 95.10 RCA 79.05 APO 157.45 V2 34.941
RC 197.979 GL -3.66 GP 8.41 ZAL 45.81 ZAP 171.20 ETS 103.93 ZAE 130.10 ETE 172.61 ZAC 26.66 ETC 11.75 CLP 177.41
       PLANETOCENTRIC CONIC
          C3 43.815 VHL 6.619 DLA -26.60 RAL 257.21 RAD 6568.7 VEL 12.852 PTH 2.34 VHP 11.637 DPA -10.81 RAP 239.21 ECC 1.7211
        C3 43.815 VHL 6.619 DLA -26.60 RAL 257.21 RAD 6568.7 VEL 12.852 PTH 2.34 VHP 11.637 DPA -10.81 RAP 239.21 ECC 1.7211 LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 42 15 1370.82 5.90 352.66 134.45 117.74 13 5 6 770.8 9.57 345.91 90.00 15 35 18 803.86 21.67 318.58 141.39 108.69 15 48 42 203.9 24.02 310.70 100.00 13 32 44 1207.80 2.87 339.02 132.78 119.77 13 52 51 607.8 6.81 332.45 100.00 17 27 31 5730.16 24.97 271.03 142.54 106.99 19 3 1 5130.2 27.06 262.85 110.00 13 48 48 1157.34 -3.00 331.55 129.13 124.07 14 8 5 557.3 1.49 325.35 110.00 19 27 56 5353.37 31.63 244.62 103.68 20 57 9 4753.4 33.19 235.61
      DIFFERENTIAL CORRECTIONS
                                                                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                                           SGT 5374.2 SGR 445.4 SG3 104.7

RRT -.4732 RRF -.4493 RTF .9418

SGB 5392.6 R23 .0015 R13 -.9418

SGI 5378.3 SG2 392.1 THA 177.74
                                                                                                                                                                                                                                                              ST 1537.0 SR 412.9 SS 366.7
CRT -.5388 CRS .3295 CST -.9722
          TDE -. 7605 TRA 4.7746 TC3-2.0108 BAU 1.1779
         ROE .4732 RRA -.1794 RC3 .0172 FAU .00843
FOE -.0875 FRA 1.2283 FC3 -.1666 BSP 17333
                                                                                                                                                                                                                                                              LSA 1593.7 MSA 356.7 SSA 13.7
          BOE .8957 BRA 4.7780 BC3 2.0108 FSP -348
                                                                                                                                                                                                                                                              ELI 1553.8 ELZ 344.0 ALF 171.34
                                                                                                                                                           FLIGHT TIME 200.00
                                                                                                                                                                                                                                                                                      ARRIVAL DATE FEB 13 1968
 LAUNCH DATE JUL 28 1967
                                                                                                                                                          DISTANCE 581.114
      HELIOCENTRIC CONIC
        RL 151.91 LAL -.00 LOL 304.25 VL 24.953 GAL 11.35 AZL 90.80 MCA 300.39 SMA 118.01 ECC .34357 INC .8012 V1 29.328 RP 108.50 LAP .69 LOP 244.65 VP 36.357 GAP 19.58 AZP 90.41 TAL 156.41 TAP 96.80 RCA 77.46 APO 158.55 VZ 34.929 RC 199.655 GL -2.78 GP 8.28 ZAL 43.75 ZAP 171.05 ETS 109.27 ZAE 130.01 ETE 172.73 ZAC 24.45 ETC 12.94 CLP 176.57
      PLANETOCENTRIC CONIC
        PLANETOCENTRIC CONIC
C3 49.737 VHL 7.052 OLA -25.88 RAL 259.53 RAD 6568.8 VEL 13.080 PTH 2.39 VHP 12.112 OPA -11.53 RAP 241.47 ECC 1.8185
LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 35 13 1457.45 3.14 357.53 137.91 118.16 12 59 30 857.4 6.88 350.85
90.00 16 0 52 780.78 22.17 317.07 146.19 108.09 16 13 53 180.8 24.43 309.14
100.00 13 30 1 1280.46 .41 343.01 136.40 119.89 13 51 22 680.5 4.38 336.48
100.00 17 48 45 5721.05 25.15 270.41 147.21 106.72 19 24 6 5121.0 27.20 262.21
110.00 15 50 30 1216.22 -5.24 334.64 132.89 123.83 14 10 46 616.2 -.76 328.42
110.00 19 44 46 5358.05 31.56 244.83 149.20 103.87 21 14 4 4758.1 33.14 235.97
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357.53 137.91 118.16 12 59 30
357.07 146.19 108.09 16 13 53
343.01 136.40 119.89 13 51 22
270.41 147.21 106.72 19 24 6
334.64 132.89 123.83 14 10 46
244.83 149.20 103.87 21 14 4
HID-COURSE EXECUTION ACCURACY ORI
                                                                                               -5.24
31.56
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      DIFFERENTIAL CORRECTIONS
                                                                                                                                                SGT 5357.0 SGR 435.9 SG3 102.4
RRT -.4784 RRF -.4561 RTF .9469
SGB 5374.7 R23 .0010 R13 -.9469
SGI 5361.1 SG2 382.5 THA 177.76
                                                                                                                                                                                                                                                            ST 1517.4 SR 399.8 SS 371.4

CRT -.4698 CRS .2763 CST -.9776

LSA 1571.7 MSA 360.3 SSA 13.0
         TOE -.6456 TRA 5.2489 TC3-1.7304 BAU 1.1506
        ROE .4875 RRA -.2003 RC3 .0151 FAU .00730
FOE -.0626 FRA 1.2965 FC3 -.1271 89P 17338
                                                                                                                                                                                                                                              CRT -.4698 CRS .2763 CS: -.5770
LSA 1571.7 MSA 360.3 SSA 13.0
ELI 1529.6 EL2 350.1 ALF 172.55
         BOE .8090 BRA 5.2527 BC3 1.7305 FSP -341
                                                                                                                                                                                                                                                                                    ARRIVAL DATE FEB 15 1968
LAUNCH DATE JUL 28 1967
                                                                                                                                                        FLIGHT TIME 202.00
                                                                                                                                                        DISTANCE 585.329
        RL 151.91 LAL -.00 LOL 304.25 VL 24.908 GAL 12.38 AZL 90.61 MCA 303.57 SMA 117.78 ECC .35700 INC .6066 VI 29.328 RP 108.53 LAP .51 LOP 247.83 VP 36.315 GAP 20.45 AZP 90.34 TAL 154.99 TAP 98.56 RCA 75.73 APO 159.82 V2 34.917 RC 201.315 GL -1.96 GP 8.16 ZAL 41.85 ZAP 170.79 ETS 114.52 ZAE 129.88 ETE 172.84 ZAC 22.28 ETC 14.40 CLP 175.71
      PLANETOCENTRIC CONIC
        C3 56.724 VML 7.532 DLA -25.18 RAL 261.65 RAD 6569.D VEL 13.345 PTH 2.44 VMP 12.637 DPA -12.20 RAP 243.72 ECC 1.9335 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LAT INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LAT INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LAT INJ 2 LAT INJ 2 LONG AZMTH INJ 2 LONG AZ
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337.72 136.55 123.46 14.13 5 674.5 -2.99

245.33 153.63 104.15 21.29.43 4764.9 33.07
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              110.00
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                                                                                                                                           MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                              SGT 5336.8 SGR 425.0 SG3 100.3
RRT -.4827 RRF -.4623 RTF .9520
SGB 5353.7 R23 .0006 R13 -.9520
SGI 5340.8 SG2 371.9 THA 177.79
                                                                                                                                                                                                                                                            ST 1507.1 SR 385.6 98 378.7
CRT -.4011 CRS .2262 CST -.9825
LSA 1560.1 NSA 359.5 SSA 12.4
        TDE -.5236 TRA 5.7573 TC3-1.4694 BAU 1.1543
        ROE .5016 RRA -.2215 RC3 .0125 FAU .00611
FDE -.0377 FRA 1.3705 FC3 -.0933 BSP 17251
BDE .7251 BRA 5.7616 BC3 1.4694 FSP -332
                                                                                                                                                                                                                                                             EL1 1515.5 EL2 351.3 ALF 173.81
                                                                                                                                                                                                                                                                                     ARRIVAL DATE FEB 17 1968
                                                                                                                                                         FLIGHT TIME 204.00
LAUNCH DATE JUL 28 1967
                                                                                                                                                        DISTANCE 589.280
     HELIOCENTRIC CONIC
       RL 151.91 LAL -.00 LOL 304.25 VL 24.865 GAL 13.91 AZL 90.40 MCA 306.75 SMA 117.55 ECC .37192 INC .3973 VI 29.328
RP 108.57 LAP .32 LOP 251.01 VP 36.274 GAP 21.41 AZP 90.24 TAL 153.63 TAP 100.38 RCA 73.83 APO 161.27 V2 34.905
RC 202.957 GL -1.19 GP 8.05 ZAL 40.12 ZAP 170.43 ETS 119.60 ZAE 129.72 ETE 172.96 ZAC 20.18 ETC 16.19 CLP 174.81
      PLANETOCENTRIC CONIC
        C3 64.998 VHL 8.062 DLA -24.50 RAL 263.57 RAD 6569.2 VEL 13.651 PTH 2.49 VHP 13.220 DPA -12.83 RAP 245.95 ECC 2.0697
       C3 64.998 WHL 8,062 DLA -24.30 RAL 263.57 RAD 6569.2 VEL 13.651 PTH 2.49 WHP 13.220 DPA -12.65 RAP 243.95 ECC 2.0697 [UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 25 34 1611.18 -1.82 6.11 144.72 118.26 12 52 26 1011.2 1.97 359.48 90.00 16 42 43 758.28 22.65 315.59 155.10 107.48 16 55 22 158.3 24.82 307.60 100.00 13 25 44 1417.01 -4.22 350.51 143.39 119.62 13 49 21 817.0 -.24 343.98 100.00 18 25 15 5715.74 25.25 270.05 155.98 106.55 20 0 31 5115.7 27.28 261.84 110.00 13 52 52 1331.88 -9.58 340.78 140.11 122.97 14 15 4 731.9 -5.17 334.47 110.00 20 14 36 5373.65 31.30 245.97 157.88 104.50 21 44 10 4773.6 32.97 237.15
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      DIFFERENTIAL CORRECTIONS
                                                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                           SGT 5311.5 SGR 412.7 SG3 98.2 ST 1503.7 SR 370.9 SS 387.9 RRT -.4864 RRF -.4680 RTF .9571 CRT -.3380 CRS .1839 CST -.9868 SG8 5327.5 R23 .0004 R13 -.9571 LSA 1556.7 MSA 354.2 SSA 11.8 SG1 5315.3 SG2 360.3 THA 177.83 EL1 1509.2 EL2 347.8 ALF 174.97
        TOE -. 4024 TRA 6.2953 TC3-1.2335 BAU 1.0719
       RDE .5157 RRA -.2421 RC3 .0099 FAU .00495
FDE -.0150 FRA 1.4485 FC3 -.0660 BSP 17260
        BOE .6541 BRA 6.3000 BC3 1.2335 FSP -325
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FLIGHT TIME 198.00

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LAUNCH DATE JUL 28 1967
                                                                              FLIGHT TIME 206.00
                                                                                                                                             ARRIVAL DATE FEB 19 1968
   HELIOCENTRIC CONIC
                                                                             DISTANCE 592.907
    RL 151.91 LAL -.00 LOL 304.25 VL 24.823 GAL 15.37 AZL 90.17 HCA 309.93 SMA 117.34 ECC .38856 INC .169 V1 29.328
RP 108.60 LAP .13 LOP 254.18 VP 36.235 GAP 22.48 AZP 90.11 TAL 152.36 TAP 102.29 RCA 71.74 APO 162.93 V2 34.894
RC 204.581 GL -.47 GP 7.94 ZAL 38.56 ZAP 169.98 ETS 124.47 ZAE 129.51 ETE 173.08 ZAC 18.14 ETC 18.38 CLP 173.87
   PLANETOCENTRIC CONIC
    C3 74.836 VHL 8.651 DLA -23.84 RAL 265.29 RAD 6569.5 VEL 14.007 PTH
                                                                                                         2.56 VHP 13.870 DPA -13.41 RAP 248.15 ECC 2.2316
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 21 51 1681.45 -4.08 10.04 148.01 118.05 12 49 53 1081.4 -.30 3.40 90.00 17 0 12 754.71 22.71 315.35 159.23 107.39 17 12 47 154.7 24.87 307.35
                    13 23 49 1481.44
18 40 56 5717.99
13 53 33 1388.18
20 27 41 5384.02
                                                                                                      119.27
                                                                                                                  13 48 30
                                                                                                                                                                     347.52
       100.00
                                                                      354.08
                                                                                     146.75
                                                                                                                                       881.4
                                                                                                                                                       -2.42
                                                        -6.37
                                                                                                      106.62 20 16 14
                                                                                                                                                       27.24
       100.00
                                                                      270.20
                                                                                     160.07
                                                                                                                                      5118.0
                                                      25.21
                                                                                                                                                                     261.99
                                                                                                      122.37 14 16 41
104.92 21 57 25
                                                                                                                                                       -7.30
       110.00
                                                                                     143.57
                                                                                                                                       788.2
                                                                                                                                                                     337.44
                                                     -11.65
                                                                      343.43
                                                                                                                                      4784.0
       110.00
                                                                      246.73
                                                                                     161.96
                                                                                                                                                       32.85
                                                                                                                                                                     237.94
                                                      31.12
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         RIG-COURSE EXECUTION ACCURACY

SIGHT -,4889 RRF -,4727 RTF .9622

SGB 5297.2 R23 .0003 R13 -,9622

SGI 5285.8 SG2 347.9 THA 177.88
                                                                                                                                ST 1505.1 SR 355.4 SS 399.2

CRT -.2792 CRS .1459 CST -.9903

LSA 1559.3 MSA 345.5 SSA 11.2

EL1 1508.5 EL2 340.5 ALF 176.02
    TOE -.2771 TRA 6.8724 TC3-1.0180 BAU 1.0186
    ROE .5297 RRA -.2620 RC3 .0072 FAU .00372
FOE .0072 FRA 1.5332 FC3 -.0431 BSP 17245
BOE .5978 BRA 6.8774 BC3 1.0181 FSP -319
LAUNCH DATE JUL 28 1967
                                                                              FLIGHT TIME 208.00
                                                                                                                                             ARRIVAL DATE FEB 21 1968
  HELIOCENTRIC CONIC
                                                                             DISTANCE 596.139
    RL 151.91 LAL -.00 LOL 304.25 VL 24.783 GAL 16.96 AZL 89.92 MCA 313.10 SMA 117.13 ECC .40716 INC .0769 V1 29.328
RP 108.64 LAP -.06 LOP 257.36 VP 36.197 GAP 23.69 AZP 89.95 TAL 151.20 TAP 104.30 RCA 69.44 APO 164.82 V2 34.883
RC 206.187 GL .20 GP 7.85 ZAL 37.17 ZAP 169.41 ETS 129.07 ZAE 129.24 ETE 173.20 ZAC 16.18 ETC 21.11 CLP 172.87
   PLANETOCENTRIC CONIC
    C3 86.597 VHL 9.306 DLA -23.21 RAL 266.83 RAD 6569.7 VEL 14.420 PTH
                                                                                                          2.62 WHP 14.598 DPA -13.94 RAP 250.31 ECC 2.4252
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 12 18 29 1748.14
                                                       -6.20
                                                                                                     117.68 12 47 37
                                                                                                                                    1148.1
                                                                                                                                                                         7.12
                                                                      13.79
                                                                                   151.19
                                                                                                                                                     -2.45
        90.00
                    17 15 46
                                      754.71
                                                       22.71
                                                                                                                  17 28 23
                                                                                                                                                                      307.35
                                                                      315.35
                                                                                     163.14
                                                                                                      107.39
                                                                                                                                       154.7
                                                                                                                                                       24.87
                   13 21 55 1543.42
18 55 4 5722.71
13 53 54 1443.13
                                                                                                     116.79 13 47 36
106.77 20 30 27
121.65 14 17 57
105.38 22 9 30
       100.00
                                                                                                                                       943.4
                                                                                                                                                                      350.93
                                                       -8.42
                                                                      357.54
                                                                                     149.99
                                                                                                                                                       -4.52
       100.00
                                                      25.12
                                                                      270.52
                                                                                     163.95
                                                                                                                                      5122.7
                                                                                                                                                     27.17
                                                                                                                                                                      262.33
       110.00
                                                     -13.63
                                                                      346.85
                                                                                     146.90
                                                                                                                                                                      340.37
                                                                                                                                      843.1
                                                                                                                                                       -9.35
                    20 39 34
       110.00
                                    5395.76
                                                       30.91
                                                                      247.58
                                                                                     165.84
                                                                                                                                      4795.8
                                                                                                                                                       32.71
                                                                                                                                                                     238.42
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                  CRRIT DETERMINATION ACCURACY
    TOE -.1484 TRA 7.4934 TC3 -.8227 BAU .9524
                                                                         SGT 5249.1 SGR 384.0 SG3 94.2
RRT -.4899 RRF -.4759 RTF .9671
                                                                                                                                 ST 1509.5 SR 339.4 SS 412.6
CRT -.2256 CRS .1123 CST -.9930
    RDE .5436 RRA -.2807 RC3 .0045 FAU .00240
FDE .0289 FRA 1.6255 FC3 -.0240 85P 17208
BDE .5635 BRA 7.4986 BC3 .8227 FSP -312
                                                                         SGB 5263.1 R23 .0002 R13 -.9671
SG1 5252.5 SG2 334.5 THA 177.94
                                                                                                                                LSA 1566.0 MSA 334.0 SSA 10.6
EL1 1511.5 EL2 330.2 ALF 176.95
                                                                                                                                            ARRIVAL DATE FEB 23 1968
LAUNCH DATE JUL 28 1967
                                                                              FLIGHT TIME 210,00
  HELIOCENTRIC CONIC
                                                                             DISTANCE 598.882
    RL 151.91 LAL -.00 LOL 304.25 VL 24.745 GAL 18.71 AZL 89.64 MCA 316.28 SMA 116.93 ECC .42804 INC .3550 VI 29.328 RP 108.67 LAP -.25 LOP 260.53 VP 36.160 GAP 25.04 AZP 89.74 TAL 150.16 TAP 106.44 RCA 66.88 APO 166.98 VZ 34.872 RC 207.774 GL .83 GP 7.76 ZAL 35.96 ZAP 168.74 ETS 133.41 ZAE 128.90 ETE 173.33 ZAC 14.34 ETC 24.51 CLP 171.81
   PLANETOCENTRIC CONIC
    C3 100.742 VHL 10.037 DLA -22.60 RAL 268.17 RAD 6570.0 VEL 14.902 PTH 2.69 VHP 15.417 DPA -14.42 RAP 252.42 ECC 2.6580
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   117.20 12 45 29
107.46 17 42 19
118.20 13 46 39
106.97 20 43 14
120.85 14 18 49
105.88 22 20 26
                                                                                                                                                     -4.48
                                                                                                                                  1211.5
                                                       -8.19
                                                                      17.30
                                                                                   154.25
                                                                                                                                                                     16.67
        90.00
                    12 15 17 1811.53
        90.00
                   17 29 42
                                     757.48
                                                       22.65
                                                                     315.54
                                                                                     166.82
                                                                                                                                      157.5
                                                                                                                                                      24.83
                                                                                                                                                                     307.54
       100.00
                    13 19 56
                                    1602.93
                                                     -10.35
                                                                        .90
                                                                                     153.10
                                                                                                                                     1002.9
                                                                                                                                                      -6.50
                                                                                                                                                                     354.23
                                                     24.98
       100.00
                   19 7 44
                                   5729.38
                                                                     270.98
                                                                                     167.61
                                                                                                                                     5129.4
                                                                                                                                                     27.07
                                                                                                                                                                     262.80
                    13 53 52 1496.49
20 50 17 5408.56
       110.00
                                                     -15.52
                                                                     349.84
                                                                                     150.10
                                                                                                                                     896.5
                                                                                                                                                    -11.31
                                                                                                                                                                     343.25
       110.00
                                                     .30 , 68
                                                                     248.51
                                                                                     169.51
                                                                                                                                     4808.6
                                                                                                                                                    32.55
                                                                                                                                                                     239.79
  DIFFERENTIAL CORRECTIONS
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SCT 5213.4 SCR 367.6 SC3 92.3
RRT -.4890 RRF -.4772 RTF .9718
SCB 5226.4 R23 .0002 R13 -.9718
SCI 5216.6 SC2 320.5 TMA 178.02
                                                                                                                                 ST 1515.5 SR 322.9 SS 428.6
CRT -.1760 CRS .0813 CST -.9951
    TDE -.0135 TRA 8.1672 TC3 -.6450 BAU .8688
    RDE .5573 RRA -.2978 RC3 .0019 FAU .00090
FDE .0510 FRA 1.7275 FC3 -.0077 8$P 17071
                                                                                                                                LSA 1575.4 MSA 320.5 SSA 10.0
EL1 1516.7 EL2 317.6 ALF 177.75
    BOE .5575 BRA 8,1726 BC3 .6451 FSP
                                                         -304
LAUNCH DATE JUL 28 1967
                                                                              FLIGHT TIME 212.00
                                                                                                                                             ARRIVAL DATE FEB 25 1968
                                                                             DISTANCE 601.010
   RL 151.91 LAL -.00 LOL 304.25 VL 24.708 GAL 20.66 AZL 89.33 MCA 319.44 SMA 116.75 ECC .45153 INC .6654 V1 29.328 RP 108.70 LAP -.43 LOP 263.70 VP 36.126 GAP 26.57 AZP 89.49 TAL 149.28 TAP 108.72 RCA 64.03 APO 169.46 V2 34.862 RC 209.341 GL 1.42 GP 7.67 ZAL 34.92 ZAP 167.94 ETS 137.47 ZAE 128.48 ETE 173.48 ZAC 12.63 ETC 28.76 CLP 170.67
  PLANETOCENTRIC CONIC
    C3 117.871 VHL 10.857 OLA -22.02 RAL 269.31 RAD 6570.2 VEL 15.466 PTH 2.76 VHP 16.345 OPA -14.85 RAP 254.46 ECC 2.9399
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 12 7 1871.70 -10.05 20.83 157.16 116.61 12 43 19 1271.7 -6.39 14.06
                                                                                  157.16
                                                                                                                                                   -6.39
                    12 12 7 1871.70
17 41 56 762.35
                                                                                                                  17 54 40
                                                                                                                                                       24.75
        90.00
                                                     22.55
                                                                     315.86
                                                                                     170.24
                                                                                                      107.59
                                                                                                                                      162.4
                                                                                                                                                                     307.44
       100.00
                    13 17 47
                                   1659.77
                                                     -12.16
                                                                       4.15
                                                                                     156.05
                                                                                                      117.52 13 45 27
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       100.00
                    10 18 50
                                    5737.55
                                                     24.82
                                                                     271.53
                                                                                     171.02
                                                                                                      107.22 20 54 37
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                                                                                                                                                       26.94
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                                                                                                     119.96 14 19 14
106.40 22 30 11
                    13 53 26 1548.00
20 59 49 5422.11
       110.00
                                                  -17.29
                                                                     352.77
                                                                                     153.15
                                                                                                                                      948.0
                                                                                                                                                    -13.18
                                                                                                                                                                     346.08
       110.00
                                                       30.42
                                                                     249.48
                                                                                     172.92
                                                                                                                                      4822.1
                                                                                                                                                      32.36
                                                                                                                                                                     240.80
                                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 5172.0 SGR 349.9 SG3 90.5
RRT -.4858 RRF -.4761 RTF .9762
                                                                                                                                ST 1520.3 SR 306.2 SS 446.7

CRT -.1332 CRS .0552 CST -.9967

LSA 1584.6 MSA 305.5 SSA 9.4
    TOE .1190 TRA 8.8921 TC3 -.4875 BAU .7682
   RDE .5713 RRA -.5120 RC3 -.0004 FAU-.00074
FOE .0716 FRA 1.8368 FC3 .0054 8SP 17035
BOE .5836 BRA 8.8976 BC3 .4875 FSP -299
                                                                         568 5183.8 R23 .0003 R13 -.9762
                                                                                                                               ELI 1520.8 ELZ 303.3 ALF 178.40
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SG1 5174.8 SG2 305.7 THA 178.11

ARRIVAL DATE FEB 27 1968

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FLIGHT TIME 214.00
LAUNCH DATE JUL 28 1967
                                                                                               DISTANCE 602.367
    RL 151.91 LAL -.00 LOL 304.25 VL 24.674 GAL 22.82 AZL 88.98 MCA 322.61 SNA 116.58 ECC .47804 INC 1.0183 V1 29.328 RP 108.73 LAP -.62 LOP 266.87 VP 36.094 GAP 28.32 AZP 89.19 TAL 148.59 TAP 111.20 RCA 60.85 APO 172.30 V2 34.853 RC 210.889 GL 1.97 GP 7.59 ZAL 34.08 ZAP 167.02 ETS 141.27 ZAE 127.96 ETE 173.63 ZAC 11.10 ETC 34.06 CLP 169.44
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 138.775 VHL 11.760 DLA -21.48 RAL 270.24 RAD 6570.5 VEL 16.128 PTH 2.84 VHP 17.400 DPA -15.24 RAP 256.41 ECC 3.2839
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         115.94 12 40 59
107.77 18 5 30
116.76 13 43 57
107.49 21 4 37
119.00 14 19 11
106.94 22 38 45
                                                                                                    159.68
                                                                                                                                                                   1328.6
                       12 8 51 1928.62
                                                                  -11.76
                                                                                      24.13
          90.00
                                                                                                                                                                     168.8
                                                                                                                                                                                                            308.32
                                                                                      316.28
                                                                                                       173.38
                         17 52 41
                                               768.80
                                                                  22.42
          90.00
                                                                                                                                                                    1113.9
                                                                                                                                                                                        -10.14
                        13 15 23 1713.68
                                                                 -13.84
                                                                                        7.29
                                                                                                      158.82
        100.00
                                                                                                                                                                                                           264 .02
                        19 28 50 5746.82
13 52 33 1597.28
                                                                                                                                                                                        26.79
                                                                                                                                                                    5146.8
                                                                 24.63
                                                                                     272.15
                                                                                                        174.15
        100.00
                                                                                                                                                                      997.3
                                                                                                                                                                                       -14.93
                                                                                                                                                                                                           348.83
                                                                                                      156.01
                                                                 -18.95
                                                                                      355.65
        110.00
                                                                                                                                                                    4836.1
                                                                                                                                                                                         32.17
                                                                                                         176.07
                                            5436.09
                                                                   30.15
                                                                                     250.48
                       21 8 9
        110.00
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 1523.0 SR 289.3 SS 467.4
CRI -.0947 CRS .0316 CST -.9978
                                                                                          SGT 5126.5 SGR 331.0 SG3 88.8
RRT -.4793 RRF -.4716 RTF .9803
SGB 5137.1 R23 .0003 R13 -.9803
SGI 5128.9 SG2 290.4 THA 178.22
     TDE .2528 TRA 9.6802 TC3 -.3466 BAU .6431
     ROE .5856 RRA -.3225 RC3 -.0024 FAU-.00266
FOE .0918 FRA 1.8624 FC3 .0166 BSP 16977
BDE .6378 BRA 9.6856 BC3 .3466 FSP -293
                                                                                                                                                              LSA 1593.1 MSA 289.5 SSA 8.9
                                                                                                                                                              ELI 1523.3 EL2 287.9 ALF 178.93
                                                                                                                                                                              ARRIVAL DATE FEB 29 1968
                                                                                                 FLIGHT TIME 216.00
LAUNCH DATE JUL 28 1967
                                                                                                DISTANCE 602.742
   HELIOCENTRIC CONIC
     RL 151.91 LAL -.00 LOL 304.25 VL 24.644 GAL 25.26 AZL 88.57 HCA 325.78 SMA 116.42 ECC .50805 INC 1.4258 V1 29.328 RP 108.76 LAP -.80 LOP 270.04 VP 36.064 GAP 30.32 AZP 88.82 TAL 148.13 TAP 113.90 RCA 57.27 APO 175.57 V2 34.844 RC 212.418 GL 2.48 GP 7.50 ZAL 33.45 ZAP 165.95 ETS 144.82 ZAE 127.33 ETE 173.80 ZAC 9.79 ETC 40.56 CLP 168.09
   PLANETOCENTRIC CONIC
                                                                                                                                  2.91 VHP 18.608 DPA -15.59 RAP 258.25 ECC 3.7072
     C3 164.500 WHL 12.826 DLA -20.96 RAL 270.95 RAD 6570.8 VEL 16.906 PTH
     C3 164.500 VHL 12.826 DLA -20.96 RAL 270.95 RAD 6570.8 VEL 16.906 PTH 2.91 VMP 18.608 DPA -15.59 RAP 258.25 ECC 5.7072
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 5 21 1982.18 -13.34 27.28 162.37 115.21 12 36 23 1382.2 -9.83 20.35
90.00 18 1 51 776.35 22.26 316.78 176.20 107.97 18 14 47 176.4 24.51 308.83
100.00 13 12 38 1765.02 -15.39 10.30 161.35 115.95 13 42 3 1165.0 -11.78 3.37
100.00 19 37 14 5756.79 24.43 272.82 176.97 107.79 21 13 11 5156.8 26.63 264.71
110.00 13 51 9 1644.34 -20.47 358.43 158.64 117.99 14 18 33 1044.3 -16.57 351.49
110.00 21 15 13 5450.24 29.86 251.48 178.91 107.47 22 46 4 4850.2 31.96 242.49
                        13 12 36 1765.02
19 37 14 5756.79
13 51 9 1644.34
21 15 13 5450.24
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 5076.9 SGR 510.9 SG3 87.1
RRT -.4682 RRF -.4624 RTF .9840
SG8 5086.4 R23 .0004 R13 -.9840
SG1 5079.0 SG2 274.6 THA 178.35
                                                                                                                                                               ST 1522.6 SR 272.3 SS 491.3
CRT -.0598 CRS .0095 CST -.9986
L9A 1599.7 MSA 272.9 SSA 8.3
     TOE .3873 TRAID.5396 TC3 -.2215 BAU .4872
      RDE .6003 RRA -.3280 RC3 -.0040 FAU-.00496
     FOE .1118 FRA 2.1006 FC3 .0261 BSP 16886
BDE .7144 BRAID.5447 BC3 .2215 FSP -288
                                                                                                                                                            ELI 1522.7 ELZ 271.8 ALF 179.37
                                                                                                                                                                             ARRIVAL DATE HAR 2 1968
                                                                                                FLIGHT TIME 218.00
LAUNCH DATE JUL 28 1967
                                                                                                DISTANCE 601.862
     RL 151.91 LAL -.00 LOL 304.25 VL 24.616 GAL 28.02 A7L 88.09 MCA 328.94 SMA 116.28 ECC .54205 INC 1.9056 V1 29.328

RP 108.78 LAP -.98 LOP 273.20 VP 36.037 GAP 32.64 A7P 88.37 TAL 147.95 TAP 116.89 RCA 53.25 APO 179.31 V2 34.836

RC 213.927 GL 2.96 GP 7.42 ZAL 33.04 ZAP 164.71 ETS 148.14 ZAE 126.55 ETE 173.99 ZAC 8.73 ETC 48.26 CLP 166.59
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 196.445 VHL 14.016 DLA -20.48 RAL 271.42 RAD 6571.1 VEL 17.826 PTH 2.99 VHP 19.998 DPA -15.90 RAP 259.95 ECC 4.2330
     C3 196.445 VHL 14.016 DLA -20.48 RAL 271.42 RAD 6571.1 VEL 17.826 PTH 2.99 VHP 19.998 DPA -15.90 RAP 259.95 ECC 4.2350 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 1 30 2032.22 -14.77 30.25 164.59 114.44 12 35 22 1432.2 -11.35 23.25 90.00 18 9 25 784.60 22.09 317.32 178.68 108.19 18 22 29 184.6 24.37 309.40 100.00 13 9 26 1812.97 -16.80 13.17 163.62 115.10 13 39 39 1213.0 -13.28 6.14 100.00 19 44 10 5767.12 24.21 273.51 179.43 108.09 21 20 17 5167.1 26.46 265.43 110.00 13 49 7 1688.60 -21.86 1.12 161.00 116.96 14 17 16 1088.6 -18.07 354.04 110.00 21 20 58 5464.26 29.57 252.47 181.39 107.99 22 52 2 4864.3 31.74 243.93
         100.00 13 9 26 1812.97
100.00 19 44 10 5767.12
110.00 13 49 7 1688.60
110.00 21 20 58 5464.26
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 5023.5 SGR 289.7 SG3 85.6
RRT -,4509 RRT -,4467 RTF .9873
SGB 5031.9 R23 .0004 R13 -,9873
SGI 5025.2 SG2 258.5 THA 178.51
                                                                                                                                                               ST 1517.9 SR 255.4 95 518.8
      TDE .5219 TRA11.4795 TC3 -.1106 BAU .2908
                                                                                                                                                               CRT -.0273 CRS -.0122 CST -.9991
      RDE .6159 RRA -.3268 RC3 -.0051 FAU-.00781
FDE .1318 FRA 2.2562 FC3 .0344 BSP 16697
                                                                                                                                                               LSA 1604.0 MSA 256.0 SSA 7.8
                                                                                                                                                               ELI 1517.9 EL2 255.3 ALF 179.73
      BOE .8072 BRAII.4841 BC3 .1107 FSP -282
                                                                                                                                                                               ARRIVAL DATE MAR 4 1968
                                                                                                 FLIGHT TIME 220.00
 LAUNCH DATE JUL 28 1967
                                                                                                 DISTANCE 599.367
     RL 151.91 LAL -.00 LOL 304.25 VL 24.593 GAL 31.16 A7L 87.52 MCA 332.09 SMA 116.17 ECC .58059 INC 2.4815 VI 29.328
RP 108.81 LAP -1.16 LOP 276.37 VP 36.014 GAP 35.33 A7P 87.81 TAL 148.13 TAP 120.22 RCA 48.72 APO 183.61 V2 34.826
RC 215.416 GL 3.40 GP 7.33 7AL 32.90 ZAP 163.27 ETS 151.26 ZAE 125.59 ETE 174.21 ZAC 7.97 ETC 56.81 CLP 164.92
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 236.475 VHL 15.378 DLA -20.04 RAL 271.61 RAD 6571.4 VEL 18.915 PTH 3.07 VHP 21.606 DPA -16.17 RAP 261.47 ECC 4.8918
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 57 8 2078.53 -16.05 33.05 166.48 113.64 12 31 47 1478.5 -12.72 25.96
                                                                                                                           113.64 12 31 47
108.41 18 28 31
                                                                                                                                                                                         24.22
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                         18 15 18
                                                                   21.90
                                                                                       317.89
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                                                793.20
            90.00
                                                                                                                              114.23 13 36 35
108.39 21 25 46
115.91 14 15 11
108.48 22 56 33
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                                                                                                                                                                      1257.5
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                                                                                        15.87
                                                                                                          165.55
                                                                   -18.06
                                              1857.46
          100.00
                          13 5 36
                                                                                                                                                                                                             266.15
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                                                                                                          181,51
                                              5777.52
                                                                   23.99
                                                                                       274.21
                         19 49 29
          100.00
                                                                                                                                                                                                             356.46
                                                                                                                                                                      1129.9
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                                                                                          3.67
                                                                                                          163.03
                                             1729.87
                                                                    -23.11
          110.00
                          13 46 21
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                         21 25 15 5477.90
                                                                                       253.42
                                                                    29.28
                                                                                                          163.46
          110.00
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                            HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                          SCT 4962.5 SGR 267.6 SG3 84.1
RRT -.4246 RRF -.4218 RTF .9901
SG8 4969.7 R23 .0005 R13 -.9901
                                                                                                                                                                ST 1506.3 SR 238.8 SS 549.7
       TOE .6452 TRAI2.4975 TC3 -.0147 BAU .0500
ROE .6329 RRA -.3161 RC3 -.0058 FAU-.01133
                                                                                                                                                            CRT .0021 CRS -.0325 CST -.9994
LSA 1603.3 MSA 239.3 SSA 7.2
       FDE .1496 FRA 2.4301 FC3 .0415 BSP 16591
BDE .9036 BRA12.5015 BC3 .0158 FSP -278
                                                                                                                                                             EL1 1506.3 EL2 238.8 ALF
                                                                                            SG1 4963.8 SG2 242.3 THA 178.69
                                                                                                                                                                                                                   .02
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ARRIVAL DATE OCT 7 1967
                                                                             FLIGHT TIME 70.00
LAUNCH DATE JUL 29 1967
   HELIOCENTRIC CONIC
                                                                             DISTANCE 202.719
    RL 151.90 LAL -.00 LOL 305.21 VL 28.684 GAL -14.79 AZL 92.18 MCA 91.30 SMA 143.53 ECC .26143 INC 2.1780 V1 29.331 RP 108.27 LAP -2.18 LOP 36.51 VP 39.077 GAP -5.29 AZP 89.95 TAL 242.75 TAP 334.06 RCA 106.00 APO 181.05 V2 35.003 RC 66.356 GL -8.20 GP -18.68 ZAL 164.85 ZAP 51.56 ETS 15.50 ZAE 161.13 ETE 323.05 ZAC 101.84 ETC 11.13 CLP -48.98
   PLANETOCENTRIC CONIC
    C3 54.547 VHL 7.386 DLA 7.62 RAL 137.90 RAD 6569.0 VEL 13.263 PTH 2.42 VHP 5.414 DPA -9.13 RAP 162.50 ECC 1.8977 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  96.32 23 53 39
69.37 14 26 26
                                                                                                                                  2102.5
                                                                                                                                                    -26.50
                                                                                  20.10
                                                     -27.66
        90.00 23 8 36 2702.52
                                                                      74.74
                                                                                                                                    4269.6
                                                                                                                                                     16.85
                                                                     211.13
                                                                                      14.30
        90.00
                    13 5 17
                                    4869.58
                                                      19.83
                                                                                                                                                    -27.79
                                                                                                                                                                      45.82
                                                                                                                                    1828.3
                     0 37 32 2428.34
                                                      -29.09
                                                                      54.39
                                                                                      19.90
                                                                                                      97.18
                                                                                                                 1 18 1
       100.00
                                                                                                                15 39 56
                                                                                                                                                                    184.74
                                                                                                                                    4019.0
                                                                                                                                                    18.06
                                                     21.18
                                                                     192.15
                                                                                      13.74
                                                                                                       68.40
                    -018.99
. 14 9 2188.59
15 22 50 44
                    14 22 57
                                    4618.99
       100.00
                                                                                                                2 30 38
16 36 42
                                                                                                                                                    -31.28
                                                                                                                                                                     26.69
                                                                                      19.24
                                                                                                       99.62
                                                                                                                                    1588.6
                                                      -32.96
                                                                      35.52
       110.00
                                                                                                                                                    21.28
                                                      24.78
                                                                                                       65.66
                                                                                                                                    3431.5
                                                                     176.27
                                                                                      12.08
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 188.3 SR 363.2 SS 175.4

CRT -.6243 CRS .3780 CST -.9453

LSA 396.6 MSA 201.1 SSA .21.2
                                                                         SCT 451.6 SCR 486.5 SC3 191.0
RRT .0752 RRF .5529 RTF .1120
SCB 663.8 R23 .1282 R13 .5425
SC1 493.5 SC2 443.9 THA 67.55
    TOE .1886 TRA -.5046 TC3 .1104 BAU .1307
    ROE -.4573 RRA -.3314 RC3 -.1413 FAU .08337
    FOE .2742 FRA-1.2916 FC3-1.3232 BSP
                                                        880
-532
                                                                                                                                EL1 364.9 EL2 136.6 ALF 110.76
    BOE .4946 BRA .6037 BC3 .1793 FSP
                                                                              FLIGHT TIME 72.00
                                                                                                                                            ARRIVAL DATE OCT 9 1967
LAUMON DATE JUL 29 1967
                                                                              DISTANCE 209.381
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.703 GAL -14.65 AZL 92.03 MCA 94.50 3MA 143.70 ECC .25860 INC 2.0349 V1 29.331
RP 108.22 LAP -2.03 LOP 39.71 VP 39.103 GAP -4.56 AZP 89.84 TAL 243.04 TAP 337.54 RCA 106.54 APO 180.86 V2 35.016
RC 68.382 GL -7.76 GP -19.71 ZAL 165.25 ZAP 56.24 ETS 13.89 ZAE 162.18 ETE 313.94 ZAC 103.55 ETC 10.53 CLP -53.82
   PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 4 40 2711.95 -27.73 75.42 19.83 95.99 23 49 52 2111.9 -26.61 66.94 90.00 13 8 47 4848.47 19.32 209.79 13.75 68.89 14 29 36 4248.5 16.28 202.44
                                                                                                          2.41 WHP 5.165 DPA
                                            8.10 RAL 137.85 RAD 6568.9 VEL 13.215 PTH
                                                                                                                                        -9.47 RAP 160.64 ECC 1.8767
                     0 33 52 2436.98
14 26 13 4598.67
                                                                                                                                     1837.0
                                                                                                                                                                      46.44
                                                                                                        96.86
                                                                                                                   1 14 29
                                                                                                                                                     -27.91
                                                      -29.17
                                                                       55.02
                                                                                      19.65
       100.00
                                                                                                        67.91 15 42 52
                                                                                                                                                                     183.51
                                                                                                                                     3998.7
                                                                                                                                                    17.49
                                                       20.67
                                                                     190.86
                                                                                      13.18
       100.00
                                  2195.48
4412.94
                                                                                                                                                                      27.20
                                                                                                        99.32
                                                                                                                   2 27 37
                                                                                                                                     1595.5
                                                                                                                                                    -31.40
                                                      -33.04
                                                                       36.04
                                                                                      19.01
       110.00
                      1 51 2
                                                                                                       65.14 16 39 5
                     15 25 32
                                                                     175.06
                                                                                      11.50
                                                                                                                                     3012.9
                                                                                                                                                      20.70
                                                                                                                                                                     167.74
                                                       24.25
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 196.8 SR 359.0 SS 188.8
CRT -.5823 CRS .3978 CST -.9651
                                                                         SGT 470.3 SGR 506.8 SG3 209.6
RRT .1628 RRF .5995 RTF .2327
SGB 691.4 R23 .1620 R13 .5932
    TOE .1889 TRA -.5453 TC3 .0799 BAU .1312
    RDE -.4449 RRA -.3480 RC3 -.1861 FAU .09033
                                                                                                                                LSA 396.4 MSA 213.5 $5A 21.3
    FOE .3226 FRA-1.3990 FC3-1.4679 BSP
                                                         960
-596
                                                                          SG1 530.8 SG2 443.1 THA 57.35
                                                                                                                                 EL1 380.5 EL2 150.9 ALF 111.19
            .4833 BRA .6452 BC3 .1843 FSP
     BOE
                                                                                                                                            ARRIVAL DATE OCT 11 1967
                                                                              FLIGHT TIME 74.00
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 216.000
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.712 GAL -14.48 AZL 91.89 HCA 97.70 SMA 143.77 ECC .25600 INC 1.8904 V1 29.331
RP 108.18 LAP -1.87 LOP 42.92 VP 39.121 GAP -3.86 AZP 89.75 TAL 243.18 TAP 340.88 RCA 106.97 APO 180.58 V2 35.029
RC 70.443 GL -7.30 GP -20.75 ZAL 165.57 ZAP 61.06 ETS 12.24 ZAE 162.88 ETE 303.26 ZAC 105.40 ETC 9.83 CLP -58.83
    PLANETOCENTRIC CONIC
     C3 52.055 VHL 7.215 DLA 8.57 RAL 137.88 RAD 6568.9 VEL 13.169 PTH 2.40 VHP 4.954 DPA -9.76 RAP 158.65 ECC 1.8567
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    95.65 23 46 27
68.43 14 33 7
96.53 1 11 18
67.44 15 46 9
                                                                                                                                 2121.4
                                                                                                                                                   -26.72
                                                                                                                                                                      67.61
                    23 1 6 2721.45
13 12 39 4827.50
                                                                                    19.66
                                                      -27.79
                                                                      76.11
         90.00
                                                                                                                                                                    201.17
                                                                                                                                                     15.71
                                                                     206.47
                                                                                      13.31
                                                                                                                                     4227.5
                                                       18.60
         90.00
                                                                                                                                                                     47.06
                                                                                                                                                    -28.02
                     0 30 32 2445.67
14 29 50 4578.50
                                                                                                                                     1845.7
                                                      -29.23
                                                                       55.66
                                                                                      19.49
        100.00
                                                                                                                                                                     182.29
                                                      20.14
                                                                     189.59
                                                                                      12.73
                                                                                                                                     3978.5
                                                                                                                                                    16.91
        100.00
                                                                                                                                                                      27.71
                                                                                                                                                    -31.52
                                                                       36.57
                                                                                      18.87
                                                                                                       99.01
                                                                                                                  2 24 58
                                                                                                                                     1602.4
                      1 48 16 2202.42
15 28 36 4394.52
                                                      -33.11
        110.00
                                                                                                        64.63 16 41 50
                                                                                                                                                    20.11
                                                                                                                                                                    166.64
                                                                                                                                     3794.5
                                                                      173.91
                                                                                       11.02
                     15 28 36
                                                       23.72
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 207.6 SR 352.8 SS 202.5
CRT -.9363 CRS .4204 CST -.9803
LSA 396.5 MSA 225.5 SSA 21.4
                                                                         SGT 500.8 SGR 528.0 SG3 227.4
RRT .2646 RRF .6418 RTF .3593
SGB 727.7 R23 .1720 R13 .6488
     TOE .1906 TRA -35897 TC3 .0416 BAU .1368
     ROE -.4302 RRA -.3637 RC5 -.1921 FAU .09664
FDE .3769 FRA-1.4930 FC3-1.6106 BSP 1117
BDE .4705 BRA .6928 BC3 .1965 FSP -654
                                                                                                                                EL1 374.6 EL2 165.0 ALF 112.00
                                                                         SG1 579.8 SG2 439.8 THA 50.66
                                                                                                                                             ARRIVAL DATE OCT 13 1967
                                                                              FLIGHT TIME 76.00
LAUNCH DATE JUL 29 1967
                                                                              DISTANCE 222.577
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.711 GAL -14.34 AZL 91.74 MCA 100.91 SMA 143.76 ECC .25361 INC 1.7436 V1 29.331
RP 108.14 LAP -1.71 LOP 46.12 VP 39.132 GAP -3.20 AZP 89.67 TAL 243.18 TAP 344.09 RCA.107.31 APO 180.22 V2 35.042
RC 72.534 GL -6.81 GP -21.77 ZAL 165.83 ZAP 65.96 ETS 10.53 ZAE 163.07 ETE 291.42 ZAC 107.36 ETC 9.03 CLP -63.98
    PLANETOCENTRIC CONIC
                                            9.04 RAL 138.00 RAD 6568.9 VEL 13.124 PTH 2.40 VMP 4.780 DPA -10.02 RAP 156.55 ECC 1.8373
     C3 50.877 WHL 7.133 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 57 49 2731.08 -27.86 76.81 19.58 95.30 23 43 20 2131.1 -26.83 68.29 90.00 13 16 53 4806.49 18.27 207.16 12.97 67.98 14 36 59 4206.5 15.12 199.90 100.00 0 27 31 2454.48 -29.30 56.30 19.42 96.20 1 8 25 1854.5 -28.13 47.69
                                                                                                        96.20 1 8 25
66.98 15 49 47
98.70 2 22 38
64.14 16 44 56
                                                                                                                                                                      181.07
                                                                                       12.38
                                                                                                                                      3958.3
                                                                                                                                                      16.33
                     14 33 48
                                     4558.31
                                                        19.61
                                                                      186.33
        100.00
                                                                                                                                                                       28.22
                                                                                                                                                      -31.63
                                                       -33.19
                                                                       37.10
                                                                                                                                     1609.4
        110.00
                       1 45 49
                                   2209.45
                                                                                       18.82
                                                                                                                                     3776.1
                                                                                                                                                       19.51
                                                                                                                                                                      165.54
                     15 32 0
                                     4376.11
                                                       23.18
                                                                      172.76
                                                                                       10.64
        110.00
                                                                                                                                 ORBIT OFTERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 221.8 SR 345.4 SS 215.5
CRT -.4928 CRS .4359 CST -.9882
LSA 397.9 MSA 236.9 SSA 21.5
     TOE .1954 TRA -.6420 TC3 -.0035 BAU .1493
                                                                          SGT 545.3 SGR 550.9 SG3 244.4
RRT .3666 RRF .6815 RTF .4769
SGB 775.2 R23 .1727 R13 .7029
     ROE -.4141 RRA -.3786 RC3 -.2195 FAU .10293
     FOE .4295 FRA-1.5750 FC3-1.7515 BSP 1312
BDE .4579 BRA .7453 BC3 .2195 FSP -715
                                                                                                                                 EL1 368.4 EL2 180.9 ALF 113.56
                                                                                 640.8 SG2 436.2 THA 45.80
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ARRIVAL DATE OCT 15 1967
                                                                                    FLIGHT TIME 78.00
LAUNCH DATE JUL 29 1967
                                                                                    DISTANCE 229.113
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.701 GAL -14.19 AZL 91.59 MCA 104.11 SMA 143.67 ECC .25136 INC 1.5935 V1 29.331
RP 108.10 LAP -1.55 LOP 49.33 VP 39.136 GAP -2.57 AZP 89.61 TAL 243.06 TAP 347.17 RCA 107.56 APO 179.79 V2 35.056
RC 74.652 GL -6.30 GP -22.77 ZAL 166.03 ZAP 70.91 ETS 8.75 ZAE 162.63 ETE 279.27 ZAC 109.36 ETC 8.15 CLP -69.23
    PLANETOCENTRIC CONIC
     C3 49.725 VHL 7.052 OLA 9.52 RAL 138.20 RAO 6568.8 VEL 13.080 PTH 2.39 VMP 4.641 DPA -10.23 RAP 154.40 ECC 1.8184
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-27,92 77,52 19.58 94.95 23 40 30 2140.9 -26.94 68.99
     LNCH AZMTH LNCH TIME L-I TIME
                     22 54 49 2740.90
13 21 30 4785.26
                                                                                          19.58
         90.00
                                                                                                               67.55 14 41 15
                                                                                                                                                4185.3
                                                                                                                                                                  14.53
         90.00
                                                           17.72
                                                                           205.84
                                                                                             12.72
                                                                                                                                                                                    48.34
                      0 24 46 2463.47
14 36 10 4537.92
                                                                                                                             1 5 49
                                                                                                                                                1863.5
                                                                            56.96
                                                                                                                                                                 -28.24
        100.00
                                                          -29.37
                                                                                             19.42
                                                                                                               95.86
                                                                                                               66.53 15 53 47
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                                                                                                                                                                 15.73
                                                                                                                                                                                  179.86
        100.00
                                                           19.06
                                                                           187.06
                                                                                             12.12
                                                                                                               98.39 2 20 11
                                      2216.62
                                                                                                                                                                 -31.74
                                                                                                                                                                                   24.75
        110.00
                       1 43 39
                                                         -33.26
                                                                            37.65
                                                                                             18.85
                                                                                                                                                1616.6
        110.00
                                                                           171.60
                                                                                             10.35
                                                                                                                                                3757.5
                                                                                                                                                                  18.90
                                                                                                                                                                                  164.45
                      15 35 46
                                       4357.54
                                                           22.62
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 605.7 SGR 573.3 SG3 259.2
RRT .4630 RRF .7158 RTF .5794
SGB 834.0 R23 .1711 R13 .7493
SG1 714.0 SG2 431.1 THA 41.61
                                                                                                                                         ST 239.0 SR 336.0 SS 228.5

CRT - .4504 CRS .4542 CST - .9915

LSA 401.4 MSA 246.2 SSA 21.6

EL1 361.5 EL2 198.3 ALF 116.19
    TOE .2026 TRA -.7010 TC3 -.0564 BAU .1685
    RDE -.3958 RRA -.3910 RC3 -.2472 FAU .10803
    FDE .4853 FRA-1.6337 FC3-1.8808 BSP 1549
BDE .4446 BRA .8026 BC3 .2535 FSP -763
                                                                                                                                                        ARRIVAL DATE OCT 17 1967
                                                                                    FLIGHT TIME 80.00
LAUNCH DATE JUL 29 1967
                                                                                    DISTANCE 235.608
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.682 GAL -14.05 AZL 91.44 HCA 107.32 SNA 143.51 ECC .24924 INC 1.4390 V1 29.331
RP 108.06 LAP -1.37 LOP 52.54 VP 39.135 GAP -1.96 AZP 89.57 TAL 242.81 TAP 350.13 RCA 107.74 APO 179.28 V2 35.069
RC 76.795 GL -5.75 GP -23.74 ZAL 166.16 ZAP 75.85 ETS 6.89 ZAE 161.54 ETE 267.78 ZAC 111.37 ETC 7.20 CLP -74.51
    C3 48.59Z VHL 6.971 DLA 10.01 RAL 138.48 RAD 6568.8 VEL 13.037 PTH 2.38 VHP 4.535 DPA -10.42 RAP 152.24 ECC 1.7997 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 52 0 2751.05 -27.97 78.26 19.66 94.59 23 37 51 2151.0 -27.04 69.72 90.00 13 26 31 4763.99 17.16 204.51 12.55 67.12 14 45 55 4163.6 13.91 197.33 100.00 0 22 14 2472.75 -29.43 57.64 19.51 95.50 1 3 26 1872.7 -28.35 49.01 100.00 14 42 55 4517.13 18.50 185.78 11.95 66.09 15 58 12 3917.1 16 11 12.00 1 41 43 9984 01
   PLANETOCENTRIC CONIC
                                                          -33.33
                                                                                             18.97
                                                                                                                98.06
                                                                                                                            2 18 47
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                       1 41 43 2224.01
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       110.00
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                                                                                                                63.19
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       110.00
                      15 39 55
                                      4330.62
                                                           22.05
                                                                           170.44
                                                                                             10.15
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RET - 5453 RRF - .7469 RTF - .6614
SGB 904.9 R23 .1695 R13 .7860
SGI 798.3 SG2 426.1 THA 38.12
                                                                                                                                           ST 259.7 SR 325.4 SS 240.4

CRT - 4144 CRS .4663 CST -.9908

LSA 408.3 MSA 253.0 SSA 21.6

EL1 355.9 EL2 216.2 ALF 120.62
    TOE .2136 TRA -.7641 TC3 -.1158 BAU .1940
    RDE -.3763 RRA -.4013 RC3 -.2753 FAU .11223
    FDE .5357 FRA-1.6735 FC3-1.9996 BSP 1833
BDF .4397 BRA .8631 BC3 .2967 FSP -813
    BDE .4327 BRA .8631 BC3 .2987 FSP
                                                                                                                                                       ARRIVAL DATE OCT 19 1967
                                                                                    FLIGHT TIME 82.00
LAUNCH DATE JUL 29 1967
                                                                                   DISTANCE 242.063
   HELTOCENTRIC CONTC.
    RL 151.90 LAL -.00 LOL 305.21 VL 28.657 GAL -13.90 AZL 91.28 MCA 110.53 SNA 143.28 ECC .24722 INC 1.2788 VI 29.331
RP 108.02 LAP -1.20 LOP 55.75 VP 39.127 GAP -1.39 AZP 89.55 TAL 242.45 TAP 352.98 RCA 107.86 APO 178.71 V2 35.082
RC 78.958 GL -5.17 GP -24.66 ZAL 166.22 ZAP 80.73 ETS 4.96 ZAE 159.90 ETE 257.67 ZAC 113.34 ETC 6.19 CLP -79.79
    PLANETOCENTRIC CONIC
    C3 47.469 VHL 6.890 DLA 10.51 RAL 138.84 RAD 6568.8 VEL 12.994 PTH 2.37 VHP 4.462 DPA -10.59 RAP 150.12 ECC 1.7812
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
90.00 22 49 21 2761.68 -28.03 79.03 19.81 94.20 23 35 23 2161.7 -27.15 70.48
90.00 13 32 0 4741.26 16.56 203.14 12.47 66.70 14 51 2 4141.3 13.27 196.01
                                                                                                                                                1882.5
                                                                                                                                                                 -28.47
                                                                                                                            1 1 14
                                                                                            19.67
                                                                                                               95.13
                        0 19 52 2482.46
                                                          -29.49
                                                                           58.36
        100.00
                                                                                                                          16 3 3
                                                                                                                                                3895.7
                                                                                                                                                                 14.46
                                                                           184.47
                                                                                            11.85
                                                                                                               65.65
        100.00
                      14 48 7 4495.71
                                                          17.90
                                                                                                               97.72
                                                                                                                            2 17 10
                                                                                                                                               1631.8
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        110.00
                        1 39 59 2231.76
                                                          -33.40
                                                                            38.81
                                                                                            10.16
                                                                                                                         16 56 29
                                                                                                                                               3719.2
                                                                                                                                                                  17.62
                                                                                                               62.72
                     15 44 29 4319.18
                                                          21.45
                                                                           169.25
                                                                                             10.03
        110.00
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 769.8 SGR 617.4 SG3 282.1
RRT .6130 RRF .7738 RTF .7243
SGB 986.8 R23 .1692 R13 .8187
SG1 892.7 SG2 420.7 THA 35.03
                                                                                                                                          ST 283.8 SR 313.4 SS 251.6

CRT -.3839 CRS .4776 CST -.9879

LSA 419.5 MSA 256.3 SSA 21.7
     TOE .2283 TRA -.8310 TC3 -.1816 BAU .2242
    RDE -.3553 RRA -.4086 RC3 -.3031 FAU .11523
    FOE .5829 FRA-1.6887 FC3-2.1015 BSP 2153
BDE .4223 BRA .9260 BC3 .3533 FSP -853
                                                                                                                                           EL1 353.1 EL2 232.6 ALF 127.76
     BDE .4223 BRA .9260 BC3 .3533 FSP
                                                                                                                                                        ARRIVAL DATE OCT 21 1967
LAUNCH DATE JUL 29 1967
                                                                                    FLIGHT TIME 84.00
                                                                                    DISTANCE 248.480
    RL 151.90 LAL -.00 LOL 305.21 VL 28.625 GAL -13.75 AZL 91.11 MCA 113.74 SMA 143.00 ECC .24529 INC 1.1117 V1 29.331
RP 107.98 LAP -1.02 LOP 56.96 VP 39.115 GAP -.84 AZP 89.55 TAL 241.99 TAP 355.73 RCA 107.92 APO 178.08 V2 35.094
RC 81.139 GL -4.54 GP -25.53 ZAL 166.20 ZAP 85.48 ETS 2.95 ZAE 157.83 ETE 249.17 ZAC 115.21 ETC 5.16 CLP -84.99
   PLANETOCENTRIC CONIC
    C3 46.351 VHL 6.808 DLA 11.03 RAL 139.27 RAD 6568.7 VEL 12.950 PTH 2.36 VHP 4.418 OPA -10.77 RAP 148.08 ECC 1.7628
    ENCH AZENTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                         20.04
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                                        4298.99
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                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               9CT 870.6 SGR 635.6 SG3 288.5
RRT .6672 RRF .7962 RTF .7714
SGB 1077.9 R23 .1701 R13 .8420
SG1 995.2 SG2 414.1 THA 32.19
                                                                                                                                          ST 311.3 SR 299.2 SS 263.C
CRT -.3588 CRS .4919 CST -.9831
     TOE .2469 TRA -.9001 TC3 -.2535 BAU .2576
     ROE -.3321 RRA -.4117 RC3 -.3294 FAU .11670
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FOE .6301 FRA-1.6745 FC3-2.1797 8SP 2495 BOE .4136 BRA .9898 BC3 .4157 FSP -875

LSA 436.0 MSA 254.9 SSA 21.8

EL1 356.1 EL2 244.1 ALF 138.14

ARRIVAL DATE OCT 23 1967

FLIGHT TIME 86.00 LAUNCH DATE JUL 29 1967 DISTANCE 254.858 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 28.586 GAL -13.60 AZL 90.94 MCA 116.96 SMA 142.66 ECC .24343 INC .9360 VI 29.331
RP 107.94 LAP -.83 LOP 62.17 VP .39.099 GAP -.32 AZP 89.58 TAL 241.42 TAP 358.38 RCA 107.94 APO 177.39 V2 35.107
RC 83.3356 GL -3.87 GP -26.37 ZAL 166.11 ZAP 90.07 ETS .88 ZAE 155.48 ETE 242.22 ZAC 116.94 ETC 4.10 CLP -90.08 PLANETOCENTRIC CONIC C3 45.236 VHL 6.726 DLA 11.58 RAL 139.77 RAD 6568.7 VEL 12.907 PTH 2.35 VHP 4.401 DPA -10.97 RAP 146.18 ECC 1.7445 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 2185.2 -27.37 20.34 72.16 93.35 23 30 40 90.00 22 44 15 2785.23 90.00 13 44 35 4693.54 100.00 0 15 23 2503.99 -28.13 80.75 15 2 49 0 57 7 4093.5 11.86 193.21 200.25 12.53 65.85 15.25 20.23 94.30 1904.0 -28.70 51.26 59.95 100.00 -29.61 16 14 14 2 14 22 17 6 21 64.78 3050.0 13.06 174.69 11.89 181.70 100.00 15 0 4 4450.01 16.59 15 U 4 4450.01 1 36 53 2248.95 15 55 3 4277.81 19.77 1649.0 -32.23 31.15 96.95 110.00 40.13 -33.55 3677.8 16.21 159.84 10.01 61.77 166.76 110.00 20.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 980.4 SGR 652.4 SG3 292.3 RRT .7095 RRF .8165 RTF .8059 SGB 1177.6 R23 .1734 R13 .8602 SGI 1104.7 SG2 408.0 THA 29.73 ST 342.2 SR 284.1 SS 272.9 CRT -.3399 CRS .5010 CST -.9787 TDE .2700 TRA -.9696 TC3 -.3302 BAU .2933 RDE -.3083 RRA -.4118 RC3 -.3553 FAU .11706 FOE .6680 FRA-1.6410 FC3-2.2404 BSP 2868 BDE .4098 BRA 1.0535 BC3 .4850 FSP -896 LSA 457.4 MSA 250.3 SSA 21.9 EL1 369.6 EL2 247.4 ALF 149.40 ARRIVAL DATE OCT 25 1967 FLIGHT TIME 88.00 LAUNCH DATE JUL 29 1967 DISTANCE 261.200 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 28.543 GAL -13.45 AZL 90.75 MCA 120.18 SMA 142.28 ECC .24163 INC .7498 V1 29.331
RP 107.91 LAP -.65 LOP 65.39 VP 39.078 GAP .18 AZP 89.62 TAL 240.77 TAP .95 RCA 107.90 APO 176.66 V2 35.119
RC 85.546 GL -3.14 GP -27.19 ZAL 165.94 ZAP 94.46 ETS 358.73 ZAE 152.97 ETE 236.62 ZAC 118.50 ETC 3.06 CLP -95.01 PLANETOCENTRIC CONIC C3 44.122 VHL 6.642 OLA 12.17 RAL 140.36 RAD 6568.7 VEL 12.864 PTH 2.34 VHP 4.409 DPA -11.22 RAP 144.44 ECC 1.7261 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 20.73 92.86 23 26 17 65.42 15 9 39 2198.7 -27.49 22 41 36 2796.75 13 51 51 4667.49 81.73 -28.18 90.00 4067.5 11.08 191.69 198.66 12.68 14.52 90.00 -29.67 15.87 0 55 4 1916.3 -28.82 52.16 0 13 8 2516.35 15 6 58 4425.12 60.86 93.82 20.63 100.00 64.33 16 20 44 3625.1 12.28 173.25 12.02 180.21 100,00 -32.37 2 15 17 12 6 2 13 4 31.89 96.50 1658.9 110.00 1 35 25 2258.86 -33.63 40.69 20.21 15.43 61.29 3655.4 158.57 165.42 10.12 110.00 16 1 10 4255.30 19.41 MID-COURSE EXECUTION ACCURACY
SCT 1097.0 SGR 665.2 SG3 292.4
RRT .7425 RRF .8335 RTF .8309
SGB 1282.9 R23 .1785 R13 .8735
SGI 1218.6 SG2 401.1 THA 27.46 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 376.7 SR 266.9 SS 283.4 CRT -.3258 CRS .5122 CST -.9739 TOE .2981 TRA-J.0381 TC3 -.4110 BAU .3299 RDE -.2825 RRA -.4074 RC3 -.3792 FAU .11598 FDE .7052 FRA-1.5810 FC3-2.2758 BSP 3246 BDE .4107 BRA 1.1152 BC3 .5593 FSP -898 LSA 484.3 MSA 241.7 SSA 21.9 EL1 393.4 EL2 241.6 ALF 158.59 ARRIVAL DATE OCT 27 1967 FLIGHT TIME 90.00 LAUNCH DATE JUL 29 1967 DISTANCE 267.508 RL 151.90 LAL -.00 LOL 305.21 VL 28.494 GAL -13.28 AZL 90.55 MCA 123.39 SMA 141.86 ECC .23988 INC .5509 V1 29.331 RP 107.87 LAP -.46 LOP 68.61 VP 39.033 GAP .66 AZP 89.70 TAL 240.04 TAP 3.43 RCA 107.83 APO 175.89 V2 35.131 RC 87.767 GL -2.33 GP -28.00 ZAL 165.68 ZAP 98.59 ETS 356.52 ZAE 150.38 ETE 232.11 ZAC 119.86 ETC 2.03 CLP -99.74 PLANETOCENTRIC CONIC C3 43.011 VML 6.558 DLA 12.81 RAL 141.02 RAD 6568.6 VEL 12.821 PTH 2.33 VMP 4.440 DPA -11.54 RAP 142.88 ECC 1.7079 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 38 51 2813.96 -28.23 82.84 21.20 92.30 23 25 45 2214.0 -27.61 74.23 90.00 13 59 55 4639.42 13.72 197.01 12.91 64.98 15 17 14 4039.4 10.23 190.07 92.30 23 25 45 64.98 15 17 14 93.28 0 52 55 63.88 16 27 57 1930.3 -28.96 53.18 0 10 44 15 14 38 -29.73 21.12 100.00 2530.27 61.89 3796.3 11.44 15.07 178.62 12.24 100.00 4398.35 1 33 54 2270.05 16 7 58 4231.33 2 11 44 -32.52 32.72 1670.1 2 11 17 16 29 -33.72 41.75 20.74 96.00 110.00 14.58 3631.3 164.01 10.30 60.60 110.00 16 7 56 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1218.5 SCR 676.6 SC3 290.3 RRT .7683 RRF .8493 RTF .8493 SCB 1393.8 R23 .1862 R13 .8838 SCI 1336.8 SG2 394.8 THA 25.48 ST 415.0 SR 248.7 55 292.8 CRT - 3148 CRS .5176 CST - .9704 TOE .3312 TRA-1.1043 TC3 -.4955 BAU .3672 RDE -.2561 RRA -.4003 RC3 -.4028 FAU .11399 FDE .7332 FRA-1.5074 FC3-2.2944 BSP 3648 BDE .4187 BRA 1.1746 BC3 .6386 FSP -901 LSA 515.8 MSA 231.0 S9A 22.1 EL1 425.5 EL2 230.2 ALF 164.75 ARRIVAL DATE OCT 29 1967 FLIGHT TIME 92.00 LAUNCH DATE JUL 29 1967 DISTANCE 273.782 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 28.442 GAL -13.12 AZL 90.34 MCA 126.62 SMA F41.41 ECC .23819 INC .3364 VI 29.331
RP 107.83 LAP -.27 LOP 71.83 VP 39.025 GAP 1.12 AZP 89.80 TAL 239.23 TAP 5.84 RCA 107.73 APO 175.09 V2 35.143
RC 89.996 GL -1.44 GP -28.83 ZAL 165.33 ZAP 102.46 ETS 354.23 ZAE 147.79 ETE 228.50 ZAC 120.99 ETC 1.02 CLP-104.25 PLANETOCENTRIC CONIC C3 41.904 WHL 6.473 DLA 13.51 RAL 141.76 RAD 6568.6 VEL 12.778 PTH 2.32 VHP 4.493 DPA -11.95 RAP 141.51 ECC 1.6896 C3 41,904 VHL 6.473 DLA 13.51 RAL 141.76 RAD 6568.6 VEL 12.778 PTH 2.32 VHP 4.493 DPA -11.93 RAP 141.51 ECC 1.6896 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 35 45 2831.42 -28.27 84.12 21.78 91.66 23 22 57 2231.4 -27.74 75.49 90.00 14 8 57 4608.83 12.83 195.20 13.24 64.54 15 25 46 4008.8 9.30 188.31 100.00 0 8 7 2546.25 -29.78 63.08 21.71 92.66 0 50 33 1946.3 -29.10 54.34 100.00 15 23 13 4369.22 14.19 176.91 12.56 63.41 16 36 2 3769.2 10.51 170.05 110.00 1 32 16 2282.95 -33.80 42.75 21.38 95.41 2 10 19 1682.9 -32.68 33.69 110.00 16 15 33 4205.29 17.74 162.49 10.58 60.29 17 25 38 3605.3 13.66 155.77 15 23 13 4369.22 1 32 16 2282.95 16 15 33 4205.29 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SG1 1342.9 SGR 684.0 SG3 285.1 RRT .7884 RRF .8651 RTF .8624 SGB 1507.0 R23 .1958 R13 .8911 SG1 1456.2 SG2 388.0 THA 23.66 ST 457.7 SR 228.2 SS 303.6 CRT -.3050 CRS .5230 CST -.9669 LSA 553.1 MSA 217.4 SSA 22.2 TOE .3705 TRA-1.1662 TC3 -.5826 BAU .4038 RDE -.2275 RRA -.3887 RC3 -.4245 FAU .11080 FOE .7618 FRA-1.4132 FC3-2.2890 BSP 4037 BOE .4348 BRA 1.2292 BC3 .7208 FSP -884 EL1 464.4 EL2 214.2 ALF 168.98

ARRIVAL DATE OCT 31 1967

LAUNCH DATE JUL 29 1967

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HELIOCENTRIC CONIC
                                                                              01STANCE 280.025
    RL 151.90 LAL -.00 LOL 305.21 VL 28.385 GAL -12.95 AZL 90.10 MCA 129.84 SMA 140.92 ECC .23655 INC .1023 V1 29.331
RP 107.80 LAP -.08 LOP 75.05 VP 38.994 GAP 1.56 AZP 89.93 TAL 238.34 TAP 8.18 RCA 107.59 APO 174.26 V2 35.154
RC 92.232 GL -.45 GP -29.70 ZAL 164.86 ZAP 106.03 ETS 351.86 ZAE 145.22 ETE 225.63 ZAC 121.90 ETC .04 CLP-108.53
   PLANETOCENTRIC CONIC
    C3 40.808 VHL 6.388 DLA 14.29 RAL 142.60 RAD 6568.6 VEL 12.735 PTH 2.32 VHP 4.566 DPA -12.48 RAP 140.33 ECC 1.6716
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
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                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          SCF 1469.4 SCR 690.7 SC3 278.4
RRT .8042 RRF .8764 RTF .8720
SCB 1623.6 R23 .2078 R13 .8967
SCI 1578.0 SC2 382.2 THA 22.07
                                                                                                                                ST 505.1 SR 206.7 SS 313.9

CRT - 2924 CRS .5196 CST - .9649

LSA 595.7 MSA 202.7 SSA 22.3
    TOE .4158 TRA-1.2233 TC3 -.6724 BAU .4403
    RDE -.1983 RRA -.3747 RC3 -.4463 FAU .10700
    FOE .7829 FRA-1.3118 FC3-2.2701 BSP
                                                         4451
-869
    BDE .4607 BRA 1.2794 BC3 .8070 FSP
                                                                                                                                  EL1 509.4 EL2 196.1 ALF 171.98
                                                                               FLIGHT TIME 96.00
                                                                                                                                              ARRIVAL DATE NOV 2 1967
LAUNCH DATE JUL 29 1967
                                                                              DISTANCE 286.237
  HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.325 GAL -12.77 AZL 89.85 MCA 133.06 SMA 140.42 ECC .23496 INC .1523 VI 29.331
RP 107.77 LAP .11 LOP 78.27 VP 38.960 GAP 1.98 AZP 90.10 TAL 237.40 TAP 10.46 RCA 107.42 APO 173.41 V2 35.165
RC 94.474 GL .67 GP -30.66 ZAL 164.28 ZAP 109.28 ETS 349.38 ZAE 142.70 ETE 223.37 ZAC 122.58 ETC 359.07 CLP-112.58
   PLANETOCENTRIC CONIC
    C3 39.727 VHL 6.303 DLA 15.16 RAL 143.53 RAD 6568.5 VEL 12.692 PTH
                                                                                                          2.31 WHP 4.658 DPA -13.16 RAP 139.33 ECC 1.6538
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 27 59 2876.16 -28.32 87.39 23.29 90.02 23 15 55 2276.2 -28.01 78.74 90.00 14 30 50 4537.15 10.70 191.02 14.24 63.62 15 46 27 3937.1 7.07 184.22 100.00 0 1 30 2587.24 -29.86 66.12 23.27 91.06 0 44 37 1987.2 -29.41 57.35 100.00 15 43 55 4301.31 12.09 172.96 13.52 62.45 16 55 37 3701.3 8.30 166.22
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   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SCT 1596.8 SGR 696.0 SG3 269.8
RRT .8167 RRF .8889 RTF .8791
SG8 1741.9 R23 .2220 R13 .9007
SG1 1700.6 SG2 377.1 THA 20.66
                                                                                                                                  ST 558.4 SR 183.6 SS 325.4
CRT -.2724 CRS .5062 CST -.9637
    TOE .4684 TRA-1.2743 TC3 -.7643 BAU .4759
    RDE -.1675 RRA -.3577 RC3 -.4678 FAU .10256
    FOE .8017 FRA-1.2017 FC3-2.2350 BSP 4867
BOE .4975 BRA 1.3235 BC3 .8961 FSP -849
                                                                                                                                  LSA 645.0 MSA 186.7 SSA 22.5
                                                                                                                                  ELI 560.9 EL2 175.9 ALF 174.32
                                                                                                                                             ARRIVAL DATE NOV 4 1967
                                                                              FLIGHT TIME 98.00
LAUNCH DATE JUL 29 1967
                                                                              DISTANCE 292.421
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.262 GAL -12.58 AZL 89.56 MCA 136.29 SMA 139.89 ECC .23342 INC .4381 VI 29.331
RP 107.73 LAP .30 LOP 81.50 VP 38.924 GAP 2.39 AZP 90.32 TAL 236.39 TAP 12.67 RCA 107.24 APO 172.54 V2 35.175
RC 96.719 GL 1.94 GP -31.73 ZAL 163.55 ZAP 112.21 ETS 346.78 ZAE 140.22 ETE 221.61 ZAC 123.02 ETC 358.12 CLP-116.39
   PLANETOCENTRIC CONIC
    C3 38.675 VHL 6.219 DLA 16.16 RAL 144.58 RAD 6568.5 VEL 12.651 PTH 2.30 VHP 4.770 DPA -14.02 RAP 138.50 ECC 1.6365
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 22 47 2905.71 -28.30 89.55 24.27 88.94 23 11 13 2305.7 -28.15 80.89 90.00 14 44 22 4494.02 9.38 188.54 14.97 63.16 15 59 16 3894.0 5.71 181.78
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63.16 15 59 16
90.01 24 36 43
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                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 619.1 SR 158.0 SS 339.5

CRT -.2351 CRS .4763 CST -.9628

LSA 703.0 MSA 169.7 SSA 22.6

EL1 620.3 EL2 153.3 ALF 176.34
                                                                          SGT 1723.7 SGR 698.7 SG3 259.3
    TOE .5303 TRA-1.3170 TC3 -.8572 BAU .5100
                                                                         RRT .8262 RRF .9004 RTF .8839
SGB 1860.0 R23 .2378 R13 .9033
SGI 1822.3 SG2 372.3 THA 19.36
    ROE -.1340 RRA -.3368 RC3 -.4881 FAU .09739
    FOE .8232 FRA-1.0813 FC3-2.1801 BSP
                                                         5260
-814
    BDE .5469 BRA 1.3593 BC3 .9864 FSP
LAUNCH DATE JUL 29 1967
                                                                              FLIGHT TIME 100.00
                                                                                                                                              ARRIVAL DATE NOV 6 1967
                                                                              DISTANCE 298.577
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 28.196 GAL -12.39 AZL 89.24 HCA 139.51 SHA 139.35 ECC .23194 INC .7590 V1 29.331 RP 107.70 LAP .49 LOP 84.73 VP 38.885 GAP 2.78 AZP 90.58 TAL 235.32 TAP 14.83 RCA 107.03 APO 171.67 VZ 35.185 RC 98.967 GL 3.41 GP -32.95 ZAL 162.65 ZAP 114.80 ETS 344.02 ZAE 137.78 ETE 220.30 ZAC 123.25 ETC 357.16 CLP-119.98
   PLANETOCENTRIC CONIC
    C3 37.666 WHL 6.137 OLA 17.32 RAL 145.75 RAD 6568.5 VEL 12.611 PTH 2.29 VHP 4.902 OPA -15.08 RAP 137.80 ECC 1.6199
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.22 92.23 25.44 87.60 23 5 13 2342.4 -28.26 83.57
    UNCH AZMTH UNCH TIME L-I TIME
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       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 1851.1 SGR 702.3 SG3 247.9
RRT .8332 RRF .9118 RTF .8875
SGB 1979.8 R23 .2555 R13 .9052
                                                                                                                                 ST 688.7 SR 131.9 SS 354.7

CRT -.1642 CRS .4100 CST -.9632

LSA 770.5 MSA 152.7 SSA 22.7
     TOE .6020 TRA-1.3513 TC3 -.9516 BAU
                                                           .5435
    RDE -.0992 RRA -.3136 RC3 -.5092 FAU .09198
    FDE .8407 FRA -.9608 FC3-2.1141 89P 5675
80E .6101 BRA 1.3872 BC3 1.0793 FSP -784
                                                                         SG1 1945.0 SG2 369.6 THA 18.22
                                                                                                                                  EL1 689.0 EL2 130.0 ALF 178.13
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FLIGHT TIME 94.00

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LAUNCH DATE JUL 29 1967
                                                                                   FLIGHT TIME 102.00
                                                                                                                                                      ARRIVAL CATE NOV 8 1967
    HELIOCENTRIC CONIC
                                                                                   DISTANCE 304,707
     RL 151.90 LAL -.00 LOL 305.21 VL 28.129 GAL -12.19 AZL 88.87 MCA 142.74 SMA 138.79 ECC .23050 INC 1.1255 V1 29.331
RP 107.67 LAP .68 LOP 87.96 VP 38.845 GAP 3.15 AZP 90.90 TAL 234.20 TAP 16.94 RCA 106.80 APO 170.78 V2 35.195
RC 101.218 GL 5.11 GP -34.37 ZAL 161.54 ZAP 117.01 ETS 341.07 ZAE 135.35 ETE 219.36 ZAC 123.26 ETC 356.17 CLP-123.38
    PLANETOCENTRIC CONIC
     C3 36.723 VHL 6.060 OLA 18.69 RAL 147.08 RAD 6568.4 VEL 12.573 PTH 2.28 VHP 5.058 DPA -16.38 RAP 137.21 ECC 1.6044
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      22 7 30 2988.85
15 19 39 4384.72
23 40 10 2690.02
16 29 40 4158.78
1 16 59 2399.46
17 13 17 4022.11
         90.00
                                                          -28.04
                                                                           95.62
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        110.00
                                                         -34.18
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        110.00
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                                                                                                                                              3422.1
                                                                                                                                                                 5.92
                                                                                                                                                                               145.86
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGT 1977.1 SGR 704.4 SG3 235.1
RRT .8377 RRF .9223 RTF .8899
SGB 2098.9 R23 .2745 R13 .9063
SG1 2066.4 SG2 368.1 THA 17.18
     TDE .6876 TRA-1.3743 TC3-1.0453 BAU .5752
                                                                                                                                         ST 770.4 SR 105.0 SS 373.9
CRT -.0187 CRS .2690 CST -.9641
     RDE -.0610 RRA -.2861 RC3 -.5292 FAU .08606
FOE .8619 FRA -.8343 FC3-2.0289 BSP 6062
RDF .6903 RRA 1.4037 RC3 1.1716 FSP -743
                                                                                                                                         LSA 851.6 MSA 136.2 SSA 22.6
     BOE .6903 BRA 1.4037 BC3 1.1716 FSP
                                                              -743
                                                                                                                                         EL1 770.4 EL2 105.0 ALF 179.85
LAUNCH DATE JUL 29 1967
                                                                                   FLIGHT TIME 104.00
                                                                                                                                                      ARRIVAL DATE NOV 10 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 310.812
    RL 151.90 LAL -.00 LOL 305.21 VL 28.059 GAL -11.99 AZL 88.45 MCA 145.97 SMA 138.22 ECC .22913 INC 1.5511 VI 29.331
RP 107.65 LAP .87 LOP 91.19 VP 38.802 GAP 3.51 AZP 91.29 TAL 233.03 TAP 19.00 RCA 106.55 APO 169.89 V2 35.204
RC 103.470 GL 7.12 GP -36.04 ZAL 160.15 ZAP 118.82 ETS 337.90 ZAE 132.89 ETE 218.75 ZAC 123.07 ETC 355.12 CLP-126.60
   PLANETOCENTRIC CONIC
    C3 35.884 WHL 5.990 DLA 20.31 RAL 148.61 RAD 6568.4 VEL 12.540 PTH 2.27 VMP 5.242 DPA -17.97 RAP 136.66 ECC 1.5906 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 55 40 3049.61 -27.67 100.03 28.55 83.73 22 46 30 2449.6 -28.25 91.41
                      15 43 39
         90.00
                                      4312.28
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                                     2744.82
4092.31
                      23 30 11
        100.00
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   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              8GT 2103.7 SGR 708.0 SG3 221.6
RRT .8397 RRF .9325 RTF .8917
SG8 2219.6 R23 .2940 R13 .9073
SG1 2188.6 SG2 369.6 THA 16.26
     TOE .7892 TRA-1.3852 TC3-1.1363 BAU .6063
                                                                                                                                         ST 866.7 SR 82.9 SS 395.4
CRT .2665 CRS -.0254 CST -.9661
    ROE -.0203 RRA -.2553 RC3 -.5493 FAU .07997
FOE .8812 FRA -.7094 FC3-1.9292 BSP 6477
BOE .7895 BRA 1.4085 BC3 1.2639 FSP -705
                                                                                                                                        LSA 948.2 MSA 121.4 SSA 22.1
                                                                                                                                         EL1 867.0 EL2 79.9 ALF
LAUNCH DATE JUL 29 1967
                                                                                                                                                    ARRIVAL DATE NOV 12 1967
                                                                                  FLIGHT TIME 106.00
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 316.893
    RL 151.90 LAL -.00 LOL 305.21 VL 27.988 GAL -11.77 AZL 87.95 MCA 149.20 SMA 137.65 ECC .227A1 INC 2.0543 V1 29.331
RP 107.62 LAP 1.05 LOP 94.42 VP 38.758 GAP 3.85 AZP 91.76 TAL 251.82 TAP 21.02 RCA 106.29 APO 169.01 V2 35.212
RC 105.723 GL 9.53 GP -38.03 ZAL 158.42 ZAP 120.19 ETS 334.46 ZAE 130.35 ETE 218.43 ZAC 122.70 ETC 353.97 CLP-129.67
   PLANETOCENTRIC CONIC
     C3 35.205 VML 5.933 OLA 22.26 RAL 150.38 RAD 6568.4 VEL 12.513 PTH 2.27 VMP 5.463 OPA -19.90 RAP 136.12 ECC 1.5794
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 38 36 3132.47 -26.91 105.97 30.56 80.84 22 30 48 2532.5 -27.90 97.44
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61.69 17 25 13
82.15 24 2 59
60.20 18 26 58
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                    23 16 1
                                     2818.34
                                                         -28.93
                                                                           83.20
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                                                                                                                                             2218.3
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       100.00
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                                       4009.13
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   DIFFERENTIAL CORRECTIONS
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             RET .8366 RRF .9415 RTF .8932
SGB 2340.8 R23 .3132 R13 .9081
SGI 2310.7 SG2 374.1 THA 15.39
    TDE .9134 TRA-1.3808 TC3-1.2268 BAU .6362
RDE .0259 RRA -.2197 RC3 -.5673 FAU .07354
FDE .9024 FRA -.5840 FC3-1.8084 BSP 6894
                                                                                                                                       ST 983.2 SR 75.3 SS 421.3
CRT .6883 CRS -.5055 CST -.9689
                                                            6894
-665
                                                                                                                                       LSA 1066.5 MSA 109.5 SSA 20.9
EL1 984.6 EL2 54.5 ALF 3.03
    BDE .9137 BRA 1.3982 BC3 1.3516 FSP
LAUNCH DATE JUL 29 1967
                                                                                  FLIGHT TIME 108,00
                                                                                                                                                     ARRIVAL DATE NOV 14 1967
  HELIOCENTRIC CONIC
                                                                                  DISTANCE 322.951
   RL 151.90 LAL -.00 LOL 305.21 VL 27.915 GAL -11.55 AZL 87.34 HCA 152.42 SMA 137.07 ECC .22655 INC 2.6631 VI 29.331
RP 107.60 LAP 1.23 LOP 97.66 VP 38.713 GAP 4.19 AZP 92.36 TAL 230.57 TAP 22.99 RCA 106.02 APO 168.13 V2 35.220
RC 107.975 GL 12.44 GP -40.41 ZAL 156.22 ZAP 121.05 ETS 330.71 ZAE 127.65 ETE 218.36 ZAC 122.16 ETC 352.69 CLP-132.65
   PLANETOCENTRIC CONIC
    C3 34.780 VML 5.897 OLA 24.64 RAL 152.49 RAO 6568.4 VEL 12.496 PTH 2.26 VMP 5.733 OPA -22.22 RAP 135.49 ECC 1.5724
   C3 34.780 VHL 5.897 OLA 24.64 RAL 152.49 RAD 6568.4 VEL 12.496 PIN 2.20 VHP 3.733 UPA -22.22 RAP 153.49 ECC 1...2

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM 1NJ 2 LAT INJ 2 LONG 90.00 21 11 23 3254.67 -25.30 114.55 32.83 76.84 22 5 37 2654.7 -26.86 106.23

90.00 16 58 54 4091.44 -3.46 165.92 24.40 61.88 18 7 5 3491.4 -7.19 159.23

100.00 22 54 20 2922.72 -27.73 90.72 33.42 78.36 23 43 3 2322.7 -29.05 82.17

100.00 17 58 38 3698.61 -1.28 150.55 23.19 60.13 19 3 36 3298.6 -5.25 144.00
                       0 48 12
                                     2578.78
       110.00
                                                        -33.32
                                                                           65.73
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                    18 25 11 3615.32
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       110.00
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                                                                                                                                             3215.3
                                                                                                                                                                -.96
                                                                                                                                                                               135.03
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                            SGT 2355.5 SGR 713.1 SG3 190.8
RRT .8336 RRF .9489 RTF .8945
SGB 2461.0 R23 .3313 R13 .9087
    TOE 1.0697 TRA-1.3557 TC3-1.3047 BAU .6639
                                                                                                                                       ST 1127.5 SR 93.5 SS 453.4
CRT .9477 CRS -.8644 CST -.9722
    RDE .0736 RRA -.1764 RC3 -.5799 FAU .06663
   FOE .9282 FRA -.4552 FC3-1.6586 BSP 7277
                                                                                                                                     LSA 1214.4 MSA 102.2 SSA 18.7
ELI 1130.9 EL2 29.7 ALF 4.50
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SG1 2431.3 SG2 381.6 THA 14.53

-614

BOE 1.0722 BRA 1.3672 BC3 1.4278 FSP

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ARRIVAL DATE NOV 16 1967
                                                                                            FEIGHT TIME 110.00
LAUNCH DATE JUL 29 1967
                                                                                           DISTANCE 328.985
    RL 151.90 LAL -.00 LOL 305.21 VL 27.841 GAL -11.32 ATL 86.58 MCA 155.65 SMA 136.49 ECC .22535 INC 3.4192 VI 29.331 RP 107.58 LAP 1.41 LOP 100.89 VP 38.666 GAP 4.51 AZP 93.12 TAL 229.27 TAP 24.92 RCA 105.73 APO 167.25 V2 35.227
   HELIOCENTRIC CONIC
                               16.03 GP -43.30 ZAL 153.39 ZAP 121.32 ETS 326.60 ZAE 124.71 ETE 218.46 ZAC 121.45 ETC 351.19 CLP-135.58
     RC 110.226 GL
   PLANETOCENTRIC CONIC
     C3 34.772 VHL 5.897 DLA 27.58 RAL 155.06 RAD 6568.4 VEL 12.496 PTH 2.26 VHP 6.075 DPA -25.01 RAP 134.66 ECC 1.5723
    C3 34.772 VML 3.897 ULA 27.38 RAL 133.06 RAD 6368.4 VEL 12.496 PIM 2.26 VMP 6.073 UPA -23.01 RAP 134.66 ECC 1.5723 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 11 55 3488.92 -20.75 130.20 34.54 70.29 21 10 4 2888.9 -23.25 122.42 90.00 18 18 52 3857.08 -10.80 152.61 30.16 63.66 19 23 9 3257.1 -14.25 145.64 100.00 22 15 6 3091.83 -24.85 102.46 36.03 72.84 23 6 37 2491.8 -26.97 94.30 100.00 18 58 22 3729.39 -6.97 141.20 28.12 60.86 20 0 31 3129.4 -10.80 134.51
                       18 58 22 3729.39
0 27 20 2690.28
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55.82 20 8 16
                                                                                                      38.19
                                                                                    74.13
                                                               -31.93
        110.00
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                                                                                  135.41
                                                                                                      24.27
                      19 6 33 3703.71
                                                                  - .73
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 1307.5 SR 132.1 $5 490.1
CRT .9927 CRS -.9744 CST -.9761
                                                                                      SGT 2482.4 SGR 713.7 SG3 173.5
RRT .8233 RRF .9539 RTF .8963
SG8 2583.0 R23 .3466 R13 .9099
     TDE 1.2700 TRA-1.3056 TC3-1.3649 BAU .6902
     RDE .1274 RRA -.1251 RC3 -.5845 FAU .05945
FDE .9530 FRA -.3295 FC3-1.4801 BSP 7688
BDE 1.276478RA 1.3116 BC3 1.4847 FSP -564
                                                                                                                                                       LSA 1398.9 MSA 99.9 SSA 15.5
EL1 1314.1 EL2 15.9 ALF 5.73
                                                                                      SG1 2552.7 SG2 393.9 THA 13.65
     BOE 1.2764 BRA 1.3116 BC3 1.4847 FSP
                                                                                                                                                                       ARRIVAL DATE NOV 18 1967
                                                                                            FLIGHT TIME 112.00
LAUNCH DATE JUL 29 1967
                                                                                            DISTANCE 334.996
    RL 151.90 LAL -.00 LOL 305.21 VL 27.766 GAL -11.08 A7L 85.61 MCA 158.87 SMA 135.91 ECC .22421 INC 4.3907 VI 29.331 RP 107.56 LAP 1.58 LOP 104.13 VP 38.618 GAP 4.82 A7P 94.10 TAL 227.94 TAP 26.80 RCA 105.44 APO 166.38 V2 35.233 RC 112.475 GL 20.50 GP -46.81 ZAL 149.71 ZAP 120.89 ETS 322.08 ZAE 121.40 ETE 218.64 ZAC 120.60 ETC 349.38 CLP-138.59
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 35.487 VHL 5.957 DLA 31.25 RAL 158.31 RAD 6568.4 VEL 12.524 PTH 2.27 VHP 6.525 DPA -28.37 RAP 133.48 ECC 1.5840 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.20 17 39 15 4028.56 -17.51 168.65 36.99 63.70 18 46 24 3428.6 -20.91 161.40
          76.20 17 39 15 4028.56
103.80 21 17 27 3327.70
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63.70 18 46 24
63.69 22 12 55
70.23 24 32 18
56.49 21 10 20
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21 17 27 3327.70
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         103.80
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                       23 44 27 2870.29
20 11 26 3533.97
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                                                               -28.47
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         110.00
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                                                                                                       30.92
                                                                  -7.18
                                                                                   126.50
         110.00
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 2610.9 SGR 708.0 SG3 154.7
RRT .8044 RRF .9543 RTF .8992
SG8 2705.2 R23 .3578 R13 .9120
SG1 2673.8 SG2 410.7 THA 12.61
                                                                                                                                                          ST 1536.3 SR 180.2 55 532.6
CRT .9846 CRS -.9970 CST -.9804
      TOE 1.5381 TRA-1.2195 TC3-1.3909 BAU .7136
     ROE .1849 RRA -.0608 RC3 -.5723 FAU .05178
FOE .9785 FRA -.2047 FC3-1.2633 8SP 8106
                                                                                                                                                          LSA 1632.7 MSA 102.6 SSA 11.9
                                                                                                                                                          EL1 1546.6 EL2 31.3 ALF 6.59
    BDE 1.5492 BRA 1.2210 BC3 1.5040 FSF -509
                                                                                                                                                                       ARRIVAL DATE NOV 20 1967
                                                                                             FLIGHT TIME 114.00
LAUNCH DATE JUL 29 1967
      RL 151.90 LAL -.00 LOL 305.21 VL 27.691 GAL -10.83 A7L 84.31 MCA 162.08 SMA 135.33 ECC .22312 INC 5.6933 VI 29.331 RP 107.54 LAP 1.75 LOP 107.37 VP 38.569 GAP 5.11 A7P 95.42 TAL 226.57 TAP 28.65 RCA 105.14 APO 165.53 V2 35.239 RC 114.720 GL 26.13 GP -51.10 TAL 144.89 ZAP 119.60 ETS 317.04 ZAE 117.53 ETE 218.70 ZAC 119.62 ETC 347.06 CLP-141.88
                                                                                            DISTANCE 340.982
     HELIOCENTRIC CONIC
      C3 -37.539 VML 6.127 DLA 35.81 RAL 162.62 RAD 6568.5 VEL 12.606 PTH 2.29 VMP 7.150 DPA -32.37 RAP 131.67 ECC 1.6178
     PLANETOCENTRIC CONIC
      C3 -37.539 VML 6.127 DLA 35.81 RAL 162.62 RAD 6568.5 VEL 12.606 PTH 2.29 VMP 7.150 DPA -32.37 RAP 131.67 ECC 1.6178

LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
67.11 16 59 24 4218.35 -19.35 184.38 43.51 59.27 18 9 42 3618.4 -23.28 177.31

112.89 22 31 43 3166.32 -19.33 105.45 43.50 59.26 23 24 30 2566.3 -23.26 98.39

67.11 16 59 24 4218.35 -19.35 184.38 43.51 59.27 18 9 42 3618.4 -23.28 177.31

112.89 22 31 43 3166.32 -19.33 105.45 43.50 59.26 23 24 30 2566.3 -23.26 98.39

67.11 16 59 24 4218.35 -19.35 184.38 43.51 59.27 18 9 42 3618.4 -23.28 177.31

112.89 22 31 43 3166.32 -19.33 105.45 43.50 59.26 23 24 30 2566.3 -23.26 98.39

DIFFERENTIAL CORPECTIONS.
                                                                                        MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                        RRT .7683 RRF .3449 RTF .9037
SGB 2825.8 R23 .3637 R13 .9152
SG1 2792.6 SG2 432.0 THA 11.18
                                                                                                                                                          ST 1830.1 SR 225.8 55 581.0
CRT .9694 CRS -.9968 CST -.9845
       TOE 1.9153 TRA-1.0772 TC3-1.3562 BAU .7507
      ROE .2404 RRA .0235 RC3 -.5298 FAU .04352
FOE 1.0046 FRA -.0792 FC3-1.0036 BSP 8485
BOE 1.9303 BRA 1.0775 BC3 1.4560 FSP -444
                                                                                                                                                          LSA 1930.2 MSA 109.8 55A 8.5
                                                                                                                                                          ELI 1843.1 ELZ 55.0 ALF 6.83
                                                                                                                                                                        ARRIVAL DATE NOV 22 1967
                                                                                              FLIGHT TIME 116.00
 LAUNCH DATE JUL 29 1967
                                                                                             DISTANCE 346.938
      RL 151.90 LAL -.00 LOL 305.21 VL 27.615 GAL -10.58 AZL 82.46 MCA 165.28 SMA 134.76 ECC .22209 INC 7.5427 VI 29.331
RP 107.52 LAP 1.91 LOP 110.62 VP 38.519 GAP 5.40 AZP 97.30 TAL 225.16 TAP 30.45 RCA 104.83 APO 164.68 V2 35.244
RC 116.961 GL 33.21 GP -56.37 ZAL 138.54 ZAP 117.29 ETS 311.22 ZAE 112.86 ETE 218.24 ZAC 118.56 ETC 343.84 CLP-145.88
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
       C3 42.321 VHL 6.505 DLA 41.36 RAL 168.70 RAD 6568.6 VEL 12.794 PTH 2.33 VMP 8.081 DPA -37.08 RAP 128.76 ECC 1.6965
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.49 16 41 21 4370.64 -20.76 197.97 53.22 53.38 17 54 11 3770.6 -25.38 191.29
                                                                                                                         53.38 17 54 11
53.37 24 29 29
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                                                                                      98.87
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                                                                 -20.74
                          23 38 15 3074.59
          121.51
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                                                                -20.76
                                                                                    197.97
                          16 41 21
                                             4370.64
            58.49
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                           23 36 15 3074.59
16 41 21 4370.64
23 36 15 3074.59
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                                                                 -20.74
          121.51
                         23 36 15
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53.37 24 29 29
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                                                                 -20.76
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            58.49
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                                                                                      98.87
                                                                                                         53.21
                                                                 -20.74
           121.51
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2197:9 SR 237.9 SS 630.3
CRT .9428 CRS -.9822 CST -.9884
                                                                                         SGT 2875.4 SGR 639.9 SG3 111.9
RRT .6887 RRF .9061 RTF .9119
SGB 2945.7 R23 .3608 R13 .9211
       TOE 2.4720 TRA -.8445 TC3-1.2262 BAU .7374
       ROE .2640 RRA .1344 RC3 -.4418 FAU .03484
FOE 1.0244 FRA .0420 FC3 -.7127 BSP 8866
BDE 2.4861 BRA .8552 BC3 1.3034 FSP -377
                                                                                                                                                         LSA 2295.7 MSA 119.4 SSA 5.8
                                                                                                                                                           EL1 2209.4 EL2 78.9 ALF 5.83
                                                                                         SG1 2909.8 SG2 458.4 THA 8.94
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LAUNCH DATE JUL 29 1967

ARRIVAL DATE NOV 24 1967

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HELIOCENTRIC CONIC
                                                                        DISTANCE 352.856
    RL 151.90 LAL -.00 LOL 305.21 VL 27.539 GAL -10.31 AZL 79.51 HCA 168.47 SHA 134.18 ECC .22107 INC10.3903 V1 29.331 RP 107.51 LAP 2.07 LOP 113.86 VP 38.469 GAP 5.66 AZP 100.19 TAL 223.72 TAP 32.18 RCA 104.52 APO 163.85 V2 35.248
    RC 119.197 GL 41.94 GP -62.79 ZAL 130.34 ZAP 113.77 ETS 303.81 ZAE 107.01 ETE 216.18 ZAC 117.52 ETC 338.72 CLP-151.85
   PLANETOCENTRIC CONIC
    C3 53.468 VML 7.312 DLA 47.69 RAL 177.83 RAD 6568.9 VEL 13.222 PTH 2.42 VMP 9.594 DPA -42.47 RAP 123.87 ECC 1.8799
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        49.AA
                   16 44 27 4516.86
                                                  -20.62
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16 44 27 4516.86
       130.12
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        49.88
                                                  -20.62
                                                                211.17
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16 44 27 4516.86
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       130.12
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                                                                                                                                         -26.05
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 3011.7 SGR 549.4 SG3 89.4
RRT .4459 RRF .7335 RTF .9264
SGB 3061.4 R23 .3453 R13 .9312
SGI 3021.9 SG2 490.1 THA 4.78
    TDE 3.3356 TRA -.4380 TC3 -.9619 BAU .7188
RDE .1468 RRA .2787 RC3 -.2928 FAU .02577
                                                                                                                      ST 2618.5 $R 151.2 $S 675.9

CRT .7231 CRS -.8058 CST -.9917
                                                                                                                             .7231 CRS -.8058 CST -.9917
    FOE 1.0378 FRA .1642 FC3 -.4172 BSP 9208
BDE 3.3389 BRA .5192 BC3 1.0055 FSP -305
                                                                                                                      LSA 2705.3 MSA 133.4 SSA 3.7
                                                                                                                       EL1 2620.8 EL2 104.4 ALF 2.40
LAUNCH DATE JUL 29 1967
                                                                        FLIGHT TIME 120.00
                                                                                                                                 ARRIVAL DATE NOV 26 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 358.709
   RL 151.90 LAL -.00 LOL 305.21 VL 27.462 GAL -10.02 A7L .74.65 MCA 171.60 SMA 133.62 ECC .22002 INC15.3472 V1 29.331
RP 107.50 LAP 2.22 LOP 117.11 VP 38.417 GAP 5.91 AZP 105.19 TAL 222.22 TAP 33.82 RCA 104.22 APO 163.01 V2 35.252
RC 121.426 GL 51.86 GP -70.31 ZAL 120.25 ZAP 108.92 ETS 291.64 ZAE 99.33 ETE 209.02 ZAC 116.85 ETC 328.22 CLP-164.15
   PLANETOCENTRIC CONIC
    C3 82.811 VHL 9.100 DLA 53.46 RAL 192.05 RAD 6569.6 VEL 14.288 PTH
                                                                                                 2.60 WHP 12.382 DPA -48.05 RAP 115.10 ECC 2.3629
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 42.56 17 17 54 4675.70 -17.00 223.28 88.97 36.51 18 35 50 4075.7 -23.19 218.29
       137.44
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                                                                                                                                                        218.29
       137.44
                    2 11 58
                                3095.05
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HIO-COURSE EXECUTION ACCURACY
SGT 3110.1 #FM 150
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                                                                                                                                                         91.98
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                      ST 2914.6 SR 393.6 SS 712.2

CRT -.9380 CRS .8963 CST -.9944

LSA 3022.1 MSA 155.7 SSA 2.2

EL1 2938.0 EL2 135.4 ALF 172.77
    TOE 4.6254 TRA .3610 TC3 -.5619 BAU .6322
                                                                   SGT 3110.1 SGR 581.8 SG3 68.9
RRT -.4121 RRF -.1264 RTF .9530
    RDE -.5945 RRA .3831 RC3 -.1019 FAU .01654
    FDE 1.0462 FRA .3025 FC3 -.1729 BSP 9598
                                                                   SG8 3164.0 R23 -.3051 R13 -.9489
    BOE 4.6634 BRA .5264 BC3 .5710 FSP -238
                                                                   SG1 3119.6 SG2 528.5 THA 175.46
LAUNCH DATE JUL 29 1967
                                                                       FLIGHT TIME 122.00
                                                                                                                                 ARRIVAL DATE NOV 28 1967
   HELIOCENTRIC CONIC
                                                                      DISTANCE 364.413
    RL 151.90 LAL -.00 LOL 305.21 VL 27.386 GAL -9.69 A7L 64.07 MCA 174.60 SMA 133.05 ECC .21872 INC25.9303 VI 29.331
RP 107.49 LAP 2.36 LOP 120.35 VP 38.365 GAP 6.11 A7P 115.83 TAL 220.65 TAP 35.25 RCA 103.95 APO 162.15 V2 35.255
RC 123.648 GL 60.38 GP -76.16 7AL 108.99 7AP 102.82 ETS 259.43 7AE 88.18 ETE 181.11 7AC 117.67 ETC 296.29 CLP 158.12
   PLANETOCENTRIC CONIC
    C3 184.397 VML 13.579 DLA 54.88 RAL 211.29 RAD 6571.0 VEL 17.485 PTH 2.97 VMP 18.610 DPA -51.71 RAP 98.46 ECC 4.0347
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG BOOL AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      40.81 18 29 36 4843.58
139.19 3 33 46 3241.14
40.81 18 29 36 4843.58
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35.59 4 27 47
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                                3241.14
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  DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   71FREMENTIAL CONNECTIONS
TOE 5.2360 TRA 2.0451 TC3 -.1179 BAU .2908
ROE-4.0992 RRA -.6098 RC3 -.0027 FAU .00547
FOE 1.1110 FRA .5528 FC3 -.0257 BSP 9608
BOE 6.6497 BRA 2.1341 BC3 .1180 FSP -179
                                                                                                                     ST 2254.6 SR 1734.8 SS 778.7

CRT -.9924 CRS .9845 CST -.9986

LSA 2943.6 MSA 185.2 SSA 1.3

EL1 2839.7 EL2 169.8 ALF 142.48
                                                                   SGT 2689.4 SGR 1786.5 SG3 53.9
RRT -.9344 RRF -.8900 RTF .9933
SGB 3228.7 R23 -.2143 R13 -.9758
                                                                   SG1 3183.7 SG2 537.5 THA 147.12
LAUNCH DATE JUL 29 1967
                                                                       FLIGHT TIME 124.00
                                                                                                                                 ARRIVAL DATE NOV 30 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 369.522
   RL 151.90 LAL -.00 LOL 305.21 VL 27.310 GAL -9.24 AZL 32.84 HCA 177.03 SMA 132.50 ECC .21606 INC57.1583 V1 29.331 RP 107.48 LAP 2.49 LOP 123.60 VP 38.313 GAP 6.14 AZP 147.12 TAL 218.78 TAP 35.82 RCA 103.87 APO 161.13 V2 35.257 RC.125.861 GL 55.96 GP -63.42 ZAL 98.83 ZAP 96.46 ETS 200.15 ZAE 67.04 ETE 126.12 ZAC 124.43 ETC 231.82 CLP 104.57
  PLANETOCENTRIC CONIC
   C3 746.919 WHL 27.330 DLA 43.36 RAL 223.39 RAD 6572.7 VEL 29.465 PTH 3.44 VHP 36.675 DPA -43.85 RAP 70.03 ECC13.2924
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   TOE-1.5126 TRA 1.3000 TC3 -.0336 BAU 1.7605
                                                                  SGT 524.2 SGR 2990.0 SG3 46.6
RRT .0502 RRF -.9930 RTF .0656
SGB 3035.6 R23 -.1171 R13 -.9928
                                                                                                                   ST 336.5 SR 2120.2 SS 1090.9
CRT .8115 CRS .9973 CST .7663
LSA 2398.7 MSA 211.9 SSA 1.3
    ROE-9.7092 RRA-6.8498 RC3 -.1731 FAU-.02536
   FOE 1.5385 FRA 1.3904 FCS .0294 BSP 8735
BOE 9.8263 BRA 6.9721 BCS .1763 FSP -144
                                                                   SG1 2990.1 SG2 523.6 THA 89.48
                                                                                                                    EL1 2137.9 EL2 195.0 ALF 82.60
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FLIGHT TIME 118.00

ARRIVAL DATE DEC 2 1967

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FLIGHT TIME 126.00
LAUNCH DATE JUL 29 1967
                                                                                                  DISTANCE 378.302
    HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 27.233 GAL -9.54 AZL 147.99 HCA 183.09 SMA 131.95 ECC .22286 INC57.9862 V1 29.331 RP 107.48 LAP 2.62 LOP 126.85 VP 38.260 GAP 7.22 AZP 32.05 TAL 218.48 TAP 41.57 RCA 102.54 APO 161.36 V2 35.258 RC 128.066 GL -55.42 GP 64.86 ZAL 98.98 ZAP 98.00 ETS 169.71 ZAE 68.44 ETE 242.25 ZAC 97.84 ETC 125.82 CLP 109.13
    PLANETOCENTRIC CONIC
     C3 765.048 VHL 27.660 DLA -56.08 RAL 163.77 RAD 6572.8 VEL 29.$71 PTH 3.45 VMP 34.674 DPA 72.99 RAP 351.29 ECC13.5908 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        73.47
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12 26 27 737.15
3 17 48 2357.16
12 26 27 737.15
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                                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 793.0 SGR 3052.4 SG3 49.4
                                                                                                                                                                     ST 326.1 SR 2570.3 SS 1513.9
     TDE 1.2267 TRA 1.8340 TC3 -.0574 BAU 1.9547
                                                                                             RRT -.7825 RRF .9964 RTF -.7302
SGB 3153.7 R23 -.1116 R13 .9933
                                                                                                                                                                    CRT -.8692 CRS -.9996 CST .8558
     RO-12.2486 RRA-3.6770 RC3 .1823 FAU-.02584
FOE-2.4177 FRA -.6039 FC3 .0292 BSP 9067
BDE12.3098 BRA 4.1090 BC3 .1911 FSP -148
                                                                                                                                                                     LSA 2996.1 MSA 166.1 SSA
                                                                                                                                                                                                                         1.5
                                                                                              SG1 3116.4 SG2 483.6 THA 101.78
                                                                                                                                                                   EL1 2585.9 EL2 160.3 ALF 96.32
                                                                                                                                                                                    ARRIVAL DATE DEC 4 1967
                                                                                                    FLIGHT TIME 128.00
                                                                                                    DISTANCE 383.470
   HELIOCENTRIC CONIC
    RL 191.90 LAL -.00 LOL 305.21 VL 27.158 GAL -9.09 AZL 119.29 MCA 185.60 SMA 131.41 ECC .22053 INC29.2938 V1 29.331 RP 107.48 LAP 2.74 LOP 130.10 VP 38.207 GAP 7.26 AZP 60.82 TAL 216.65 TAP 42.25 RCA 102.43 APO 160.39 V2 35.259 RC 130.261 GL -61.19 GP 73.66 ZAL 105.87 ZAP 105.55 ETS 119.32 ZAE 88.63 ETE 194.37 ZAC 90.40 ETC 74.76 CLP 162.33
   PLANETOCENTRIC CONIC
                                                                                                                                        3.05 WHP 18.034 OPA 80.38 RAP 251.85 ECC 4.6907
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 42.25 2 9 10 2220.90 6.92 61.75 49.36 143.40 2 46 11 1620.9 13.31 57.28 137.75 11 1 22 635.75 6.94 294.96 49.40 143.40 11 11 58 35.7 13.33 290.51
     C3 224.259 WHL 14.975 DLA -53.71 RAL 144.51 RAD 6573..3 VEL 18.590 PTH
                                                                                                                                  143.40 11 11 58
                                                                                                                                                                                                  13.31
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                                                                                                                                  143.40
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635.75
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          42.25
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143.40 2 46 11
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         137.75
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2297.1 SGR 2562.0 SG3 61.8
RRT .9585 RRT .9539 RTF .9991
SG8 3516.1 R23 -.1785 R13 .9832
                                                                                                                                                                     ST 1738.4 SR 1529.1 SS 842.2
     TOE-4.3740 TRA-2.4255 TC3 -.0447 BAU .1436
                                                                                                                                                                     CRT .9819 CRS -.9816 CST-1.0000
      RDE-5.5730 RRA-3.5329 RC3 .0173 FAU .00614
                                                                                                                                                                     LSA 2453.0 MSA 228.4 SSA 1.2
     FOE-1.3605 FRA -.7507 FC3 -.0237 88P 10658
                                                                                                                                                                  EL1 2304.8 EL2 218.5 ALF 41.27
                                                                                             SG1 3480.2 SG2 500.9 THA 49.39
     BOE 5.6479 BRA 4.2854 BC3 .0479 FSP -195
                                                                                                                                                                                    ARRIVAL DATE DEC 6 1967
                                                                                                    FLIGHT TIME 130.00
LAUNCH DATE JUL 29 1967
                                                                                                  DISTANCE 389.138
     RL 151.90 LAL -.00 LOL 305.21 VL 27.082 GAL -8.73 A7L 109.35 MCA 188.62 SMA 130.88 ECC .21964 INC19.3522 VI 29.331

RP 107.48 LAP 2.85 LOP 133.35 VP 38.153 GAP 7.45 A7P 70.85 TAL 215.00 TAP 43.62 RCA 102.13 APO 159.63 V2 35.259

RC 132.447 GL -57.49 GP 65.99 ZAL 111.87 ZAP 113.63 ETS 82.92 ZAE 99.66 ETE 160.69 ZAC 89.15 ETC 38.53 CLP-170.11
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 110.643 VHL 10.519 DLA -47.85 RAL 142.35 RAD 6570.1 VEL 15.231 PTH 2.73 VHP 12.315 DPA 71.55 RAP 210.42 ECC 2.8209
     C3 110.643 VHL 10.519 DLA -47.85 RAL 142.35 RAD 6570.1 VEL 15.231 PTH 2.73 VHP 12.315 DPA 71.55 RAP 210.42 ECC 2.8209 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 49.66 2 24 3 2042.04 12.56 50.11 40.71 136.57 2 58 5 1442.0 18.30 44.74 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 149.66 2 24 3 2042.04 12.56 50.11 40.71 136.57 2 58 5 1442.0 18.30 44.74 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 272.54 40.72 136.57 12 6 54 5254.3 18.31 267.17 130.34 10 29 19 5854.31 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 12.57 
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                             SGT 3545.7 SGR 897.8 SG3 80.7
RRT .8439 RRF .6961 RTF .9707
SG8 3657.6 R23 -.2568 R13 .9638
                                                                                                                                                                    ST 2103.1 SR 271.1 95 703.6
      TOE-3.5180 TRA-3.5570 TC3 -.3567 BAU .5285
                                                                                                                                                                   CRT .5253 CRS -.3984 CST -.9897
      ROE -.0638 RRA-1.1039 RC3 -.0207 FAU .01865
                                                                                                                                                                    LSA 2220.0 MSA 251.0 SSA 2.0
EL1 2108.0 EL2 230.1 ALF 3.92
      FOE-1.1661 FRA -.7535 FC3 -.1459 BSF 11213
BOE 3.5186 BRA 3.7243 BC5 .3573 FSP -258
                                                                                              SG1 3627.2 SG2 470.8 THA 12.27
                                                                                                                                                                                     ARRIVAL DATE DEC 8 1967
                                                                                                    FLIGHT TIME 132.00
 A AUNCH! DATE JUL 29 1967
                                                                                                   DISTANCE 394.919
     RL 151.90 LAL -.00 LOL 305.21 VL 27.007 GAL -8.40 AZL 104.61 MCA 191.76 SMA 130.36 ECC .21919 INC14.6099 VI 29.331

RP 107.48 LAP 2.95 LOP 136.60 VP 38.099 GAP 7.66 AZP 75.68 TAL 213.39 TAP 45.14 RCA 101.79 APO 158.93 V2 35.258

RC 134.624 GL -52.80 GP 57.29 ZAL 116.32 ZAP 121.03 ETS 71.03 ZAE 107.23 ETE 152.43 ZAC 89.07 ETC 26.92 CLP-162.58
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 71.575 VHL 8.460 DLA -42.92 RAL 143.86 RAD 6569.4 VEL 13.890 PTH 2.54 VHP 9.811 DPA 62.70 RAP 197.86 ECC 2.1779
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
56.29 2 54 53 1881.27 15.83 38.43 36.09 130.43 3 26 14 1281.3 20.92 32.33
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                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 1988.6 SR 294.4 55 670.6

CRT -.6498 CRS .7975 CST -.9768

LSA 2103.5 MSA 257.7 SSA 2.8

EL1 1997.9 EL2 222.7 ALF 174.44
                                                                                             SGT 3732.6 SGR 461.3 SG3 101.0
RRT .3383 RRF .0298 RTF .9454
SG8 3761.0 R23 -.3128 R13 .9439
SG1 3735.9 SG2 433.8 THA 2.43
       TOE-2.6064 TRA-3.2980 TC3 -.7273 BAU
                                                                             . 6965
      ROE .4028 RRA -.3986 RC3 .0291 FAU .02742
FDE-1.1282 FRA -.7394 FC3 -.3317 BSP 11566
BDE 2.6374 BRA 3.3220 BC3 .7278 FSP -325
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ARRIVAL DATE DEC 10 1967

JPL TM 33-99

LAUNCH DATE JUL 29 1967 HELIOCENTRIC CONIC DISTANCE 400.734 RL 151.90 LAL -.00 LOL 305.21 VL 26.932 GAL -8.06 AZL 101.86 MCA 194.94 SMA 129.85 ECC .21896 INC11.8564 V1 29.331
RP 107.48 LAP 3.04 LOP 139.85 VP 38.044 GAP 7.89 AZP 78.53 TAL 211.77 TAP 46.72 RCA 101.41 APO 158.28 V2 35.256
RC 136.791 GL -48.62 GP 49.76 ZAL 119.40 ZAP 127.45 ETS 65.49 ZAE 112.73 ETE 151.09 ZAC 89.00 ETC 21.76 CLP-160.26 PLANETOCENTRIC CONIC C3 53.320 VHL 7.302 DLA -39.08 RAL 146.16 RAD 6568.9 VEL 13.217 PTH 2.41 VHP 8.530 DPA 54.99 RAP 192.27 ECC 1.6775 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.86 3 28 38 1741.68 17.49 27.78 33.32 125.52 3 57 39 1141.7 22.01 21.18 118.14 9 55 8 5819.16 17.50 273.86 33.33 125.52 11 32 7 5219.2 22.02 267.26 61.86 3 28 38 1741.68 17.49 27.78 33.32 125.52 3 57 39 1141.7 22.01 21.18 125.52 11 32 7 125.52 3 57 39 125.52 11 32 7 5819.16 17,50 273.86 33.33 5219.2 22.02 267.26 9 55 8 118.14 3 28 36 1741.68 1141.7 22.01 21.18 17.49 27,78 33.32 61.86 5219.2 22.02 267.26 9 55 8 17.50 273.86 33.33 5619.16 118.14 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS 8GT 3830.8 SGR 401.1 SG3 118.9 RRT -.0972 RRF -.4361 RTF .9268 ST 1897.8 SR 345.0 SS 655.4 CRT -.7844 CRS .9189 CST -.9654 LSA 2020.4 MSA 261.0 SSA 3.8 TOE-2.1159 TRA-3.0276 TC3-1.0942 BAU .7814 RDE .4337 RRA -.1856 RC3 .0679 FAU .03391 FDE-1.1002 FRA -.7006 FC3 -.5505 BSP 11819 BDE 2.1599 BRA 3.0333 BC3 1.0963 FSP -361 ste 3651.8 R23 .3467 R13 -.9272 861 3631.0 862 399.2 THA 179.41 EL1 1917.2 EL2 211.8 ALF 171.78 ARRIVAL DATE DEC 12 1967 FLIGHT TIME 136,00 LAUNCH DATE JUL 29 1967 **DISTANCE 406.559** HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.858 GAL -7.72 AZL 100.06 MCA 198.15 SMA 129.34 ECC .21891 INC10.0559 V1 29.331
RP 107.49 LAP 3.12 LOP 143.10 VP 37.990 GAP 8.12 AZP 80.44 TAL 210.15 TAP 48.31 RCA 101.03 APO 157.66 V2 35.254
RC 138.949 GL -45.11 GP 43.50 ZAL 121.39 ZAP 132.87 ETS 61.98 ZAE 116.78 ETE 151.95 ZAC 88.65 ETC 18.70 CLP-159.68 PLANETOCENTRIC CONIC C3 43.033 WHL 6.560 DLA -36.15 RAL 148.63 RAD 6568.6 VEL 12.822 PTH 2.33 WHP 7.815 OPA 48.42 RAP 189.53 ECC 1.7082 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 31.74 22.34 4 2 14 1618.79 9 41 14 5834.86 4 29 12 1018.8 11.36 66.53 18.28 18.29 121.75 11 18 29 5234.9 22.35 26A.76 18.29 275.70 31.75 121.74 113.47 4 2 14 1618.79 9 41 14 5634.86 4 29 12 1018.8 22.34 11.36 31.74 121.75 66.53 16.26 18.29 121.74 11 18 29 5234.9 22.35 268.76 275.70 31.75 18.29 113.47 121.75 4 29 12 121.74 11 16 29 1018.6 22.34 11.36 4 2 14 1618.79 16.28 18.29 31.74 66.53 5234.9 22.35 268.76 9 41 14 275.70 31.75 113.47 5834.86 18.29 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3926.2 SGR 364.6 SG3 133.2 RRT -.2817 RRF -.6072 RTF ..9133 SGB 3945.0 R23 .3623 R13 -.9143 SGI 3927.7 SG2 368.9 THA 178.41 ST 1836.8 SR 350.9 SS 642.5 CRT -.8150 CRS .9493 CST -.9557 TOE-1.8241 TRA-2.8112 TC3-1.4523 BAU .8370 RDE .3998 RRA -.1057 RC3 .0866 FAU .03850 FDE-1.0624 FRA -.6427 FC3 -.7745 BSP 12139 LSA 1959.8 MSA 262.7 SSA EL1 1859.2 EL2 200.9 ALF 171.05 BOE 1.8674 BRA 2.8132 BC3 1.4549 FSP -428 ARRIVAL DATE DEC 14 1967 FLIGHT TIME 138.00 LAUNCH DATE JUL 29 1967 DISTANCE 412.385 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.785 GAL -7.38 AZL 98.78 HCA 201.37 SMA 128.85 ECC .21901 INC 8.7819 V1 29.331 RP 107.50 LAP 3.19 LOP 146.35 VP 37.935 GAP 8.35 AZP 81.81 TAL 208.53 TAP 49.90 RCA 100.63 APO 157.07 V2 35.251 RC 141.095 GL -42.19 GP 36.34 7AL 122.52 7AP 137.41 ETS 59.36 7AE 119.77 ETE 153.58 7AC 87.97 ETC 16.57 CLP-159.84 PLANETOCENTRIC CONIC C3 36.467 VHL 6.039 DLA -33.94 RAL 151.13 RAD 6568.4 VEL 12.563 PTH 2.28 VHP 7.399 DPA 42.82 RAP 188.28 ECC 1.6002 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.36 31.00 4 59 57 908.8 2.69 118.88 70.46 18.66 4 34 48 1508.78 9.84 278.02 31.01 118.87 11 6 17 5261.3 22.38 270.86 9 28 36 5861.26 18.67 1/19.54 4 59 57 908.8 22.36 2.69 4 34 48 1508,78 31.00 118.88 9.84 70.46 18.66 278.02 31.01 118.87 11 6 17 5261.3 22.38 270.86 9 28 36 5861.26 18.67 109.54 19.55 120.82 9 11 22 117.00 11 38 11 298.10 59.4 -9 0 22 15.58 304.97 29.15 110.00 659.35 10 2 12 5758.68 5158.7 25.25 264.33 271.79 32.78 110.00 21.81 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4021.8 SGR 368.8 SG3 143.8 RRI -.3565 RRF -.6643 RTF ..9033 SGB 4038.7 R23 .3638 R13 -.9043 SGI 4024.0 SGZ 344.4 THA 178.11 ST 1795.9 SR 344.3 SS 629.4 CRT -.8273 CRS .9634 CST -.9474 LSA 1915.9 MSA 263.4 SSA 5.9 TDE-1.6353 TRA-2.6295 TC3-1.7996 BAU .8785 RDE .3620 RRA -.0696 RC3 .0896 FAU .04144 FDE-1.0163 FRA -.5720 FC3 -.9839 BSP 12463 EL1 1818.5 ELZ 191.0 ALF 170.89 BDE 1.6748 BRA 2.6305 BC3 1.8019 FSP -462 FLIGHT TIME 140.00 ARRIVAL DATE DEC 16 1967 LAUNCH DATE JUL 29 1967 DISTANCE 418.206 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.712 GAL -7.03 AZL 97.83 MCA 204.59 SMA 128.36 ECC .21925 INC 7.8286 V1 29.331 RP 107.51 LAP .3.25 LOP 149.60 VP 37.880 GAP 8.58 AZP 82.87 TAL 206.89 TAP 51.48 RCA 100.22 APO 156.51 V2 35.247 RC 143.232 GL -39.75 GP 34.10 ZAL 122.98 ZAP 141.24 ETS 57.26 ZAE 121.99 ETE 155.43 ZAC 86.99 ETC 14.95 CLP-160.33 PLANETOCENTRIC CONIC C3 31.891 VHL 5,647 DLA -32.29 RAL 153.64 RAD 6568.3 VEL 12.380 PTH 2.23 VHP 7.153 DPA 38.04 RAP 187.92 ECC 1.5248 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.79 5 5 57 1409.74 18.87 2.33 30.88 116.70 5 29 27 809.7 22.30 355.02 5 5 57 1409.74 302.65 30.88 116.69 9 27 33 4.6 22.32 295.34 9 17 28 604.60 18.89 106.21 809.7 22.30 355.02 2.33 30.88 116.70 1409.74 18.87 73.79 5 5 57 116.69 9 27 33 122.67 8 28 52 111.13 12 39 34 22.32 295.34 30.88 4.6 18.89 302.65 9 17 24 604.60 106.21 196.1 305.97 10.67 312.52 26.05 14.91 8 15 36 796.05 110.00 258.67 35.04 4954.3 30.13 250.45 11 6 59 5554.32 27.52 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4114.8 SGR 353.7 SG3 151.1 RRT -.3851 RRF -.6738 RTF .8955 SG8 4129.9 R23 .3541 R13 -.8964 ST 1769.4 SR 336.4 SS 616.4 CRT -.8361 CRS .9725 CST -.9405 LSA 1885.4 MSA 263.1 SSA 7.0 TOE-1.5066 TRA-2.4669 TC3-2.1375 BAU .9120 RDE .3311 RRA -.0500 RC3 .0824 FAU .04308 FDE -.9665 FRA -.4940 FC3-1,1694 BSP 12763 BDE 1.5426 BRA 2.4674 BC3 2.1391 FSP -486 SG1 4117.0 SG2 326.3 THA 178.09 EL1 1791.9 EL2 182.2 ALF 170.87

FLIGHT TIME 134.00

ARRIVAL DATE DEC 18 1967

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FLIGHT TIME 142.00
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 424.020
   HÉLIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOU 305.21 VL 26.640 GAL -6.87 AZL 97.08 MCA 207.82 SMA 127.89 ECC .21963 INC 7.0844 VI 29.331 RP 107.53 LAP 3.30 LOP 152.85 VP 37.825 GAP 8.82 AZP 83.73 TAL 205.24 TAP 53.06 RCA 99.80 APO 155.98 VZ 35.243 RC 145.356 GL -37.69 GP 30.58 ZAL 122.89 ZAP 144.49 ETS 55.52 ZAE 123.65 ETE 157.26 ZAC 85.77 ETC 13.64 CLP-161.00
   PLANETOCENTRIC CONIC
    C3 28.492 VHL 5.338 OLA -31.09 RAL 156.18 RAD 6568.1 VEL 12.242 PTH 2.20 VHP 7.013 OPA 33.92 RAP 188.14 ECC 1.4689 ENCH ATMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.59 5 35 18 1321.19 19.04 355.70 31.24 115.05 5 57 20 721.2 22.26 348.29
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       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SGT 4211.3 SGR 342.6 SG3 156.2

MRT -.3950 MRF -.6610 RTF .8898

SGB 4225.2 R23 .3348 R13 -.8906

SGI 4213.5 SG2 314.6 THA 178.15
                                                                                                                                ST 1756.5 SR 351.5 SS 606.3

CRT -.8465 CRS .9798 CST -.9353

LSA 1871.2 MSA 261.8 SSA 8.2
    TOE-1.4211 TRA-2.3172 TC3-2.4733 BAU .9425
    RDE .3086 RRA -.0364 RC3 .0700 FAU .04365
FDE -.9199 FRA -.4159 FC3-1.3325 BSP 13110
BDE 1.4542 BRA 2.3175 BC3 2.4743 FSP -506
                                                                                                                                ELI 1781.0 EL2 174.3 ALF 170.84
                                                                                                                                             ARRIVAL DATE DEC 20 1967
                                                                              FLIGHT TIME 144.00
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 429.834
  HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 26.569 GAL -6.29 AZL 96.48 MCA 211.05 SMA 127.42 ECC .22014 INC 6.4843 V1 29.331
RP 107.54 LAP 3.34 LOP 156.10 VP 37.770 GAP 9.05 AZP 84.44 TAL 203.57 TAP 54.63 RCA 99.37 APO 155.47 V2 35.237
RC 147.489 GL -35.92 GP 27.66 ZAL 122.34 ZAP 147.27 ETS 54.08 ZAE 124.90 ETE 158.96 ZAC 84.34 ETC 12.57 CLP-161.76
  PLANETOCENTRIC CONIC
    C3 25.839 VHL 5.083 DLA -30.26 RAL 158.77 RAD 6568.0 VEL 12.133 PTH 2.17 VHP 6.940 DPA 30.31 RAP 188.76 ECC 1.4252 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                      6 2 14 1244.33
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                                   5360.93
                                                       31.17
                                                                     246.51
                                                                                      36.61
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 4108.6 SCR 319.0 SC3 145.5
RRT -.2983 RRF -.5737 RTF .8649
SCB 4120.9 R23 .3293 R13 -.8655
SCI 4109.7 SC2 304.4 THA 178.67
                                                                                                                                 ST 1659.0 SR 313.3 SS 546.3
CRT -.8428 CRS .9856 CST -.9204
    TOE-1.2792 TRA-2.0859 TC3-2.6745 BAU
                                                          . 9239
    ROE .2776 RRA -.0411 RC3 .0311 FAU .04046
FDE -.8023 FRA -.2823 FC3-1.3597 89P 11375
BOE 1.3089 BRA 2.0863 BC3 2.6746 FSP -367
                                                                                                                                 LSA 1755.7 MSA 257.5 SSA
                                                                                                                                                                          9.5
                                                                                                                                 EL1 1680.1 EL2 166.5 ALF 170.87
                                                                                                                                            ARRIVAL DATE DEC 22 1967
                                                                             FLIGHT TIME 146.00
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 435.622
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 26.499 GAL -5.92 ATL 95.99 MCA 214.29 SMA 126.97 ECC .22082 INC 5.9872 VI 29.331
RP 107.56 LAP 3.37 LOP 159.35 VP 37.715 GAP 9.28 ATP 85.05 TAL 201.91 TAP 56.19 RCA 98.93 APO 155.00 V2 35.231
RC 149.570 GL -34.37 GP 25.20 ZAL 121.41 ZAP 149.69 ETS 52.90 ZAE 125.85 ETE 160.52 ZAC 82.77 ETC 11.66 CLP-162.57
   PLANETOCENTRIC CONIC
     C3 23.713 VHL 4.870 DLA -29.69 RAL 161.42 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 6.915 DPA 27.12 RAP 189.66 ECC 1.3903
     ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
                    12 23 34
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4358.6 SGR 330.3 SG3 158.6
RRT -.3709 RRF -.5905 RTF .8781
SGB 4371.1 R23 .2835 R13 -.8787
SG1 4360.4 SG2 306.6 THA 178.38
                                                                                                                               ST 1750.9 SR 327.7 SS 581.9

CRT -.8715 CRS .9909 CST -.9277

LSA 1856.5 MSA 255.0 SSA 10.7
     TOE-1.3137 TRA-2.0116 TC3-3.1119 BAU .9866
    ROE .2784 RRA -.0193 RC3 .0335 FAU .04283
FOE -.8224 FRA -.2473 FC3-1.5637 BSP 13383
                                                                                                                                ELI 1774.2 ELZ 158.6 ALF 170.66
     BOE 1.3429 BRA 2.0116 BC3 3.1120 FSP -498
                                                                              FLIGHT TIME 148.00
                                                                                                                                            ARRIVAL DATE DEC 24 1967
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 441.406
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 26.429 GAL -5.53 AZL 95.57 HCA 217.52 SMA 126.52 ECC .22164 INC 5.5663 VI 29.331 RP 107.58 LAP 3.39 LOP 162.60 VP 37.660 GAP 9.52 AZP 85.58 TAL 200.23 TAP 57.75 RCA 98.48 APO 154.56 V2 35.225 RC 151.657 GL -32.99 GP 23.11 ZAL 120.13 ZAP 151.82 ETS 51.96 ZAE 126.59 ETE 161.91 ZAC 81.05 ETC 10.89 CLP-163.41
   PLANETOCENTRIC CONIC
     C3 21.955 VHL 4.686 DLA -29.38 RAL 164.18 RAD 6567.9 VEL 11.972 PTH 2.13 VHP 6.922 DPA 24.27 RAP 190.78 ECC 1.3613
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
81.83 6 46 32 1131.94 19.76 341.92 34.52 112.19 7 5 24 531.9 22.60 334.31
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        110.00
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                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 4449.0 SGR 332.3 SG3 159.5
RRT - .3650 RRF - .5562 RTF .8756
                                                                                                                                 ST 1773.2 SR 331.6 55 578.6
     TDE-1.2976 TRA-1.8665 TC3-3.4439 BAU 1.0109
                                                                                                                              CRT -.8888 CRS .9949 CST -.9275
LSA 1877.9 MSA 249.5 SSA 12.0
ELI 1797.7 EL2 149.9 ALF 170.50
     ROE .2711 RRA -.0107 RC3 .0174 FAU .04210
FDE -.7880 FRA -.1748 FC3-1.6600 85P 13722
BDE 1.3256 BRA 1.8665 BC3 3.4440 FSP -504
                                                                         SGB 4461.4 R23 .2525 R13 -.8761
                                                                         SG1 4450.6 SG2 309.2 THA 178.43
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ARRIVAL DATE DEC 26 1967

LAUNCH DATE JUL 29 1967

DISTANCE 447.179 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.360 GAL -5.13 A7L 95.20 MCA 220.75 SMA 126.08 ECC .22262 INC 5.2032 V1 29.331
RP 107.60 LAP 3.39 LOP 165.85 VP 37.605 GAP 9.75 A7P 86.05 TAL 198.54 TAP 59.29 RCA 98.02 APO 154.15 V2 35.217
RC 153.730 GL -31.74 GP 21.33 7AL 118.54 7AP 153.71 ETS 51.24 7AE 127.17 ETE 163.14 7AC 79.23 ETC 10.22 CLP-164.25 PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA -29.26 RAL 167.06 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 6.954 DPA 21.68 RAP 192.08 ECC 1.3371 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 339.92 111.71 7 20 14 502.9 22.87 36.24 20.10 82.32 7 1 51 1102.94 9 20 11 93.2 22.89 111.70 97.68 9 8 37 693.20 20.12 309.86 36.25 19.25 115.63 8 48 11 201.6 315.95 34.32 100.00 8 34 50 801.59 15.93 107.82 11 54 18 10 18 20 5757.82 264.79 37.91 5157.8 26.61 100,00 24.40 272.89 123.25 8 31 45 100.44 14 20 7 256.2 12.76 309.32 110.00 8 17 28 856.24 8.44 315.76 30.00 5275.93 35.63 40.30 4675.9 110,00 12 52 11 32.74 238.72 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1801.6 SR 336.9 SS 575.4 CRT -.9066 CRS ..9975 CST -.9284 RCT 4529.4 SCR 336.9 SC3 159.2 RRT -.3568 RRF -.5208 RTF .6731 SCB 4541.9 R23 .2224 R13 -.6735 SCI 4531.0 SCE 314.7 THA 178.47 TDE-1.2925 TRA-1.7152 TC3-3.7697 BAU 1.0323 ROE .2661 RRA -.0032 RC3 .0015 FAU .04100 FOE -.7548 FRA -.1029 FC3-1.7327 BSP 13963 BOE 1.3196 BRA 1.7152 BC3 3.7697 FSP -503 LSA 1905.6 MSA 242.5 SSA 13.3 EL1 1827.4 EL2 140.2 ALF 170.32 ARRIVAL DATE DEC 28 1967 FLIGHT TIME 152.00 LAUNCH DATE JUL 29 1967 **DISTANCE 452.939** HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.292 GAL -4.72 ATL 94.88 MCA 223.99 3MA 125.66 ECC .22376 INC 4.8849 V1 29.331
RP 107.63 LAP 3.39 LOP 160.09 VP 37.550 GAP 9.99 AZP 86.48 TAL 196.85 TAP 60.83 RCA 97.54 APO 153.77 V2 35.210
RC 155.789 GL -30.58 GP 19.80 ZAL 116.67 ZAP 155.40 ETS 50.72 ZAE 127.64 ETE 164.23 ZAC 77.32 ETC 9.65 CLP-165.09 PLANETOCENTRIC CONIC 2.10 WHP 7.004 DPA C3 19.239 WHL 4.366 DLA -29.30 RAL 170.08 RAD 6567.8 VEL 11.858 PTH 19.32 RAP 193.51 ECC 1.3166 LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 30 48 492.2 23.23 331.61 111.40 82.15 7 12 36 1092.19 20.50 339.30 36.27 9 33 12 74.2 23.24 300.93 97.85 9 21 57 674.16 20.51 306.62 36.27 111.39 115.27 9 1 33 107.54 12 4 31 181.4 19.79 307.47 100.00 8 48 32 781.35 16.52 314.74 36.46 5148.3 26.77 264.12 100.00 10 28 43 5748.28 24.60 272.25 39.64 8 44 3 239.5 13.36 508.40 123.10 110.00 8 30 4 839.49 9.07 314.86 32.19 99.87 14 31 23 228.65 110.00 5262.90 13 3 40 32.89 237.74 42.14 4662.9 33.91 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4608.3 SGR 344.2 SG3 158.5 RRT -.3510 RRF -.4891 RTF .8715 SG8 4621.1 R23 .1941 R13 -.8718 SG1 4809.9 SG2 322.2 THA 178.49 ST 1840.0 SR 344.0 SS 574.3 CRT -.9245 CRS .9987 CST -.9306 TOE-1.2999 TRA-1.5584 TC3-4.0939 BAU 1.0530 RDE .2633 RRA .0036 RC3 -.0127 FAU .03975 LSA 1943.9 MSA 234.1 SSA FOE -.7255 FRA -.0344 FC3-1.7889 BSP 14258 14.7 EL1 1867.4 EL2 129.2 ALF 170.15 BOE 1.3263 BRA 1.5594 BC3 4.0939 FSP -501 ARRIVAL DATE DEC 30 1967 FLIGHT TIME 154.00 LAUNCH DATE JUL 29 1967 DISTANCE 458.686 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.225 GAL -4.30 AZL 94.60 MCA 227.22 SMA 125.24 ECC .22507 INC 4.6019 V1 29.331 RP 107.65 LAP 3.38 LOP 172.34 VP 37.495 GAP 10.23 AZP 86.87 TAL 195.14 TAP 62.36 RCA 97.05 APO 153.43 V2 35.201 RC 157.834 GL -29.47 GP 18.47 ZAL 114.54 ZAP 156.93 ETS 50.41 ZAE 128.02 ETE 165.19 ZAC 75.33 ETC 9.14 CLP-165.93 PLANETOCENTRIC CONIC C3 18.187 VHL 4.265 DLA -29.47 RAL 173.26 RAD 6567.7 VEL 11.814 PTH 2.09 VHP 7.070 DPA 17.14 RAP 195.05 ECC 1.2993 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 38 15 9 50 39 495.9 23.64 339.76 40.60 111.22 7 19 59 1095.93 20.94 81.48 298.85 44.0 23.65 9 39 55 644.00 20.96 306.58 40.60 111.20 98.52 20.78 305.06 143.0 312.42 39.11 114.54 9 21 22 100.00 9 8 59 743.02 17.62 264.95 107.89 12 9 36 122.90 8 56 44 99.65 14 41 36 26.57 10 33 36 100.00 5760.19 24.36 273.05 41.91 5160.2 307.22 110.00 8 45 6 818.28 9.85 313.72 34.74 214.3 14.12 5257.69 228.24 13 13 58 237.34 44.31 4657.7 33.93 110.00 32.95 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1883.1 SR 352.0 SS 572.8 CRT -.9415 CRS .9983 CST -.9335 LSA 1986.9 MSA 224.3 SSA 16.1 RCT 4676.7 SCR 352.9 SC3 156.9 RRT -.3453 RRF -.4599 RTF .8698 SCB 4690.0 R23 .1684 R13 -.6701 SCI 4678.3 SC2 331.1 THA 178.50 TDE-1.3140 TRA-1.3951 TC3-4.4057 BAU 1.0718 RDE .2620 RRA .0094 RC3 -.0257 FAU .03629 FDE -.6970 FRA .0330 FC3-1.8228 BSP 14453 EL1 1912.2 EL2 116.8 ALF 169.98 BDE 1.3398 BRA 1.3951 BC3 4.4058 FSP -494 FLIGHT TIME 156.00 ARRIVAL DATE JAN I 1968 LAUNCH DATE JUL 29 1967 DISTANCE 464.418 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 26.159 GAL -3.86 AZL 94.35 MCA 230.45 SMA 124.83 ECC .22656 INC 4.3472 V1 29.331
RP 107.68 LAP 3.35 LOP 175.58 VP 37.440 GAP 10.48 AZP 87.23 TAL 193.43 TAP 63.88 RCA 96.55 APO 153.11 V2 35.192
RC 159.863 GL -28.40 GP 17.31 ZAL 112.15 ZAP 158.33 ETS 50.29 ZAE 128.33 ETE 166.04 ZAC 73.28 ETC 8.71 CLP-166.76 PLANETOCENTRIC CONIC C3 17.303 VHL 4.160 DLA -29.74 RAL 176.60 RAD 6567.7 VEL 11.777 PTH 2.08 VHP 7.149 DPA 15.10 RAP 196.68 ECC 1.2848 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.15 7 44 13 508.7 24.10 1108.72 80.50 7 25 44 21.42 340.90 43.23 24.11 8.0 10 11 1 99.50 10 0 53 608.05 21.43 304.11 43.24 111.13 113.16 9 50 42 109.13 12 6 36 76.6 22.42 300.80 9 39 25 676.61 19.45 306.34 42.38 100.00 10 29 52 5603.43 23.42 275.92 44.03 5203.4 25.81 100.00 9 15 34 305.84 193.6 14.99 9 2 20 793.63 10.76 312.39 37.62 122.64 110.00 4659.2 33.93 228.36 99.71 14 51 6 13 23 27 5259.17 32.94 257.45 46.80 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1938.1 SR 361.4 SS 573.7 CRT -.9570 CRS .9963 CST -.9375 SGT 4750.4 SGR 363.2 SG3 155.5 RRT -.3444 RRF -.4370 RTF .8696 SGB 4764.2 R23 .1449 R13 -.8699 TOE-1.3389 TRA-1.8270 TC3-4.7133 BAU 1.0904 RDE .2823 RRA .0144 RC3 -.0358 FAU .03688 FDE -.6727 FRA .0955 FC3-1.8451 BSP 14710 BDE 1.3644 BRA 1.2271 BC3 4.7135 FSP -490 LSA 2042.1 MSA 213.4 SSA 17.5 EL1 1968.8 EL2 103.2 ALF 169.85

FLIGHT TIME 150.00

SG1 4752.0 SG2 340.9 THA 178.48

ARRIVAL CATE JAN 3 1968

EL1 2219.5 EL2 41.4 ALF 169.56

LAUNCH DATE JUL 29 1967

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HELIOCENTRIC CONIC
                                                                             DISTANCE 470.134
    RL 151.90 LAL -.00 LOL 305.21 VL 26.094 GAL -3.42 AZL 94.12 MCA 233.68 SMA 124.43 ECC .22824 INC 4.1153 V1 29.331 RP 107.71 LAP 3.31 LOP 178.82 VP 37.386 GAP 10.73 AZP 87.56 TAL 191.71 TAP 65.39 RCA 96.03 APO 152.83 V2 35.183 RC 161.876 GL -27.33 GP 16.30 ZAL 109.53 ZAP 159.62 ETS 50.37 ZAE 128.60 ETE 166.79 ZAC 71.18 ETC 8.33 CLP-167.58
   PLANETOCENTRIC CONIC
    C3 16.572 VHL 4.071 DLA -30.09 RAL 180.14 RAO 6567.7 VEL 11.745 PTH 2.07 VHP 7.238 DPA 13.20 RAP 198.39 ECC 1.2727
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH 'INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.17 7 49.57

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10 23 37 5858.55
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  DIFFERENTIAL CORRECTIONS
                                                                         SGT 4820.3 SGR 374.4 SG3 153.8

RRT -.3456 RRF -.4188 RTF .8700

SGB 4834.9 R23 .1242 R13 -.8703

SGI 4822.1 SG2 351.2 THA 178.45
                                                                                                                                ST 1998.7 SR 371.6 SS 575.0
CRT -.9703 CRS .9929 CST -.9419
    TOE-1.3697 TRA-1.0512 TC3-5.0035 BAU 1.1086
    ROE .2639 RRA .0185 RC3 -.0434 FAU .03541
FDE -.6502 FRA .1556 FC3-1.8498 BSP 14965
BDE 1.3949 BRA 1.0514 BC3 5.0037 FSP -487
                                                                                                                                LSA 2102.9 MSA 201.9 SSA 19.1
                                                                                                                                EL1 2031.0 EL2 88.4 ALF 169.75
                                                                              FLIGHT TIME 160.00
                                                                                                                                             ARRIVAL DATE JAN 5 1968
                                                                              DISTANCE 475.833
  HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 26.029 GAL -2.96 AZL 33.90 MCA 236.91 SMA 124.04 ECC .23012 INC 3.9020 V1 29.331 RP 107.74 LAP 3.27 LOP 182.06 VP 37.331 GAP 10.99 AZP 87.87 TAL 189.99 TAP 66.90 RCA 95.50 APO 152.58 V2 35.172 RC 163.875 GL -26.26 GP 15.40 ZAL 106.70 ZAP 160.80 ETS 50.65 ZAE 128.82 ETE 167.46 ZAC 69.04 ETC 8.00 CLP-168.39
   PLANETOCENTRIC CONIC
    C3 15.983 VHL 3.998 DLA -30.49 RAL 183.86 RAD 6567.6 VEL 11.720 PTH
                                                                                                          2.07 VHP 7.338 OPA 11.41 RAP 200.16 ECC 1.2630
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   -- TIME

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10 47 11 5822.53

7 37 17 1144

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       110.00
                                                                        MID-COURSE EXECUTION ACCURACY.
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 4888.0 SGR 385.8 SG3 152.0
RRT -.3486 RRF -.4047 RTF .8711
SGB 4903.2 R23 .1059 R13 -.8713
SGI 4889.9 SG2 361.5 THA 178.41
                                                                                                                                 ST 2063.4 SR 382.4 SS 575.6
CRT -.9811 CRS .9881 CST -.9463
    TDE-1.4050 TRA -.8678 TC3-5.2699 BAU 1.1261
    RDE .2667 RRA .0213 RC3 -.0485 FAU .03392
                                                                                                                               LSA 2167.6 MSA 190.2 SSA 20.6
ELÍ 2097.3 EL2 72.8 ALF 169.68
    FOE -.6283 FRA .2134 FC3-1.8371 BSP 15211
BOE 1.4300 BRA .8681 BC3 5.2701 FSP -482
                                                                                                                                            ARRIVAL DATE JAN 7 1968
                                                                              FLIGHT TIME 162,00
LAUNCH DATE JUL 29 1967
                                                                             DISTANCE 481.514
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 25.965 GAL -2.48 AZL 93.70 MCA 240.13 SMA 123.66 ECC .23222 INC 3.7039 VI 29.331
RP 107.78 LAP 3.21 LOP 185.29 VP 37.277 GAP 11.25 AZP 88.15 TAL 188.26 TAP 68.40 RCA 94.94 APO 152.37 VZ 35.162
RC 165.860 GL -25.16 GP 14.61 ZAL 103.66 ZAP 161.90 ETS 51.12 ZAE 129.02 ETE 168.05 ZAC 66.85 ETC 7.72 CLP-169.19
   PLANETOCENTRIC CONIC
                                                                                                                                        9.70 RAP 202.00 ECC 1.2556
    C3 15.533 VHL 3.941 DLA -30.91 RAL 187.77 RAD 6567.6 VEL 11.701 PTH 2.06 VHP 7.448 DPA
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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11 11 7 5789.71
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11 11 7 5789.71
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121.57 10 16 57
101.25 15 17 58
                                                                                                                                                                     266.83
                                                                                                                                     5189.7
                                                                                                                                                      25.56
                                                       22.85
                                                                     274.67
                                                                                      53.06
       102.95
                                                                                                                                                                     300.98
                    10 5 8
                                      708.43
                                                       13.85
                                                                      307.72
                                                                                       48.34
                                                                                                                                      108.4
                                                                                                                                                      17.92
       110.00
                   13 49 43 5295.04
                                                                     240.16
                                                                                      56.24
                                                                                                                                     4695.0
                                                                                                                                                       33.70
                                                                                                                                                                     231.13
                                                       32.49
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RRT - .3527 RRF - .393.8 RTF .8727
SCB 4966.1 R23 .0900 R13 - .8729
SCI 4952.2 SC2 371.6 THA 178.37
                                                                                                                               ST 2126.5 SR 393.5 SS 574.4

CRT -.9891 CRS ..9819 CST -.9503

LSA 2230.3 MSA 178.8 SSA 22.2

EL1 2161.9 EL2 56.9 ALF 169.62
    TOE-1.4408 TRA -.6752 TC3-5.5020 BAU 1.1426
    ROE .2705 RRA .0229 RC3 -.0511 FAU .03240
FOE -.6060 FRA .2695 FC3-1.8059 BSP .15435
BOE 1.4660 BRA .6755 BC3 5.5023 FSP -477
                                                                                                                                             ARRIVAL DATE JAN 9 1968
LAUNCH DATE JUL 29 1967
                                                                              FLIGHT TIME 164.00
                                                                             DISTANCE 487.176
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 25.903 GAL -1.99 ATL 93.52 MCA 243.36 SMA 123.28 ECC .23453 INC 3.5184 VI 29.331 RP 107.81 LAP 3.14 LOP 188.52 VP 37.223 GAP 11.52 ATP 88.42 TAL 186.53 TAP 69.89 RCA 94.37 APO 152.20 V2 35.151 RC 167.829 GL -24.03 GP 13.90 ZAL 100.44 ZAP 162.92 ETS 51.79 ZAE 129.19 ETE 168.57 ZAC 64.64 ETC 7.49 CLP-169.98
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.99 7 53 26 1184.76 23.25 347.37 56.96 111.62 8 13 11 584.8 25.98 339.51 104.01 11 34 57 5761.53 23.26 272.72 56.97 111.61 13 10 58 5161.5 25.99 764.86
    C3 15.219 VHL 3.901 DLA -51.33 RAL 191.87 RAD 6567.6 VEL 11.688 PTH 2.06 VHP 7.567 DPA
                                                                                                                                         8.09 RAP 203.88 ECC 1.2505
                                                                                                   339.51
                                                                                                                                       584.8
                                                                      347.37
                                                                                       56.96
                                                                                                                                                       25.98
                      7 53 26 1184.76
                                                       23.25
        75.99
                                                       23.26
                                                                      272.72
                                                                                       56.97
                                                                                                                                      5161.5
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                                                                                                                                                                     264.86
                     11 34 57
                                    5761.53
       104.01
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                                                                                                                                                       18.88
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                                                        14.86
                                                                      306.12
                                                                                       52.56
       110.00
                    10 28 50
                                      679.86
                                                                                                                                      4714.4
                                                                                                                                                       33.55
                                                                                                                                                                     232.63
                    13 58 43 5314.43
       110.00
                                                       32.23
                                                                      241.61
                                                                                       60.03
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        9GT 5001.4 SGR 408.2 SG3 147.4
RRT -.3565 RRF -.3848 RTF .8739
SG8 5018.1 R23 .0765 R13 -.8741
                                                                                                                               ST 2182.7 SR 404.4 SS 569.9
CRT -.9946 CRS .9739 CST -.9536
LSA 2285.5 HSA 168.5 SSA 23.8
     TOE-1.4742 TRA -.4710 TC3-5.6844 BAU 1.1566
    ROE .2753 RRA .0229 RC3 -.0518 FAU .03079
FOE -.5818 FRA .3256 FC3-1.7517 BSP 15589
BOE 1.4996 BRA .4715 BC3 5.6847 FSP -467
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FLIGHT TIME 158.00

SG1 5003.6 SG2 381.2 THA 178.32

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LAUNCH DATE JUL 29 1967
                                                                                         FLIGHT TIME 166.00
                                                                                                                                                                ARRIVAL DATE JAN 11 1968
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 492.816
     RL 151.90 LAL -.00 LOL 305.21 VL 25.841 GAL -1.49 AZL 93.34 MCA 246.58 SMA 122.92 ECC .23709 TNC 3.3431 VI 29.331 RP 107.84 LAP 3.07 LOP 191.76 VP 37.169 GAP 11.80 AZP 88.67 TAL 184.80 TAP 71.38 RCA 93.78 APO 152.06 V2 35.139 RC 169.783 GL -22.85 GP 13.27 ZAL 97.07 ZAP 163.88 ETS 52.68 ZAE 129.35 ETE 169.03 ZAC 62.39 ETC 7.29 CLP-170.76
     PLANETOCENTRIC CONIC
      C3 15.044 VML 3.879 OLA -31.72 RAL 196.13 RAD 6567.6 VEL 11.680 PTH 2.05 VMP 7.695 OPA
      ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEZHTH INJETHE PO CST TIM INJEET INJE LONG
                        8 4 3 1202.26
11 58 22 5738.86
          75.06
                                                               23.59
                                                                                348.84
                                                                                                  61.17
                                                                                                                    111.85
                                                                                                                                  8 24 5
                                                                                                                                                        602.3
         104.94
                                                               23.60
                                                                               271.15
                                                                                                                                 13 34 1
                                                                                                   61.17
                                                                                                                    111.84
                                                                                                                                                        5138.9
                                                                                                                                                                           26.36
                       8 4 3 1202.26
11 58 22 5738.86
- 74 11 653.55
          75.06
                                                               23.59
                                                                                348.84
                                                                                                  61.17
                                                                                                                    111.85
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                                                                                                                                                         602.3
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         104.94
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                                                                               271.15
                                                                                                   61.17
                                                                                                                    111.84
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                                                                                                                                                                                            263.28
                                                                                                                    120.72 11 4 5
102.95 15 37 20
         110.00
                                                                                                                                                           53.5
                                                               15.78
                                                                               304.64
                                                                                                  57.08
                                                                                                                                                                           19.74
                                                                                                                                                                                            297.75
                       14 8 24 5335.57
                                                                                                                                                       4735.6
         110.00
                                                               31.91
                                                                               243.18
                                                                                                  64.11
                                                                                                                                                                           33.37
    DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   SCT 5058.0 SCR 419.0 SC3 145.1
RRT - .3628 RRF - .3601 RTF .8769
SCB 5075.3 R23 .0644 R13 -.8770
SCI 5060.3 SC2 390.3 THA 178.27
     TDE-1.5076 TRA -.2612 TC3-5.8249 BAU 1.1716
RDE .2813 RRA .0220 RC3 -.0495 FAU .02929
                                                                                                                                                  ST 2235.3 SR 415.7 SS 564.4
CRT -.9974 CRS .9648 CST -.9568
     FOE -.5584 FRA .3776 FC3-1.6857 BSP 15804
                                                                                                                                                  LSA 2337.0 MSA 159.7 SSA 25.3
     BOE 1.5336 BRA .2621 BC3 5.8251 FSP -462
                                                                                                                                                   EL1 2273.4 EL2 29.3 ALF 169.49
LAUNCH DATE JUL 29 1967
                                                                                         FLIGHT TIME 168.00
                                                                                                                                                                ARRIVAL DATE JAN 13 1968
    HELIOCENTRIC CONIC
                                                                                       DISTANCE 498.432
     RL 151.90 LAL -.00 LOL 305.21 VL 25.780 GAL -.96 AZL 93.18 HCA 249.80 SMA 122.56 ECC .23991 INC 3.1763 V1 29.331 RP 107.88 LAP 2.98 LOP 194.98 VP 37.116 GAP 12.09 AZP 88.90 TAL 183.06 TAP 72.86 RCA 93.16 APO 151.96 V2 35.128 RC 171.722 GL -21.63 GP 12.71 ZAL 93.56 ZAP 164.77 ETS 53.79 ZAE 129.49 ETE 169.45 ZAC 60.12 ETC 7.14 CLP-171.53
    PLANETOCENTRIC CONIC
     C3 15.013 VHL 3.875 DLA -32.06 RAL 200.55 RAD 6567.6 VEL 11.679 PTH 2.05 VHP 7.833 DPA
     C3 15.013 VML 3.875 DLA -32.06 RAL 200.55 RAD 6567.6 VEL 11.679 PTH 2.05 VMP 7.833 DPA 5.06 RAP 207.79 ECC 1.2471 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.31 8 16 30 1217.89 23.84 350.14 65.65 112.10 8 36 48 617.9 26.62 342.26 105.69 12 21 7 5722.29 23.85 270.00 65.66 112.08 13 56 29 5122.3 26.63 262.12 74.31 8 16 30 1217.89 23.84 350.14 65:65 112.10 8 36 48 617.9 26.62 342.26 105.69 12 21 7 5722.29 23.85 270.00 65.66 112.08 13 56 29 5122.3 26.63 262.12 105.69 12 21 7 5722.29 23.85 270.00 65.66 112.08 13 56 29 5122.3 26.63 262.12 110.00 11 17 35 631.32 16.55 303.37 61.83 120.35 11 28 6 31.3 20.45 296.43
                                                                                                                                                             5.06 RAP 207.79 ECC 1.2471
                       11 17 35
                                                                                                                                 11 28 6
                                       5356.87
                                            631.32
                                                               16.55
                                                                               303.37
                                                                                                  61.83
                                                                                                                    120.35
                                                                                                                                                          31.3
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                                                                                                                                                                                            296.43
         110.00
                        14 19 13
                                                               31.58
                                                                               244.75
                                                                                                                    103.83 15 48 30
                                                                                                                                                       4756.9
                                                                                                  68.48
                                                                                                                                                                           33.15
                                                                                                                                                                                            235.88
    DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   SCT 5109.2 SGR 429.1 SG3 142.7
RRT -.3694 RRF -.3771 RTF .8797
SGB 5127.1 R25 .0539 R13 -.8798
SGI 5111.6 SG2 398.5 THA 178.21
     TOE-1.5353 TRA -.0398 TC3-5.9056 BAU 1.1854
                                                                                                                                                  ST 2274.6 SR 426.4 SS 555.1
CRT -.9979 CRS .9537 CST -.9590
     RDE .2883 RRA .0193 RC3 -.0452 FAU .02779
     FOE -.5328 FRA .4300 FC3-1.6027 BSP 15982
BOE 1.5622 BRA .0442 BC3 5.9058 FSP -454
                                                                                                                                                   LSA 2374.7 MSA 153.6 SSA 26.5
                                                                                                                                                   EL1 2314.0 EL2 27.0 ALF 169.40
LAUNCH DATE JUL 29 1967
                                                                                        FLIGHT TIME 170.00
                                                                                                                                                               ARRIVAL DATE JAN 15 1968
    MELIOCENTRIC CONIC
                                                                                       DISTANCE 504.023
     RL 151.90 LAL -.00 LOL 305.21 VL 25.720 GAL -.42 AZL 93.02 HCA 253.02 SMA 122.21 ECC .24300 INC 3.0164 V1 29.331
RP 107.92 LAP 2.88 LOP 198.21 VP 37.063 GAP 12.38 AZP 89.12 TAL 181.32 TAP 74.34 RCA 92.52 APO 151.91 V2 35.116
RC 173.647 GL -20.36 GP 12.20 ZAL 89.95 ZAP 165.60 ETS 55.14 ZAE 129.61 ETE 169.82 ZAC 57.83 ETC 7.04 CLP-172.29
    PLANETOCENTRIC CONIC
     C3 15.132 VHL 3.890 DLA -32.31 RAL 205.07 RAD 6567.6 VEL 11.684 PTH 2.05 VHP 7.980 DPA 3.64 RAP 209.80 ECC 1.2490
     C3 13.132 VML 3.890 DLA -32.31 RAL 205.07 RAD 6567.6 VEL 11.684 PTH 2.05 VMP 7,980 DPA 3.64 RAP 209.80 ECC 1.2490 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.75 8 30 51 1231.25 23.97 351.21 70.38 112.34 8 51 22 651.2 26.79 343.34 106.25 12 42 54 5712.47 23.98 269.31 70.39 112.33 14 18 6 5112.5 26.80 261.44 73.75 8 30 51 1231.25 23.97 351.21 70.38 112.34 8 51 22 651.2 26.79 343.34 106.25 12 42 54 5712.47 23.98 269.31 70.39 112.33 14 18 6 5112.5 26.80 261.44 110.00 11 41 12 615.32 17.10 302.46 66.77 120.06 11 51 28 15.3 20.96 295.46
                                                                                                                   14 31 42 5376.40
        110.00
                                                              31.25
                                                                               246.18
                                                                                                  73.12
                                                                                                                                                       4776.4
                                                                                                                                                                          32.94
                                                                                                                                                                                           237.36
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5156.9 SGR 438.4 SG3 140.0
RRT -.3763 RRF -.3762 RTF .8830
SG8 5175.5 R23 .0452 R13 -.8831
SG1 5159.6 SG2 406.0 THA 178.16
     TDE-1.5558 TRA .1896 TC3-5.9228 BAU 1.1982
                                                                                                                                                 ST 2297.8 38 436.6 SS 542.7
CRT -.9962 CRS .9407 CST -.9606
     ROE .2964 RRA .0153 RC3 -.0393 FAU .02630
FOE -.5059 FRA .4799 FC3-1.5044 BSP .16161
BOE 1.5638 BRA .1902 BC3 5.9230 FSP -447
                                                                                                                                                 LSA 2396.2 MSA 150.4 SSA 27.3
EL1 2338.7 EL2 37.5 ALF 169.28
LAUNCH DATE JUL 29 1967
                                                                                        FLIGHT TIME 172.00
                                                                                                                                                               ARRIVAL DATE JAN 17 1968
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 509.585
    RL 151.90 LAL -.00 LOL 305.21 VL 25.661 GAL .14 A7L 92.86 HCA 256.24 SMA 121.87 ECC .24638 INC 2.8620 V1 29.331
RP 107.96 LAP 2.78 LOP 201.43 VP 37.010 GAP 12.70 A7P 89.32 TAL 179.58 TAP 75.82 RCA 91.84 APO 151.90 V2 35.103
RC 175.555 GL -19.05 GP 11.74 ZAL 86.28 ZAP 166.38 ETS 56.73 ZAE 129.73 ETE 170.15 ZAC 55.52 ETC 6.97 CLP-173.05
   PLANETOCENTRIC CONIC
     C3 15.411 VHL 3.926 DLA -32.47 RAL 209.67 RAD 6567.6 VEL 11.696 PTH 2.06 VMP 8.139 DPA
                                                                                                                                                           2.28 RAP 211.84 ECC 1.2536
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                112.58
                                                                                                                                  9 7 38
         73.41
                         8 46 56
                                         1242.41
                                                              23.98
                                                                              352.07
                                                                                                                                                        642.4
                                                                                                  75.31
                                                                                                                                                                          26.82
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                                                                                                  75.32
                                                                                                                                  14 38 40
        106.59
                       13 3 31
                                          5709.51
                                                                                                                   112.57
                                                              23.99
                                                                              269.09
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          73.41
                         8 46 56
                                         1242.41
                                                              23.98
                                                                               352.07
                                                                                                                                  9 7 38
                                                                                                  75.31
                                                                                                                   112.58
                                                                                                                                                        642.4
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                                                                                                                                                                                           344.21
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        106.59
                       13 3 31
                                          5709.51
                                                              23.99
17.35
                                                                              269.09
                                                                                                  75.32
                                                                                                                   112.57
                                                                                                                                                       5109.5
                                                                                                                                                                          26.63
                                                                                                                                                                                           261.23
                                                                                                                   119.92 12 13 20
105.24 16 16 17
                       12 3 13
                                           607.83
                                                                               302.03
                                                                                                  71.43
                                                                                                                                                           7.8
                                                                                                                                                                          21.20
                                                                                                                                                                                           295.01
                       14 46 24
                                          5392.09
                                                                              247.32
                                                                                                  78.02
                                                                                                                                                       4792.1
                                                               30.98
                                                                                                                                                                          32.75
                                                                                                                                                                                           238.55
   DIFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TOE-1.5637 TRA .4337 TC3-5.8489 BAU 1.2051
ROE .3050 RRA .0095 RC3 -.0357 FAU .02435
FOE -.4740 FRA .5321 FC3-1.3677 BSP 16248
                                                                                   SCT 5182.6 SCR 446.3 SC3 136.0
RRT -.3783 RRF -.3740 RTF .8825
SCB 5201.8 R23 .0411 R13 -.8826
                                                                                                                                               ST 2297.4 SR 445.2 SS 524.3
CRT -.9921 CRS .9237 CST -.9606
LSA 2393.2 MSA 151.9 SSA 27.5
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SG1 5185.4 SG2 412.9 THA 178.12

EL1 2339.5 EL2 54.8 ALF 169.11

BOE 1.5932 BRA .4336 BC3 5.8490 FSP -431

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ARRIVAL DATE JAN 19 1968
                                                                                                                    FLIGHT TIME 174.00
LAUNCH DATE JUL 29 1967
                                                                                                                   DISTANCE 515.117
     RL 151.90 LAL -.00 LOL 305.21 VL 25.602 GAL .72 A7L 92.71 MCA 259.45 SMA 121.54 ECC .25009 INC 2.7119 V1 29.331
RP 107.99 LAP 2.67 LOP 204.65 VP 36.957 GAP 13.02 A7P 89.50 TAL 177.84 TAP 77.29 RCA 91.14 APO 151.93 V2 35.091
RC 177.448 GL -17.71 GP 11.33 ZAL 82.57 ZAP 167.10 ETS 58.60 ZAE 129.83 ETE 170.44 ZAC 53.20 ETC 6.94 CLP-173.80
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 15.861 VHL 3.983 DLA -32.52 RAL 214.30 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 8.308 DPA .97 RAP 213.92 ECC 1.2610 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.30 9 4 44 1250.96 23.84 352.66 80.41 112.80 9 25 35 651.0 26.72 344.82 106.70 13 22 38 5713.99 23.85 269.37 80.41 112.79 14 57 52 5114.0 26.73 261.53 106.70 13 22 38 5713.99 23.84 352.66 80.41 112.80 9 25 35 651.0 26.72 344.82 106.70 13 22 38 5713.99 23.85 269.37 80.41 112.80 9 25 35 651.0 26.72 344.82 106.70 13 22 38 5713.99 23.85 269.37 80.41 112.79 14 57 52 5114.0 26.73 261.53 110.00 12 22 49 610.75 17.25 302.19 76.92 119.98 12 32 59 10.7 21.11 295.19 110.00 15 3 44 5402.20 30.79 248.05 83.13 105.63 16 33 46 4802.2 32.63 239.31
      C3 15.861 VHL 3.983 DLA -32.52 RAL 214.30 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 8.308 DPA
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                 ST 2279.2 SR 453.3 SS 506.7
CRT -.9857 CRS .9046 CST -.9609
                                                                                                              SCT 5231.9 SCR 453.8 SC3 134.2
RRT -.3888 RRF -.3769 RTF .8886
SCB 5251.5 R23 .0316 R13 -.8887
SCI 5234.9 SC2 417.8 THA 178.06
      TOE-1.5624 TRA .6861 TC3-5.7463 BAU 1.2185
RDE .3151 RRA .0025 RC3 -.0249 FAU .02324
FDE -.4445 FRA .5813 FC3-1.2682 BSP 16426
BDE 1.5939 BRA .6861 BC3 5.7464 FSP -429
                                                                                                                                                                                                 LSA 2373.1 MSA 156.6 SSA 27.0
                                                                                                                                                                                                 EL1 2322.6 EL2 74.9 ALF 168.90
                                                                                                                                                                                                                    ARRIVAL DATE JAN 21 1968
                                                                                                                     FLIGHT TIME 176.00
LAUNCH DATE JUL 29 1967
      RL 151.90 LAL -.00 LOL 305.21 VL 25.545 GAL 1.33 A7L 92.57 HCA 262.67 SMA 121.21 ECC .25414 INC 2.5650 V1 29.331
RP 108.03 LAP 2.54 LOP 207.87 VP 36.905 GAP 13.36 AZP 89.67 TAL 176.10 TAP 78.77 RCA 90.41 APO 152.02 V2 35.078
RC 179.325 GL -16.34 GP 10.95 ZAL 78.87 ZAP 167.78 ETS 60.75 ZAE 129.93 ETE 170.71 ZAC 50.87 ETC 6.97 CLP-174.54
                                                                                                                     DISTANCE 520.613
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                                                                                                -.29 RAP 216.03 ECC 1.2715
      C3 16.499 VHL 4.062 DLA -32.45 RAL 218.91 RAD 6567.7 VEL 11.742 PTH 2.07 VHP 8.490 DPA -.29 RAP 216.03 ECC 1.2715
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.45 9 24 6 1256.88 23.55 352.98 85.60 112.99 9 45 2 656.9 26.46 345.17
106.55 13 40 2 5726.01 23.57 270.16 85.61 112.98 15 15 28 5126.0 26.47 262.35
73.45 9 24 6 1256.88 23.55 352.98 85.60 112.99 9 45 2 656.9 26.46 345.17
106.55 13 40 2 5726.01 23.57 270.16 85.61 112.98 15 15 28 5126.0 26.47 262.35
110.00 12 39 31 624.99 16.77 303.01 81.99 120.23 12 49 56 25.0 20.66 296.05
110.00 15 23 45 5405.90 30.73 248.31 88.44 105.78 16 53 52 4805.9 32.58 239.59
                                                                                                                                                               2.07 VHP 8.490 DPA
      C3 16.499 VHL 4.062 DLA -32.45 RAL 218.91 RAD 6567.7 VEL 11.742 PTH
                            9 24 6 1256.88
13 40 2 5726.01
9 24 6 1256.88
13 40 2 5726.01
12 39 31 624.99
15 23 46 5405.90
                                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SCI 5268.5 SCR 460.1 SC3 151.5

RRT - .3969 RRF - .3801 RTF .8931

SCB 5288.6 R23 .0255 R13 - .8932

SCI 5271.7 SC2 422.0 THA 178.00
                                                                                                                                                                                                  ST 2241.1 SR 459.8 SS 486.4
CRT -.9766 CRS .8813 CST -.9603
LSA 2332.9 MSA 165.5 SSA 26.0
       TDE-1.5495 TRA .9496 TC3-5.5681 BAU 1.2282
       ROE .3260 RRA -.0060 RC3 -.0160 FAU .02188
       FOE -.4129 FRA .6299 FC3-1.1482 BSP 16601
BOE 1.5834 BRA .9496 BC3 5.5681 FSP -425
                                                                                                                                                                                                  EL1 2285.7 EL2 96.9 ALF 168.65
                                                                                                                                                                                                                   ARRIVAL DATE JAN 23 1968
                                                                                                                     FLIGHT TIME 178.00
LAUNCH DATE JUL 29 1967
                                                                                                                     DISTANCE 526.071
     HELIOCENTRIC CONIC
      RL 151.90 LAL -.00 LOL 305.21 VL 25.488 GAL 1.96 A7L 92.42 ACA 265.88 SMA 120.89 ECC .25857 INC 2.4204 V1 29.331 RP 108.07 LAP 2.41 LOP 211.08 VP 36.854 GAP 13.72 A7P 89.83 TAL 174.37 TAP 80.24 RCA 89.63 APO 152.15 V2 35.065 RC 181.185 GL -14.97 GP 10.61 ZAL 75.20 ZAP 168.40 ETS 63.21 ZAE 130.02 ETE 170.95 ZAC 48.53 ETC 7.03 CLP-175.28
      PLANETOCENTRIC CONIC
       C3 17.341 VHL 4.164 DLA -32.26 RAL 223.44 RAD 6567.7 VEL 11.778 PTH 2.08 VHP 8.684 DPA -1.50 RAP 218.16 ECC 1.2854
       C3 17.341 VML 4.164 DLA -32.26 RAL 223.44 RAD 6567.7 VEL 11.778 PTH 2.08 VMP 8.684 DPA -1.50 RAP 218.16 ECC 1.2854 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM IN.2 LAT INJ 2 LONG 73.86 9 44 53 1259.95 23.12 353.01 90.86 113.15 10 5 53 659.9 26.05 345.24 106.14 13 55 26 5745.86 23.13 271.47 90.87 113.14 15 31 11 5145.9 26.06 263.70 106.14 13 55 26 5745.86 23.13 271.47 90.86 113.15 10 5 53 659.9 26.05 345.24 106.14 13 55 26 5745.86 23.13 271.47 90.87 113.14 15 31 11 5145.9 26.06 263.70 106.00 12 53 18 650.15 15.90 304.45 86.98 120.67 13 4 8 50.2 19.85 297.55 110.00 15 46 11 5403.65 30.77 248.15 93.88 105.69 17 16 15 4803.6 32.61 239.42 TOF-1.5200 TRA 1.2284 TC3.4.3239 RAU 1.2342 SCR 464.9 SC3 128.7 ST 2179.7 SR 464.2 SS 464.0
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                  ST 2179.7 SR 464.2 $5 464.0
CRT -.9640 CRS .8516 CST -.9587
                                                                                                             SGT 5294.2 SGR 464.9 SG3 128.7

RRT -.4035 RRF -.3831 RTF .8964

SG8 5314.6 R23 .0209 R13 -.8965

SG1 5297.6 SG2 425.2 THA 177.96
        TDE-1.5200 TRA 1.2284 TC3-5.3239 BAU 1.2342
        ROE .3373 RRA -.0163 RC3 -.0083 FAU .02043
FOE -.3787 FRA .6803 FC3-1.0200 BSP 16653
                                                                                                                                                                                                LSA 2269.2 MSA 178.8 SSA 24.7
EL1 2225.3 EL2 120.9 ALF 168.36
        BOE 1.5570 BRA 1.2285 BC3 5.3239 FSP -415
                                                                                                                                                                                                                     ARRIVAL DATE JAN 25 1968
                                                                                                                      FLIGHT TIME 180.00
LAUNCH DATE JUL 29 1967
                                                                                                                     DISTANCE 531.484
       RL 151.90 EAL -.00 LOL 305.21 VL 25.433 GAL 2.61 A7L 92.28 MCA 269.08 SMA 120.58 ECC .26342 INC 2.2769 VI 29.331 RP 108.11 LAP 2.28 LOP 214.29 VP 36.803 GAP 14.10 A7P 89.96 TAL 172.64 TAP 81.72 RCA 88.82 APO 152.34 V2 35.052 RC 183.028 GL -13.61 GP 10.30 7AL 71.61 7AP 168.96 ETS 65.99 7AE 130.09 ETE 171.17 7AC 46.19 ETC 7.16 CLP-176.02
      PLANETOCENTRIC CONIC
        C3 18.409 VHL 4.291 DLA -31.96 RAL 227.87 RAD 6567.7 VEL 11.823 PTH 2.09 VHP 8.893 DPA -2.66 RAP 220.32 ECC 1.3030 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.53 10 7 1 1259.83 22.54 352.74 96.13 113.27 10 28 1 659.8 25.49 345.01
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113.26 15 44 47
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                                                                                                          273.33
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                                                                                    22.55
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113.26 15 44 47
121.22 13 15 52
105.42 17 40 15
                                 14 8 34 5773.82
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                                                                                    22.54
                                 10 7 1
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             105.47
                                 14 8 34
                                                        5773.82
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                                                                                                                                   91.87
             110.00
                                 13 4 27
                                                           684.80
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                                                                                                                                                                                                                                                          238.91
                                 16 10 19 5396.85
                                                                                                          247.66
                                                                                                                                   99.41
                                                                                     30.89
             110.00
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                               ST 2108.0 SR 467.1 SS 442.9
CRT -.9477 CRS .8177 CST -.9572
LSA 2195.3 MSA 195.0 SSA 23.2
                                                                                                                SCT 5321.9 SCR 468.9 SC3 125.9
RRT -.4111 RRF -.3884 RTF .9006
SGB 5342.5 R23 .0173 R13 -.9007
         TDE-1.4816 TRA 1.5156 TC3-5.0417 BAU 1.2408
        ROE .3496 RRA -.0277 RC3 -.0005 FAU .01909
FDE -.3459 FRA .7267 FC3 -.8976 BSP 16803
BDE 1.5223 BRA 1.5158 BC3 5.0417 FSP -409
                                                                                                                                                                                                ELI 2154.2 EL2 145.8 ALF 168.08
                                                                                                          SG1 5325.4 SGZ 427.2 THA 177.91
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ARRIVAL DATE JAN 27 1968

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FLIGHT TIME 182.00
LAUNCH DATE JUL 29 1967
                                                                                                DISTANCE 536.848
    HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 25.378 GAL 3.30 AZL 92.13 HCA 272.29 SMA 120.28 ECC .26871 INC 2.1339 V1 29.331
RP 108.16 LAP 2.13 LOP 217.50 VP 36.752 GAP 14.50 AZP 90.09 TAL 170.92 TAP 83.21 RCA 87.96 APO 152.60 V2 35.039
RC 184.853 GL -12.26 GP 10.02 ZAL 68.12 ZAP 169.47 ETS 69.12 ZAE 130.16 ETE 171.37 ZAC 43.84 ETC 7.33 CLP-176.75
    PLANETOCENTRIC CONIC
     C3 19.750 VHL 4.442 DLA -31.55 RAL 232.13 RAD 6567.8 VEL 11.879 PTH 2.11 VHP 9.118 DPA -3.78 RAP 222.51 ECC 1.3247
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            113.36 10 51 24
113.35 15 55 59
                      10 30 28 1256.05
14 19 9 5810.30
10 30 28 1256.05
14 19 9 5810.30
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                                                                                                         101.38
          75.47
                                                                    21.83
                                                                                      352.12
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         104.53
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113.35 15 55 59
121.83 13 25 33
105.05 18 5 9
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          104.53
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                                              727.02
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                                                                                      308.75
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         110.00
                                              5387.33
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ST 2024.1 SR 467.8 SS 422.1
CRT -.9264 CRS .7760 CST -.9551
                                                                                           SGT 5344.0 SGR 471.5 SG3 123.1
RRT -.4185 RRF -.3935 RTF .9047
      TDE-1.4296 TRA 1.8173 TC3-4.7213 BAU 1.2454
     ROE .3624 RRA. -.0406 RC3 .0062 FAU .01777
FOE -.3118 FRA .7784 FC3 -.7796 BSP 16915
BOE 1.4748 BRA 1-8177 BC3 4.7213 FSP -402
                                                                                           SG8 5364.8 R23 .0137 R13 -.9047
SG1 5347.7 SG2 427.9 THA 177.87
                                                                                                                                                                LSA 2108.9 MSA 214.4 55A 21.8
                                                                                                                                                                EL1 2070.3 EL2 172.2 ALF 167.83
                                                                                                 FLIGHT TIME 184.00
                                                                                                                                                                               ARRIVAL DATE JAN 29 1968
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 542.156
     RL 151.90 LAL -.00 LOL 305.21 VL 25.324 GAL 4.03 AZL 91.99 MCA 275.49 SMA 119.98 ECC .27449 INC 1.9903 V1 29.331
RP 108.20 LAP 1.98 LOP 220.71 VP 36.703 GAP 14.93 AZP 90.19 TAL 169.21 TAP 84.70 RCA 87.05 APO 152.91 VZ 35.025
RC 186.660 GL -10.95 GP 9.76 ZAL 64.74 ZAP 169.92 ETS 72.60 ZAE 130.22 ETE 171.55 ZAC 41.49 ETC 7.58 CLP-177.49
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 21.335 VHL 4.619 OLA -31.05 RAL 236.21 RAO 6567.9 VEL 11.946 PTH 2.13 VHP 9.360 OPA -4.85 RAP 224.71 ECC 1.3511
LNCH AFMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.70 10 55 18 1247.83 21.01 351.12 106.57 113.41 11 16 6 647.8 23.99 345.50
103.30 14 26 52 5855.92 21.02 278.83 106.57 113.40 15 4 28 5255.9 24.00 271.21
76.70 10 55 18 1247.83 21.01 351.12 106.57 113.41 11 16 6 647.8 23.99 345.50
103.30 14 26 52 5855.92 21.02 278.83 106.57 113.40 16 4 28 5255.9 24.00 271.21
103.30 14 26 52 5855.92 21.02 278.83 106.57 113.40 16 4 28 5255.9 24.00 271.21
110.00 13 20 42 774.95 11.45 311.37 101.30 122.43 13 33 37 174.9 15.64 304.79
110.00 17 0 38 5376.79 31.24 246.20 110.49 104.63 18 30 15 4776.8 32.94 237.39
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                                                               ST 1935.2 SR 466.5 SS 403.7
CRT -.8991 CRS .7278 CST -.9534
                                                                                           SGT 5361.0 SGR 472.7 SG3 120.3
RRT -.4258 RRF -.3994 RTF .9088
     TOE-1.3662 TRA 2.1326 TC3-4.3748 BAU 1.2478
     ROE .3756 RRA -.0549 RC3 .0118 FAU .01648
FOE -.2784 FRA .8286 FC3 -.6688 BSP 17021
                                                                                           SG8 5361.8 R23 .0110 R13 -.9089
SG1 5364.8 SG2 427.4 THA 177.84
                                                                                                                                                                LSA 2017.2 MSA 236.0 SSA 20.4
      BOE 1.4169 BRA 2.1333 BC3 4.3748 FSP -395
                                                                                                                                                                 ELI 1980.6 EL2 199.5 ALF 167.64
                                                                                                                                                                              ARRIVAL DATE JAN 31 1968
                                                                                                FLIGHT TIME 186.00
LAUNCH DATE JUL 29 1967
                                                                                               DISTANCE 547.400
    HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 25.271 GAL 4.78 AZL 91.85 MCA 278.69 SMA 119.69 ECC .28082 INC 1.8453 V1 29.331
RP 108.24 LAP 1.82 LOP 223.91 VP 36.653 GAP 15.38 AZP 90.28 TAL 167.51 TAP 86.20 RCA 86.08 APO 153.30 V2 35.012
RC 188.449 GL -9.68 GP 9.53 ZAL 61.51 ZAP 170.31 ETS 76.44 ZAE 130.26 ETE 171.72 ZAC 39.15 ETC 7.89 CLP-178.23
                               -9.68 CP
    PLANETOCENTRIC CONIC
     C3 23.260 VHL 4.823 DLA -30.48 RAL 240.08 RAD 6567.9 VEL 12.027 PTH 2.15 VHP 9.622 DPA -5.88 RAP 226.94 ECC 1.3828
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
                                                                                                                            113.42 11 42 25
113.41 14 41 36
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          78.23
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                        11 21 52 1233.60
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14 41 36
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104.22 18 55 0
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                                                                                      314.19
         110.00
                         13 26 40
                                               827.04
                                            5366.57
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                                                                                      245.46
                                                                                                         115.95
         110.00
                         17 25 34
                                                                    31.42
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 5371.2 SGR 472.4 SG3 117.7
RRT -,4324 RRF -.4049 RTF .9128
SGB 5391.9 R23 .0086 R13 -.9128
SGI 5375.1 SG2 425.7 THA 177.81
                                                                                                                                                               ST 1843.4 SR 463.0 SS 387.4

CRT -.8639 CRS .6708 CST ,9519

LSA 1922.2 MSA 259.6 SSA 19.1
     TDE-1.2888 TRA 2.4667 TC3-4.0077 BAU 1.2463
     RDE .3889 RRA -.0706 RC3 .0158 FAU .01517
FDE -.2443 FRA .8809 FC3 -.5645 BSP 17026
                                                                                                                                                                EL1 1886.9 EL2 227.8 ALF 167.57
     BOE 1.3462 BRA 2.4677 BC3 4.0077 FSP -385
                                                                                                                                                                               ARRIVAL DATE FEB 2 1968
                                                                                                FLIGHT TIME 188.00
LAUNCH DATE JUL 29 1967
                                                                                                DISTANCE 552.571
   HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 25.219 GAL 5.58 AZL 91.70 MCA 281.89 SMA 119.41 ECC .28774 INC 1.6979 VI 29.331
RP 108.28 LAP 1.66 LOP 227.11 VP 36.605 GAP 15.87 AZP 90.35 TAL 165.83 TAP 87.72 RCA 85.05 APO 153.76 VZ 34.999
RC 190.221 GL -8.46 GP 9.32 ZAL 58.44 ZAP 170.63 ETS 80.63 ZAE 130.30 ETE 171.87 ZAC 36.81 ETC 8.28 CLP-178.97
    PLANETOCENTRIC CONIC
     C3 25.551 VHL 5.055 DLA -29.84 RAL 243.73 RAD 6568.0 VEL 12.121 PTH 2.17 VMP 9.905 DPA -6.86 RAP 229.18 ECC 1.4205
     C3 25.551 VML 5.055 DLA -29.84 RAL 243.73 RAD 6568.0 VEL 12.121 PTH 2.17 VMP 9.905 DPA -6.86 RAP 229.18 ECC 1.4205 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.16 11 50 51 1210.67 19.07 347.45 116.67 113.40 12 11 2 610.7 22.07 339.94 14 31 19 693.01 19.08 309.39 116.67 113.39 14 42 52 93.0 22.08 301.88 100.00 14 18 15 734.72 17.85 311.92 116.10 114.38 14 30 30 134.7 21.00 304.53 100.00 14 46 36 644.20 20.30 306.31 117.22 112.42 14 57 20 44.2 23.17 298.69 110.00 13 31 37 882.07 7.48 317.13 110.24 123.45 13 46 19 282.1 11.83 310.73 110.00 17 49 43 5357.65 31.57 244.81 121.32 103.86 19 19 1 4757.7 33.15 235.94
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SCT 5379.7 SCR 471.0 SC3 115.1
RRT -.4396 RRF -.4117 RTF .9173
SCB 5400.3 R23 .0066 R13 -.9174
SCI 5383.7 SC2 422.8 TMA 177.78
                                                                                                                                                              ST 1759.9 $R 457.9 $S 375.1
CRT -.8215 CRS .6105 CST -.9521
     TDE-1.2060 TRA 2.8131 TC3-3.6422 BAU 1.2441
     ROE .4028 RRA -.0873 RC3 .0188 FAU .01395
FDE -.2125 FRA .9332 FC3 -.4728 8SP 17118
BDE 1.2715 BRA 2.8145 BC3 3.6422 FSP -379
                                                                                                                                                               LSA 1835.0 MSA 282.8 SSA 17.9
                                                                                                                                                                EL1 1800.5 ELZ 255.2 ALF 167.68
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ARRIVAL DATE FEB 4 1968

LAUNCH DATE JUL 29 1967

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HELIOCENTRIC CONIC
                                                                                                             DISTANCE 557.658
      RL 151.90 LAL -.00 LOL 305.21 VL 25.168 GAL 6.42 ATL 91.55 MCA 285.09 SMA 119.13 ECC .29534 INC 1.5471 V1 29.331
RP 108.32 LAP 1.49 LOP 230.30 YP 36.557 GAP 16.39 AZP 90.40 TAL 164.16 TAP 89.25 RCA 83.95 APO 154.31 V2 34.986
RC 191.975 GL -7.30 GP 9.12 ZAL 55.52 ZAP 170.88 ETS 85.14 ZAE 130.32 ETE 172.01 ZAC 34.48 ETC 8.77 CLP-179.72
    PLANETOCENTRIC CONIC
      C3 28.259 VHL 5.316 OLA -29.17 RAL 247.15 RAD 6568.1 VEL 12.233 PTH 2.20 VHP 10.212 DPA -7.80 RAP 231.43 ECC 1.4651
      LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                             21.00
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                                                                                                                   121.55
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113.34 14 38 10
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           82.69 12 24 17 1172.22
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                          14 25 8
13 50 51
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                                                     781.50
                                                                             18.01
                                                                                                 315.45
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           97.31
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109.73 17 18 21
123.82 13 51 24
103.57 19 42 1
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          100.00
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          100.00
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          110.00
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                                                                             31.64
         110.00
                                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SGT 5383.8 SGR 468.2 SGS 112.5
RRT -.4465 RRF -.4187 RTF .9219
SG8 5404.2 R23 .0051 R13 -.9219
SG1 5387.9 SG2 418.7 THA 177.76
                                                                                                                                                                                    ST 1685.2 SR 451.0 SS 366.2

CRT -.7710 CRS .5467 CST -.9537

LSA 1756.2 MSA 305.0 SSA 16.9

EL1 1721.7 EL2 281.1 ALF 168.02
      TDE-1.1153 TRA 3.1770 TC3-3.2803 BAU 1.2393
     RDE .4169 RRA -.1052 RC3 .0206 FAU .01277
FDE -.1819 FRA .9873 FC3 -.3912 BSP 17182
BDE 1.1907 BRA 3.1787 BC3 3.2803 FSP -372
                                                                                                              FLIGHT TIME 192.00
                                                                                                                                                                                                       ARRIVAL DATE FEB 6 1968
LAUNCH DATE JUL 29 1967
   HELIOCENTRIC CONIC
                                                                                                             DISTANCE 562.647
     RL 151.90 LAL -.00 LOL 305.21 VL 25.117 GAL 7.32 A7L 91.39 HCA 288.28 SMA 118.86 ECC .30367 INC 1.3917 V1 29.331
RP 108.36 LAP 1.32 LOP 233.49 VP 36.510 GAP 16.96 AZP 90.44 TAL 162.52 TAP 90.80 RCA 82.77 APO 154.95 V2 34.973
RC 193.712 GL -6.19 GP 8.94 ZAL 52.78 ZAP 171.05 ETS 89.98 ZAE 130.32 ETE 172.15 ZAC 32.17 ETC 9.37 CLP 179.52
     RC 193.712 GL
    PLANETOCENTRIC CONIC
      C3 31.452 VHL 5.608 DLA -28.46 RAL 250.33 RAD 6568.3 VEL 12.362 PTH 2.23 VHP 10.545 DPA -8.69 RAP 233.70 ECC 1.5176 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                              113.27 13 30 12
113.26 14 18 4
116.30 13 57 46
108.45 17 52 34
124.06 13 55 52
103.38 20 3 51
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          86.99 13 12 6 1085.65
93.01 14 2 42 921.71
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                                                                                                  337.24
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                                                                                                  326.95
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          100.00
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                            16 16 15 5779.59
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          100.00
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                            13 39 14
                                                                                                  323.20
          110.00
                                                     997.38
                                                                               3.11
                                                 5346.02
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                                                                                                 243.95
                                                                                                                        131.70
                            18 34 45
                                                                             31.75
          110.00
                                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SCT 5382.6 SGR 464.0 SG3 110.1
RRT -.4531 RRF -.4257 RTF .9267
SGB 5402.5 R23 .0037 R13 -.9267
SGI 5386.7 SG2 413.3 THA 177.75
                                                                                                                                                                                    ST 1621.8 SR 442.6 SS 360.6
CRT -.7125 CRS .4808 CST -.9569
      TOE-1.0171 TRA 3.5604 TC3-2.9262 BAU 1.2304
      ROE .4311 RRA -.1239 RC3 .0212 FAU .01160
FOE -.1522 FRA 1.0435 FC3 -.3193 BSP 17237
BOE 1.1047 BRA 3.5626 BC3 2.9263 FSP -365
                                                                                                                                                                                    LSA 1688.3 MSA 325.2 SSA 15.9
                                                                                                                                                                                      EL1 1653.3 EL2 304.6 ALF 168.61
                                                                                                                                                                                                     ARRIVAL DATE FEB 8 1968
                                                                                                             FLIGHT TIME 194.00
LAUNCH DATE JUL 29 1967
                                                                                                            DISTANCE 567.522
     RL 151.90 LAL -.00 LOL 305.21 VL 25.068 GAL 8.26 AZL 91.23 HCA 291.47 SHA 118.60 ECC .31283 INC 1.2308 V1 29.331 RP 108.40 LAP 1.15 LOP 236.68 VP 36.464 GAP 17.57 AZP 90.45 TAL 160.91 TAP 92.38 RCA 81.50 APO 155.70 V2 34.960 RC 195.431 GL -5.15 GP 8.78 ZAL 50.22 ZAP 171.13 ETS 94.96 ZAE 130.30 ETE 172.27 ZAC 29.87 ETC 10.11 CLP 178.74
    PLANETOCENTRIC CONIC
      C3 35.206 VHL 5.935 DLA -27.74 RAL 253.28 RAD 6568.4 VEL 12.513 PTH 2.27 VHP 10.910 DPA -9.53 RAP 235.97 ECC 1.5794
     C3 53.206 VML 5.935 DLA -27.74 RAL 253.28 RAU 0508.4 VEL 12.315 PM 2.27 VMP 10.910 UM -3.35 RAV 253.97 ECC 1.3794 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A8C INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 59 3 1195.19 11.34 342.62 128.87 116.12 13 18 58 595.2 14.76 335.61 90.00 14 39 19 869.02 20:19 322.79 132.81 110.29 14 53 48 269.0 22.77 315.07 100.00 13 35 32 1077.25 7.24 331.80 126.70 119.08 13 53 30 477.2 11.06 325.10 100.00 16 43 31 5750.23 24.56 272.38 134.43 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 107.59 18 21 21 5150.2 26.74 264.26 110.00 13 32 11 1055 37 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 1055 38 105
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13 35 32 1077.25
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103.29 20 24 25
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          110.00
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                                                                                                                      136.70
          110.00
                                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SGT 5377.2 SGR 458.3 SGS 107.7
RRT -.4591 RRF -.4325 RTF ..9315
SGB 5396.7 R23 .0028 R13 -.9315
SGI 5381.3 SG2 406.8 THA 177.75
                                                                                                                                                                                    ST 1570.3 SR 432.5 SS 358.4
      TOE -. 9093 TRA 3.9675 TC3-2.5844 BAU 1.2164
                                                                                                                                                                                    CRT -.6459 CRS .4136 CST -.9613
LSA 1632.2 MSA 342.3 SSA 15.1
      ROE .4452 RRA -.1437 RC3 .0206 FAU .01041
FOE -.1229 FRA 1.1032 FC3 -.2560 BSP 17199
                                                                                                                                                                                     ELI 1596.1 ELZ 324.8 ALF 169.47
      BOE 1.0125 BRA 3.9701 BC3 2.5845 FSP -356
                                                                                                                                                                                                      ARRIVAL DATE FEB 10 1968
                                                                                                             FLIGHT TIME 196.00
LAUNCH DATE JUL 29 1967
                                                                                                            DISTANCE 572.262
    HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 25.020 GAL 9.28 AZL 91.06 MCA 294.66 SMA 118.34 ECC .32293 INC 1.0627 V1 29.331 RP 108.44 LAP .97 LOP 239.87 VP 36.419 GAP 18.24 AZP 90.44 TAL 159.33 TAP 93.99 RCA 80.13 APO 156.56 V2 34.947 RC 197.134 GL -4.17 GP 8.62 ZAL 47.82 ZAP 171.14 ETS 100.14 ZAE 130.26 ETE 172.40 ZAC 27.60 ETC 11.00 CLP 177.95
    PLANETOCENTRIC CONIC
     C3 39.617 VML 6.294 DLA -27.01 RAL 256.01 RAD 6568.5 VEL 12.688 PTH 2.30 VMP 11.309 DPA -10.33 RAP 238.25 ECC 1.6520 LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 44 42 1308.22 7.87 349.12 132.24 117.29 13 6 30 708.2 11.47 342.29
           90.00
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108.99 15 29 1
119.57 13 50 53
107.00 18 46 42
124.16 14 3 16
105.31 20 43 41
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5730.50
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19 14 37 5344.27
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          110.00
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          110.00
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 5367.6 SGR 451.3 SG3 105.4
RRT -,4650 RRF -,4396 RTF ,9365
SGB 5366.5 R23 .0020 R13 -,9365
SGI 5371.7 SG2 399.2 THA 177.75
                                                                                                                                                                                    ST 1533,4 SR 421.3 SS 359.1
       TDE -.8003 TRA 4.3931 TC3-2.2653 BAU 1.1998
                                                                                                                                                                                    CRT -.5765 CRS .3518 CST -.9669
LSA 1591.3 MSA 354.4 SSA 14.3
ELL 1553.5 EL2 339.8 ALF 170.54
      ROE .4596 RRA -.1639 RC3 .0194 FAU .00929
FDE -.0960 FRA 1.1645 FC3 -.2031 BSP 17249
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FLIGHT TIME 190.00

BOE .9229 BRA 4.3962 BC3 2.2653 FSP -349

ARRIVAL DATE FEB 12 1968

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FLIGHT TIME 198.00
LAUNCH DATE JUL 29 1967
                                                                           DISTANCE 576.844
   HELIOCENTRIC CONIC
   RL 151.90 LAL -.00 LOL 305.21 VL 24.973 GAL 10.36 AZL 90.89 NCA 297.84 SNA 118.09 ECC .33407 INC .8859 V1 29.331 RP 108.48 LAP .78 LOP 243.06 VP 36.374 GAP 18.97 AZP 90.41 TAL 157.80 TAP 95.64 RCA 78.64 APO 157.55 V2 34.935 RC 198.819 GL -3.25 GP 8.49 ZAL 45.60 ZAP 171.05 ETS 105.37 ZAE 130.20 ETE 172.51 ZAC 25.36 ETC 12.08 CLP 177.14
   PLANETOCENTRIC CONIC
    C3 44.806 VHL 6.694 OLA -26.29 RAL 258.52 RAD 6568.7 VEL 12.891 PTH 2.35 VMP 11.747 DPA -11.07 RAP 240.52 ECC 1.7374
LNCH AZHTH LNCH TIME LITIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    .c 36 7 1401.31
15 44 0 701
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                                                      4.93
                                                                  354.38
        90.00 12 36 7
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                                                     22.09
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106.61 19 9 25
124.01 14 6 20
103.43 21 1 39
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                 13 28 40 1231.57
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       100.00
                    17 34 8
                                   5717.63
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                    13 46 45 1174.82
19 32 32 5347.14
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                                                     -3.67
                                                                    332.47
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                                                                    244.03
                                                     31.73
                                                                                  146.27
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 1508.8 SR 409.0 SS 362.6

CRT -.5050 CRS .2940 CST -.9727

LSA 1563.4 MSA 361.5 SSA 13.6
                                                                       SCT 5354.0 SCR 442.8 SC3 103.2
RRT -.4704 RRF -.4466 RTF .9417
SCB 5372.3 R23 .0014 R13 -.9417
    TOE -.6862 TRA 4.8445 TC3-1.9663 BAU 1.1779
    ROE .4738 RRA -.1846 RC3 .0176 FAU .00818
FOE -.0701 FRA 1.2294 FC3 -.1581 BSP 17276
                                                                                                                              EL1 1523.6 EL2 349.6 ALF 171.77
                                                                        SG1 5358.1 SG2 390.5 THA 177.76
    BOE .8339 BRA 4.8480 BC3 1.9664 FSP -342
                                                                                                                                          ARRIVAL DATE FEB 14 1968
                                                                            FLIGHT TIME 200.00
                                                                           DISTANCE 581.237
  HELIOCENTRIC CONIC
   RL 151.90 LAL -.00 LOL 305.21 VL 24.927 GAL 11.52 A7L 90.70 MCA 301.03 SMA 117.85 ECC .34640 INC .6984 V1 29.331 RP 108.51 LAP .60 LOP 246.24 VP 36.331 GAP 19.77 AZP 90.36 TAL 156.31 TAP 97.34 RCA 77.03 APO 158.68 V2 34.923 RC 200.487 GL -2.39 GP 8.36 ZAL 43.55 ZAP 170.87 ETS 110.59 ZAE 130.10 ETE 172.63 ZAC 23.16 ETC 13.40 CLP 176.31
   PLANETOCENTRIC CONIC
    C3 50.917 VHL 7.136 OLA -25.57 RAL 260.81 RAD 6568.9 VEL 13.125 PTH 2.40 VHP 12.230 DPA -11.77 RAP 242.79 ECC 1.8380
    LNCH AZMTH LNCH TIME L-I TIME INLLAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 30 2 1484.84 2.26 359.06 139.25 118.23 12 54 47 884.8 6.01 352.39
                                                                                                   107.67 16 21 9
119.89 13 48 2
106.38 19 29 58
123.73 14 9 2
103.64 21 18 21
                                                                                                                                    165.1
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                    16 8 24
                                     765.07
                                                      22.49
                                                                    316.04
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                    13 26 19
                                    1303.13
                                                       -.36
                                                                    344.25
                                                                                   137.79
       100.00
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                    17 54 48 5710.06
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       100,00
                                 1233.61
5352.34
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                    13 48 28
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                                                      -5.90
                                                                    335.55
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       110.00
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                    19 49 8
                                                      31.65
                                                                    244.41
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       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1494.7 SR 395.7 SS 368.5
CRT -.4338 CRS .2409 CST -.9784
                                                                       SCT 5336.0 SGR 433.0 SG3 101.0
RRT -.4751 RRF -.4530 RTF .9470
SGB 5353.6 R23 .0009 R13 -.9470
SGI 5340.0 SG2 380.7 THA 177.78
    TOE -.5673 TRA 5.3240 TC3-1.6884 BAU 1.1494
    RDE .4880 RRA -.2054 RC3 .0153 FAU .00707
FDE -.0452 FRA 1.2986 FC3 -.1201 BSP 17279
                                                                                                                              LSA 1547.3 MSA 363.6 SSA 12.9
EL1 1505.1 EL2 354.1 ALF 173.06
    BOE .7483 BRA 5.3279 BC3 1.6685 FSP -336
                                                                                                                                         ARRIVAL DATE FEB 16 1968
                                                                            FLIGHT TIME 202.00
LAUNCH DATE JUL 29 1967
                                                                           DISTANCE 585.404
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 24.882 GAL 12.77 AZL 90.50 MCA 304.21 SMA 117.62 ECC .36007 INC .4983 V1 29.331 RP 108.55 LAP .41 LOP 249.42 VP 36.289 GAP 20.66 AZP 90.28 TAL 154.89 TAP 99.10 RCA 75.27 APO 159.97 V2 34.911 RC 202.138 GL -1.59 GP 8.24 ZAL 41.67 ZAP 170.59 ETS 115.70 ZAE 129.98 ETE 172.75 ZAC 21.01 ETC 15.02 CLP 175.44
   PLANETOCENTRIC CONIC
    C3 58.133 VHL 7.625 DLA -24.87 RAL 262.90 RAD 6569.1 VEL 13.397 PTH 2.45 VHP 12.764 DPA -12.43 RAP 245.05 ECC 1.9567
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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107.34 16 42 21
119.78 13 47 10
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16 29 48 753.10
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        90.00
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        90.00
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                    13 24 18 1371.86
18 13 30 5706.77
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       100.00
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       100.00
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                    13 49 50 1291.74
20 4 27 5359.66
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                                                                    338.63
                                                                                   138.02
       110.00
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                                                      31.53
                                                                    244.95
                                                                                   155.25
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                             ST 1489.5 SR 361.4 SS 376.8

CRT - .3638 CRS .1916 CST - .9834

LSA 1541.2 MSA 361.2 SSA 12.3

EL1 1496.3 EL2 353.6 ALF 174.36
                                                                        SGT 5315.0 SGR 421.7 SG3 99.0
RRT - 4789 RRF - 4587 RTF .9522
    TOE -.4412 TRA 5.8379 TC3-1.4304 BAU 1.1117
    ROE .5020 RRA -.2263 RC3 .0125 FAU .00589
FOE -.0203 FRA 1.3734 FC3 -.0877 BSP 17190
                                                                        SGB 5331.7 R23 .0006 R13 -.9522
SGI 5318.8 SGZ 369.9 THA 177.81
    BOE .6683 BRA 5.8422 BC3 1.4305 FSP -327
                                                                                                                                          ARRIVAL DATE FEB 18 1968
                                                                             FLIGHT TIME 204.00
LAUNCH DATE JUL 29 1967
                                                                            DISTANCE 589.296
   HELIOCENTRIC CONIC
    RL 151.90 LAL -.00 LOL 305.21 VL 24.839 GAL 14.13 AZL 90.28 HCA 307.39 SMA 117.40 ECC .37529 INC .2825 VI 29.331
RP 108.59 LAP .22 LOP 252.60 VP 36.248 GAP 21.64 AZP 90.17 TAL 153.54 TAP 100.93 RCA 73.34 APO 161.45 V2 34.899
RC 203.771 GL -.83 GP 8.13 ZAL 39.96 ZAP 170.22 ETS 120.65 ZAE 129.81 ETE 172.86 ZAC 18.91 ETC 17.02 CLP 174.54
   PLANETOCENTRIC CONIC
    C3 66.687 VHL 8.166 DLA -24.19 RAL 264.80 RAD 6569.3 VEL 13.713 PTH 2.51 VHP 13.358 DPA -13.03 RAP 247.28 ECC 2.0975
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT TNJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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107.17 17 1 15
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                     12 21 25 1635.11
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        90.00
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106.28 20 5 33
122.80 14 13 21
104.31 21 48 0
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       100.00
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                     13 50 52 1348.94
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       110.00
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                                    5366.65
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                                                                                    159.48
       110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1490.4 SR 366.5 SS 366.9
CRT -.3002 CRS .1409 CST -.9876
LSA 1542.6 MSA 354.4 SSA 11.7
                                                                        SCT 5288.7 SCR 409.0 SC3 96.9
RRT -.4819 RRF -.4639 RTF .9575
SC8 5304.5 R23 .0004 R13 -.9575
     TOE -.3155 TRA 6.3822 TC3-1.1972 BAU 1.0674
     ROE .5160 RRA -.2466 RC3 .0098 FAU .00473
     FOE .0026 FRA 1.4527 FC3 -.0614 85P 17203
BOE .6048 BRA 6.3670 BC3 1.1972 FSP -321
                                                                                                                               ELI 1494.7 EL2 346.6 ALF 175.54
                                                                        SG1 5292.4 SG2 358.1 THA 177.86
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LAUNCH CATE JUL 29 1967

ARRIVAL DATE FEB 20 1968

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FLIGHT TIME 206.00
                                                                                                       DISTANCE 592.852
    HELIOCENTRIC CONIC
      RL 151.90 LAL -.00 LOL 305.21 VL 24.797 GAL 15.62 AZL 90.05 MCA 310.56 SMA 117.18 ECC .39226 INC .0459 V1 29.331
RP 108.62 LAP .04 LOP 255.77 VP 36.209 GAP 22.73 AZP 90.03 TAL 152.28 TAP 102.84 RCA 71.22 APO 163.15 V2 34.888
RC 205.386 GL -.13 GP 8.03 ZAL 38.43 ZAP 169.74 ETS 125.38 ZAE 129.59 ETE 172.98 ZAC 16.90 ETC 19.51 CLP 173.59
     PLANETOCENTRIC CONIC
      C3 76.869 VHL 8.768 DLA -23.54 RAL 266.49 RAD 6569.5 VEL 14.079 PTH 2.57 VHP 14.021 DPA -13.59 RAP 249.48 ECC 2.2651 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              11.31 149.40 117.94 12 46 24

514.67 160.89 107.11 17 18 10

555.21 148.17 119.12 13 45 44

69.67 161.69 106.38 20 20 55

144.75 145.04 122.16 14 14 59

146.41 163.54 104.74 22 1 2

MID-COURSE EXECUTION ACCURACY

SGT 5258.7 SGR 395.0 SG3 05 0
                                                                                                                                                                                1104.2
                                                                                                                                                                                                                               4.66
                                                                                                                                                                                                        -1.03
            90.00 12 18 0 1704.16
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            90.00
                            17 5 46
                                                  744.44
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                                                                                             314,67
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                          13 20 42 1501.77
18 45 45 5710.11
13 51 34 1404.99
20 31 22 5379.65
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                                                                                                                                                                                                                            348.54
          100.00
                                                                         -7.05
                                                                                             355.21
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          100,00
                                                                         25.36
                                                                                             269.67
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          110.00
                                                                       -12.26
                                                                                             344.75
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                                                                                                                                                                                                        -7.93
                                                                                                                                                                                                                           33A.33
                                                                                                                                                                                  4779.6
                                                                          31.20
                                                                                             246.41
                                                                                                                                                                                                        32.90
                                                                                                                                                                                                                           237.61
          110.00
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SCT 5258.7 SCR 395.0 SC3 95.0
RRT -.4836 RRF -.4679 RTF .9626
SCB 5273.6 R23 .0004 R13 -.9626
SCI 5262.2 SC2 345.5 THA 177.91
                                                                                                                                                                          ST 1495.5 SR 350.9 SS 399.1
CRT -,2415 CRS .1128 CST -.9910
      TOE -.1855 TRA 6.9665 TC3 -.9847 BAU 1.0120
      ROE .5299 RRA -.2660 RC3 .0070 FAU .00350
FOE .0251 FRA 1.5387 FC3 -.0394 BSP 17179
BOE .5614 BRA 6.9716 BC3 .9847 FSP -315
                                                                                                                                                                          LSA 1549.3 MSA 344.5 SSA 11.1
                                                                                                                                                                           EL1 1498.1 EL2 340.0 ALF 176.58
                                                                                                        FLIGHT TIME 208.00
                                                                                                                                                                                            ARRIVAL DATE FEB 22 1968
LAUNCH DATE JUL 29 1967
                                                                                                       DISTANCE 595.998 1
    HELIOCENTRIC CONIC
      RL 151.90 LAL -.00 LOL 305.21 VL 24.757 GAL 17.24 AZL 89.79 MCA 313.73 SMA 116.98 ECC .41126 INC .2094 VI 29.331
RP 108.65 LAP -.15 LOP 258.94 VP 36.171 GAP 23.96 AZP 89.85 TAL 151.13 TAP 104.86 RCA 68.87 APO 165.08 V2 34.878
RC 206.983 GL .53 GP 7.94 ZAL 37.06 ZAP 169.16 ETS 129.86 ZAE 129.31 ETE 173.11 ZAC 14.97 ETC 22.62 CLP 172.59
    PLANETOCENTRIC CONIC
      C3 89.057 VHL 9.437 DLA -22.90 RAL 268.00 RAD 6569.7 VEL 14.505 PTH
                                                                                                                                            2.63 WHP 14.765 DPA -14.10 RAP 251.64 ECC 2.4656
     C3 89.057 VHL 9.437 OLA -22.90 RAL 268.00 RAO 6569.7 VEL 14.505 PTM 2.63 VMP 14.765 DPA -14.10 RAP 251.64 ECC 2.4656 LNCN AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 14 52 1769.61 -6.89 15.01 152.59 117.55 12 44 22 1169.8 -3.14 8.33 90.00 17 20 54 745.53 22.89 314.74 164.76 107.14 17 33 20 145.5 25.02 306.72 100.00 13 18 55 1563.06 -9.06 358.65 151.42 118.61 13 44 58 963.1 -5.17 352.02 100.00 18 59 32 5715.55 25.26 270.04 165.54 106.55 20 34 47 5115.6 27.28 261.82 110.00 13 51 55 1459.62 -14.22 347.77 148.38 121.42 14 16 14 859.6 -9.96 341.26 110.00 20 43 2 5391.76 30.98 247.29 167.39 105.22 22 12 53 4791.8 32.76 236.52
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT OFTERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5224.8 SGR 379.6 SG3 93.1
RRT -.4837 RRF -.4703 RTF ..9676
SG8 5238.6 R23 .0004 R13 -.9676
SG1 5228.0 SG2 332.0 THA 177.98
                                                                                                                                                                          ST 1502.8 SR 334.9 SS 413.4
CRT -.1884 CRS .0800 CST -.9937
      TOE -.0522 TRA 7.5953 TC3 -.7923 BAU .9433
      ROE .5436 RRA -.2840 RC3 .0042 FAU .00217
                                                                                                                                                                         LSA 1559.3 MSA 332.0 SSA 10.5
EL1 1504.2 EL2 328.6 ALF 177.48
      FOE .0471 FRA 1.6326 FC3 -.0211 BSP 17147
BOE .5463 BRA 7.6006 BC3 .7923 FSP -309
                                                                                                                                                                                          ARRIVAL DATE FEB 24 1968
                                                                                                       FLIGHT TIME 210.00
LAUNCH DATE JUL 29 1967
    HELIOCENTRIC CONIC
                                                                                                      DISTANCE 598.632
     RL 151.90 LAL -.00 LOL 305.21 VL 24.718 GAL 19.03 AZL 89.50 MCA 316.90 5MA 116.78 ECC .43260 INC .4962 V1 29.331
RP 108.69 LAP -.34 LOP 262.12 VP 36.135 GAP 25.34 AZP 89.64 TAL 150.11 TAP 107.02 RCA 66.26 APO 167.30 V2 34.867
RC 208.560 GL 1.14 GP 7.85 ZAL 35.87 ZAP 168.47 ETS 134.09 ZAE 128.96 ETE 173.25 ZAC 13.17 ETC 26.56 CLP 171.52
    PLANETOCENTRIC CONIC
      C3 103.734 VHL 10.185 DLA -22.30 RAL 269.31 RAD 6570.0 VEL 15.002 PTH 2.70 VHP 15.603 OPA -14.56 RAP 253.74 ECC 2.707E
     C3 103.734 VML 10.185 DLA -22.30 RAL 269.31 RAD 6570.0 VEL 15.002 PTH 2.70 VMP 15.603 DPA -14.56 RAP 253.74 ECC 2.7072 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 11 51 1832.23 -8.83 18.56 155.64 117.01 12 42 23 1232.2 -5.14 11.83 90.00 17 34 22 749.19 22.82 314.99 168.39 107.24 17 46 51 149.2 24.96 306.97 100.00 13 17 2 1621.83 -10.96 1.98 154.52 117.98 13 44 4 1021.8 -7.15 355.28 100.00 19 11 52 5722.85 25.11 270.53 169.16 106.77 20 47 15 5122.9 27.17 262.34 110.00 13 51 53 1512.59 -16.08 350.75 151.57 120.58 14 17 6 912.6 -11.90 344.13 110.00 20 53 30 5404.87 30.74 248.24 171.02 105.74 22 23 35 4804.9 32.59 239.51
                                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                                                                         ST 1511.3 SR 318.4 SS 430.3

CRT -.1395 CRS .0496 CST -.9956

LSA 1571.5 MSA 517.6 SSA 9.9

EL1 1512.0 EL2 315.1 ALF 178.24
                                                                                                 SGT 5188.5 SGR 362.8 SG3 91.3
RRT -.4817 RRF -.4705 RTF .9723
SGB 5201.2 R23 .0004 R13 -.9723
SGI 5191.5 SG2 317.8 THA 178.06
     TDE .0881 TRA 8.2783 TC3 -.6175 BAU .8564
      RDE .5575 RRA -.3001 RC3 .0016 FAU .00065
FOE .0697 FRA 1.7365 FC3 -.0054 BSP 17007
      BDE .5644 BRA 8.2837 BC3 .6175 FSP
                                                                              - 301
                                                                                                                                                                                          ARRIVAL DATE FEB 26 1968
LAUNCH DATE JUL 29 1967
                                                                                                       FLIGHT TIME 212.00
                                                                                                       DISTANCE 600.627
    HELIOCENTRIC CONIC
     RL 151.90 LAL -.00 LOL 305.21 VL 24.682 GAL 21.02 A7L 89.18 MCA 320.07 SMA 116.60 ECC .45662 INC .8190 V1 29.331
RP 108.72 LAP -.55 LOP 265.29 VP 36.101 GAP 26.91 A7P 89.37 TAL 149.25 TAP 109.33 RCA 63.36 APO 169.84 V2 34.858
RC 210.118 GL 1.71 GP 7.76 ZAL 34.86 ZAP 167.65 ETS 138.06 ZAE 128.53 ETE 173.39 ZAC 11.52 ETC 31.53 CLP 170.37
    PLANETOCENTRIC CONIC
      C3 121.536 VHL 11.024 DLA -21.73 RAL 270.42 RAD 6570.3 VEL 15.584 PTH 2.78 VHP 16.553 DPA -14.97 RAP 255.77 ECC 3.0002
                                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-10.65 21.97 158.54 116.39 12 40 21 1291.5 -7.02 15.17
     UNCH AZMTH UNCH TIME L-I TIME
90.00 12 8 49 1891.46
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107.39 17 58 49
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107.04 20 58 19
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                                               1677.99
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         100.00
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                                               5731.57
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106.27 22 33 6
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         110.00
                           21 2 47
                                                 5418.69
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                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 1517.7 SR 301.7 SS 449.2

CRT -.0974 CRS .0240 CST -.9971

LSA 1582.7 MSA 302.0 SSA 9.3
                                                                                                 SGT 5146.2 SGR 344.8 SG3 89.5

RRT - .4771 RRF - .4680 RTF .9767

SGB 5157.8 R23 .0004 R13 -.9767

SGI 5148.9 SG2 302.9 THA 178.16
      TOE .2259 TRA 9.0132 TC3 -.4627 BAU .7518
RDE .5716 RRA -.3130 RC3 -.0007 FAU-.00103
      FOE .0909 FRA 1.8501 FC3 .0073 85P 16972
BOE .6146 BRA 9.0187 BC3 .4627 FSP -296
                                                                                                                                                                           ELI 1518.0 ELZ 300.2 ALF 178.85
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ARRIVAL DATE FEB 28 1968

JPL TM 33-99

FLIGHT TIME 214.00 LAUNCH DATE JUL 29 1967 DISTANCE 601.813 HELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 24.649 GAL 23.24 AZL 88.81 MCA 323.24 SMA 116.43 ECC .48375 INC 1.1871 V1 29.331
RP 108.74 LAP -.71 LOP 268.45 VP 36.069 GAP 28.70 AZP 89.05 TAL 148.59 TAP 111.83 RCA 60.11 APO 172.75 V2 34.848
RC 211.656 GL 2.25 GP 7.68 ZAL 34.05 ZAP 166.71 ETS 141.78 ZAE 127.99 ETE 173.55 ZAC 10.07 ETC 37.79 CLP 169.12 PLANETOCENTRIC CONIC C3 143.295 VHL 11.971 DLA -21.19 RAL 271.31 RAD 6570.6 VEL 16.267 PTH 2.85 VHP 17.635 DPA -15.34 RAP 257.71 ECC 3.3583 LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 5 39 1947.41 -12.32 25.23 161.24 115.70 12 38 7 1347.4 -8.76 18.36 12 5 39 1947.41 18 9 16 17 56 34 761.92 174.85 107.58 161.9 24.75 307.85 22.56 315.83 90.00 13 12 37 1731.31 116.49 13 41 28 -10.70 160.20 1131.3 100.00 -14.38 8.31 175.60 107.33 21 7 59 26.88 19 32 17 5741.30 13 50 32 1612.50 21 10 51 5432.92 5141.3 24.74 271.78 100.00 118.69 14 17 25 106 82 22 41 24 1012.5 -15.46 349.68 356.54 110.00 -19.44 157.44 4832.9 32.21 110.00 177.50 30.21 250.25 MID-COURSE EXECUTION ACCORACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5099.9 SGR 325.6 SG3 87.9 RRT -,4688 RRF -,4617 RTF .9808 ST 1521.5 SR 284.8 SS 470.9 CRT -.0596 CRS .0006 CST -.9981 TOE .3657 TRA 9.8126 TC3 -.3244 BAU .6215 RDE .5860 RRA -.3219 RC3 -.0026 FAU-.00299 SG8 5110.2 R23 .0005 R13 -.9608 LSA 1592.5 MSA 285.6 SSA 8.8 FDE .1120 FRA 1.9763 FC3 .0181 BSP 16905 SGI 5102.2 SG2 287.5 THA 178.28 EL1 1521.6 ELZ 284.3 ALF 179.34 80E .6908 BRA 9.8179 BC3 .3244 FSP -290 ARRIVAL DATE MAR I 1968 FLIGHT TIME 216.00 LAUNCH DATE JUL 29 1967 HELIOCENTRIC CONIC DISTANCE 601.972 RL 151.90 LAL -.00 LOL 305.21 VL 24.618 GAL 25.73 AZL 88.39 HCA 326.40 SMA 116.28 ECC .51447 INC 1.6135 V1 29.331
RP 108.77 LAP -.89 LOP 271.62 VP 36.040 GAP 30.76 AZP 88.66 TAL 148.17 TAP 114.57 RCA 56.45 APO 176.10 V2 34.840 7.59 TAL 33.45 TAP 165.61 ETS 145.26 TAE 127.33 ETE 173.73 TAC 8.87 ETC 45.48 CLP 167.75 RC 213.175 GL 2.74 GP PLANETOCENTRIC CONIC C3 170.121 VHL 13.043 DLA -20.69 RAL 271.98 RAD 6570.8 VEL 17.072 PTH 2.93 VHP 18.874 DPA -15.67 RAP 259.53 ECC 3.7998 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.95 12 35 34 107.80 18 18 10 1400.0 -10.37 163.70 21.38 -13.85 28.33 90.00 12 2 14 1999.97 308.40 170.0 177.62 24.62 90.00 18 5 20 770.04 22.39 316.37 13 9 54 115.66 13 39 36 1181.6 -12.304.33 100.00 1781.59 -15.88 11.29 162.71 19 40 21 5751.68 5151.7 26.71 264.36 100.00 24.53 272.48 178.37 107.64 21 16 13 13 49 6 1658.77 21 17 39 5447.28 117.66 14 16 45 107.36 22 48 26 -17.06 352.31 110.00 -20.93 359.30 160.04 1058.8 180.28 4847.3 32.00 242.67 110.00 29.92 251.27 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1521.5 SR 268.0 SS 495.7 CRT -.0251 CRS -.0214 CST -.9988 TOE .5063 TRA10.6843 TC3 -.2018 BAU .4590 SCT 5049.3 SCR 305.2 SG3 86.3 RRT -.4555 RRF -.4502 RTF .9845 SGB 5058.5 R23 .0006 R13 -.9845 ROE .6010 RRA -.3253 RC3 -.0041 FAU-.00537 FOE .1329 FRA 2.1175 FC3 .0273 BSP 16805 BOE .7859 BRA10.6893 BC3 .2018 FSP -285 LSA 1600.0 MSA 268.8 SSA 8.2 EL1 1521.5 EL2 267.9 ALF 179.74 SG1 5051.2 SG2 271.6 THA 178.42 ARRIVAL DATE HAR 3 1968 LAUNCH -DATE JUL 29 1967 FLIGHT TIME 218.00 DISTANCE 600.815 RL 151.90 LAL -.00 LOL 305.21 VL 24.592 GAL 28.56 AZL 87.88 MCA 329.56 SMA 116.14 ECC .54930 INC 2.1174 VI 29.331
RP 108.80 LAP -1.07 LOP 274.79 VP 36.014 GAP 33.14 AZP 88.17 TAL 148.05 TAP 117.61 RCA 52.35 APO 179.94 V2 34.832
RC 214.674 GL 3.21 GP 7.51 ZAL 33.09 ZAP 164.34 ETS 148.54 ZAE 126.53 ETE 173.93 ZAC 7.96 ETC 54.48 CLP 166.22 PLANETOCENTRIC CONIC C3 203.493 VHL 14.265 DLA -20.22 RAL 272.40 RAD 6571.1 VEL 18.023 PTH 3.01 VHP 20.303 DPA -15.96 RAP 261.20 ECC 4.3490 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG 1448.9 114.16 12 32 36 108.03 18 25 28 -11.84 24.22 90.00 11 58 27 2048.93 -15.24 31.26 165.88 309.00 18 12 29 316.94 180.03 178.8 24.47 90.00 778.80 22.21 -13.76 7.05 1828.60 164.93 114.80 13 37 12 1228.6 100.00 13 6 43 -17.25 14.11 107.95 21 22 56 116.62 14 15 24 107.88 22 54 6 265.10 180.77 5162.4 26.54 19 46 54 5762.40 24.31 273.20 1702.29 -18.53 1102.3 354.63 110.00 13 47 1 -22.28 1.96 162.35 243.73 21 23 5 252.27 182.70 4461.5 31.76 110.00 5461.49 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY SGT 4995.0 SGR 283.8 SG3 84.8 RRT -.4351 RRF -.4314 RTF .9877 SGB 5003.0 R23 .0006 R13 -.9877 ST 1516.8 SR 251.2 SS 524.2 CRT .0072 CRS -.0453 CST -.9992 LSA 1604.7 MSA 251.9 SSA 7.6 TOE .6470 TRAI1.6374 TC3 -.0934 BAU .2545 RDE .6170 RRA -.3214 RC3 -.0052 FAU-.00833 FOE .1539 FRA 2.2766 FC3 .0354 BSP 16618 BOE .8940 BRA11.6419 BC3 .0935 FSP -279 SG1 4996.5 SG2 255.5 THA 178.58 EL1 1516.8 ELZ 251.2 ALF .07 FLIGHT TIME 220.00 ARRIVAL DATE MAR 5 1968 LAUNCH DATE JUL 29 1967 DISTANCE 597.965 MELIOCENTRIC CONIC RL 151.90 LAL -.00 LOL 305.21 VL 24.569 GAL 31.80 AZL 87.27 MCA 332.72 SMA 116.03 ECC .58876 INC 2.7251 V1 29.331
RP 108.82 LAP -1.25 LOP 277.95 VP 35.992 GAP 35.92 AZP 87.58 TAL 148.30 TAP 121.01 RCA 47.72 APO 184.35 V2 34.824
RC 216.153 GL 3.63 GP 7.41 ZAL 32.99 ZAP 162.87 ETS 151.62 ZAE 125.53 ETE 174.16 ZAC 7.38 ETC 64.19 CLP 164.51 PLANETOCENTRIC CONIC C3 245.391 VHL 15.665 DLA -19.79 RAL 272.54 RAD 6571.4 VEL 19.150 PTH 3.09 VHP 21.957 DPA -16.22 RAP 262.69 ECC 5.0385 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.36 12 29 1 108.27 18 31 3 113.93 13 34 7 1494.1 2094.08 26.87 -16.47 33.99 167.72 -13.17 11 54 7 309.62 187.9 24.31 18 17 55 767.86 22.02 317.54 182.02 90.00 13 2 54 1872.07 -18.47 16.76 166.81 113.93 1272.1 -15.08 9.61 100.00 19 51 48 5773.17 13 44 11 1742.70 21 27 1 5475.30 108.27 21 28 1 26.35 265.85 100.00 24.08 273.92 182.76 5173.2 115.58 14 13 14 108.39 22 58 16 110.00 -23.49 4.47 164.33 1142.7 -19.86 357.22 253.24 184.71 4875.3 31.56 244.74 29.34 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1904.4 SR 234.9 SS 556.1 CRT .0367 CRS -.0642 CST -.9995 LSA 1603.9 MSA 235.1 SSA 7.1 SGT 4932.8 SGR 261.7 SG3 83.4 RRT -.4047 RRF -.4024 RTF .9905 TDE .7761 TRA12.6690 TC3 .0001 BAU .0186 RDE .6347 RRA -.3073 RC3 -.0057 FAU-.01199 FOE .1729 FRA 2.4545 FC3 .0423 BSP 16512 BDE 1.0026 BRA12.6728 BC3 .0057 FSP -275 LSA 1603.9 MSA 235.1 SSA 7.1 ELI 1504.4 ELZ 234.7 ALF .34 SG8 4939.7 R23 .0006 R13 -.9905

SG1 4933.9 SG2 239.2 THA 178.77

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ARRIVAL DATE OCT 8 1967
                                                                                     FLIGHT TIME 70.00
LAUNCH DATE JUL 30 1967
                                                                                    DISTANCE 203.941
    HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 28.813 GAL -15.10 A7L 92.11 MCA 91.95 SMA 144.66 ECC .26485 INC 2.1051 V1 29.334 RP 108.25 LAP -2.10 LOP 38.11 VP 39.175 GAP -4.88 A7P 89.93 TAL 244.42 TAP 336.36 RCA 106.34 APO 182.97 V2 35.009 RC 67.365 GL -7.80 GP -19.28 ZAL 165.84 ZAP 54.59 ETS 14.43 ZAE 162.16 ETE 316.85 ZAC 103.39 ETC 10.65 CLP -52.13
    PLANETOCENTRIC CONIC
     C3 56.727 VHL 7.532 DLA 8.00 RAL 138.06 RAD 6569.0 VEL 13.345 PTH 2.44 VHP 5.347 OPA -9.10 RAP 160.90 ECC 1.9336
    C3 36.727 VHL 7,532 DLA 8.00 RAL 138.06 RAD 6569.0 VEL 13.345 PTH 2.44 VHP 5.347 OPA -9.10 RAP 160.90 ECC 1.9336 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 2 22 2724.24 -27.81 76.31 21.18 95.55 23 47.46 2124.2 -26.75 67.81 90.00 13 4 55 4867.15 19.77 210.98 15.03 69.31 14 26 3 4267.1 16.78 203.58 100.00 0 31 30 2449.44 -29.26 55.93 21.01 96.39 1 12 19 1849.4 -28.07 47.33 100.00 14 22 24 4617.18 21.14 192.03 14.47 68.36 15 39 22 4017.2 18.01 184.63 110.00 1 48 33 2208.30 -33.18 37.01 20.40 98.75 2 25 21 1608.3 -31.61 28.14 110.00 15 21 51 4431.08 24.77 176.24 12.79 65.65 16 35 42 3831.1 21.27 168.84
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RRT .1366 RRF .5556 RTF .2034
SGB 672.6 R23 .1557 R13 .5585
SGI 510.4 SG2 438.1 THA 57.95
                                                                                                                                           ST 192.6 SR 359.5 SS 180.3

CRT -.5986 CRS .4178 CST -.9651

LSA 395.8 MSA 204.3 SSA 20.9
    TOE .1924 TRA -.5428 TC3 .0838 BAU
                                                               .1280
     RDE -.4609 RRA -.3434 RC3 -.1465 FAU .08586
     FDE .3116 FRA-1.3209 FC3-1.3103 8SP
                                                              899
                                                                                                                                            EL1 381.0 EL2 145.6 ALF 110.99
           .4994 BRA .6423 BC3 .1687 FSP
                                                                -542
                                                                                                                                                         ARRIVAL DATE OCT 10 1967
                                                                                     FLIGHT TIME 72.00
LAUNCH DATE JUL 30 1967
   HELIOCENTRIC CONIC
                                                                                     QISTANCE 210.582
    RL 151.88 LAL -.00 LOL 306.17 VL 28.823 GAL -14.93 AZL 91.96 MCA 95.15 SMA 144.75 ECC .26207 INC 1.9597 VI 29.334 RP 108.20 LAP -1.95 LOP 41.32 VP 39.194 GAP -4.16 AZP 89.82 TAL 244.60 TAP 339.75 RCA 106.82 APO 182.68 VZ 35.023 RC 69.409 GL -7.35 GP -20.29 ZAL 166.19 ZAP 59.35 ETS 12.79 ZAE 162.98 ETE 306.62 ZAC 105.18 ETC 9.99 CLP -57.07
   PLANETOCENTRIC CONIC
    C3 55.388 VHL 7.442 OLA 8.46 RAL 138.06 RAD 6569.0 VEL 13.295 PTH 2.43 VHP 5.117 DPA -9.39 RAP 158.97 ECC 1.9115 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                95.22 23 44 18
68.84 14 29 22
                                                                                          20.97
         90.00 22 58 45 2733.30
90.00 13 8 36 4846.34
100.00 0 28 8 2457.71
100.00 14 25 50 4597.16
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                                                                                                                                                                   -26.85
                                                                             76.97
                                                           -27.87
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                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RET .2306 RRF .6086 RTF .3251
SGB 705.0 R23 .1669 R13 .6153
SGI 554.1 SG2 435.9 THA 51.00
                                                                                                                                            ST 202.5 SR 354.4 SS 193.8
CRT -.5555 CRS .4400 CST -.9798
     TOE .1936 TRA -.5867 TC3 .0503 BAU .1314
    ROE -.4472 RRA -.3588 RC3 -.1702 FAU .09237
FOE .3643 FRA-1.4162 FC3-1.4437 BSP 1019
BOE .4873 BRA .6877 BC3 .1774 FSP -597
                                                                                                                                           LSA 396.2 MSA -216.2 SSA 21.0
                                                                                                                                            EL1 376.1 EL2 158.7 ALF 111.65
                                                                                                                                                        ARRIVAL DATE OCT 12 1967
                                                                                     FLIGHT TIME 74.00
LAUNCH DATE JUL 30 1967
                                                                                    DISTANCE 217.180
    RL 151.88 LAL -.00 LOL 306.17 VL 28.823 GAL -14.78 AZL 91.81 MCA 98.35 SMA 144.75 ECC .25949 INC 1.8127 V1 29.334 RP 108.16 LAP -1.79 LOP 44.52 VP 39.206 GAP -3.48 AZP 89.74 TAL 244.65 TAP 342.99 RCA 107.19 APO 182.31 V2 35.036 RC 71.485 GL -6.88 GP -21.29 ZAL 166.47 ZAP 64.21 ETS 11.10 ZAE 163.34 ETE 295.02 ZAC 107.09 ETC 9.24 CLP -62.17
    PLANETOCENTRIC CONIC
     C3 54.103 VML 7.355 DLA 8.93 RAL 138.16 RAD 6569.0 VEL 13.246 PTH 2.42 VMP 4.925 DPA -9.64 RAP 156.92 ECC 1.8904
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00 22 55 28 2742.44

90.00 13 12 37 4825.61

100.00 0 25 5 2466.06

100.00 14 29 36 4577.23

110.00 1 43 14 2221.48

110.00 15 27 56 4394.58
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                                                                               MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                               SGT 525.3 SGR 531.7 SG3 225.8
RRT .3279 RRF .6495 RTF .4413
SGB 747.4 R23 .1679 R13 .6724
                                                                                                                                           ST 215.5 SR 348.1 SS 206.7
CRT -.5143 CRS .4558 CST -.9877
     TOE .1979 TRA - .6366 TC3 .0105 BAU .1415
     RDE -.4321 RRA -.3737 RC3 -.1954 FAU .09857
                                                                                                                                           LSA 397.6 MSA 227.7 SSA 21.1
     FOE .4160 FRA-1.5016 FC3-1.5772 BSP 1194
BOE .4753 BRA .7381 BC3 .1956 FSP -656
                                                                                SG1 609.1 SG2 433.2 THA 46.06
                                                                                                                                            EL1 370.8 EL2 173.5 ALF 112.95
     BOE .4753 BRA .7381 BC3 .1956 FSP
                                                                                                                                                         ARRIVAL DATE OCT 14 1967
                                                                                     FLIGHT TIME 76.00
LAUNCH DATE JUL 30 1967
                                                                                    DISTANCE 223.736
    RL 151.88 LAL -.00 LOL 306.17 VL 28.814 GAL -14.63 A7L 91.66 MCA 101.55 SMA 144.67 ECC .25708 INC 1.6631 V1 29.334 RP 108.12 LAP -1.63 LOP 47.72 VP 39.211 GAP -2.83 A7P 89.67 TAL 244.56 TAP 346.11 RCA 107.48 APO 181.86 V2 35.049 RC 73.590 GL -6.39 GP -22.27 7AL 166.69 ZAP 69.14 ETS 9.36 ZAE 163.11 ETE 282.81 ZAC 109.06 ETC 8.40 CLP -67.37
    PLANETOCENTRIC CONIC
     C3 52.855 VHL 7.270 DLA 9.39 RAL 138.33 RAO 6568.9 VEL 13.199 PTH 2.41 VHP 4.769 DPA -9.85 RAP 154.81 ECC 1.8699
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 52 27 2751.71 -27.98 78.31 20.81 94.56 23 38 19 2151.7 -27.05 69.76 90.00 13 17 0 4804.79 18.23 207.06 13.87 67.95 14 37 4 4204.8 15.08 199.80
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15 31 30 4376.32
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        110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                             SGB 800.5 R23 .1665 R13 .7225
SG1 675.7 SG2 429.2 THA 41.83
                                                                                                                                          ST 231.4 SR 340.0 SS 219.6

CRT - 4737 CRS .4737 CST -.9911

LSA 400.4 MSA 237.9 SSA 21.2

EL1 364.7 EL2 189.9 ALF 115.11
      TOE .2044 TRA -.6933 TC3 -.0367 BAU .1583
      ROE - 4149 RRA - .3864 RC3 - .2210 FAU .10393
     FDE .4708 FRA-1.5665 FC3-1.7024 BSP 1411
BDF .4625 BRA .7937 BC3 .2240 FSP -705
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BOE .4625 BRA .7937 BC3 .2240 FSP

ARRIVAL DATE OCT 16 1967

FLIGHT TIME 78.00 LAUNCH DATE JUL 30 1967 **DISTANCE 230.249** HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 28.796 GAL -14.48 A7L 91.51 HCA 104.76 SHAN 44.51 ECC .25480 INC 1.5100 V1 29.334 RP 108.08 LAP -1.46 LOP 50.93 VP 39.210 GAP -2.21 A7P 89.62 TAL 244.34 TAP 349.10 RCA 107.69 APO 181.33 V2 35.062 RC 75.721 GL -5.87 GP -23.21 TAL 166.85 TAP 74.07 ETS 7.54 TAE 162.23 ETE 270.97 TAC 111.06 ETC 7.48 CLP -72.63 PLANETOCENTRIC CONIC PLANEIOCENTRIC CONIC
C3 51.632 VML 7.186 DLA 9.86 RAL 138.58 RAD 6568.9 VEL 13.153 PTH 2.40 VMP 4.648 DPA -10.02 RAP 152.67 ECC 1.8497
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 49 41 2761.21 -28.03 79.00 20.84 94.22 23 35 42 2161.2 -27.15 70.44
90.00 13 21 45 4783.68 17.68 205.75 13.67 67.52 14 41 29 4183.7 14.48 198.53
100.00 0 19 49 2483.18 -29.49 58.41 20.71 95.10 1 1 13 1883.2 -28.47 49.76
100.00 14 38 14 4536.94 19.04 187.00 13.06 66.51 15 53 51 3936.9 15.70 179.80
110.00 1 39 7 2235.04 -33.43 39.06 20.19 97.57 2 16 22 1635.0 -32.03 30.11
110.00 15 35 26 4357.85 22.63 171.62 11.28 63.67 16 48 3 3757.9 18.91 164.46 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 250.6 SR 330.6 SS 231.6 CRT -.4384 CRS .4864 CST -.9907 LSA 405.8 MSA 246.2 SSA 21.3 SGT 647.2 SGR 573.9 SG3 255.0 RRT .5070 RRF .7184 RTF .6320 SGB 865.0 R23 .1645 R13 .7652 TOE .2144 TRA -.7545 TC3 -.0901 BAU .1816 RDE -.3963 RRA -.3973 RC3 -.2471 FAU .10849 FDE .5213 FRA-1.6142 FC3-1.8190 BSP 1673 BDE .4506 BRA .8527 BC3 .2630 FSP -755 EL1 359.4 EL2 207.2 ALF 118.69 SG1 753.4 SG2 424.9 THA 38.32 FLIGHT TIME 80.00 ARRIVAL DATE OCT 18 1967 HELIOCENTRIC CONIC DISTANCE 236.721 RL 151.88 LAL -.00 LOL 306.17 VL 28.771 GAL -14.32 AZL 91.35 MCA 107.97 SMA 144.28 ECC .25262 INC 1.3521 VI 29.334
RP 108.04 LAP -1.29 LOP 54.14 VP 39.203 GAP -1.61 AZP 89.58 TAL 244.01 TAP 351.98 RCA 107.83 APO 180.72 VZ 35.075
RC 77.874 GL -5.32 GP -24.11 ZAL 166.93 ZAP 78.96 ETS 5.65 ZAE 160.76 ETE 260.32 ZAC 113.02 ETC 6.51 CLP -77.89 PLANETOCENTRIC CONIC 2.39 WHP 4.559 OPA -10.18 RAP 150.56 ECC 1.8299 50.427 VHL 7.101 OLA 10.34 RAL 138.90 RAD 6568.9 VEL 13.107 PTH LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22 47 6 2771.07 13 26 56 4762.07 0 17 31 2492.17 14 43 9 4516.20 1 37 24 2242.15 15 39 44 4338.96 93.86 23 33 17 67.09 14 46 18 94.76 0 59 3 -27.24 -28.07 79.72 20.95 2171.1 71.15 204.41 13.54 4162.1 13.87 197.24 17.12 59.08 20.83 94.76 0 59 3 1892.2 -28.57 50.41 -29.55 94.76 0 59 3 66.07 15 58 25 97.25 2 14 47 63.20 16 52 3 18.47 185.72 12.93 3916.2 15.08 178.57 100.00 -33.50 39.60 20.34 1642.2 -32.13 30.64 110.00 170.46 3739.0 18.29 163.36 22.06 11.11 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 728.9 SGR 594.1 SG3 265.8 RRT .5778 RRF .7471 RTF .6998 SGB 940.4 R23 .1637 R13 .7996 ST 273.0 SR 319.7 55 242.8 CRT -.4082 CRS .4980 CST -.9879 TOE .2279 TRA -.8199 TC3 -.1499 BAU .2100 RDE -.3762 RRA -.4053 RC3 -.2730 FAU .11192 LSA 414.8 MSA 251.5 85A 21.4 FOE .5688 FRA-1.6389 FC3-1.9215 8SP 1973 5G1 841.3 5G2 420.1 THA 35.19 EL1 355.8 EL2 224.0 ALF 124.39 BDE .4399 BRA .9146 BC3 .3115 FSP ARRIVAL DATE OCT 20 1967 FLIGHT TIME 82.00 LAUNCH DATE JUL 30 1967 DISTANCE 243.152 HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 28.739 CAL -14.17 AZL 91.19 MCA 111.18 SMA 143.99 ECC .25054 INC 1.1884 VI 29.334
RP 108.00 LAP -1.11 LOP 57.35 VP 39.191 CAP -1.05 AZP 89.57 TAL 243.58 TAP 354.76 RCA 107.91 APO 180.06 V2 35.088
RC 80.046 GL -4.72 CP -24.97 ZAL 166.95 ZAP 83.76 ETS 3.69 ZAE 158.83 ETE 251.28 ZAC 114.92 ETC 5.51 CLP -83.11 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 49.232 VHL 7.017 0LA 10.83 RAL 139.30 RAD 6568.8 VEL 13.061 PTH 2.38 VHP 4.501 DPA -10.33 RAP 148.53 ECC 1.8102
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 44 39 2781.45 -28.12 80.47 21.14 93.49 23 31 0 2181.4 -27.34 71.89
90.00 13 32 34 4739.73 16.52 203.05 13.50 66.67 14 51 34 4139.7 13.22 195.92
100.00 0 15 20 2501.63 -29.60 59.78 21.02 94.39 0 57 2 1901.6 -28.67 51.09
100.00 14 48 30 4494.78 17.87 184.41 12.87 65.63 16 3 25 3894.8 14.43 177.30
110.00 1 35 52 2249.65 -33.56 40.18 20.56 96.92 2 13 22 1649.6 -32.24 1 35 52 2249.65 15 44 28 4319.53 -33.56 20.56 96.92 2 13 22 1649.6 -32.24 40.18 96.92 2 13 22 62.73 16 56 27 110.00 3719.5 11.03 17.63 162.23 169.27 110.00 21.46 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 822.8 SGR 611.7 SG3 273.4 RRT .6356 RRF .7713 RTF .7511 SGB 1025.3 R23 .1643 R13 .8259 ST 298.7 SR 306.9 SS 253.9 TOE .2451 TRA -.8883-TC3 -.2155 BAU .2420 ROE -.3541 RRA -.4093 RC3 -.2979 FAU .11397 FOE .6159 FRA-1.6355 FC3-2.0041 BSP 2296 BOE .4307 BRA .9781 BC3 .3677 FSP -823 CRT -.3832 CRS .5125 CST -.9832 LSA 428.4 MSA 252.8 SSA 21.4 SG1 937.8 SG2 414.3 THA 32.34 EL1 356.3 EL2 237.7 ALF 132.97 FLIGHT TIME 84.00 ARRIVAL DATE OCT 22 1967 LAUNCH DATE JUL 30 1967 **DISTANCE 249.544** HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 28.700 GAL -14.02 A7L 91.02 MCA 114.39 SMA 143.64 ECC .24853 INC 1.0171 V1 29.334
RP 107.96 LAP -.93 LOP 60.56 VP 39.174 GAP -.51 AZP 89.58 TAL 243.04 TAP 357.44 RCA 107.94 APO 179.34 V2 35.101
RC 82.236 GL -4.09 GP -25.78 ZAL 166.89 ZAP 88.40 ETS 1.67 ZAE 156.57 ETE 243.84 ZAC 116.69 ETC 4.49 CLP -88.22 PLANETOCENTRIC CONIC C3 48.043 VHL 6.931 DLA 11.35 RAL 139.78 RAD 6568.8 VEL 13.016 PTH 2.37 VHP 4.471 DPA -10.50 RAP 146.60 ECC 1.7907 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.16 81.28 21.39 93.08 23.28 48 210.2 6 -27.44 LNCH AZMTH LNCH TIME L-I TIME 93.08 23 28 48 66.25 14 57 21 22 42 15 2792.57 90.00 15 38 44 4716.39 15.88 201.63 13.52 4116.4 12.54 194.55 90.00 0 55 7 -28.78 51.83 0 13 15 2511.78 -29.65 60.53 21.29 94.00 1911.8 100.00 16 8 54 3872.4 13.75 175.99 100.00 14 54 22 17.24 183.05 65.20 4472.41 12.89 1 34 27 2257.69 2 12 5 1657.7 -32.35 31.80 -33.62 40.80 20.86 96.56 110.00 96.56 2 12 5 62.26 17 1 18 168.04 11.02 3699.3 16.94 161.06 110.00 15 49 39 4299.26 20.82 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 926.1 SGR 627.9 SG3 278.4 RRT .6813 RRF .7932 RTF .7894 SGB 1118.9 R23 .1670 R13 .8467 ST 327.7 SR 293.2 SS 263.6 CRT -.3647 CRS .5223 CST -.9788 LSA 446.8 MSA 250.7 SSA 21.5 TOE .2666 TRA -.9577 TC3 -.2860 BAU .2767 RDE -.3313 RRA -.4106 RC3 -.3222 FAU .11490 FOE .6544 FRA-1.6132 FC3-2.0705 BSP 2650 BDE .4252 BRA 1.0420 BC3 .4308 FSP -648 SG1 1041.6 SG2 408.6 THA 29.84 EL1 365.1 EL2 245.0 ALF 143.51

ARRIVAL DATE OCT 24 1967

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LAUNCH DATE JUL 30 1967
  HELIOCENTRIC CONIC
                                                                        DISTANCE 255.899
    RL 15[.88 LAL -.00 LOL 306.17 VL 28.656 GAL -13.86 AZL 90.84 MCA 117.61 SNA 143.25 ECC .24658 INC .8368 V1 29.334 RP 107.92 LAP -.74 LOP 63.78 VP 39.153 GAP .00 AZP 89.61 TAL 242.41 TAP .02 RCA 107.92 APO 178.57 V2 35.113 RC 84.440 GL -3.40 GP -26.56 ZAL 166.75 ZAP 92.85 ETS 359.58 ZAE 154.12 ETE 237.82 ZAC 118.29 ETC 3.47 CLP -93.19
   PLANETOCENTRIC CONIC
    C3 46.857 VHL 6.845 DLA 11.90 RAL 140.32 RAD 6568.8 VEL 12.970 PTH 2.36 VMP 4.467 DPA -10.70 RAP 144.83 ECC 1.7712
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       90.00 22 39 51 2804.71
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                                                                    MID-COURSE EXECUTION ACCURACY
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  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 360.1 SR 277.0 SS 274.4

CRT -.3513 CRS .5365 CST -.9734

LSA 470.7 MSA 244.3 SSA 21.6
                                                                    SGT 1036.9 SGR 639.9 SG3 279.8
RRT .7174 RRF .8112 RTF .8172
SGB 1218.5 R23 .1714 R13 .8618
    TDE .2928 TRA-1.0267 TC3 -.3607 BAU .3125
    RDE -.3061 RRA -.4070 RC3 -.3446 FAU .11434
   FOE .6937 FRA-1.5623 FC3-2.1125 BSP 3007
BDE .4236 BRA 1.1045 BC3 .4988 FSP -850
                                                                    SG1 1150.3 SG2 401.9 THA 27.51
                                                                                                                        EL1 383.6 EL2 243.5 ALF 153.53
                                                                                                                                   ARRIVAL DATE OCT 26 1967
                                                                        FLIGHT TIME 88.00
LAUNCH DATE JUL 30 1967
                                                                        DISTANCE 262.217
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 28.606 GAL -13.70 AZL 90.65 MCA 120.83 SMA 142.81 ECC .24469 INC .6455 V1 29.334
RP 107.89 LAP -.55 LOP 67.00 VP 39.127 GAP .50 AZP 89.67 TAL 241.70 TAP 2.53 RCA 107.87 APO 177.76 V2 35.125
RC 86.655 GL -2.66 GP -27.33 ZAL 166.53 ZAP 97.08 ETS 357.43 ZAE 151.58 ETE 232.97 ZAC 119.71 ETC 2.46 CLP -97.98
  PLANETOCENTRIC CONIC
   C3 45.676 VHL 6.758 DLA 12.49 BAL 140.94 RAD 6568.7 VEL 12.924 PTH 2.36 VHP 4.486 DPA -10.95 RAP 143.23 ECC 1.7517
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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13 52 58 4665.41
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4423.68
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      110.00
                                  4255.29
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 1153.4 SGR 651.5 SG3 279.4
RRT .7457 RRF .8266 RTF .8379
SGB 1324.6 R23 .1785 R13 .8739
SG1 1264.0 SG2 396.0 TMA 25.53
                                                                                                                        ST 396.0 SR 260.6 SS 283.1
CRT - 3419 CRS .5425 CST - .9700
    TOE .3236 TRA-1.0942 TC5 -.4391 BAU .3495
    RDE -.2810 RRA -.4015 RC3 -.3670 FAU .11300
                                                                                                                        LSA 498.7 MSA 235.9 SSA 21.7
    FDE .7202 FRA-1.5016 FC3-2.1419 BSP 3400
                                                                                                                        EL1 411.2 EL2 235.8 ALF 160.78
    BOE .4286 BRA 1.1655 BC3 .5723 FSP -861
                                                                                                                                  ARRIVAL DATE OCT 28 1967
                                                                        FLIGHT TIME 90.00
LAUNCH DATE JUL 30 1967
                                                                        DISTANCE 268.501
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 28.553 GAL -13.53 AZL 90.44 HCA 124.05 SHA 142.34 ECC .24285 INC .4407 V1 29.334 RP 107.85 LAP -.37 LOP 70.22 VP 39.099 GAP .97 AZP 89.75 TAL 240.91 TAP 4.95-RCA 107.77 APO 176.91 V2 35.137 RC 88.880 GL -1.83 GP -28.11 ZAL 166.22 ZAP 101.05 ETS 355.21 ZAE 149.00 ETE 229.08 ZAC 120.92 ETC 1.48 CLP-102.55
   PLANETOCENTRIC CONIC
    C3 44.499 VHL 6.671 DLA 13.13 RAL 141.64 RAD 6568.7 VEL 12.879 PTH 2.35 VHP 4.528 DPA -11.30 RAP 141.82 ECC 1.7323 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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64.95 15 18 32
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15 15 46 4396.55
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16 8 39 4230.94
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                                                                163.99
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 1273.6 SGR 660.1 SG3 276.2
RRT .7681 RRF .8440 RTF .8529
SGB 1434.4 R23 .1877 R13 .8828
                                                                                                                        ST 435.7 SR 242.4 55 292.1
    TOE .3597 TRA-1.1586 TC3 -.5205 BAU .3863
                                                                                                                        CRT -,3349 CRS .5483 CST -.9671
    ROE -.2544 RRA -.3922 RC3 -.3882 FAU .11059
FOE .7440 FRA-1.4228 FC3-2.1515 BSP 3795
                                                                                                                        LSA 531.9 MSA 224.9 SSA 21.8
                                                                    SG1 1380.4 SG2 390.0 THA 23.71
                                                                                                                        EL1 445.9 EL2 223.2 ALF 165.82
    BOE .4406 BRA 1.2232 BC3 .6493 FSP -858
                                                                                                                                   ARRIVAL DATE OCT 30 1967
                                                                        FLIGHT TIME 92.00
LAUNCH DATE JUL 30 1967
                                                                        DISTANCE 274.752
   RL 151.88 LAL -.00 LOL 306.17 VL 28.495 GAL -13.36 A7L 90.22 MCA 127.27 SMA 141.84 ECC .24107 INC .2193 VI 29.334 RP 107.82 LAP -.17 LOP 73.44 VP 39.067 GAP 1.42 A7P 89.87 TAL 240.04 TAP 7.31 RCA 107.65 APO 176.03 V2 35.149 RC 91.113 GL -.93 GP -28.91 7AL 165.81 7AP 104.74 ETS 352.92 7AE 146.45 ETE 225.97 7AC 121.90 ETC .53 CLP-106.90
   PLANETOCENTRIC CONIC
    C3 43.330 VHL 6.583 DLA 13.84 RAL 142.43 RAD 6568.6 VEL 12.833 PTH 2.34 VHP 4.589 DPA -11.74 RAP 140.61 ECC 1.7131
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 31 35 2851.27 -28.30 85.57 23.25 90.94 23 19 6 2251.3 -27.87 76.93
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1 28 47 2300.59
16 16 27 4204.51
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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 480.0 SR 221.8 SS 302.6

CRT - .3284 CRS .5536 CST - .9641

LSA 571.0 MSA 211.2 SSA 21.9
                                                                    SGT 1395.6 SGR 665.1 SG3 270.5
RRT .7857 RRF .8576 RTF .8638
-5GB 1546.0 R23 .1987 R13 .8890
    TOE .4021 TRA-1.2183 TC3 -.6041 BAU .4223
    ROE -. 2256 RRA -. 3789 RC3 -. 4079 FAU .10712
                                                                   SCR 1546 () 823
    FOE .7689 FRA-1.3267 FC3-2.1403 BSP 4179
                                                                                                                        EL1 486.8 EL2 206.6 ALF 169.45
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FLIGHT TIME 86.00

-840

BOE .4611 BRA 1.2756 BC3 .7289 FSP

SG1 1497.7 SG2 383.4 THA 22.05

ARRIVAL DATE NOV 1 1967

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FLIGHT TIME 94.00
LAUNCH DATE JUL 30 1967
                                                                                                           DISTANCE 280.972
    HELIOCENTRIC CONIC
     RL 151.88 LAL -.00 LOL 306.17 VL 28.433 GAL -13.18 AZL 89.98 HCA 130.49 SHA 141.31 ECC .23933 INC .0000 V1 29.334
RP 107.78 LAP .02 LOP 76.66 VP 39.032 GAP 1.85 AZP 90.01 TAL 239.11 TAP 9.60 RCA 107.49 APO 175.13 V2 35.160
RC 93.352 GL .09 GP -29.78 ZAL 165.29 ZAP 108.13 ETS 350.54 ZAE 143.94 ETE 223.50 ZAC 122.65 ETC 359.60 CLP-111.01
    PLANETOCENTRIC CONIC
                                                                                                                                                 2.33 VHP 4.669 DPA -12.32 RAP 139.58 ECC 1.6941
      C3 42.174 VHL 6.494 DLA 14.63 RAL 143.30 RAD 6568.6 VEL 12.788 PTH
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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14 21 5 4571.33
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                                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                     SCT 1519.4 SGR 669.7 SC3 263.4
RRT .7997 RRF .8710 RTF .8717
SGB 1660.5 R23 .2122 R13 .8937
SCI 1616.9 SG2 377.8 THA 20.59
                                                                                                                                                                                  ST 529.2 SR 200.3 SS 312.8
CRT -.3186 CRS .5504 CST -.9626
      TOE .4507 TRA-1.2729 TC3 -.6901 BAU .4578
      RDE -.1962 RRA -.3634 RC3 -.4278 FAU .10316
                                                                                                                                                                                  LSA 615.5 MSA 196.5 SSA 22.1
     FOE .7867 FRA-1.2254 FC3-2.1175 BSP 4581
BDE .4915 BRA 1.3237 BC3 .8120 FSP -823
                                                                                                                                                                                   EL1 533.6 EL2 488.3 ALF 172.14
                                                                                                                                                                                                   ARRIVAL DATE NOV 3 1967
                                                                                                            FLIGHT TIME 96.00
                                                                                                            DISTANCE 287.161
     RL 151.88 LAL -.00 LOL 306.17 VL 28.369 GAL -12.99 A7L 89.71 MCA 133.72 SMA 140.76 ECC .23765 INC .2866 V1 29.334
RP 107.75 LAP .21 LOP 79.88 VP 36.995 GAP 2.26 A7P 90.20 TAL 238.11 TAP 11.83 RCA 107.31 APO 174.21 V2 35.170
RC 95.596 GL 1.24 GP -30.74 7AL 164.64 7AP 111.21 ETS 348.06 7AE 141.49 ETE 221.57 7AC 123.17 ETC 358.69 CLP-114.89
    HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 41.041 VHL 6.406 DLA 15.52 RAL 144.27 RAD 6568.6 VEL 12.744 PTH 2.32 VHP 4.769 DPA -13.05 RAP 138.73 ELC 1.077

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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23 53 34 2607.40
15 45 56 4297.56
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90.27 24 37 2
62.40 16 57 36
93.06 2 3 37
59.20 17 44 19
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          110.00
                                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SCT 1644.1 SGR 673.3 SG3 254.9
RRT .8109 RRF .8838 RTF .8776
SGB 1776.7 R23 .2277 R13 .8972
SG1 1737.1 SG2 373.0 THA 19.29
                                                                                                                                                                                   ST 584.3 SR 177.1 SS 324.0

CRT -.3005 CRS .5372 CST -.9619

LSA 666.8 MSA 180.8 SSA 22.2
      TOE .5065 TRA-1.3211 TC3 -.7783 BAU .4926
       RDE -. 1653 RRA -. 3450 RC3 -. 4476 FAU .09865
      FOE .8027 FRA-1.1175 FC3-2.0810 BSP 4992
BOE .5328 BRA 1.3654 BC3 .8978 FSP -803
                                                                                                                                                                                   EL1 586.9 EL2 168.2 ALF 174.33
       BOE .5328 BRA 1.3654 BC3 .8978 FSP
                                                                                                                                                                                                  ARRIVAL DATE NOV 5 1967
                                                                                                            FLIGHT TIME 98.00
LAUNCH DATE JUL 30 1967
                                                                                                            DISTANCE 293.323
      RL 151.88 LAL -.00 LOL 306.17 VL 28.302 GAL -12.80 A7L 89.42 MCA 136.94 SMA 140.19 ECC .23601 INC .5827 V1 29.334
RP 107.72 LAP .40 LOP 83.11 VP 38.955 GAP 2.66 A7P 90.43 TAL 237.05 TAP 14.00 RCA 107.11 APO 173.28 V2 35.180
RC 97.843 GL 2.55 GP -31.82 ZAL 163.84 ZAP 113.95 ETS 345.43 ZAE 139.09 ETE 220.10 ZAC 123.47 ETC 357.79 CLP-118.55
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
       C3 39.941 VHL 6.320 DLA 16.54 RAL 145.36 RAD 6568.5 VEL 12.701 PTH 2.31 VHP 4.887 DPA -13.97 RAP 138.02 ECC 1.6573
      C3 39.941 VHL 6.320 DLA 16.54 RAL 145.36 RAD 6568.5 VEL 12.701 PTH 2.31 VMP 4.887 DPA -13.97 RAP 138.02 ELC 1.575
ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 18 20 2927.83 -28.26 91.17 25.85 88.13 23 7 8 2327.8 -28.22 82.50
90.00 14 47 11 4488.19 9.20 188.20 16.30 63.10 16 1 59 3888.2 5.52 181.46
100.00 23 49 1 2635.40 -29.88 69.70 25.89 89.18 24 32 57 2035.4 -29.68 60.90
100.00 15 59 11 4255.87 10.64 170.36 15.54 61.90 17 10 7 3655.9 6.80 163.68
110.00 1 21 51 2357.26 -34.13 48.53 25.84 92.01 2 1 8 1757.3 -33.48 39.35
                               1 21 51 2357.26
16 46 47 4106.75
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                                                                                                     MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                 ST 647.5 SR 151.4 SS 338.2

CRT -.2648 CRS .5073 CST -.9614

LSA 727.4 MSA 164.0 SSA 22.3
                                                                                                     SCT 1767.8 SCR 674.6 SC3 244.6
RRT .8192 RRF .8957 RTF .8815
SCB 1892.1 R23 .2449 R13 .8992
SCI 1855.9 SC2 368.5 THA 18.10
       TOE . .5723 TRA-1.3604 TC3 -.8669 BAU .5257
       ROE -.1316 RRA -.3228 RC3 -.4664 FAU .09350
FOE .8219 FRA-1.0005 FC3-2.0267 BSP 5375
BOE .5872 BRA 1.3981 BC3 .9844 FSP -769
                                                                                                                                                                                   EL1 648.8 EL2 145.7 ALF 176.27
       BDE .5872 BRA 1.3981 BC3 .9844 FSP
                                                                                                                                                                                                    ARRIVAL DATE NOV 7 1967
                                                                                                             FLIGHT TIME 100.00
 LAUNCH DATE JUL 30 1967
                                                                                                            DISTANCE 299.457
     HELIOCENTRIC CONIC
      RL 151.88 LAL -.00 LOL 306.17 VL 28.232 GAL -12.60 AZL 89.08 HCA 140.17 SMA 139.61 ECC .23443 INC .9169 V1 29.334

RP 107.69 LAP .59 LOP 86.34 VP 38.913 GAP 3.04 AZP 90.70 TAL 235.95 TAP 16.12 RCA 106.88 APO 172.35 V2 35.190

RC 100.092 GL 4.05 GP -33.08 ZAL 162.85 ZAP 116.36 ETS 342.64 ZAE 136.71 ETE 219.02 ZAC 123.56 ETC 356.87 CLP-121.99
     PLANETOCENTRIC CONIC
       C3 38.893 VHL 6.236 DLA 17.73 RAL 146.58 RAD 6568.5 VEL 12.659 PTH 2.30 VMP 5.026 DPA -15.10 RAP 137.44 ECC 1.6401 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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62.64 16 17 46
87.82 24 27 41
61.40 17 24 54
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                                                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    ST 719.7 SR 125.2 SS 353.6
CRT -.1937 CRS .4402 CST -.9623
       TOE .6482 TRA-1.3912 TC3 -.9572 BAU .5582
                                                                                                       SGT 1892.2 SGR 677.1 SG3 233.7
                                                                                                      RRT .8253 RRF .9076 RTF .8844
SGB 2009.7 R23 .2639 R13 .9009
       ROE -.0966 RRA -.2984 RC3 -.4862 FAU .08819
                                                                                                                                                                                    LSA 797.7 MSA 147.6 SSA 22.4
       FOE .8375 FRA -.8847 FC3-1.9630 BSP 5782
BDE .6554 BRA 1.4228 BC3 1.0736 FSP -740
                                                                                                                                                                                    EL1 720.1 EL2 122.7 ALF 178.01
                                                                                                        SG1 1976.1 SG2 366.2 THA 17.06
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LAUNCH DATE JUL 30 1967
                                                                       FLIGHT TIME 102.00
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                                                                       DISTANCE 305.566
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 28.161 GAL -12.40 AZL 88.70 MCA 143.40 SMA 139.02 ECC .23291 INC 1.2998 V1 29.334 RP 107.66 LAP .78 LOP 89.57 VP 38.869 GAP 3.41 AZP 91.04 TAL 234.79 TAP 18.19 RCA 106.64 APO 171.40 V2 35.199 RC 102.344 GL 5.82 GP -34.54 ZAL 161.64 ZAP 118.39 ETS 339.65 ZAE 134.34 ETE 218.28 ZAC 123.45 ETC 355.91 CLP-125.25
   PLANETOCENTRIC CONIC
    C3 37.925 VHL 6.158 DLA 19.13 RAL 147.96 RAD 6568.5 VEL 12.621 PTH 2.29 VHP 5.189 DPA -16.48 RAP 136.94 ECC 1.6241
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   22 2 17 3014.94
15 24 1 4374.91
                                                  -27.90
                                                                 97.52
                                                                               28.54
                                                                                              84.97
                                                                                                         22 52 32
                                                                                                                         2414.9
                                                                                                         16 36 56
                                                                181.77
                                                                               18.63
                                                                                                                          3774.9
                                                    5.65
                                                                                               62.21
                                                                                                                                          1.89
                                                                                                                                                       175.11
                 23 35 26 2714.58
16 33 34 4150.50
       100.00
                                                                 75.58
                                                                                                         24 20 40
                                                                                                                          2114.6
                                                                                                                                                        66.7A
                                                  -29.66
                                                                               28.69
                                                                                              86.10
                                                                                                                                         -29.89
                                                                164.43
                                                                               17.79
                                                                                               60.91 17 42 44
                                                    7.20
                                                                                                                          3550.5
                                                                                                                                          3.27
                                                                                                                                                      157.85
       110.00
                    1 13 9
                                2421.14
                                                                                                         1 53 30
                                                                                                                                                        44.28
                                                 -34.17
                                                                 53.52
                                                                               28.92
                                                                                              89.06
                                                                                                                          1821.1
                                                                                                                                        -33.92
                                                                                              57.45 18 23 12
       110.00
                   17 16 16
                                 4016.70
                                                 11.08
                                                                151.94
                                                                               15.44
                                                                                                                          3416.7
                                                                                                                                          6.71
                                                                                                                                                       145.57
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SCT 2015.3 SCR 678.2 SC3 221.4
RRT .8287 RRF .9186 RTF .8863
SCB 2126.4 R23 .2840 R13 .9017
    TOE .7390 TRA-1.4100 TC3-1.0463 BAU
                                                      .5890
                                                                                                                     ST 804.8 SR 98.1 SS 373.0
CRT -.0420 CRS .2933 CST -.9635
    ROE -.0582 RRA -.2697 RC3 -.5048 FAU .08239
    FOE .8575 FRA -.7633 FC3-1.8808 BSP 6160
                                                                                                                     LSA 882.4 MSA 131.8 SSA 22.2
                                                                    SG1 2094.8 SG2 365.2 THA 16.09
    BDE .7413 BRA 1.4356 BC3 1.1617 FSP
                                                                                                                      EL1 804.8 EL2 98.0 ALF 179.70
                                                     -701
LAUNCH DATE JUL 30 1967
                                                                       FLIGHT TIME 104.00
                                                                                                                                 ARRIVAL DATE NOV 11 1967
                                                                       DISTANCE 311.650 =
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 28.087 GAL -12.18 AZL 88.25 MCA 146.63 SMA 138.43 ECC .23145 INC 1.7458 V1 29.334 RP 107.63 LAP .96 LOP 92.80 VP 38.824 GAP 3.76 AZP 91.46 TAL 233.58 TAP 20.21 RCA 106.39 APO 170.47 V2 35.208 RC 104.596 GL 7.90 GP -36.28 ZAL 160.14 ZAP 120.02 ETS 336.43 ZAE 131.93 ETE 217.84 ZAC 123.15 ETC 354.89 CLP-128.35
  PLANETOCENTRIC CONIC
   C3 37.076 VHL 6.089 DLA 20.80 RAL 149.55 RAD 6568.4 VEL 12.588 PTH
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
90.00 21 49 37 3079.38 -27.43 102.17 30.29 8
                                                                                                2.28 WHP 5.381 DPA -18.16 RAP 136.47 ECC 1.6102
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2479.4
                                                                                             82.68
                                                                                                         22 40 57
                                                                                                                                                        93.58
                                                                                                                                       -28.16
                 15 49 20 4299.03
23 24 48 2772.47
16 56 51 4081.17
1 6 19 2467.16
                                                                                                         17 0 59
        90.00
                                                    3.23
                                                                177.51
                                                                               20.40
                                                                                               61.85
                                                                                                                          3699.0
                                                                                                                                                       170.88
                                                                                                                                           -.56
                                                                                               83.87
                                                 -29.31
                                                                 79.85
                                                                               30.54
                                                                                                         24 11 0
                                                                                                                          2172.5
                                                                                                                                                        71.08
                                                                                                                                         -29.85
                                                                                                       18 4 52
      100.00
                                                    4.89
                                                               160.58
                                                                               19.49
                                                                                              60.47
                                                                                                                          3481.2
                                                                                                                                            .92
                                                                                                                                                      154.04
                                                                                                         1 47 26
                                                 -34.06
                                                                 57.11
                                                                               30.99
                                                                                              86.94
                                                                                                                          1867.2
                                                                                                                                         -34.11
                                                                                                                                                        47.86
                                                                                              56.87 18 41 44
      110.00
                   17 35 45
                               3959.25
                                                  8.96
                                                                                                                          3359.2
                                                                                                                                           4.54
                                                               148.84
                                                                               16.99
                                                                                                                                                       142.55
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 2139.1 SGR 680.8 SG3 208.5
RRT .8295 RRF .9291 RTF .8879
    TOE .8468 TRA-1.4165 TC3-1.1342 BAU .6191
                                                                                                                      ST 905.3 SR 76.1 SS 394.9
CRT .2664 CRS -.0251 CST -.9658
    RDE -.0175 RRA -.2377 RC3 -.5232 FAU .07644
                                                                                                                      LSA 983.3 MSA 117.9 SSA 21.6
    FOE .8758 FRA - .6443 FC3-1.7849 BSP 6565
                                                                   SGB 2244.9 R23 .3045 R13 .9025
                                                    -665
    BDE .8470 BRA 1.4364 BC3 1.2490 FSP
                                                                   SG1 2214.6 SG2 367.3 THA 15.22
                                                                                                                      ELI 905.6 EL2 73.3 ALF 1.29
                                                                                                                               ARRIVAL DATE NOV 13 1967
LAUNCH CATE JUL 30 1967
                                                                      FLIGHT TIME 106.00
                                                                      DISTANCE 317.711
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 28.013 GAL -11.96 AZL 87.72 MCA 149.85 SMA 137.82 ECC .23004 INC 2.2756 YI 29.334 RP 107.61 LAP 1.14 LOP 96.04 VP 38.777 GAP 4.10 AZP 91.97 TAL 232.33 TAP 22.19 RCA 106.12 APO 169.53 V2 35.216 RC 106.849 GL 10.39 GP -38.34 ZAL 158.27 ZAP 121.19 ETS 332.92 ZAE 129.42 ETE 217.67 ZAC 122.68 ETC 353.76 CLP-131.32
  PLANETOCENTRIC CONTC
   C3 36.414 VHL 6.034 OLA 22.82 RAL 151.40 RAD 6568.4 VEL 12.561 PTH 2.28 VHP 5.612 DPA -20.19 RAP 135.98 ECC 1.5993
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                              108.52
                                                                            32.35
                                                                                            79.63 22 23 49
                                                                                                                       2568.5
                                                                                                                                     -27.66
       90.00 21 31 0 3168.48
                                                -26.50
                                                                                             61.68 17 32 43
80.94 23 57 0
60.16 18 33 29
                  16 22 42 4200.82
23 9 29 2850.98
                                                                              22.87
                                                                                                                         3600.8
                                                   .06
                                                              172.03
                                                                                                                                         -3.72
                                                                                                                                                      165.39
       90.00
                                                                              32.75
                                                                                                                         2251.0
                                                                                                                                       -29.56
                                                                                                                                                      76.90
                                                                85.57
      100.00
                                                 -28.61
                                                              155.75
                                                                                                                                         -2.05
                                                                                                                                                     149.23
                                                                                                                         3393.5
      100.00
                  17 26 55
                               3993.55
                                                  1.94
                                                                              21.83
                                                                                             8'4.16 1 38 47
56.34 19 5 0
                                                                                                                         1928.0
      110.00
                    0 56 39
                                 2527.99
                                                -33.74
                                                                61.83
                                                                              33.54
                                                                                                                                       -34.18
                                                                                                                                                       52.61
      110.00
                  18 0 10 3889.30
                                                 6.34
                                                              145.12
                                                                              19.10
                                                                                                                         3289.3
                                                                                                                                         1.87
                                                                                                                                                      138.89
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY.
                                                                  SCT 2263.4 SCR 683.7 SC3 194.6
RRT .8271 RRF .9384 RTF .8893
SCB 2364.4 R23 .3243 R13 .9033
SCI 2334.9 SC2 372.5 THA 14.40
                                                                                                                     ST 1026.8 SR 69.8 SS 421.0
CRT .7178 CRS -.5425 CST -.9688
   TOE .9786 TRA-1.4071 TC3-1.2174 BAU .6483 RDE .0268 RRA -.2006 RC3 -.5396 FAU .07020
                                                                                                                    LSA 1106.6 MSA 107.1 SSA 20.3
EL1 1028.1 EL2 48.5 ALF 2.80
   FOE .8960 FRA -.5249 FC3-1.6691 BSP 6980
BDE .9790 BRA 1.4213 BC3 1.3316 FSP -626
                                                                                                                                ARRIVAL DATE NOV 15 1967
LAUNCH DATE JUL 30 1967
                                                                      FLIGHT TIME 108,00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 323.749
   RL 151.88 LAL -.00 LOL 306.17 VL 27.937 GAL -11.73 A7L 87.08 MCA 153.08 SMA 137.22 ECC .22870 INC 2.9196 V1 29.334 RP 107.59 LAP 1.32 LOP 99.28 VP 38.729 GAP 4.42 AZP 92.60 TAL 231.05 TAP 24.13 RCA 105.84 APO 168.60 V2 35.223 RC 109.101 GL 13.42 GP -40.83 7AL 155.91 ZAP 121.84 ETS 329.09 ZAE 126.73 ETE 217.71 ZAC 122.05 ETC 352.47 CLP-134.21
  PLANETOCENTRIC CONIC
   C3 36.044 VHL 6.004 OLA 25.29 RAL 153.50 RAD 6568.4 VEL 12.546 PTH 2.27 VMP 5.897 OPA -22.63 RAP 135.38 ECC 1.5932
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 0 11 3303.91 -24.49 117.93 34.59 75.33 21 55 15 2703.9 -26.27 109.71
                 21 0 11 3303.91
17 11 7 4060.23
                                                                              26.57
                                                 -4.46
                                                              164.17
                                                                                              62.01
                                                                                                        18 18 47
                                                                                                                         3460.2
                                                                                                                                        -8.17
                                                                                                                                                      157.46
       90.00
                                                                                              76.92
                                2964.58
                                                -27.12
                                                                93.69
                                                                              35.31
                                                                                                       23 34 51
                                                                                                                         2364.6
                                                                                                                                                       85.22
      100.00
                  22 45 26
                                                                                                                                        -28.65
      100.00
                  18 A 33
                                3874.79
                                                 -2.09
                                                              149.24
                                                                              25.26
                                                                                              60.17
                                                                                                       19 13 7
                                                                                                                         3274.8
                                                                                                                                         -6.04
                                                                                                                                                      142.68
                               2611.26
                   0 42 18
                                                                                                         1 25 49
                                                - 32 . 98
                                                                66.21
                                                                              36,67
                                                                                              80.46
                                                                                                                         2011.3
                                                                                                                                       -33.95
                                                                                                                                                       59.10
      110.00
                                                                              22.09
                                                                                              55.93
                                                                                                        19 35 27
                                                                                                                         3200.9
                                                                                                                                         -1.51
                                                                                                                                                      134.27
      110.00
                  1A 32 5
                                 3800.88
                                                 2.98
                                                              140.48
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE 1.1459 TRA-1.3751 TC3-1.2879 BAU .6748
                                                                  SCT 2386.2 SGR 683.9 SG3 179.2
RRT .8200 RRF .9456 RTF .8905
SGB 2482.3 R23 .3427 R13 .9040
                                                                                                                     ST 1178.0 SR 90.1 SS 453.6
CRT .9610 CRS -.8903 CST -.9723
   ROE .0763 RRA -.1553 RC3 -.5497 FAU .06345
FDE .9214 FRA -.4020 FC3-1.5239 BSP 7349
                                                                                                                     LSA 1261.3 MSA 101.2 SSA 17.8
   BDE 1.1484 BRA 1.3838 BC3 1.4003 FSP -577
                                                                  SG1 2452.9 SG2 3AG.A THA 13.56
                                                                                                                     EL1 1181.2 EL2 24.8 ALF 4.20
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ARRIVAL DATE NOV 17 1967

EL1 2296.5 EL2 83.3 ALF 4.66

LAUNCH DATE JUL 30 1967

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DISTANCE 329.763
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 27.860 GAL -11.50 A7L 86.28 MCA 156.30 SMA 136.61 ECC .22742 INC 3.7246 V1 29.334 RP 107.57 LAP 1.50 LOP 102.51 VP 38.680 GAP 4.74 A7P 93.41 TAL 229.72 TAP 26.02 RCA 105.55 APO 167.68 V2 35.230 RC 111.351 GL 17.15 GP -43.84 ZAL 152.88 ZAP 121.89 ETS 324.90 ZAE 123.77 ETE 217.90 ZAC 121.27 ETC 350.95 CLP-157.10
   PLANETOCENTRIC CONTC
    C3 36.161 VHL 6.013 DLA 28.35 RAL 156.30 RAD 6568.4 VEL 12.551 PTH 2.27 VHP 6.260 DPA -25.56 RAP 134.54 ECC 1.5951 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            66.19 20 6 44
66.18 20 28 53
70.84 22 50 58
61.26 20 18 35
                                                                                                                                   -18.95
                                                                                                                                                   137.77
                                                                                                                       3120.8
                 19 4 44
                                                                             34.55
        88.60
                                 3720.83
                                                -15.86
                                                              145.09
                                                                                                                                                   132.21
        91.40
                  19 28 8
                                 3644.95
                                                -15.85
                                                              139.53
                                                                             34.54
                                                                                                                       3045.0
                                                                                                                                    -18.93
                                                                                                                       2560.8
                                                                                                                                    -25.19
                                                                                                                                                    99.08
       100.00
                   21 58 18
                                3160.83
                                                -23.39
                                                              107.06
                                                                             37.69
      100.00
                   19 17 15
                                 3680.18
                                                 -8.59
                                                              138.45
                                                                             30.88
                                                                                                                       3080.2
                                                                                                                                    -12.36
                                                                                                                                                   131.69
                                                                                                       1 4 41
      110.00
                   0 19 8
                                2732.26
                                                -31.25
                                                               77.21
                                                                             40.38
                                                                                            75.39
                                                                                                                       2132.3
                                                                                                                                    -32.94
                                                                                                                                                    68.40
                                                                                            55.85 20 18 11
                                                 -1.58
      110,00
                   19 16 50
                                3681.52
                                                              134.25
                                                                             26.58
                                                                                                                       30A+.5
                                                                                                                                     -6.05
                                                                                                                                                   128.02
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 2511.2 SGR 682.8 SG3 162.7
RRT .8065 RRF .9497 RTF .8926
SGB 2602.4 R23 .3577 R13 .9055
                                                                                                                   ST 1366.5 SR 128.9 S5 490.5
CRT .9913 CRS -.9823 CST -.9764
    TDE 1.3612 TRA-1.3165 TC3-1.3389 BAU .6999
    RDE .1291 RRA -.1014 RC3 -.5510 FAU .05643
                                                                                                                   LSA 1454.0 MSA 100.0 SSA 14.6
    FDE .9456 FRA -.2825 FC3-1.3509 BSP 7756
BDE 1.3673 BRA 1.3203 BC3 1.4478 FSP -529
                                                                  SG1 2572.4 SG2 394.1 THA 12.67
                                                                                                                   ELI 1372.4 EL2 16.9 ALF 5.34
LAUNCH DATE JUL 30 1967
                                                                      FLIGHT TIME 112.00
                                                                                                                              ARRIVAL DATE NOV 19 1967
                                                                     QISTANCE 335.755
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.782 GAL -11.25 AZL 85.23 MCA 159.52 SMA 136.01 ECC .22620 INC 4.7670 V1 29.334 RP 107.55 LAP 1.67 LOP 105.75 VP 38.630 GAP 5.04 AZP 94.47 TAL 228.36 TAP 27.88 RCA 105.24 APO 166.78 V2 35.236
    RC 113.598 GL 21.82 GP -47.51 7AL 148.95 ZAP 121.20 ETS 320.27 ZAE 120.39 ETE 218.13 ZAC 120.36 ETC 349.08 CLP-140.09
   PLANETOCENTRIC CONIC
    C3 37.126 VHL 6.093 DLA 32.15 RAL 159.75 RAD 6568.4 VEL 12.589 PTH
                                                                                             2.28 VHP 6,743 DPA -29.06 RAP 133.29 ECC 1.6110
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       74.10
                  17 26 39
                                 4085.19
                                                -17.63
                                                             173.01
                                                                             39,40
                                                                                           62.67 18 34 44
                                                                                                                       3485.2
                                                                                                                                    L-21.15
                                                                                                                                                   165.81
                                                                                            62.66 22 28 37
62.67 18 34 44
62.66 22 28 37
67.95 24 17 34
56.86 21 29 5
      105.90
                   21 33 43
                                3293.89
                                                -17.61
                                                              114.37
                                                                             39.39
                                                                                                                       2693.9
                                                                                                                                    -21.13
                                                                                                                                                   107.17
       74.10
                   17 26 39
                                 4085.19
                                                -17.63
                                                              173.01
                                                                             39.40
                                                                                                                       3485.2
                                                                                                                                     -21.15
                                                                                                                                                   165.81
      105.90
                   21 33 43
                                3293.89
                                                -17.61
                                                              114.37
                                                                             39.39
                                                                                                                       2693.9
                                                                                                                                     -21.33
                                                                                                                                                   107.17
      110.00
                   23 28 35
                                2938.69
                                                -26.80
                                                               91.62
                                                                             43.95
                                                                                                                       2338.7
                                                                                                                                     -29.55
                                                                                                                                                    A3.51
      110.00
                   20 30 57 3486.40
                                                 -8.89
                                                              124.07
                                                                             34.18
                                                                                                                       2868.4
                                                                                                                                    -13.19
                                                                                                                                                   117.52
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 2638.0 SGR 674.5 SG3 144.5
RRT .7820 RRF .9477 RTF .8961
SGB 2722.8 R23 .3680 R13 .9080
SGI 2691.5 SG2 412.0 TMA 11.58
                                                                                                                   ST 1605.5 SR 174.1 SS 533.0 CRT .9786 CRS -.9978 CST -.9808
    TDE 1.6511 TRA-1.2186 TC3-1.3526 BAU .7218
    RDE .1836 RRA -.0336 RC3 -.5342 FAU .04892
    FOE .9701 FRA -.1638 FC3-1.1408 BSP 8170
                                                                                                                   LSA 1697.4 MSA 103.5 SSA 11.1
    BOE 1.6613 BRA 1.2190 BC3 1.4542 FSP
                                                   -477
                                                                                                                   EL1 1614.6 EL2 35.6 ALF
                                                                                                                                                       6.06
                                                                                                                             ARRIVAL DATE NOV 21 1967
                                                                     FLIGHT TIME 114.00
LAUNCH DATE JUL 30 1967
                                                                     DISTANCE 341.721
    RL 151.88 LAL -.00 LOL 306.17 VL 27.704 GAL -11.00 AZL 83.82 MCA 162.74 SMA 135.41 ECC .22504 INC 6.1789 V1 29.334 RP 107.53 LAP 1.83 LOP 109.00 VP 38.579 GAP 5.33 AZP 95.90 TAL 226.96 TAP 29.69 RCA 104.94 APO 165.88 V2 35.241 RC 115.842 GL 27.69 GP -52.01 ZAL 143.80 ZAP 119.63 ETS 315.09 ZAE 116.41 ETE 218.16 ZAC 119.35 ETC 346.64 CLP-143.44
   PLANETOCENTRIC CONIC
    C3 39.684 VHL 6,300 DLA 36.87 RAL 164.37 RAD 6568.5 VEL 12.691 PTH 2.31 VHP 7.425 DPA -33.22 RAP 131.32 ECC 1.6531
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           57.99 18 3 54-
57.99 23 36 52
                                                                                                                                                180.81
                                                                                                                     3660.8
                                4260.76
                                                                           46.45
                                                                                                                                   -23.44
       65.34
                  16 52 53
                                                -19.36
                                                             187.79
                   22 44 20
                                3152.01
                                                -19.34
                                                              104.31
                                                                             46.44
                                                                                                                       2552.0
                                                                                                                                    -23.43
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      114.66
                                                                                            57.99 18 3 54
57.99 23 36 52
                                                                                                                                                   180.81
                   16 52 53
                                 4260.76
                                                -19.36
                                                              187.79
                                                                             46.45
                                                                                                                       3660.8
                                                                                                                                    -23.44
       65.34
                   22 44 20
                                3152.01
                                                -19.34
                                                              104.31
                                                                             46.44
                                                                                                                      2552.0
                                                                                                                                                    97.34
      114.66
                                                                                            57.99 18 3 54
57.99 23 36 52
                                                                             46.45
                                                                                                                       3660.8
                                                                                                                                    -23.44
                                                                                                                                                   180.81
                   16 52 53
                                4260.76
                                                -19.36
                                                              187.79
       65.34
                                                                             46.44
                   22 44 20
                                                              104.31
                                                                                                                      2552.0
                                                                                                                                    -23.43
                                                                                                                                                    97.34
      114.66
                                3152.01
                                                -19.34
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 2766.1 SGR 649.4 SG3 124.6
RRT .7343 RRF .9315 RTF .9016
SGB 2841.3 R23 .3722 R13 .9121
                                                                                                                   ST 1911.5 SR 211.6 SS 581.2
    TOE 2.0632 TRA-1.0578 TC3-1.3003 BAU .7363
   ROE .2308 RRA .0558 RC3 -.4852 FAU .04081
FOE .9953 FRA -.0442 FC3 -.8903 BSP 8536
ROF 2.0761 BRA 1.0593 RC3 1.3879 FSP -415
                                                                                                                   CRT .9592 CRS -.9931 CST -.9850
                                                                                                                  ELI 1922.3 EL2 59.4 ALF 6.07
                                                                 SG1 2808.0 SG2 434.3 THA 10.02
    BOE 2.0761 BRA 1.0593 BC3 1.3879 FSP
                                                    -415
LAUNCH DATE JUL 30 1967
                                                                     FLIGHT TIME 116.00
                                                                                                                             ARRIVAL DATE NOV 23 1967
  HELIOCENTRIC CONIC
                                                                     DISTANCE 347.656
   RL 151.88 LAL -.00 LOL 306.17 VL 27.626 GAL -10.73 A7L 81.79 MCA 165.93 SHA 134.81 ECC .22393 INC 8.2120 V1 29.334
RP 107.52 LAP 1.99 LOP 112.24 VP 38.527 GAP 5.60 AZP 97.97 TAL 225.53 TAP 31.46 RCA 104.62 APO 165.00 V2 35.246
RC 118.080 GL 35.06 GP -57.51 ZAL 137.08 ZAP 117.00 ETS 309.02 ZAE 111.55 ETE 217.50 ZAC 118.29 ETC 343.16 CLP-147.69
   PLANETOCENTRIC CONIC
   C3 45.562 VHL 6.750 OLA 42.55 RAL 170.95 RAD 6568.7 VEL 12.920 PTH 2.35 VHP 8.456 DPA -38.10 RAP 128.09 ECC 1.7498
   LNCH AZMTH LNCH TIME L-I TIME
56.80 16 39 16 4408.78
                                                           INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                               INJ LAT
                                                                                          51.85 17 52 45
51.84 24 41 41
                 16 39 16
                                                                                                                                   -25.29
                                                                                                                                                194.55
                                                -20.49
                                                              201.09
                                                                             56.95
                                                                                                                       3008.8
      123.20
                   23 50 27
                                3073.60
                                                -20.47
                                                               98.56
                                                                             56.94
                                                                                                                       2473.6
                                                                                                                                     -25.27
                                                                                                                                                    92.03
                                                                                                    17 52 45
                                                                                                                       3808.8
                                                                                                                                     -25.29
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       56.80
                  16 39 16
                                 4408.78
                                                -20.49
                                                              201.09
                                                                             56.95
                                                                                            51.85
                                                                                            2473.6
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      123.20
                  23 50 27
                                3073.60
                                                -20.47
                                                               98.56
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                  16 39 16 4408.78
23 50 27 3073.60
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                                                              201.09
                                                                             56.95
      123.20
                                                -20.47
                                                               96.56
                                                                             56.94
                                                                                                                       2473.6
                                                                                                                                     -25.27
                                                                                                                                                    92.03
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
    TOE 2.6765 TRA -.7941 TC3-1.1480 BAU .7385
                                                                  SGT 2898.4 SGR 595.4 SG3 103.5
                                                                                                                   ST 2288.9 SR 204.3 SS 629.6
    ROE .2294 RRA .1730 RC3 -.3696 FAU .03231
FOE 1.0143 FRA .0717 FC3 -.6139 BSP 8914
BOE 2.6863 BRA .8127 BC3 1.2124 FSP -351
                                                                 RRT .6231 RRF .8695 RTF .9116
$68 2958.9 R23 .3665 R13 .9194
                                                                                                                  CRT .9124 CRS -.9629 CST -.9889
                                                                                                                   LSA 2379.6 MSA 121.5 SSA 5.3
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FLIGHT TIME 110.00

SG1 2922.7 SG2 461.8 THA 7.48

ARRIVAL DATE NOV 25 1967

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LAUNCH DATE JUL 30 1967
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.547 GAL -10.45 A7L 78.59 HCA 169.11 SMA 134.22 ECC .22283 INC11.4069 V1 29.334 RP 107.50 LAP 2.14 LOP 115.48 VP 38.474 GAP 5.86 A7P 101.21 TAL 224.05 TAP 33.16 RCA 104.31 APO 164.13 V2 35.250 RC 120.312 GL 44.03 GP -64.19 7AL 128.48 7AP 113.13 ETS 300.99 7AE 105.41 ETE 214.80 7AC 117.33 ETC 337.34 CLP-154.43
                                                                            DISTANCE 353.549
   PLANETOCENTRIC CONIC
    C3 59.434 VHL 7.709 DLA 48,84 RAL 180.94 RAD 6569.1 VEL 13.446 PTH 2.46 VHP 10.171 DPA -43.58 RAP 122.57 ECC 1.9781
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.39 16 47 52 4555.26 -19.75 214.02 72.65 44.38 18 3 47 3955.3 -25.36 208.25
                                                                                                 44.38 18 3 47
44.37 1 56 27
                                  3058.95
4555.26
                                                                                     72.64
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                     1 5 28
                                                     -19.74
                                                                     96.50
       131.61
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                                                                                                     44.38 18 3 47
                                                                                                                                   3955.3
                                                                                                                                                 -25.36
                   16 47 52
                                                     -19.75
                                                                    214,02
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        48.39
                                                    -19.74
                                                                     96.50
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44.37 1 56 27
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                                  4555.26
                                                    -19.75
                                                                    214.02
                    16 47 52
        48.39
                                                                        HID-COURSE EXECUTION ACCURACY
                                  3058.95
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                                                                                                                                                  -25.35
                     1 5 24
                                                    -19.74
                                                                     96.50
      131.61
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                        SCT 3028.2 SCR 513.1 SC3 82.3
RRT .2609 RRF .5828 RTF .9291
SCB 3071.4 R23 .3457 R13 .9317
                                                                                                                              ST 2699-8 SR 110.5 SS 674.5
CRT .1421 CRS -.2646 CST -.9921
    TOE 3.6293 TRA -.3246 TC3 -.8605 BAU .7091
    ROE .0269 RRA .3193 RC3 - .2365 FAU .02343
                                                                                                                               LSA 2781.6 MSA 136.5 SSA 3.3
   FOE 1.0288 FRA .1914 FC3 -.3413 BSP 9247
BDE 3.6294 BRA .4553 BC3 .8924 FSP -282
                                                                                                                            EL1 2699.9 EL2 109.4 ALF
                                                                        5G1 3031.3 SG2 494.8 THA 2.60
                                                                                                                                                                        .33
                                                                             FLIGHT TIME 120.00
                                                                                                                                           ARRIVAL DATE NOV 27 1967
LAUNCH DATE JUL 30 1967
                                                                            DISTANCE 359.367
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.469 GAL -10.15 A7L 72.85 MCA 172.22 SMA 133.64 ECC .22166 INC17.1515 V1 29.334
RP 107.49 LAP 2.29 LOP 118.73 VP 38.421 GAP 6.10 A7P 107.00 TAL 222.53 TAP 34.75 RCA 104.01 APO 163.26 V2 35.253
RC 122.538 GL 53.91 GP -71.77 ZAL 118.06 ZAP 107.92 ETS 286.63 ZAE 97.22 ETE 205.33 ZAC 116.90 ETC 324.46 CLP-169.64
  PLANETOCENTRIC CONIC
   C3 97.356 VML 9.867 DLA 54.03 RAL 196.31 RAD 6569.9 VEL 14.788 PTH 2.67 VMP 13.434 DPA -48.99 RAP 112.56 ECC 2.6022 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 -21.48
       41.86 17 28 55 4716.01
138.14 2 27 5 3126.36
                                                                                                     37,50 18 47 31
                                                                    225.35
                                                                                  94.95
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                                                     -15.20
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                                                                      98.05
      138.14
                   17 28 55 4716.01
2 27 5 3126.36
17 28 55 4716.01
2 27 5 3126.38
                   17 28 55
2 27 5
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HID-COURSE EXECUTION ACCURACY
SGT 3087.6 879
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                                                                                                                                                                    93.25
                                                                     96.05
                                                     -15.19
       138.14
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2897.9 SR 621.0 SS 715.4

CRT -.9723 CRS .9444 CST -.9951

LSA 3044.5 MSA 161.0 SSA 1.9

EL1 2960.3 EL2 142.0 ALF 168.20
                                                                       SGT 3087.6 SGR 715.0 SG3 63.8
RRT -.6569 RRF -.4275 RTF .9604
SG8 3169.3 R23 -.2947 R13 -.9529
SG1 3124.2 SG2 333.0 THA 171.09
   TOE 4.9799 TRA .6304 TC3 -.4484 BAU .5884
ROE-1.0538 RRA .3558 RC3 -.0579 FAU .01425
    FOE 1.0471 FRA .3392 FC3 -.1267 85P 9511
    BOE 5.0901 BRA .7239 BC3 .4521 FSP -218
                                                                                                                                          ARRIVAL DATE NOV 29 1967
                                                                            FLIGHT TIME 122.00
LAUNCH DATE JUL 30 1967
                                                                            DISTANCE 364.992
  HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 27.390 CAL -9.81 AZL 59.89 HCA 175.16 SMA 133.06 ECC .22013 INC30.1078 VI 29.334 RP 107.49 LAP 2.43 LOP 121.98 VP 38.367 GAP 6.28 AZP 120.02 TAL 220.91 TAP 36.07 RCA 103.77 APO 162.35 V2 35.256
    RC 124.755 GL 61.12 GP -75.67 7AL 106.79 7AP 101.58 ETS 246.13 7AE 84.85 ETE 168.98 7AC 118.55 ETC 283.71 CLP 148.20
   PLANETOCENTRIC CONIC
    C3 239.069 VHL 15.462 DLA 53.63 RAL 215.46 RAD 6571.4 VEL 18.984 PTH 3_DB VHP 21.088 DPA -51.39 RAP 93.62 ECC 4.9345 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       42.34 18 46 43 4873.14
137.66 3 42 3 3289.68
42.34 18 46 43 4873.14
137.66 3 42 3 3289.68
                                                                                                                                 4273.1 -12.82
                                                                                  120.71
                                                                                                  36,63 20 7 56
                                                     -6.44
                                                                    230.96
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36.63 20 7 56
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       137.66
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                                                      -6.44
                                                                    230.96
                                                                                  120.71
                                                                        4.34 120.69 36.63 4 36 53
0.96 120.71 36.63 20 7 56
4.34 120.69 36.63 4 36 53
MID-COURSE EXECUTION ACCURACY
                                                                  104.34
                                                                                                                                                                   99.87
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                                                      -6.42
                                                                                                                                   2689.7
       137.66
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                                                                    230.96
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                    18 46 43 4873.14
3 42 3 3289.68
                                                      -6.44
        42.34
                                                                                                                                                 -12.81
                                                                                                                                  2689.7
                                                                 104.34
                                                      -6.42
       137 66
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 1765.6 SR 2101.9 55 813.5
                                                                        SCT 2266.8 SCR 2268.5 SC3 51.0
RRT -.9466 RRF -.9364 RTF ..9988
SCB 3207.0 R23 -.1910 R13 -.9807
    TOE 4.6113 TRA 2.3702 TC3 -.0504 BAU .1841
                                                                                                                              CRT -.9919 CRS .9892 CST -.9998
LSA 2857.0 MSA 186.9 SSA 1.3
EL1 2739.7 EL2 171.7 ALF 129.99
    ROE-5.6263 RRA-1.4242 RC3 -.0278 FAU .00204
FOE 1.1597 FRA .6457 FC3 -.0074 BSP 9632
                                                                        SG1 3163.8 SG2 524.2 THA 134.98
    BOE 7.2745 BRA 2.7652 BC3 .0576 FSP -169
                                                                                                                                           ARRIVAL DATE DEC 1 1967
                                                                             FLIGHT TIME 124.00
LAUNCH DATE JUL 30 1967
                                                                            DISTANCE 369.766
   HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.312 GAL -9.29 A7L 20.21 MCA 177.28 SMA 132.49 ECC .21660 INC69.7905 V1 29.334
RP 107.48 LAP 2.56 LOP 125.22 VP 38.313 GAP 6.21 A7P 159.77 TAL 218.89 TAP 36.17 RCA 103.79 APO 161.19 V2 35.258
RC 126.964 GL 51.03 GP -56.63 7AL 97.43 7AP 95.51 ETS 193.96 7AE 60.03 ETE 121.83 7AC 127.83 ETC 223.36 CLP 100.06
   PLANETOCENTRIC CONIC
     C31058.405 VHL 32.533 OLA 37.62 RAL 223.65 RAD 6573.0 VEL 34.347 PTH 3.51 VHP 43.375 OPA -38.31 RAP 64.48 ECC18.4187
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 64.13 20 43 7 4780.08 .35 215.57 134.12 52.39 22 2 47 4180.1 -4.52 209.64
                   20 43 7 3634.79
20 43 7 4780.08
2 50 57 3634.79 -
20 43 7 4780.08
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       115.67
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                                                                    215.57
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         64.13
                                                                       HID-COURSE EXECUTION ACCURACY
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                     2 50 57 3634.79
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                                                                    129.12
                                                                                                                                   3034.8
                                                        .37
       115.87
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 545.2 SR 1809.4 SS 1184.1
CRT .9266 CRS .9981 CST .9016
LSA 2219.4 MSA 217.5 SSA 1.2
                                                                        SGT 661.8 SGR 2789.5 SG3 45.8
RRT .5986 RRF -.9960 RTF -.5266
     TDE-3.0865 TRA .6045 TC3 -.0542 BAU 2.6851
     RDE-9.7775 RRA-8.3132 RC3 -.1819 FAU-.04073
     FOE 1.6702 FRA 1.7274 FC3 .0333 BSP 8058
B0E10.2531 BRA 8.3352 BC3 .1898 FSP -138
                                                                        SGB 2867.0 R23 -.1141 R13 -.9933
                                                                                                                               ELI 1879.4 EL2 197.4 ALF 74.22
                                                                        SG1 2818.5 SG2 524.7 THA 81.63
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FLIGHT TIME 118.00

ARRIVAL DATE DEC 3 1967

LAUNCH DATE JUL 30 1967

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DISTANCE 378.736
  HELIOCENTRIC CONTC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.234 GAL -9.62 AZL 139.29 HCA 183.53 SMA 131.93 ECC .22393 INC49.2913 VI 29.334 RP 107.48 LAP 2.68 LOP 128.47 VP 38.258 GAP 7.35 AZP 40.76 TAL 218.64 TAP 42.17 RCA 102.39 APO 161.47 V2 35.259 RC 129.165 GL -58.25 GP 69.05 ZAL 100.47 ZAP 99.47 ETS 163.17 ZAE 73.92 ETE 236.04 ZAC 95.58 ETC 117.95 CLP 117.41
  PLANETOCENTRIC CONIC
                                                                                             3.38 VHP 29.788 DPA 77.55 RAP 337.71 ECC10.4291
   C3 572.937 VHL 23.936 DLA -56.90 BAL 157.89 RAD 6572.5 VEL 26.348 PTH
   LNCM AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        146.89 3 26 45
146.89 12 13 40
146.89 3 26 45
146.89 12 13 40
146.89 3 26 45
146.89 12 13 40
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                                               1.50
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                                                                                                                   1743.9
                                                             66.12
       38.34
                   2 47 41 2343.86
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                 2 47 41 2343.86
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                   2 47 41 2343.86
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                 12 1 47
                                 712.76
                                                  1.52
                                                             296.05
      141.66
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 180.6 SR 2560.4 SS 1295.4
CRT .3157 CRS -.9991 CST -.3550
                                                                 SGT 553.1 SGR 3215.9 SG3 50.9
    TOE -.3896 TRA 1.1767 TC3 -.0369 BAU 1.2742
                                                                 RRT - .4884 RRF . .9937 RTF - .3912
SGB 3263.1 R23 - .1206 R13 .9922
SG1 3227.5 SG2 480.9 THA 94.91
   RO-10.4357 RRA-4.2672 RC3 .1622 FAU-.01509
FDE-2.0690 FRA -.6827 FC3 .0228 BSP 9899
BDE10.4430 BRA 4.4265 BC3 .1664 FSP -160
                                                                                                                  LSA 2869.6 MSA 177.7 SSA 1.3
                                                                                                                  EL1 2561.0 EL2 171.5 ALF 88.72
                                                                                                                             ARRIVAL DATE DEC 5 1967
                                                                     FLIGHT TIME 128.00
                                                                    DISTANCE 384.064
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.156 GAL -9.20 AZL 116.74 MCA 186.22 SMA 131.38 ECC .22199 INC26.7364 V1 29.334 RP 107.48 LAP 2.79 LOP 131.72 VP 38.203 GAP 7.43 AZP 63.40 TAL 216.86 TAP 43.08 RCA 102.21 APO 160.54 V2 35.259 RC 151.355 GL -60.59 GP 72.42 ZAL 107.40 ZAP 107.33 ETS 109.04 ZAE 91.21 ETE 184.22 ZAC 90.01 ETC 63.51 CLP 170.41
  PLANETOCENTRIC CONIC
                                                                                              2.98 WHP 16.587 OPA 78.88 RAP 236.81 ECC 4.1543
   C3 191.665 VHL 13.844 DLA -52.62 RAL 143.96 RAD 6571.0 VEL 17.691 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   55.12
                                                                           47.70
                                                                                         142.16
                                                                                                       2 43 33
                                                                                                                     1588.3
                                                                                                                                   14.39
                    2 7 4 2188.29
                                                 8.11
                                                             59.76
       43.60
                                                                                                     11 1 37
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                                620.79
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                 2 7 4 2188.29
10 51 16 620.79
2 7 4 2188.29
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       43.60
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                 10 51 16
                                                             294.92
                                                                            47.72
      136.40
                                620.79
                                                  8.12
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 RGT 2753.9 SCR 2215,6 SG3 64.2
RRT .9583 RRF .9294 RTF .9953
SGB 3534.7 R23 -.1972 R13 .9793
SGI 3499.4 SG2 498.4 TMA 36.56
                                                                                                                  ST 1927.5 SR 1134.1 SS 786.3
CRT .9732 CRS -.9630 CST -.9992
    TOE-4.4150 TRA-3.0012 TC3 -.0882 BAU
                                                    .2269
    RDE-2.3273 RRA-2.9271 RC3 -.0078 FAU .00914
                                                                                                                   LSA 2358.7 MSA 237.7 SSA
                                                                                                                                                        1.4
    FOE-1.2729 FRA -.7499 FC3 -.0413 BSP 10716
                                                                                                                   EL1 2225.0 EL2 225.9 ALF 30.14
    BOE 4.9909 BRA 4.1923 BC3 .0885 FSP
                                                    -203
                                                                                                                             ARRIVAL DATE DEC 7 1967
                                                                     FLIGHT TIME 130.00
LAUNCH DATE JUL 30 1967
                                                                    DISTANCE 389.754
   RL 151.88 LAL -.00 LOL 306.17 VL 27.079 GAL -8.85 A7L 108.29 MCA 189.27 SMA 130.84 ECC .22115 INC18.2925 VI 29.334 RP 107.48 LAP 2.90 LOP 134.97 VP 38.148 GAP 7.62 A7P 71.93 TAL 215.21 TAP 44.48 RCA 101.90 APO 159.77 V2 35.259 RC 133.537 GL -56.40 GP 64.12 7AL 113.14 7AP 115.32 ETS 80.16 7AE 101.32 ETE 158.25 7AC 89.01 ETC 34.82 CLP-168.43
   PLANETOCENTRIC CONIC
    C3 101.670 VML 10.083 DLA -46.83 RAL 143.02 RAD 6570.0 VEL 14.934 PTH 2.69 VMP 11.795 DPA 69.53 RAP 206.89 ECC 2.6732
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          40.29
                                                                                                       3 0 58
                                                                                                                     1412.7
                                                                                        135.36 3 0 58
135.35 12 0 52
                    2 27 25 2012.72
10 23 23 5848.23
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                                                 13.21
       51.00
                                                                                                                       5248.2
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      129.00
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                                                                                                       3 0 58
                               2012.72
5848.23
                                                               47.97
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                                                                                          135.36
       51.00
                    2 27 25
                                                 13.21
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135.36 3 0 58
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10 23 23 5848.23
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                  10 23 23
                                                              272.65
                                                                             40.30
      129.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 3583.3 SGR 768.7 SG3 82.9
RRT .7924 RRF .6105 RTF .9644
SGB 3664.8 R23 -.2732 R13 .9587
SGI 3635.5 SG2 462.2 THA 9.81
                                                                                                                   ST 2053.1 SR 236.2 SS 682.2
CRT .2125 CRS -.0503 CST -.9866
    TOE-3.2606 TRA-3.5481 TC3 -.4212 BAU .5729
    RDE .0952 RRA -.9226 RC3 -.0144 FAU .02041
                                                                                                                   LSA 2161.4 MSA 254.5 SSA
                                                                                                                                                       2.2
    FOE-1.1316 FRA -.7459 FC3 -.1738 BSP 11226
                                                                                                                   EL1 2053.7 EL2 230.7 ALF
    BOE 3.2620 BRA 3.6661 BC3 .4215 FSP -265
                                                                                                                             ARRIVAL DATE DEC 9 1967
LAUNCH DATE JUL 30 1967
                                                                      FLIGHT TIME 132.00
                                                                      DISTANCE 395.532
   HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 27.002 GAL -8.51 ATL 104.05 HCA 192.42 SMA 130.30 ECC .22068 INC14.0518 V1 29.334

RP 107.48 LAP 2.99 LOP 138.22 VP 38.092 GAP 7.84 AZP 76.26 TAL 213.58 TAP 46.00 RCA 101.55 APO 159.06 V2 35.257

RC 135.709 GL -51.75 GP 55.67 ZAL 117.35 ZAP 122.53 ETS 70.22 ZAE 108.39 ETE 152.06 ZAC 88.86 ETC 25.19 CLP-162.42
   PLANETOCENTRIC CONIC
    C3 68.177 VHL 8.257 OLA -42.10 RAL 144.78 RAD 6569.3 VEL 13.767 PTH 2.52 VHP 9.606 DPA 60.87 RAP 196.72 ECC 2.1220
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          36.16
                                                                                         129.44
                                                                                                       3 30 21
                                                                                                                       1256.8
                    2 59 24 1856.76
        57.45
                                                 16.08
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       122.55
                  10 5 27
                                 5823.58
                                                  16.10
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                                                                                                                       1256.8
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       122.55
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1940.6 SR 300.7 SS 653.9
CRT -.6688 CRS .8218 CST -.9732
                                                                  SCT 3739.6 SCR 445.1 SC3 102.1
RRT .2901 RRF -.0353 RTF .9399
SCB 3766.0 R23 -.3255 R13 .9386
    TOE-2.4630 TRA-3.2734 TC3 -.7880 BAU
    ROE .4079 RRA -.3626 RC3 .0332 FAU .02654
FOE-1.0967 FRA -.7244 FC3 -.3624 89P 11572
                                                                                                                   LSA 2053.3 MSA 260.4 SSA 3.0
                                                                                                                   ELI 1951.1 EL2 222.4 ALF 174.00
                                                                  SG1 3741.9 SG2 425.7 THA 2.00
    BOE 2.4965 BRA 3.2935 BC3 .7887 FSP -328
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FLIGHT TIME 126.00

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LAUNCH DATE JUL 30 1967
                                                                           FLIGHT TIME 134.00
                                                                                                                                       ARRIVAL DATE DEC 11 1967
                                                                           DISTANCE 401.339
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 26.926 GAL -8.17 AZL 101.52 MCA 195.61 SMA 129.78 ECC .22043 INC11.5151 V1 29.334
RP 107.49 LAP 3.08 LOP 141.48 VP 38.037 GAP 8.06 AZP 78.90 TAL 211.96 TAP 47.56 RCA 101.17 APO 158.39 V2 35.255
    RC 137.871 GL -47.68 GP 48.43 7AL 120.24 7AP 128.73 ETS 65.22 7AE 113.56 ETE 151.29 7AC 88.64 ETC 20.62 CLP-160.53
    PLANETOCENTRIC CONTC
    C3 51.790 VHL 7,197 DLA -38.43 RAL 147.14 RAD 6568.9 VEL 13.159 PTH 2.40 VHP 8.457 DPA 53.40 RAP 192.02 ECC 1.8523
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 33 24 1720.62
9 50 15 5825.78
                                                                   26.05
                                                                                                 124.77
                                                                                                               4 2 4
                                                                                                                             1120.6
                                                                                   33.68
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        62.86
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9 50 15 5825.78
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                     3 33 24
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124.76 11 27 21
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                                                                                   33.69
                                                                                                                                                21.96
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 3635.8 SGR 393.5 SG3 118.6
RRT -.0866 RRF -.4355 RTF .9216
SG6 3655.9 R23 .3562 R13 -.9219
SG1 3835.9 SG2 392.0 THA 179.49
                                                                                                                           ST 1855.3 SR 338.6 SS 637.8
CRT -.7757 CRS .9194 CST -.9614
    TDE-2.0232 TRA-3.0149 TC3-1.1480 BAU .7962
   ROE .4196 RRA -.1816 RC3 .0665 FAU .03448
FDE-1.0646 FRA -.6792 FC3 -.5763 BSP 11818
BDE 2.0662 BRA 3.0204 BC3 1.1499 FSP -379
                                                                                                                            LSA 1973.3 MSA 263.5 SSA 4.0
                                                                                                                            EL1 1874.0 EL2 211.6 ALF 171.84
LAUNCH DATE JUL 30 1967
                                                                           FLIGHT TIME 136.00
                                                                                                                                       ARRIVAL DATE DEC 13 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 407.155
    RL 151.88 LAL -.00 LOL 306.17 VL 26.851 GAL -7.82 AZL 99.82 MCA 198.82 SMA 129.27 ECC .22034 INC 9.8244 V1 29.334 RP 107.50 LAP 3.16 LOP 144.73 VP 37.981 GAP 8.29 AZP 80.69 TAL 210.32 TAP 49.14 RCA 100.78 APO 157.75 V2 35.253 RC 140.023 GL -44.27 GP 42.43 ZAL 122.08 ZAP 133.95 ETS 61.94 ZAE 117.37 ETE 152.33 ZAC 88.14 ETC 17.81 CLP-160.10
   PLANETOCENTALC CONIC
    C3 42.277 VHL 6.502 DLA -35.63 RAL 149.62 RAD 6568.6 VEL 12.792 PTH 2.33 VHP 7.807 DPA 47.04 RAP 189.72 ECC 1.6958 LNCH AZNTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG 67.40 4 7 2 1599.93 18.20 16.73 32.29 121.18 4 33 42 999.9 22.20 9.76
                                                                                                                                             22.20
                                                                                                             11 13 49
                    9 36 24
       112.60
                                  5844.79
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                    4 7 2 1599.93
9 36 24 5844.79
4 7 2 1599.93
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                                   5844.79
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                                                                                                                                                               269.47
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 3932.5 SGR 375.2 SG3 131.6
RRT -.2522 RRF -.5881 RTF .9084
SG8 3950.3 R23 .3690 R13 -.9092
SG1 3933.6 SG2 363.0 THA 178.61
                                                                                                                           ST 1798.2 SR 341.9 SS 624.0

CRT -.8037 CRS .9479 CST -.9512

LSA 1915.6 MSA 265.2 SSA 5.0
    TOE-1.7568 TRA-2.8072 TC3-1.4999 BAU .8490
    ROE .3859 RRA -.1092 RC3 .0813 FAU .03862
FOE-1.0241 FRA -.6180 FC3 -.7909 8SP 12151
BOE 1.7986 BRA 2.8093 BC3 1.5021 FSP -422
                                                                                                                            Fit 1819.3 Ft2 201.1 ALF 171.20
                                                                                                                                      ARRIVAL DATE DEC 15 1967
                                                                          FEIGHT TIME 138.00
LAUNCH DATE JUL 30 1967
                                                                          DISTANCE 412.970
   HELTOCENTRIC CONTC
   RL 151.88 LAL -.00 LOL 306.17 VL 26.776 GAL -7.47 AZL 98.61 MCA 202.04 SMA 128.77 ECC .22041 INC 8.6122 V1 29.334 RP 107.51 LAP 3.22 LOP 147.98 VP 37.925 GAP 8.51 AZP 82.01 TAL 208.68 TAP 50.72 RCA 100.38 APO 157.15 V2 35.249 RC 142.165 GL -41.44 GP 37.49 ZAL 123.11 ZAP 138.34 ETS 59.45 ZAE 120.18 ETE 153.99 ZAC 87.33 ETC 15.82 CLP-160.31
   PLANETOCENTRIC CONIC
    C3 36.079 VHL 6,007 DLA -33.53 RAL 152.11 RAD 6568.4 VEL 12.548 PTH 2.27 VHP 7.424 DPA 41.63 RAP 188.72 ECC 1.5938
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG.
                                                                                              118.45 5 4 29

118.44 11 1 38

118.45 5 4 29

118.44 11 1 38

121.69 8 52 39

115.38 11 56 46
                                                                                                                               891.3 22.19
5273.4 22.21
                    4 39 36 1491.26
                                                                                31.69
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                                                    18.54
                                                                    8.41
        71.25
                                                                                  31.70
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                                                                  278.69
                    9 23 44
                                  5873.37
                                                     18.56
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        71.25
                    4 39 36
                                  1491.26
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                    9 23 44 5873.37
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       108.75
                                                     18.56
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       110.00
                     8 40 42
                                    717.12
                                                     13.54
                                                                  308.20
                                                                                   28.68
                                                                                                                                117.1
                                                                                                                                                17.63
                   10 21 50 5695.51
                                                                  267.87
                                                                                  34.50
                                                                                                                               5095.5
                                                                                                                                               26.92
                                                                                                                                                              260.18
                                                   23.71
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                          CRT -.8164 CRS ..9622 CST -.9426
LSA 1873.2 MSA 265.9 SSA 6.1
EL1 1780.6 EL2 191.7 ALF 171.03
                                                                     SGT 4027.4 SGR 359.5 SG3 141.2
RRT -.3231 RRF -.6408 RTF .8984
SG8 4043.4 R23 .3681 R13 -.8993
SG1 4029.1 SG2 340.0 THA 178.34
    TOE-1.5813 TRA-2.6293 TC3-1.8411 BAU .8889
    ROE .3512 RRA -.0743 RC3 .0822 FAU .04123
FOE -.9772 FRA -.5459 FC3 -.9893 89P 12469
    BOE 1.6199 BRA 2.6304 BC3 1.8430 FSP
                                                        -454
                                                                                                                                       ARRIVAL DATE DEC 17 1967
LAUNCH DATE JUL 30 1967
                                                                          FLIGHT TIME 140.00
                                                                          DISTANCE 418.781
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 26.702 GAL -7.11 AZL 97.70 MCA 205.26 SMA 128.27 ECC .22063 INC 7.6962 V1 29.334
RP 107.32 LAP 3.28 LOP 151.23 VP 37.869 GAP 8.74 AZP 83.03 TAL 207.03 TAP 52.29 RCA 99.97 APO 156.58 V2 35.245
RC 144.295 GL -39.07 GP 33.42 ZAL 123.48 ZAP 142.03 ETS 57.43 ZAE 122.28 ETE 155.81 ZAC 86.26 ETC 14.29 CLP-160.82
   PLANETOCENTRIC CONIC
    C3 31.693 WHL 5.630 OLA -31.96 RAL 154.63 RAD 6568.3 VEL 12.372 PTH 2.23 WHP 7.198 DPA 36.99 RAP 188.53 ECC 1.5216
    LNGH AZMTH LNGH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.52 5 10 49 1393.00 18.74 .98 31.66 116.38 5 34 2 793.0 22.13 353.66
                                                                               31.66
                                                                                                               5 34 2
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                  5 10 49
                                1393.00
                                                                                               116.38
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                     9 12 35
                                   618.20
                                                     18.76
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9 22 53
8 22 8
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                                  618.20
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       105.48
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                                     847.08
                                                      9.90
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       110.00
                      8 8 31
                                                                                                                           4930.2
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                                                   28.10
                                                                                                                                                              248.73
                                                                                                                                                30.60
       110.00
                   11 14 3
                                  5530.16
                                                                  257.03
                                                                                   36.06
                                                                   #10-COURSE EXECUTION ACCURACY

9GT 4119.6 SGR 345.6 SG3 147.8

RRT -.3517 RRF -.6487 RTF .8906

SGB 4134.1 R23 .3563 R13 -.8915
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1733.9 SR 329.7 SS 597.1
CRT -.8262 CRS .9718 CST -.9353
    TOE-1.4613 TRA-2.4683 TC3-2.1739 BAU
                                                        .9216
    ROE .3234 RRA -. 0542 RC3 .0739 FAU .04261
    FDE -.9280 FRA -.4680 FC3-1.1640 BSP 12764
BDE 1.4967 BRA 2.4689 BC3 2.1752 FSP -474
                                                                                                                          LSA 1844.2 M$A 265.6 SSA 7.3
                                                                     SG1 4121.4 SG2 323.4 THA 178.30 ELT 1755.4 ELZ 183.4 ALF 170.97
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LAUNCH DATE JUL 30 1967
                                                                          FLIGHT TIME 142.00
                                                                                                                                     ARRIVAL DATE DEC 19 1967
    HELIOCENTRIC CONIC'
                                                                          DISTANCE 424.583
     RL 151.88 LAL -.00 LOL 306.17 VL 26.629 GAL -6.75 A7L 96.98 MCA 208.49 SMA 127.79 ECC .22099 INC 6.9760 V1 29.334
RP 107.53 LAP 3.32 LOP 154.48 VP 37.813 GAP 8.97 AZP 83.86 TAL 205.36 TAP 53.85 RCA 99.55 APO 156.03 V2 35.240
RC 146.414 GL -37.06 GP 30.05 ZAL 123.32 ZAP 145.17 ETS 55.77 ZAE 123.85 ETE 157.60 ZAC 84.95 ETC 13.06 CLP-161.49
    PLANETOCENTRIC CONIC
     C3 28.398 VHL 5.329 DLA -30.83 RAL 157.17 RAD 6568.1 VEL 12.238 PTH
                                                                                                    2.20 VMP 7.069 DPA 32.98 RAP 188.85 ECC 1.4674
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.28 5 40 15 1304.81 18.92 354.40 32.10 114.80 6 1 59 704.8 22.10 346.99
       102.72
                      9 3 25
                                    651.36
                                                     18.93
                                                                  306.21
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        77.28
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123.26 8 11 55
106.88 13 15 47
                     9 3 25 651.36
       102.72
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                      7 57 38
       110.00
                                     857.71
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                                                                  315.83
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                    11 45 13 5434.49
       110.00
                                                     30.18
                                                                  250.36
                                                                                  36.80
                                                                                                                                               32.19
                                                                                                                               4834.5
                                                                                                                                                            241.72
    DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 4229.8 SGR 337.6 SG3 153.4
RRT -.3703 RRF -.6400 RTF .8863
SGB 4243.2 R23 .3337 R13 -.8870
SGI 4231.6 SG2 313.4 THA 178.30
                                                                                                                          ST 1731.3 SR 327.6 SS 590.8
CRT -.8393 CRS .9796 CST -.9307
     TOE-1.3882 TRA-2.3257 TC3-2.5148 BAU .9551
     RDE .3044 RRA -.0384 RC3 .0631 FAU .04347
     FOE -.8882 FRA -.3966 FC3-1.3253 BSP 13269
                                                                                                                          LSA 1839.5 MSA 264.3 SSA
                                                                                                                                                                 8.5
     BOE 1.4212 BRA 2.3261 BC3 2.5156 FSP -503
                                                                                                                          EL1 1753.2 EL2 175.9 ALF 170.88
LAUNCH DATE JUL 30 1967
                                                                          FLIGHT TIME 144.00
                                                                                                                                     ARRIVAL DATE DEC 21 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 430.385
    RL 131.88 LAL -.00 LOL 306.17 VL 26.357 GAL -6.37 AZL 96.39 MCA 211.72 SMA 127.32 ECC .22148 INC 6.3915 V1 29.334 RP 107.55 LAP 3.36 LOP 157.73 VP 37.757 GAP 9.20 AZP 84.56 TAL 203.69 TAP 55.41 RCA 99.12 APO 155.52 V2 35.234 RC 148.521 GL -35.34 GP 27.23 ZAL 122.71 ZAP 147.87 ETS 54.39 ZAE 125.05 ETE 159.25 ZAC 83.46 ETC 12.04 CLP-162.24
   PLANETOCENTRIC CONIC
     C3 25.806 VHL 5.080 DLA -30.04 RAL 159.76 RAD 6568.0 VEL 12.132 PTH
                                                                                                    2.17 WHP 7.002 DPA 29.46 RAP 189.56 ECC 1.4247
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        79.54
                     6 7 15 1228.17
                                                    19.12
                                                                 348.77
                                                                                  32.91
                                                                                               113.62
                                                                                                            6 27 43
                                                                                                                                628.2
                                                                                                                                               22.15
                                                                                                                                                            341.27
       100.46
                      8 57 8
                                     680.43
                                                                  308.48
                                                     19.13
                                                                                  32.92
                                                                                                 113.61
                                                                                                              9 8 29
                                                                                                                                 80.4
                                                                                                                                               22.16
                                                                                                                                                             300.98
        79.54
                    6 7 15
                                 1226.17
                                                                  348.77
                                                     19.12
                                                                                  32.91
                                                                                                 113.62
                                                                                                              6 27 43
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                                 680.43
675.00
5369.63
                    8 57 8
                                                                  308.48
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8 10 10
       100.46
                                                    19.13
                                                                                  32.92
                                                                                                 113.61
                                                                                                                                 80.4
                                                                                                                                               22.16
                                                                                                                                                             300.98
       110.00
                    7 55 35
                                                     7.74
                                                                  316.75
                                                                                  26.58
                                                                                                123.40
                                                                                                                                275.0
                                                                                                                                             12.08
                                                                                                                                                            310.35
                  12 7 59
       110.00
                                                    31.37
                                                                  245.66
                                                                                  37.56
                                                                                                 104.34
                                                                                                            13 37 29
                                                                                                                              4769.6
                                                                                                                                               33.02
                                                                                                                                                            236.85
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 1653.8 SR 314.6 SS 542.7

CRT -.8402 CRS .9859 CST -.9178

LSA 1749.5 MSA 260.2 SSA 9.8
    TDE-1.2683 TRA-2.1122 TC3-2.7416 BAU .9459
                                                                      SGT 4168.8 SGR 319.8 SG3 145.6
RRT -.2977 RRF -.5665 RTF .8660
    RDE .2786 RRA -.0366 RC3 .0302 FAU .04077
    FOE -.7892 FRA -.2621 FC3-1.3679 BSP 11967
BOE 1.2986 BRA 2.1126 BC3 2.7418 FSP -398
                                                                      SG8 4181.0 R23 .3219 R13 -.8665
SG1 4169.8 SG2 305.2 THA 178.68
                                                                                                                          EL1 1675.0 EL2 168.5 ALF 170.82
LAUNCH DATE JUL 38 1967
                                                                          FLIGHT TIME 146.00
                                                                                                                                    ARRIVAL DATE DEC 23 1967
                                                                         DISTANCE 436.165
    RL 151.88 LAL -.00 LOL 306.17 VL 26.485 GAL -5.98 AZL 95.91 MCA 214.95 SMA 126.86 ECC .22214 INC 5.9051 VI 29.334 RP 107.57 LAP 3.38 LOP 160.98 VP 37.701 GAP 9.43 AZP 85.15 TAL 202.01 TAP 56.96 RCA 98.68 APO 155.04 V2 35.228 RC 150.615 GL -33.82 GP 24.85 ZAL 121.73 ZAP 150.22 ETS 53.28 ZAE 125.96 ETE 160.75 ZAC 81.82 ETC 11.18 CLP-163.05
   PLANETOCENTRIC CONIC
    C3 23.712 VML 4.869 DLA -29.52 RAL 162.43 RAD 6568.0 VEL 12.045 PTH 2.15 VMP 6.981 DPA 26.34 RAP 190.52 ECC 1.3902
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.29 6 31 23 1164.25 19.36 344.13 34.06 112.73 6 50 48 564.2 22.27 336.58
        81.29 6 31 23 1164.25
                                                                              34.06
                                                                                             112.73 6 50 48
112.72 9 6 1
115.57 8 37 49
                     8 54 18
        98.71
                                    702.72
                                                    19.37
                                                                 310.24
                                                                                 34.07
                                                                                                                               102.7
                                                                                                                                              22.28
                                                                                                                                                            302.68
                   8 24 31
       100.00
                                    798.05
                                                   16.03
                                                                 315.74
                                                                                 32.50
                                                                                                                               198.1
                                                                                                                                              19.34
                                                                                                                                                           308.51
                                                                                               115.57 B 37 49
109.91 11 21 4
123.43 B 13 22
102.46 :13 54 53
       100.00
                                  5832.19
                     9 43 51
                                                  22.77
                                                                 277.81
                                                                                 35.49
                                                                                                                              5232.2
                                                                                                                                              25.27
                                                                                                                                                           269.90
       110.00
                     7 58 43
                                   A79.37
                                                     7.58
                                                                 316.99
                                                                                 27.62
                                                                                                                              279.4
                                                                                                                                              11.92
                                                                                                                                                            310.59
       110.00
                  12 26 9
                                 5323.63
                                                    32.09
                                                                 242.29
                                                                                 38.53
                                                                                                                              4723.6
                                                                                                                                             33.47
                                                                                                                                                           233.33
   DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 4362.7 SGR 327.5 SG3 154.5
RRT -.3461 RRF -.5678 RTF ..8735
SGB 4375.0 R23 .2814 R13 -.8740
SGI 4364.2 SG2 307.2 THA 178.50
                                                                                                                        ST 1718.0 SR 325.4 SS 564.0

CRT -.8659 CRS .9912 CST -.9224

LSA 1819.1 MSA 256.9 SSA 11.0

ELI 1741.1 EL2 160.6 ALF 170.60
    TOE-1.2823 TRA-2.0128 TC3-3.1397 BAU .9953
    RDE .2765 RRA -.0205 RC3 .0265 FAU .04208
    FOE -.7890 FRA -.2274 FC3-1.5364 BSP 13393
LAUNCH DATE JUL 30 1967
                                                                         FLIGHT TIME 148.00
                                                                                                                                    ARRIVAL DATE DEC 25 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 441.939
   RL 151.88 LAL -.00 LOL 306.17 VL 26.415 GAL -5.59 ATL 95.49 HCA 218.18 SMA 126.41 ECC .22295 INC 5.4916 V1 29.334 RP 107.59 LAP 3.39 LOP 164.22 VP 37.644 GAP 9.66 ATP 85.68 TAL 200.32 TAP 58.50 RCA 98.23 APO 154.59 V2 35.221 RC 152.696 GL -32.46 GP 22.84 ZAL 120.40 ZAP 152.29 ETS 52.39 ZAE 126.68 ETE 162.10 ZAC 80.06 ETC 10.44 CLP-163.87
   PLANETOCENTRIC CONIC
    C3 21.974 VML 4.688 DLA -29.23 RAL 165.21 RAD 6567.9 VEL 11.973 PTH 2.13 VMP 6.991 DPA 23.54 RAP.191.69 ECC 1.3616
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.41 6 51 16 1117.48 19.66 340.81 35.52 112.08 7 9 53 517.5 22.48 333.20
                     6 51 16 1117.48
                                                                             35.52
                                                                                             112.08 7 9 53
112.07 9 8 27
                                                                                                                            517.5
                                                                                                                                                        333.20
                                                                                                                                           22.48
       97.59
                    8 56 34
                                  712.45
                                                    19.67
                                                                 311.09
                                                                                 35.53
                                                                                                                               112.5
                                                                                                                                              22.50
                                                                                                                                                            303.49
      100.00
                     8 22 37
                                   821.37
                                                                                                            8 36 18
                                                    15.34
                                                                 317.13
                                                                                 33.50
                                                                                               115.97 8 36 16
108.23 11 44 6
123.39 8 20 25
101.12 14 9 21
                                                                                                115.97
                                                                                                                               221.4
                                                                                                                                              18.71
                                                                                                                                                            309.95
                  10 7 54 5771.83
8 5 51 874.16
      100.00
                                                   24.11
                                                                 273.63
                                                                                 37.28
                                                                                                                              5171.8
                                                                                                                                              26.38
                                                                                                                                                            265.76
                                                     7.77
                                   874.16
                                                                 316.71
                                                                                 29.11
                                                                                                                              274.2
                                                                                                                                              12.11
                                                                                                                                                            310.30
                  12 41 9
                                 5291.81
                                                    32.54
                                                                 239.92
                                                                                 39.78
                                                                                                                              4691.8
                                                                                                                                              33.72
                                                                                                                                                           230.88
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
    TOE-1.2684 TRA-1.8665 TC3-3.4701 BAU 1.0194
                                                                   SGT 4452.3 SGR 330.7 SG3 155.3
RRT -.3433 RRF -.5352 RTF .8711
SGB 4464.6 R23 .2499 R13 -.8716
                                                                                                                       ST 1740.2 SR 330.2 SS 560.8

CRT -.8844 CRS .9952 CST -.9223

LSA 1840.8 MSA 251.2 SSA 12.3
   ROE .2701 RRA -.0112 RC3 .0114 FAU .04131
FOE -.7568 FRA -.1369 FC3-1.6275 83P 13734
BOE 1.2968 BRA 1.8666 BC3 3.4702 FSP -490
                                                                    SG1 4453.8 SG2 310.5 THA 178.53
                                                                                                                       ELI 1764.7 EL2 151.9 ALF 170.40
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APRIVAL CATE DEC 27 1967

LAUNCH DATE JUL 30 1967

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RL 151.88 LAL -.00 LOL 306.17 VL 26.345 GAL -5.18 ATL 95.13 MCA 221.42 SMA 125.97 ECC .22391 INC 5.1336 V1 29.334 RP 107.62 LAP 3.39 LOP 167.47 VP 37.568 GAP 9.90 APP 86.15 TAL 198.62 TAP 60.03 RCA 97.76 APO 154.17 V2 35.214 RC 134.762 GL -51.22 GP 21.11 TAL 118.77 ZAP 154.13 ETS 51.73 ZAE 127.24 ETE 163.29 ZAC 78.20 ETC 9.81 CLP-164.70
                                                                             DISTANCE 447:702
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                         2.12 WHP 7.023 DPA 21.00 RAP 193.03 ECC 1.3576
    C3 20.512 VHL 4.529 DLA -29.14 RAL 168.11 RAD 6567.8 VEL 11.912 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                   331.32
                                                                                                                                     490.5
                                                                                                                  7 24 15
                                                                                   37.28
                                                                                                     111.63
                   7 6 5 1090.47
9 4 53 706.36
                                                       20.02
                                                                     338.97
        82.82
                                                                                                                                                                     303.15
                                                                                                                                       106.4
                                                                                                                                                       22.79
                                                                                                      111.62 9 16 39
115.89 8 44 8
                                                                     310.80
                                                                                      37.29
                                                       20.03
        97.18
                                                                                                                                       216.7
                                                                                                                                                                     309.66
                                                                                                                                                       18.84
                                                                     316.85
                                                                                      35.19
                                                       15.48
                   8 30 31 816.67
10 23 7 5743.44
8 16 8 861.97
12 54 0 5270.90
                     8 30 31
                                      816.67
                                                                                                     107.39 11 58 51
123.30 8 30 30
100.22 14 21 51
                                                                                                                                     5145.4
                                                                                                                                                      26.85
                                                                                                                                                                    263.78
                                                                                      39.08
                                                                     271.92
                                                       24.70
       100.00
                                                                                                                                                                     309.63
                                                                                                                                      262.0
                                                                                                                                                      12.55
                                                                                      30.98
                                                        8.23
                                                                     316.06
                                     861.97
                                                                                                                                     4670.9
                                                                                                                                                       33.86
                                                                                                                                                                     229.27
                                                                                     41.34
                                                                     236.34
                                                       32.80
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         RET -13364 RRF -13023 RTF -18667
SGB 4544.3 R23 -2199 R13 -18691
SGI 4533.2 SGZ 316.5 THA 178.53
                                                                                                                                ST 1768.6 SR 336.4 SS 558.1
CRT -.9034 CRS ..9977 CST -.9235
    TDE-1.2655 TRA-1.713: TC3-3.7947 BAU 1.0406
    ROE .2659 RRA -.0033 RC3 -.0035 FAU .04020
FOE -.7254 FRA -.0870 FC3-1.6967 88P 13991
BOE 1.2931 BRA 1.7135 BC3 3.7947 FSP -489
                                                                                                                                 LSA 1868.9 MSA 244.0 SSA 13.7
                                                                                                                                 ELI 1794.7 EL2 142.1 ALF 170.19
                                                                                                                                             APRIVAL DATE DEC 29 1967
                                                                              FLIGHT TIME 152.00
LAUNCH DATE JUL 30 1967
                                                                              DISTANCE 453.452
    RL 151.88 LAL -.00 LOL 306.17 VL 26.276 GAL -4.77 AZL 94.82 MCA 224.65 SMA 125.54 ECC .22505 INC 4.8188 V1 29.334 RP 107.64 LAP 3.38 LOP 170.71 VP 37.533 GAP 10.13 AZP 86.57 TAL 196.91 TAP 61.56 RCA 97.28 APO 153.79 V2 35.205 RC 156.813 GL -30.07 GP 19.63 ZAL 116.86 ZAP 155.78 ETS 51.27 ZAE 127.70 ETE 164.34 ZAC 76.25 ETC 9.26 CLP-165.53
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 19:275 VML 4.390 OLA -29:20 RAL 171:15 RAD 6567.8 VEL 11:860 PTH 2:10 VMP 7:075 OPA 18:68 RAP 194:49 ECC 1:5172
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
82.56 7 16 6 1082.47 20.43 338.55 39.54 111.33 7 34 9 482.5 23.14 330.86
                                                                                                                    9 30 32
                                                                                                                                         84.8
                                                                                                                                                        23.16
                                                                                                                                                                      301.69
                                                                        111.32 9 30 32
115.52 37.39 115.51 8 58 13
171.43 41.01 107.17 12 8 32
15.12 33.22 123.14 8 43 10
137.43 43.22 99.70 14 32 58
MIO-COURSE EXECUTION ACCURACY
                                                                                       39.35
                                                                                                       111.32
                                                        20.44
                                                                      309,37
                      9 19 8
                                      664.77
                                                                                                                                                        19.44
                                                                                                                                                                      308.28
                                                                                                                                       194.3
                                                                      315.52
                                                       16.14
                       6 44 59
                                       794.35
        100.00
                                                                                                                                                        26.96
                                                                                                                                                                      263.27
                                                                                                                                      5136.2
                   10 32 56 5736.17
                                                       24.85
                                                                      271.43
                                                                                                                                                        13.19
                                                                                                                                                                      308.67
                                                                                                                                       244.4
                                                        8.69
                                                                      315.12
                       8 29 5
                                     844.36
       110.00
                                                                                                                                                        33.93
                                                                                                                                      4658.9
                                                                      237.43
                                                        32.94
                    13 5 19 5258.90
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1806.6 SR 344.0 SS 557.1
CRT -.9223 CRS .9986 CST -.9262
LSA 1907.2 MSA 235.1 SSA 15.0
                                                                          SCT 4609.7 SCR 344.4 SC3 154.3
RRT -,3357 RRF -,4730 RTF .8673
SCB 4622.6 R23 .1915 R13 -.8676
SCI 4611.2 SC2 324.3 THA 178.56
     TOE-1.2742 TRA-1.5558 TC3-4.1179 BAU 1.0612
RDE .2636 RRA .0039 RC3 -.0166 FAU .03697
    FOE -.6975 FRA -.0205 FC3-1.7502 BBP 14263
BOE 1.3012 BRA 1.5558 BC3 4.1179 FSP -488
                                                                                                                               EL1 1834.4 EL2 130.9 ALF 169.99
                                                                                                                                             ARRIVAL DATE DEC 31 1967
                                                                              FLIGHT TIME 154.00
LAUNCH DATE JUL 30 1967
                                                                              DISTANCE 459.189
     RL 151.88 LAL -.00 LOL 306.17 VL 28.208 GAL -4.34 A7L 94.54 MCA 227.88 SMA 125.11 ECC .22635 INC 4.5382 V1 29.334 RP 107.67 LAP 3.36 LOP 173.96 VP 37.477 GAP 10.37 AZP 86.95 TAL 195.20 TAP 63.07 RCA 96.79 APO 153.43 V2 35.197 RC 158.850 GL -28.97 GP 18.33 7AL 114.68 ZAP 157.28 ETS 51.01 ZAE 128.07 ETE 165.27 ZAC 74.23 ETC 8.79 CLP-166.35
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 18.227 VHL 4.269 DLA -29.39 RAL 174.35 RAD 6567.7 VEL 11.816 PTH 2.09 VHP 7.140 DPA 16.52 RAP 196.06 ECC 1.3000
     LNCH AZMTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   111.17 7 40 58
111.15 9 48 50
                                                                                  41.71
                       7 22 49 1088.80
                                                       20.88
         81.79
                                                                                                                                                       23.58
                                                                                                                                        52.2
                                                                      307.15
                                                                                       41.71
                       9 37 58
                                     652.16
                                                        20.89
         98.21
                                                                                                      114.79 9 18 14
107.54 12 13 38
122.94 8 58 9
99.51 14 43 6
                                                                                                                                                       20.46
                                                                                                                                                                      305.86
                                                                                       40.08
                                                                                                                                       155.8
                                                                      313.19
                                       755.75
                                                        17.26
                       9 5 38
        100.00
                                                                                                                                                       26.77
                                                                                                                                                                      264.13
                                                                                                                                      514A.5
                                                                                       43.12
                    10 37 50 5746.48
                                                                      272.26
                                                       24.60
        100.00
                                                                                                                                                                      307.45
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                                                                                                                                      222.5
                                                                                       35.60
                                                                      313.95
                       8 44 26
                                       822.53
                                                         9.70
        110.00
                                                                                                                                      4654.5
                                                                                                                                                        33.95
                                                                                                                                                                      227.99
                                                                                       45.42
                    13 15 31 5254.46
                                                                      237.10
                                                        32.99
        110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1849.8 SR 352.6 SS 556.0
CRT -.9401 CRS ..9980 CST -.9295
LSA 1950.5 MSA 225.0 SSA 16.5
                                                                         SGT 4677.9 SGR 353.7 SG3 152.9
RRT -.3329 RRF -.4462 RTF .8657
SGB 4691.3 R23 .1660 R13 -.8660
SGI 4679.4 SG2 333.4 THA 178.55
     TDE-1.2900 TRA-1.3893 TC3-4.4298 BAU 1.0795
     ROE .2627 RRA .0097 RC3 -.0283 FAU .03754
FOE -.6705 FRA .0452 FC3-1.7630 BSP 14458
                                                                                                                                  EL1 1879.4 EL2 118.3 ALF 169.80
     BOE 1.3164 BRA 1.3894 BC3 4.4298 FSP
                                                          -481
                                                                                                                                              ARRIVAL DATE JAN 2 1968
                                                                               FLIGHT TIME 156.00
 LAUNCH DATE JUL 30 1967
     RELICUENTRIC CONTC.

RE 151.88 LAL -.00 LOL 306.17 VL 26.141 GAL -3.90 AZE 94.28 MCA 231.11 SMA 124.70 ECC .22784 INC 4.2849 V1 29.334

RP 107.70 LAP 3.33 LOP 177.20 VP 37.421 GAP 10.62 AZP 87.31 TAL 193.47 TAP 64.58 RCA 96.29 APO 153.11 V2 35.187

RC 160.871 GL -27.90 GP 17.21 ZAL 112.26 ZAP 158.65 ETS 50.95 ZAE 128.39 ETE 166.10 ZAC 72.16 ETC 8.37 CLP-167.17
                                                                              DISTANCE 464.911
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 17.346 VHL 4.165 DLA -29.67 RAL 177.73 RAD 6567.7 VEL 11.778 PTH 2.08 VHP 7.219 DPA 14.51 RAP 197.72 ECC 1.2855
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.74 7 28 5 1103.60 21.35 340.50 44.58 111.11 7 46 28 503.6 24.03 332.74
                                                                                        44.39
                                                                                                       111.09
                                                                       304.55
                        9 59 40
                                       614.31
                                                         21.37
          99.26
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                                                                                                                      9 46 27
                                                                                                                                          93.5
                                                                                                       113.53
                                                                       309.39
                                                                                        43.35
                                                         18.99
                        9 34 53
                                        693.53
         100.00
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                                                                                                                                       51A7.6
                                                                                                       108.68 12 12 0
                                                                                        45.33
                      10 35 33 5787.65
                                                         23.77
                                                                       274.88
         100.00
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                                                                                                                                        197.4
                                                                                        36.73
                                                                       312.60
                                                         10.62
                        9 1 56
         110.00
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                                                                                                         99.59 14 52 35
                                                                                                                                      4656.5
                                                                       237.25
                                                                                        47,96
                                     5256.50
                      13 24 59
                                                         32.97
         110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1904.1 SR 362.4 SS 557.0

CRT -.9562 CRS ..9957 CST -.9339

LSA 2005.3 MSA 213.7 SSA 18.0

EL1 1935.4 EL2 104.4 ALF 169.66
                                                                          SCT 4750.1 SCR 364.4 SC3 151.6
RRT -.3343 RRF -.4255 RTF .8657
SCB 4764.1 R23 .1427 R13 -.8660
      TDE-1.3157 TRA-1.2192 1C3-4.7358 BAU 1.0983
      ROE .2634 RRA .0149 RC3 -.0373 FAU .03614
FOE -.6473 FRA .1059 FC3-1.8036 BSP 14713
                                                                           SG1 4751.7 SG2 343.3 THA 178.52
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FLIGHT TIME 150,00

BOE 1.3418 BRA 1.2192 BC3 4.7360 FSP -478

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ARRIVAL CATE JAN 4 1968
                                                                                   FLIGHT TIME 158.00
LAUNCH DATE JUL 30 1967
                                                                                  DISTANCE 470.617
   HELFOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 26.075 GAL -3.45 A7L 94.05 MCA 234.34 SMA 124.30 ECC .22952 INC 4.0539 V1 29.334 RP 107.73 LAP 3.29 LOP 180.44 VP 37.366 GAP 10.87 A7P 87.63 TAL 191.75 TAP 66.08 RCA 95.77 APO 152.83 V2 35.178 RC 162.878 GL -26.83 GP 16.22 ZAL 109.60 ZAP 159.91 ETS 51.09 ZAE 128.65 ETE 166.82 ZAC 70.04 ETC 8.01 CLP-167.98
    PLANETOCENTRIC CONIC
     C3 16.617 VML 4.076 DLA -30.03 RAL 181.30 BAO 5567.7 VEL 11.747 PTH 2.07 VMP 7.309 DPA 12.63 RAP 199.45 ECC 1.2735
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        47.37
                                                                                                           111.14
                                                                                                                           7 51 58
                                                                                                                                               522.6
                                                                                                                                                               24.52
                                                                                                                                                                               334.32
                      7 33 16 1122.57
10 22 55 5863.60
                                                                         342.11
                                                         21.85
                                                                                                                         12 0 39
                                                                                                                                                                24.53
                                                                                                                                                                                271.99
                                                                                                                                              5263.6
                                                                                                            111.13
                                                           21.86
                                                                          279.78
                                                                                            47.38
                                                                                                                            7 51 58
                                                                                                                                                522.6
                                                                                                                                                                24.52
                                                                                                                                                                                334.32
                      7 33 16 1122.57
10 22 55 5863.60
                                                                                                             111.14
                                                                                            47.37
         79.55
                                                           21.85
                                                                          342.11
                                                                                                            111.13 12 0 39
122.37 9 34 14
99.93 15 1 42
                                                                                                                                                                24.53
                                                                                                                                                                                271.99
                                                                                                                                              5263.6
        100.45
                                                           21.86
                                                                          279.78
                                                                                            47.38
                                                                                                                                                170.0
                                                                                                                                                                15.82
                                                                                                                                                                                304.51
                                        770.01
                                                           11.63
                                                                          311.11
                                                                                            42.01
       110.00
                       9 21 24
                                                                                                                                                               33.90
                                                                                                                                                                                228.74
                                                                                                                                              4664.2
                      13 33 57 5264.16
                                                           32.88
                                                                          237.83
                                                                                            50.82
        110.00
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                             SCE 4819.2 SGR 375.8 SG3 150.0
RRT -.3374 RRF -.4090 RTF ..8663
SGB 4833.9 R23 ..1223 R13 -.8665
                                                                                                                                         ST 1964.1 SR 372.9 SS 558.3
CRT -.9700 CRS .9919 CST -.9386
     TDE-1.3472 TRA-1.0411 TC3-5.0248 BAU 1.1163
    RDE .2652 RRA .0189 RC3 -.0439 FAU .03469
FDE -.6256 FRA .1645 FC3-1.8073 BSP 14962
                                                                                                                                          LSA 2065.8 MSA 201.9 SSA 19.5
                                                                                                                                          ELI 1997.2 ELZ 89.2 ALF 169.54
                                                                               SG1 4820.9 SG2 353.6 THA 178.748
     BDE 1.3731 BRA 1.0413 BC3 5.0249 FSP -474
                                                                                                                                                      ARRIVAL DATE JAN 5 1968
                                                                                   FLIGHT TIME 160.00
                                                                                   DISTANCE 476.306
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 26.010 GAL -2.98 A7L 93.84 MCA 237.57 SNA 123.90 ECC .23140 INC 3.8410 VI 29.334 RP 107.76 LAP 3.24 LOP 183.67 VP 37.311 GAP 11.12 AZP 87.94 TAL 190.01 TAP 67.58 RCA 95.23 APO 152.58 V2 35.167 RC 164.869 GL -25.76 GP 15.34 ZAL 106.73 ZAP 161.07 ETS 51.42 ZAE 128.88 ETE 167.47 ZAC 67.87 ETC 7.71 CLP-168.77
   PLANETOCENTRIC CONIC
     C3 16.032 VHL 4.004 DLA -30.44 RAL 185.05 RAD 6567.6 VEL 11.722 PTH 2.07 VHP 7.408 DPA 10.85 RAP 201.24 ECC 1.2638
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.34 7 39 14 1143.09 22.33 343.84 50.69 111.24 7 58 17 543.1 25.01 336.03 78.34 7 39 14 1143.09 22.33 343.84 50.69 111.24 7 58 17 543.1 25.01 336.03
                                                                                                            111.23 12 24 3
122.02 9 54 57
                                                                                                                                               5226.7
                                                                                                                                                                 25.03
                                                                                                                                                                                 269.41
                      10 46 56 5826.71
                                                           22.34
                                                                          277.23
                                                                                             50.69
        101.66
                                                                                                                          9 54 57
                                                                                                                                               141.2
                                                                                                                                                                                 302.87
                                         741.21
                                                           12.67
                                                                           309.53
                                                                                            45.62
        110.00
                        9 42 36
                                                                                                             100.46 15 10 41
                                                                                                                                               4676.6
                                                                                                                                                                 33.83
                                                                                                                                                                                 229.71
                      13 42 45 5276.59
                                                                          238.77
                                                                                            54.01
        110.00
                                                           32.73
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 4884.5 SCR 387.3 SC3 148.3
RRT -.3418 RRF -.3961 RTF .8675
SCB 4899.8 R23 .1042 R13 -.8677
SCI 4886.3 SCZ 363.9 THA 178.44
                                                                                                                                          ST 2027.0 SR 383.9 SS 558.5
CRT -.9810 CRS .9867 CST -.9433
     TOE-1.3821 TRA -.8550 TC3-5.2882 BAU 1.1335
     ROE .2682 RRA .0216 RC3 -.0481 FAU .03321
                                                                                                                                         LSA 2128.8 MSA 189.8 55A 21.1
     FOE -.604] FRA .2210 FC3-1.7934 BSP 15196
BDE 1.4079 BRA .8552 BC3 5.2884 FSP -469
                                                                                                                                          EL1 2061.8 EL2 73.2 ALF 169.46
                                                                                                                                                      ARRIVAL DATE JAN 8 1968
                                                                                   FLIGHT TIME 162.00
LAUNCH DATE JUL 30 1967
                                                                                   DISTANCE 481.978
    HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 25.946 GAL -2.50 A7L 93.64 MCA 240.79 SMA 123.52 ECC .23350 INC 3.6429 VI 29.334
RP 107.79 LAP 3.18 LOP 186.91 VP 37.256 GAP 11.38 A7P 88.22 TAL 188.27 TAP 69.07 RCA 94.68 APO 152.36 V2 35.156
RC 166.846 GL -24.66 GP 14.57 7AL 103.65 7AP 162.14 ETS 51.96 7AE 129.08 ETE 168.04 7AC 65.67 ETC 7.44 CLP-169.56
    PLANETOCENTRIC CONIC
     C3 15.586 VML 3.948 DLA -30.86 RAL 189.00 RAD 6567.6 VEL 11.703 PTH 2.06 VMP 7.518 CPA
                                                                                                                                                  9.17 RAP 203.10 ECC 1.2565
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           111.40 8 5 57
111.39 12 47 40
                                                                                                                                               563.4
                                                                                         54.33
                                                                          345.56
                       7 46 34 1163.38
11 11 7 5793.63
                                                           22.78
          77.19
                                                                                                                                               5193.6
                                                                                                                                                                                 267.10
                                                            22.80
                                                                           274.94
                                                                                            54.33
        102.81
                                                                                                                          8 5 57
                                                                                                                                                                 25.49
                                                                                                                                                                                 337.72
                       7 46 34 1163.38
11 11 7 5793.63
                                                                                                                                                563.4
                                                                           345.56
                                                                                             54.33
                                                                                                             111.40
                                                            22.78
          77.19
                                                                                                             111.39 12 47 40
121.62 10 17 7
101.16 15 19 50
                                                                                                                                                                 25.50
                                                                                                                                                                                 267.10
                                                                                                                                               5193.6
                                                           22.80
                                                                           274.94
                                                                                             54.33
        102.81
                                                                                                                                                                17.80
                                                                                                                                               112.1
                                                            13.72
                                                                           307.92
                                                                                             49.57
                                         712.13
        110.00
                       10 5 14
                                                                                                                                                                 35.72
                       13 51 37 5292.88
                                                                                             57.53
                                                                                                                                               4692.9
                                                            32.52
                                                                           240.00
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SGT 4945.8 SGR 399.9 SG3 146.3
RRT -.3472 RRF -.3866 RTF .8692
SGB 4961.9 R23 .0886 R13 -.8694
SGI 4947.8 SG2 373.9 THA 178.39
                                                                                                                                          ST 2089.6 SR 395.2 SS 557.4

CRT -.9892 CRS .9800 CST -.9477

LSA 2191.1 MSA 178.1 SSA 22.8
     TOE-1.4183 TRA -. 6601 TC3-5.5174 BAU 1.1497
     ROE .2722 RRA .0230 RC3 -.0499 FAU .03171
FOE -.5827 FRA .2758 FC3-1.7615 BSP 15424
                                                                                                                                          EL1 2125.8 EL2 56.9 ALF 169.40
     BOE 1.4442 BRA .6605 BC3 5.5177 FSP -465
                                                                                                                                                       ARRIVAL DATE JAN 10 1968
                                                                                    FLIGHT TIME 164.00
 LAUNCH DATE JUL 30 1967
                                                                                    DISTANCE 487.629
    HELIOCENTRIC CONIC
     RL 151.88 LAL -.00 LOL 306.17 VL 25.882 GAL -2.01 AZL 93.46 HCA 244.02 SMA 123.14 ECC .23583 INC 3.4570 VI 29.334 RP 107.83 LAP 3.11 LOP 190.14 VP 37.201 GAP 11.65 AZP 88.48 TAL 186.53 TAP 70.55 RCA 94.10 APO 152.18 V2 35.145 RC 168.808 GL -23.52 GP 13.88 ZAL 100.40 ZAP 163.14 ETS 52.69 ZAE 129.26 ETE 168.55 ZAC 63.44 ETC 7.23 CLP-170.34
    PLANETOCENTRIC CONIC
                                                                                                                                                   7.57 RAP 205.00 ECC 1.2514
     C3 15.278 VHL 3.909 DLA -31.28 RAL 193.14 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 7.637 OPA 7.57 RAP 205.00 ECC 1.2514 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.13 .7 55 35 1182.60 23.19 347.18 58.28 111.60 8 15 15 582.6 25.91 339.32 103.87 11 35 8 5765.44 23.20 272.99 58.28 111.59 13 11 13 5165.4 25.92 265.13 103.87 11 35 8 5765.44 23.20 272.99 58.28 111.60 8 15 15 582.6 25.91 339.32 103.87 11 35 8 5765.44 23.20 272.99 58.28 111.50 8 15 15 582.6 25.91 339.32 110.00 10 28 58 684.04 14.71 306.36 53.83 121.21 10 40 22 84.0 18.74 299.55 110.00 14 0 53 5312.00 32.26 241.43 61.36 101.97 15 29 25 4712.0 33.57 232.44 DIFFERENTIAL CORRECTIONS
     C3 15.278 VHL 3.909 DLA -31.28 RAL 193.14 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 7.637 DPA
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 2144.4 SR 406.2 SS 552.8
CRT -.9946 CRS .9716 CST -.9512
                                                                               SGT 4997.9 SGR 409.8 SG3 144.0
RRT -.3523 RRF -.3788 RTF .8709
SGB 5014.7 R23 .0750 R13 -.8711
      TOE-1.4514 TRA -.4543 TC3-5.6986 BAU 1.1640
      RDE .2770 RRA .0229 RC3 -.0497 FAU .03015
FDE -.5590 FRA .3301 FC3-1.7087 BSP 15584
BDE 1.4776 BRA .4549 BC3 5.6988 FSP -456
                                                                                                                                          LSA 2245.1 MSA 167.7 SSA 24.5
                                                                                                                                        EL1 2182.2 EL2 41.3 ALF 169.33
                                                                               SG1 5000.0 SG2 383.4 THA 178.34
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LAUNCH DATE JUL 30 1967
                                                                                           FLIGHT TIME 166.00
                                                                                                                                                                    ARRIVAL DATE JAN 12 1968
                                                                                           DISTANCE 493.259
    HELIOCENTRIC CONIC
     RL 151.88 LAL -.00 LOL 306.17 VL 25.820 GAL -1.50 AZL 93.28 MCA 247.24 SMA 122.78 ECC .23841 INC 3.2811 V1 29.334 RP 107.86 LAP 3.03 LOP 193.37 VP 37.147 GAP 11.93 AZP 88.73 TAL 184.79 TAP 72.03 RCA 93.51 APO 152.05 V2 35.134 RC 170.755 GL -22.34 GP 13.26 ZAL 96.99 ZAP 164.08 ETS 53.65 ZAE 129.41 ETE 169.00 ZAC 61.18 ETC 7.05 CLP-171.11
    PLANETOCENTRIC CONIC
     C3 15.112 VHL 3.887 DLA -31.66 RAL 197.44 RAD 6567.6 VEL 11.683 PTH
                                                                                                                           2.05 VHP 7.765 DPA
                                                                                                                                                                6.03 RAP 206.95 ECC 1.2487
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       8 6 22 1200.09
11 58 39 5743.03
                                                                                                                                                             600.1
                                                                23.52
                                                                                 348.64
                                                                                                     62.53
                                                                                                                      111.83
                                                                                                                                       8 26 22
                                                                                                                     111.81 13 34 22
111.83 8 26 22
111.81 13 34 22
120.81 11 4 14
102.83 15 39 49
                                                                                                                                                            5143.0
                                                                 23.53
                                                                                 271.44
                                                                                                     62.54
                                                                                                                                                                                 26.28
                       8 6 22 1200.09
11 58 39 5743.03
          75.21
                                                                 23.52
                                                                                  348.64
                                                                                                     62.53
                                                                                                                                                              600.1
                                                                                                                                                                                26.27
                                                                23.53
                                                                                 271.44
                                                                                                     62.54
                                                                                                                                                            5143.0
                                                                                                                                                                                26.28
         104.79
                        10 53 15
                                                                                                     58.38
                                                                                                                                                                                                 298.05
         110.00
                                             658.54
                                                                 15.61
                                                                                  304.92
                                                                                                                                                               58.5
                                                                                                                                                                                 19.58
                                        5332.58
                                                                                                                                                            4732.6
                        14 10 56
                                                                                 242.96
                                                                                                     65.50
                                                                                                                                                                                 33.39
        110.00
                                                               31.96
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
     TOE-1.4845 TRA -.2417 TC3-5.8355 BAU 1.1790

RDE .2832 RRA .0215 RC3 -.0465 FAU .02870

FDE -.5366 FRA .3815 FC3-1.6440 BSP 15788

BDE 1.5113 BRA .2427 BC3 5.8357 FSP -450
                                                                                     SCT 5054.4 SGR 420.7 SG3 141.9

RRT -.3598 RRF -.3754 RTF .8740

SGB 5071.9 R23 .0633 R13 -.8742

SGI 5056.7 SG2 392.3 THA 178.27
                                                                                                                                                       ST 2195.9 SR 417.6 SS 547.6
CRT -.9974 CRS .9620 CST -.9545
                                                                                                                                                     LSA 2295.7 MSA 159.0 SSA 25.9
                                                                                                                                                      EL1 2235.0 EL2 29.3 ALF 169.26
                                                                                           FLIGHT TIME 168.00
                                                                                                                                                                     ARRIVAL DATE JAN 14 1968
LAUNCH DATE JUL 30 1967
   HELIOCENTRIC CONIC
                                                                                          DISTANCE 498.865
     RL 151.88 LAL -.00 LOL 306.17 VL 25.759 GAL -.97 A7L 93.11 MCA 250.46 SMA 122.42 ECC .24124 INC 3.1135 V1 29.334 RP 107.90 LAP 2.93 LOP 196.60 VP 37.093 GAP 12.21 A7P 88.96 TAL 183.04 TAP 73.50 RCA 92.88 APO 151.95 V2 35.122 RC 172.686 GL -21.11 GP 12.71 ZAL 93.44 ZAP 164.95 ETS 54.82 ZAE 129.56 ETE 169.40 ZAC 58.89 ETC 6.92 CLP-171.87
   PLANETOCENTRIC CONIC
                                                                                                                           2.05 VHP 7.903 DPA
     C3 15.091 VHL 3.885 DLA -31.98 RAL 201.89 RAD 6567.6 VEL 11.682 PTH
                                                                                                                                                                 4.57 RAP 208.93 ECC 1.2484
    C3 15.091 VHL 3.885 DLA -31.98 RAL 201.89 RAD 6567.6 VEL 11.682 PTH 2.05 VHP 7,903 DPA 4.57 RAP 208.93 ECC 1.2484 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.47 8 19 6 1215.50 23.76 349.92 67.06 112.07 8 39 21 615.5 26.54 342.05 105.53 12 21 26 5727.00 23.77 270.32 67.06 112.06 13 56 53 5127.0 26.55 262.45 105.53 12 21 26 5727.00 23.77 270.32 67.06 112.07 8 39 21 615.5 26.54 342.05 105.53 12 21 26 5727.00 23.77 270.32 67.06 112.07 8 39 21 615.5 26.54 342.05 105.53 12 21 26 5727.00 23.77 270.32 67.06 112.06 13 56 53 5127.0 26.55 262.45 110.00 11 17 28 637.48 16.54 303.73 63.17 120.45 11 28 5 37.5 20.26 296.80 110.00 14 22 14 535.02 31.64 244.46 69.93 103.67 15 51 27 4753.0 33.19 235.58
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                    SGT 5103.5 SGR 430.6 SG3 139.4

RRT -.3666 RRF -.3731 RTF .8769

SGB 5121.7 R23 .0534 R13 -.8770

SGI 5106.0 SG2 400.5 THA 178.22
                                                                                                                                                       ST 2232.0 SR 428.3 SS 538.2
CRT -.9978 CRS .9502 CST -.9568
     TOE-1.5104 TRA -.0182 TC3-5.9097 BAU 1.1923
     ROE .2903 RRA .0185 RC3 -.0418 FAU .02720
     FOE -.5114 FRA .4328 FC3-1.5602 BSP 15980
BDE 1.5381 BRA .0260 BC3 5.9098 FSP -444
                                                                                                                                                    LSA 2330.4 MSA 153.0 SSA 27.2
EL1 2272.6 EL2 28.0 ALF 169.16
                                                                                                                                                                   ARRIVAL DATE JAN 16 1968
                                                                                          FLIGHT TIME 170.00
LAUNCH DATE JUL 30 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 504.445
     RL 151.88 LAL -.00 LOL 306.17 VL 25.698 GAL -.42 AZL 92.95 MCA 253.67 SMA 122.07 ECC .24435 INC 2.9525 VI 29.334 RP 107.94 LAP 2.83 LOP 199.82 VP 37.039 GAP 12.51 AZP 89.17 TAL 181.29 TAP 74.97 RCA 92.24 APO 151.89 V2 35.110 RC 174.603 GL -19.83 GP 12.21 ZAL 89.80 ZAP 165.76 ETS 56.24 ZAE 129.69 ETE 169.76 ZAC 56.59 ETC 6.83 CLP-172.62
   PLANETOCENTRIC CONIC
     C3 15.223 VHL 3.902 DLA -32.22 RAL 206.46 RAD 6567.6 VEL 11.688 PTH 2.06 VMP 8.051 CPA 3.16 RAP 210.96 ECC 1.2505
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   112.31 8 54 12
112.30 14 18 29
112.30 14 18 29
112.31 8 54 12
112.30 14 18 29
120.20 11 51 11
104.41 16 4 49
                       8 33 44 1228.56
12 43 11 5717.86
8 33 44 1228.56
12 43 11 5717.86
                                                                                               71.83
                                                                                                                                                           628.6
          73.94
                                                               23.88
                                                                                350.97
                                                                23.89
                                                                                 269.68
                                                                                                    71.83
                                                                                                                                                           5117.9
                                                                                                                                                                               26.70
                                                                                                                                                                                                261.81
        106.06
                                                                                 350.97
                                                                                                    71.83
                                                                                                                                                             628.6
                                                                23.88
          73.94
                                                                23.89
                                                                                 269.68
                                                                                                    71.83
                                                                                                                                                           5117.9
                                                                                                                                                                               26.70
        106.06
                      11 40 48 623.03
14 35 18 5371.38
        110.00
                                                                16.83
                                                                                 302.90
                                                                                                     68.13
                                                                                                                                                                               20.72
                                                                                 245.81
                                                                                                    74.62
                                                                                                                                                           4771.4
                                                                                                                                                                                33.00
        110.00
                                                               31.34
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE-1.5280 TRA .2161 TC3-5.9188 BAU 1.2046

ROE .2985 RRA .0141 RC3 -.0351 FAU .02577

FDE -.4847 FRA .4829 FC3-1.4653 BSP 16111

BDE 1.5569 BRA .2166 BC3 5.9189 FSP -438
                                                                                     SGT 5148.6 SGR 439.8 SG3 137.1
RRT - .3744 RRF - .3728 RTF .8806
SGB 5167.4 R23 .0443 R13 - .8807
SGI 5151.3 SG2 407.6 THA 178.16
                                                                                                                                                      ST 2250.9 SR 438.3 SS 525.6
CRT -.9958 CRS .9361 CST -.9584
                                                                                                                                                     LSA 2347.7 MSA 150.4 SSA 27.9
                                                                                                                                                     EL1 2292.9 EL2 39.6 ALF 169.02
                                                                                           FLIGHT TIME 172.00
                                                                                                                                                                    ARRIVAL DATE JAN 18 1968
LAUNCH DATE JUL 30 1967
                                                                                         DISTANCE 509.996
   HELIOCENTRIC CONIC
    RL 151.88 LAL --.00 LOL 306.17 VL 25.638 GAL .15 AZL 92.80 MCA 256.89 SMA 121.72 ECC .24777 INC 2.7969 V1 29.334 RP 107.97 LAP 2.72 LOP 203.04 VP 36.966 GAP 12.82 AZP 89.37 TAL 179.54 TAP 76.43 RCA 91.56 APO 151.88 V2 35.097 RC 176.504 GL -18.52 GP 11.76 ZAL 86.10 ZAP 166.52 ETS 57.91 ZAE 129.81 ETE 170.08 ZAC 54.27 ETC 6.78 CLP-173.37
   PLANETOCENTRIC CONIC
     C3 15.519 VHL 3.939 OLA -32.36 RAL 211.09 RAO 6567.6 VEL 11.701 PTH 2.06 VHP 8.209 OPA
     LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73,64 8 50 10 1239.21 23.86 351.77 76.80 112.54 9 10 49 639.2 26.70 343.92
                       8 50 10 1239.21
13 3 41 5715.86
                                                                                                                       112.53 14 38 57
                                                                23.87
                                                                                 269.52
                                                                                                     76.81
                                                                                                                                                            5115.9
                                                                                                                                                                                26.71
        106.36
                       8 50 10 1239.21
13 3 41 5715.86
12 2 24 617.36
14 50 37 5385.71
                                                                                 351.77
                                                                                                    76.80
                                                                                                                       112.54
                                                                                                                                       9 10 49
                                                                                                                                                             639.2
                                                                                                                                                                                26.70
                                                                                                                                                                                                343.92
                                                                23.86
         73.64
                                                                                                                       112.53 14 38 57
                                                                                                                                                                                26.71
                                                                                 269.52
        106.36
                                                                23.87
                                                                                                     76.81
                                                                                                                                                            5115.9
                                                                                                                                                                                               261.66
                                                                                                                      120.10 12 12 42
104.98 16 20 23
                                                                17.03
                                                                                                    73.20
                                                                                                                                                                                20.90
                                                                                                                                                                                                295.59
        110.00
                                                                                 302.58
                                                                                                                                                           4785.7
                                                                                 246.85
                                                                                                   79.57
                                                                                                                                                                                32.63
        110.00
                                                                31.09
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     TOE-1.5344 TRA .4615 TC3-5.8541 BAU 1.2146

ROE .3071 RRA .0078 RC3 -.0289 FAU .02415

FOE -.4531 FRA .5346 FC3-1.3472 BSP 16253

BOE 1.5648 BRA .4616 BC3 5.8542 FSP -426
                                                                                   SGT 5185.1 SGR 447.4 SG3 134.1
RRT -.3798 RRF -.3713 RTF .8821
SGB 5204.4 R23 .0369 R13 -.8822
                                                                                                                                                    ST 2248.7 SR 446.7 SS 507.3
CRT -.9914 CRS .9178 CST -.9581
                                                                                                                                                    LSA 2342.9 MSA 152.7 SSA 27.9
                                                                                     SG1 5187.9 SG2 413.7 THA 178.11
                                                                                                                                                     EL1 2291.9 EL2 57.5 ALF 168.85
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ARRIVAL DATE JAN 20 1968

FLIGHT TIME 174.00 LAUNCH DATE JUL 30 1967 DISTANCE 515.516 HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 25.580 GAL .74 AZL 92.65 MCA 260.10 SMA 121.39 ECC .25151 INC 2.6454 VI 29.334
RP 108.01 LAP 2.61 LOP 206.26 VP 36.933 GAP 13.15 AZP 89.55 TAL 177.80 TAP 77.90 RCA 90.86 APO 151.92 VZ 35.084
RC 178.389 GL -17.17 GP 11.36 ZAL 82.37 ZAP 167.22 ETS 59.84 ZAE 129.92 ETE 170.37 ZAC 51.94 ETC 6.77 CLP-174.11 PLANETOCENTRIC CONIC C3 15.990 VHL 3.999 DLA +32.39 RAL 215.74 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 8.380 DPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.93 112.75 9 29 8 647.2 26.57 344.47 9 8 21 1247.16 13 22 37 5721.44 352.31 73.58 23.70 14 57 59 262.04 112.73 5121.4 26.5A 23.71 269.88 81.93 106.42 112.75 9 29 8 647.2 26.57 344,47 81.93 73.58 9 8 21 1247.16 23.70 352.31 112.75 9 29 0 112.73 14 57 59 120.18 12 31 57 105.33 16 38 28 262.04 5121.4 26.58 81.93 106.42 13 22 37 5721.44 23.71 269.88 295.88 22.2 20.75 12 21 35 622.17 16.66 302.65 78.30 110.00 4794.4 32.73 238.72 84.73 15 8 33 30.93 247.49 110.00 5594.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5225.0 SGR 454.8 SG3 131.6 RRT - .3880 RRF - .3742 RTF .8870 SGB 5244.7 R23 .0302 R13 - .8871 SGI 5228.0 SGZ 418.9 THA 178.05 ST 2227.4 SR 454.5 SS 489.6 CRT -.9844 CRS .8975 CST -.9584 TOE-1.5306 TRA .7160 TC3-5.7320 BAU 1.2253 ROE .3172 RRA .0006 RC3 -.0201 FAU .02280 FOE -.4237 FRA .5820 FC3-1.2344 BSP 16423 BOE 1.5631 BRA .7160 BC3 5.7320 FSP -422 LSA 2319.9 MSA 157.9 55A 27.3 EL1 2272.0 EL2 78.4 ALF 168.63 ARRIVAL DATE JAN 22 1968 FLIGHT TIME 176.00 DISTANCE 521.000 HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 25.522 GAL 1.35 AZL 92.50 HCA 263.32 SMA 121.06 ECC .25561 INC 2.4970 V1 29.334 RP 108.05 LAP 2.48 LOP 209.48 VP 36.881 GAP 13.49 AZP 89.71 TAL 176.05 TAP 79.37 RCA 90.12 APO 152.00 V2 35.071 RC 180.257 GL -15.81 GP 10.99 ZAL 78.64 ZAP 167.88 ETS 62.07 ZAE 130.02 ETE 170.63 ZAC 49.60 ETC 6.81 CLP-174.84 PLANETOCENTRIC CONIC -.73 RAP 217.23 ECC 1.2740 C3 16.652 VHL 4.081 OLA -32.30 RAL 220.36 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 8.562 DPA LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.78 9 28 8 1252.25 23.39 352.56 87.16 112.93 9 49 0 652.3 26.29 344.75 112.92 15 15 18 112.93 9 49 0 112.92 15 15 18 120.46 12 48 33 105.43 16 59 4 5134.9 26.30 262.96 13 39 44 5734.87 23.40 270.76 87.16 106.22 38.1 20.24 12 37 55 636.13 16.31 303.76 83.37 110.00 15 29 7 5596.99 4797.0 32.69 247.67 30.89 90.08 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5259.1 SGR 461.0 SG3 128.9 RRT -.3957 RRF -.3781 RTF .8909 SGB 5279.2 R23 .0253 R13 -.8910 SGI 5262.3 SG2 423.1 THA 178.00 ST 2187.0 SR 460.7 SS 470.0 CRT -.9746 CRS .8725 CST -.9577 TOE-1.5150 TRA .9816 TC3-5.5443 BAU 1.2343 ROE: .3281 RRA -.0084 RC3 -.0117 FAU .02140 LSA 2277.6 MSA 167.8 S6A 26.2 EL1 2232.7 EL2 101.0 ALF 168.37 FOE -.5928 FRA .6305 FC3-1.1126 BSP 16579 BOE 1.5502 BRA .9816 BC3 5.5443 FSP -416 ARRIVAL DATE JAN 24 1968 FLIGHT TIME 178.00 LAUNCH DATE JUL 30 1967 DISTANCE 526.445 RL 151.88 LAL -.00 LOL 306.17 VL 25.465 GAL 1.99 A7L 92.35 MCA 266.52 SMA 120.74 ECC .26009 INC 2.3506 V1 29.334 RP 108.09 LAP 2.35 LOP 212.69 VP 36.829 GAP 13.85 A7P 89.86 TAL 174.31 TAP 80.83 RCA 89.34 APO 152.14 V2 35.058 RC 182.108 GL -14.44 GP 10.65 ZAL 74.96 ZAP 168.47 ETS 64.60 ZAE 130.10 ETE 170.87 ZAC 47.26 ETC 6.90 CLP-175.58 PLANETOCENTRIC CONIC C3 17.523 VHL 4.186 DLA -32.08 RAL 224.91 RAD 6567.7 VEL 11.786 PTH 2.08 VHP 8.758 CPA -1.93 RAP 219.38 ECC 1.2884 C3 17.523 VHL 4.186 DLA -32.08 RAL 2Z4.91 RAD 6567.7 VEL 11.786 PTH 2.08 VMP 8.758 CPA -1.93 RAP 219.38 ECC 1.2884 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.25 9 49 22 1254.37 22.94 352.50 92.44 113.07 10 10 16 654.4 25.86 344.74 105.75 13 54 46 5756.28 22.95 272.18 92.44 113.06 15 30 42 5156.3 25.87 264.42 105.75 13 54 46 5756.28 22.95 272.18 92.44 113.07 10 10 16 654.4 25.86 344.74 105.75 13 54 46 5756.28 22.95 272.18 92.44 113.07 10 10 16 654.4 25.86 344.74 110.00 12 51 25 664.69 15.39 305.27 88.37 120.91 13 2.99 64.7 19.38 298.41 110.00 15 51 53 5393.96 30.94 247.45 95.56 105.31 17.21 47 4794.0 32.73 238.69 INTERFERENTIAL CORPECTIONS ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2122.2 SR 464.6 SS 447.8 CRT -.9609 CRS .8403 CST -.9558 LSA 2210.5 MSA 182.2 SSA 24.8 EL1 2168.8 EL2 125.8 ALF 168.08 SCT 5283.2 SCR 465.5 SC3 126.1 RRT -.4023 RRF -.3610 RTF .8946 SCB 5303.6 R23 .0205 R13 -.8946 SCI 5286.5 SC2 425.9 THA 177.96 TOE-1.4814 TRA 1.2636 TC3-5.2926 BAU 1.2399 ROE .3394 RRA -.0190 RC3 -.0041 FAU .01998 FDE -.3586 FRA .6803 FC3 -.9869 BSP 16622 BOE 1.5197 BRA 1.2638 BC3 5.2926 FSP -4/16 ARRIVAL DATE JAN 26 1968 LAUNCH DATE JUL 30 1967 FLIGHT TIME 180.00 DISTANCE 531.845 HELIOCENTRIC CONIC RL 151.88 LAL -.00 LOL 306.17 VL 25.409 GAL 2.66 A7L 92.21 HCA 269.73 SMA 120.43 ECC .26499 INC 2.2053 V1 29.334
RP 108.13 LAP 2.21 LOP 215.90 VP 36.778 GAP 14.23 A7P 89.99 TAL 172.57 TAP 82.31 RCA 88.52 APO 152.34 V2 35.045
RC 183.942 GL -13.08 GP 10.35 ZAL 71.35 ZAP 169.02 ETS 67.46 ZAE 130.18 ETE 171.08 ZAC 44.91 ETC 7.04 CLP-176.31 PLANETOCENTRIC CONIC C3 18.627 VHL 4.316 OLA -31.76 RAL 229.33 RAD 6567.8 VEL 11.833 PTH 2.10 VMP 8.968 OPA -3.08 RAP 221.55 ECC 1.3066 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.98 10 12 0 1253.04 22.34 352.13 97.73 113.18 10 32 53 653.0 25.28 344.41 1NJ AZMTH INJ TIME 113.18 10 32 53 113.17 15 43 52 113.18 10 32 53 113.17 15 43 52 121.45 13 14 3 105.05 17 46 0 25.29 5186.1 105.02 14 7 26 5786.12 22.35 274.17 97.73 653.0 25.28 10 12 0 22.34 352.13 97.73 74.98 1253.04 22.35 274.17 97.73 5186.1 25.29 105.02 14 7 26 5786.12 100.4 18.19 300.51 700.37 307.27 93.27 14.13 4786.8 32.82 110.00 16 16 13 5386.79 51.07 246.93 101.11 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2048.3 SR 466.8 SS 427.0 CRT -.9432 CRS .8028 CST -.9538 TOE-1.4389 TRA 1.5540 TC3-5.0038 BAU 1.2461 SGT 5309.5 SGR 469.1 SG3 123.4 RRT - .4099 RRF - .3858 RTF .8988 SGB 5330.2 R23 .0165 R13 - .8989 RDE .3515 RRA -.0309 RC3 .0034 FAU .01865 LSA 2134.3 MSA 199.7 SSA 23.3 FOE -.3254 FRA .7287 FC3 -.8670 BSP 16760 BOE 1.4812 BRA 1.5543 BC3 5.0038 FSP -400 EL1 2095.3 EL2 151.7 ALF 167.80 SG1 5313.0 SG2 427.6 THA 177.91

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FLIGHT TIME 182.00
                                                                                                                                          ARRIVAL DATE JAN 28 1968
LAUNCH DATE JUL 30 1967
                                                                            OISTANCE 537.195
   HELIOCENTRIC CONIC
    RL 151.88 LAL --.00 LOL 306.17 VL 25.354 GAL 3.36 AZL 92.06 MCA 272.93 5MA 120.12 ECC .27034 INC 2.0602 V1 29.334 RP 108.18 LAP 2.06 LOP 219.10 VP 36.727 GAP 14.63 AZP 90.11 TAL 170.85 TAP 83.78 RCA 87.65 APO 152.60 V2 35.032 RC 185.758 GL -11.74 GP 10.07 ZAL 67.85 ZAP 169.50 ETS 70.65 ZAE 130.25 ETE 171.28 ZAC 42.55 ETC 7.25 CLP-177.04
   PLANETOCENTRIC CONIC
    C3 19.990 VHL 4.471 DLA -31.33 RAL 233.59 RAD 6567.8 VEL 11.890 PTH 2.11 VMP 9.195 DPA -4.18 RAP 223.75 ECC 1.3290 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                24.56
                  10 36 3 1247.59
14 17 22 5824.96
10 36 3 1247.59
14 17 22 5824.96
                                                                                 102.98
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113.24 15 54 27
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        76.00 10 36 3
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       104.00
                                                      21.62
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113.24 15 54 27
122.04 13 23 39
104.65 18 10 58
        76.00
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                                                                     351.38
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       104.00
                                                      21.62
                                                                    276.78
                                                                                   102.99
                                                                                                                                    5225.0
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                                                                                                                                                                  269.11
                   13 11 15
                                    743.32
                                                     12.60
                                                                     309.64
                                                                                     98.05
                                                                                                                                    143.3
                                                                                                                                                    16.74
                                                                                                                                                                  302.99
       110.00
                                  5377.23
                    16 41 21
                                                                    246.24
                                                                                   106.67
                                                                                                                                   4777.2
                                                                                                                                                    32.93
                                                                                                                                                                  237.42
       110.00
                                                      31.24
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5330.8 SGR 471.5 SG3 120.8
RRT -.4173 RRF -.3915 RTF .9032
                                                                                                                               ST 1964.5 SR 467.1 SS 407.7
CRT -.9199 CRS .7586 CST -.9520
     TDE-1.3837 TRA 1.8581 TC3-4.6786 BAU 1.2503
    RDE. .3642 RRA -.0441 RC3 .0098 FAU .01737
FDE -.2924 FRA .7777 FC3 -.7521 BSP 16875
                                                                        568 5351.6 R23 .0134 R13 -.9033
561 5334.4 562 428.2 THA 177.87
                                                                                                                               LSA 2048.1 MSA 220.0 SSA 21.7
     BOE 1.4308 BRA 1.8586 BC3 4.6786 FSP -394
                                                                                                                               ELI 2011.4 EL2 178.9 ALF 167.56
                                                                             FLIGHT TIME 184.00
                                                                                                                                           ARRIVAL DATE JAN 30 1968
  HELIOCENTRIC CONIC
                                                                            DISTANCE 542.487
    RL 151.88 LAL -.00 LOL 306.17 VL 25.299 GAL 4.09 AZL 91.91 MCA 276.14 SMA 119.82 ECC .27620 INC 1.9143 V1 29.334 RP 108.22 LAP 1.90 LOP 222.31 VP 36.677 GAP 15.06 AZP 90.20 TAL 169.13 TAP 85.27 RCA 86.73 APO 152.92 VZ 35.019 RC 187.557 GL -10.44 GP 9.82 ZAL 64.47 ZAP 169.93 ETS 74.19 ZAE 130.31 ETE 171.46 ZAC 40.20 ETC 7.52 CLP-177.77
   PLANETOCENTRIC CONIC
    C3 21.643 VHL 4.652 OLA -30.61 RAL 237.67 RAD 6567.9 VEL 11.959 PTH 2.13 VMP 9.439 OPA -5.24 RAP 225.97 ECC 1.3562
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   11 1 36 1237.16
14 24 16 5673.50
11 1 36 1237.16
14 24 16 5673.50
13 14 30 701.76
                                                                                  108.16
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       77.32
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                                                                    350.20
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115.28 16 2 9
127.62 13 31 42
104.23 18 36 2
        77.32
                                                      20.76
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       102.66
                   13 16 30
                                     791.76
                                                      10.83
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       110.00
       110.00
                   17 6 35 5366.89
                                                                    245.48
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                                                                                                                                                                  236.54
                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 5347.0 SGR 472.4 SG3 118.2
RRT -.4245 RRF -.3974 RTF .9075
SG8 5367.8 R23 .0106 R13 -.9075
SG1 5350.8 SG2 427.4 THA 177.84
                                                                                                                               ST 1876.2 SR 465.3 SS 390.4"
CRT -.8901 CRS .7065 CST -.9502
    TOE-1.3165 TRA 2.1768 TC3-4.3282 BAU 1.2524
    ROE .5773 RRA -.0588 RC3 .0149 FAU .01610
FOE -.2592 FRA .8280 FC3 -.6438 BSP 16971
                                                                                                                              LSA 1957.0 MSA 242.6 SSA 20.3
    BOE 1.3695 BRA 2.1776 BC3 4.3282 FSP -367
                                                                                                                               EL1 1922.0 EL2 207.1 ALF 167.40
                                                                            FLIGHT TIME 186.00
                                                                                                                                         ARRIVAL CARE FEB 1 1968
LAUNCH DATE JUL 30 1967
                                                                           DISTANCE 547.714
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 25.246 GAL 4.86 AZL 91.77 MCA 279.34 SMA 119.53 ECC .28261 INC 1.7668 VI 29.334 RP 108.26 LAP 1.74 LOP 225.51 VP 36.627 GAP 15.52 AZP 90.29 TAL 167.42 TAP 86.76 RCA 85.75 APO 153.32 VZ 35.005 RC 189.337 GL -9.18 GP 9.59 ZAL 61.24 ZAP 170.29 ETS 78.07 ZAE 130.36 ETE 171.62 ZAC 37.85 ETC 7.86 CLP-178.50
   PLANETOCENTRIC CONIC
    C3 23.627 VHL 4.861 DLA -30.22 RAL 241.52 RAD 6568.0 VEL 12.042 PTH 2.15 VHP 9.703 DPA -6.25 RAP 228.20 ECC 1.3888
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.98 11 29 15 1219.67 19.82 348.46 113.29 113.29 11 49 35 619.7 22.80 340.91 101.02 14 27 26 645.54 19.83 306.20 113.29 113.28 14 38 11 45.5 22.81 298.64
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113.28 14 38 11
113.29 11 49 35
113.28 14 38 11
123.14 13 38 32
103.83 19 0 41
                                  1219.67
645.54
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                                                                    348,46
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        78.98
                   11 29 15
                                                                                                                                                   22.81
                   14 27 26
                                                   19.83
                                                                                113.29
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                                                                    306.20
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                  13 24 27 844.20
17 31 24 5357.05
      110.00
                                                       8.89
                                                                    315.11
                                                                                   107.25
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                                                                                                                                 4757.0
                                                                                                                                                                 235.89
      110.00
                                                     31.58
                                                                    244.76
                                                                                   117.66
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1786.9 SR 461.3 SS 375.6
CRT -.8516 CRS .6455 CST -.9489
                                                                        SGT 5356.4 SGR 471.8 SG3 115.6
    TOE-1.2356 TRA 2.5137 TC3-3.9589 BAU 1.2505
   RDE .3905 RRA -.0749 RC3 .0184 FAU .01481
FDE -.2255 FRA .8803 FC3 -.5426 BSP 16986
                                                                       RRT -.4311 RRF -.4029 RTF .9117
5GB 5377.2 R23 .0083 R13 -.9117
5G1 5360.3 SG2 425.4 THA 177.81
                                                                                                                             LSA 1864.2 MSA 267.0 SSA 19.0
EL1 1830.3 EL2 236.1 ALF 167.39
    BOE 1.2959 BRA 2.5148 BC3 3.9589 FSP -378
LAUNCH DATE JUL 30 1967
                                                                            FLIGHT TIME 188.00
                                                                                                                                          ARRIVAL DATE FEB 3 1968
                                                                            DISTANCE 552.866
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 25.194 GAL 5.67 ATL 91.62 MCA 282.53 SMA 119.25 ECC .28963 INC 1.6167 VI 29.334 RP 108.30 LAP 1.58 LOP 228.70 VP 36.579 GAP 16.01 AZP 90.35 TAL 165.74 TAP 88.27 RCA 84.71 APO 153.79 V2 34.992 RC 191.100 GL -7.98 GP 9.38 ZAL 58.17 ZAP 170.59 ETS 82.28 ZAE 130.40 ETE 171.77 ZAC 35.51 ETC 8.30 CLP-179.24
  PLANETOCENTRIC CONIC
   C3 25.985 VHL 5.098 DLA -29.57 RAL 245.15 RAD 6568.1 VEL 12.139 PTH 2.18 VHP 9.989 DPA -7.21 RAP 230.45 ECC 1.4277
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                               21.78
                                                                                                                                                              338,40
                                                                                118.29
                                                                                                 113.26 12 19 45
113.25 14 37 45
        81.11 11 59 54 1191.46
                                  720.57
                                                     18.79
                                                                   345.69
                                                                                                                                    591.5
                   14 25 44
                                                      18.80
                                                                    311.31
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        98.89
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110.74 16 48 44
123.58 13 44 24
103.49 19 24 33
                  15 57 19
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                                                      15.64
                                                                    316.54
       100.00
                                                                    279.86
                                                                                   119.68
                                                                                                                                   5263.8
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       100.00
                   15 11 0
                                  5863.80
                                                     22.02
                                                                    318.05
                                                                                   111.67
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                                                                                                                                                   11.19
                                                                                                                                                                  311.66
                   13 29 25
                                    899.47
                                                       6.82
       110.00
                                                                                                                                 4748.6
                                  5348.60
                   17 55 24
                                                     31.71
                                                                    244.14
                                                                                   123.02
                                                                                                                                                   33.24
                                                                                                                                                                 235.25
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SCT 5364.0 SCR 470.1 SC3 113.1
RRT -.4381 RRF -.4097 RTF .9165
SCB 5384.6 R23 .0064 R13 -.9165
                                                                                                                              ST 1706.7 SR 455.8 SS 364.7
CRT -.8055 CRS .5822 CST -.9497
    TOE-1.1493 TRA 2.8631 TC3-3.5924 BAU 1.2480
   ROE .4043 RRA -.0918 RC3 .0211 FAU .01363
FOE -.1943 FRA .9323 FC3 -.4540 BSP 17061
BDE 1.2183 BRA 2.8646 BC3 3.5925 FSP -372
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SG1 5368.0 SG2 422.3 THA 177.79

LSA 1780.1 MSA 290.7 SSA 17.8

ELI 1746.7 EL2 263.9 ALF 167.57

ARRIVAL DATE FEB 5 1968

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FLIGHT TIME 190.00
LAUNCH DATE JUL 30 1967
                                                                                                              DISTANCE 557.932
     HELIOCENTRIC CONIC
      RL 151.88 LAL -.00 LOL 306.17 VL 25.142 GAL 6.52 A7L 91.46 MCA 285.73 SMA 118.97 ECC .29734 INC 1.4630 V1 29.334 RP 108.34 LAP 1.41 LOP 231.90 VP 36.531 GAP 16.54 A7P 90.40 TAL 164.07 TAP 89.79 RCA 83.60 APO 154.35 V2 34.979 RC 192.846 GL -6.83 GP 9.19 TAL 55.27 TAP 170.81 ETS 86.80 ZAE 130.41 ETE 171.92 ZAC 33.18 ETC 8.83 CLP-179.99
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC

C3 28.775 VHL 5.364 OLA -28.88 RAL 248.55 RAD 6568.2 VEL 12.254 PTH 2.20 VHP 10.300 OPA -8.13 RAP 232.72 ECC 1.4736

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

84.07 12 37 0 1141.10 17.70 341.69 123.17 113.20 12 56 1 541.1 20.69 334.24

95.93 14 15 43 821.66 17.72 318.28 123.18 113.19 14 29 25 221.7 20.70 310.84

100.00 13 42 28 928.64 12.05 323.39 120.40 117.56 13 57 57 328.6 15.65 316.44

100.00 15 52 56 5797.40 23.55 275.52 125.58 108.96 17 29 33 5197.4 25.92 267.53

110.00 13 33 34 956.65 4.66 321.07 115.96 123.90 13 49 31 356.6 9.08 314.77

110.00 18 18 20 5342.15 31.81 243.66 128.27 103.22 19 47 22 4742.2 33.30 234.75
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                         SGT 5369.4 SGR 467.0 SG3 110.7
RRT -,4450 RRF -.4165 RTF .9211
SGB 5389.7 R23 .0047 R13 -.9211
SGI 5373.5 SGZ 417.9 THA 177.77
                                                                                                                                                                                         ST 1637.8 SR 448.5 SS 357.3
CRT -.7510 CRS .5147 CST -.9516
      TOE-1.0563 TRA 3.2317 TC3-3.2312 BAU 1.2431
      ROE .4182 RRA -.1099 RC3 .0223 FAU .01245
FOE -.1638 FRA .9869 FC3 -.3745 BSP 17168
BOE 1.1360 BRA 3.2336 BC3 3.2313 FSP -365
                                                                                                                                                                                         LSA 1706.7 MSA 313.1 SSA 16.8
                                                                                                                                                                                          ELI 1673.1 ELZ 289.9 ALF 168.02
                                                                                                                                                                                                           ARRIVAL DATE FEB 7 1968
                                                                                                                 FLIGHT TIME 192.00
LAUNCH DATE JUL 30 1967
                                                                                                                DISTANCE 562.897
      TELIOCENINIC CONTE DISTANCE 702.894

RL 151.88 LAL -.00 LOL 306.17 VL 25.092 GAL 7.43 A7L 91.30 MCA 288.92 SMA 118.70 ECC .30580 INC 1.3044 V1 29.334

RP 108.38 LAP 1.23 LOP 235.09 VP 36.884 GAP 17.11 AZP 90.42 TAL 162.42 TAP 91.34 RCA 82.40 APO 155.00 V2 34.966

RC 194.574 GL -5.74 GP 9.01 TAL 52.54 TAP 170.96 ETS 91.57 TAE 130.42 ETE 172.05 TAC 30.87 ETC 9.49 CLP 179.25
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 32.063 VHL 5.662 DLA -28.16 RAL 251.71 RAD 6568.3 VEL 12.387 PTH 2.24 VHP 10.638 DPA -9.00 RAP 235.00 ECC 1.5277
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 13 12 1092.15 14.35 336.55 126.90 114.68 13 31 24 492.2 17.56 329.35
90.00 14 4 44 924.90 18.83 326.33 128.90 111.55 14 20 9 324.9 21.59 318.74
100.00 15 35 9 1021.12 9.08 328.65 124.21 118.60 13 52 10 421.1 12.83 321.87
100.00 16 25 28 5759.21 24.38 272.98 131.04 107.86 18 1 27 5159.2 26.59 264.88
110.00 13 37 5 1015.03 2.44 324.12 120.14 124.11 13 54 0 415.0 6.90 317.88
110.00 18 40 1 5338.06 31.88 243.36 133.34 103.06 20 8 9 4738.1 33.34 234.44
                                                                                                                                                                                                    -9.00 RAP 235.00 ECC 1.5277
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                           HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                         ST 157A.1 SR 439.6 SS 353.2
CRT -.6875 CRS .4469 CST -.9559
                                                                                                          SGT 5365.0 SGR 462.4 SG3 108.3
RRT -.4511 RRF -.4235 RTF .9262
       TOE -.9527 TRA 3.6176 TC3-2.8767 BAU 1.2332
       ROE .4322 RRA -.1289 RC3 .0225 FAU .01131
FDE -.1346 FRA 1.0432 FC3 -.3054 BSP 17199
                                                                                                         SGB 5364.8 R23 .0036 R13 -.9262
SG1 5369.0 SG2 412.4 THA 177.76
                                                                                                                                                                                          LSA 1642.3 MSA 333.0 SSA 15.8
                                                                                                                                                                                          EL1 1608.0 EL2 313.3 ALF 168.72
        BOE 1.0462 BRA 3.6199 BC3 2.8768 FSP -359
                                                                                                                                                                                                           ARRIVAL DATE FEB 9 1968
                                                                                                                 FLIGHT TIME 194.00
 LAUNCH DATE JUL 30 1967
                                                                                                               DISTANCE 567.745
       #ELIOCENTRIC CONIC

RL 151.88 LAL -.00 LOL 306.17 VL 25.042 GAL 8.39 A7L 91.14 MCA 292.11 SMA 118.44 ECC .31511 INC 1.1398 VI 29.334

RP 108.42 LAP 1.06 LOP 238.28 VP 36.438 GAP 17.74 A7P 90.43 TAL 160.81 TAP 92.92 RCA 81.12 APO 155.76 V2 34.953

RC 196.285 GL -4.72 GP 8.85 7AL 49.98 7AP 171.02 ETS 96.53 7AE 130.40 ETE 172.18 7AC 28.57 ETC 10.29 CLP 178.48
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
        C3 35.932 VHL 5.994 DLA -27.43 RAL 254.63 RAD 6568.4 VEL 12.542 PTH 2.27 VHP 11.008 CPA -9.82 RAP 237.28 ECC 1.5913
       C3 35.932 VHL 5.994 DLA -27.43 RAL 254.63 RAD 6568.4 VEL 12.542 PTH 2.27 VHP 11.008 DPA -9.82 RAP 237.28 ECC 1.5913 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 48 38 1239.40 10.00 345.18 129.99 116.63 13 9 17 639.4 13.50 336.25 100.00 13 20 30 30 1104.07 6.35 335.29 128.03 119.27 13 6.35 255.1 23.44 312.81 100.00 13 30 30 1104.07 6.35 335.29 128.03 119.27 13 48 54 504.1 10.20 326.62 100.00 16 53 28 5733.72 24.90 271.27 136.23 107.10 18 29 2 5133.7 27.00 263.10 110.00 13 40 4 1074.07 .18 327.20 124.22 124.18 13 57 58 474.1 4.66 320.99 110.00 19 0 24 5356.49 31.90 243.25 138.37 102.99 20 29 21 4736.5 33.36 234.32 21FFERENTIAL CORRECTIONS
                                                                                                           MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                         ST 1532.8 SR 429.2 SS 352.4

CRT -.6166 CRS .3780 CST -.9611

LSA 1592.4 MSA 349.4 SSA 15.0

EL1 1556.6 EL2 332.7 ALF 169.73
                                                                                                           SGT 5358.8 SGR 456.3 SG3 106.1
        TOE -.8414 TRA 4.0289 TC3-2.5360 BAU 1.2183
                                                                                                         RRT -.4567 RRF -.4300 RTF .9311
SGB 5378.2 RZ3 .0026 R13 -.9311
SGI 5362.9 SGZ 405.6 THA 177.76
        RDE .4462 RRA -.1488 RC3 .0216 FAU .01013
FDE -.1054 FRA 1.1034 FC3 -.2441 BSP 17153
        BDE .9524 BRA 4.0317 BC3 2.5361 FSP -350
                                                                                                                                                                                                            ARRIVAL DATE FEB 11 1968
                                                                                                                  FLIGHT TIME 196.00
 LAUNCH DATE JUL 30 1967
                                                                                                                DISTANCE 572.455
      HELIOCENTRIC CONIC
       RL 151.88 LAL -.00 LOL 306.17 VL 24.994 GAL 9.42 A7L 90.97 MCA 295.29 SNA 118.19 ECC .32537 INC .9677 V1 29.334
RP 108.46 LAP .87 LOP 241.46 VP 36.392 GAP 18.41 A7P 90.41 TAL 159.23 TAP 94.52 RCA 79.73 APO 156.64 V2 34.941
RC 197.979 GL -3.75 GP 8.70 ZAL 47.60 ZAP 171.00 ETS 101.63 ZAE 130.36 ETE 172.30 ZAC 26.31 ETC 11.27 CLP 177.69
      PLANETOCENTRIC CONIC
        C3 40.480 VHL 6.362 DLA -26.70 RAL 257.33 RAD 6568.6 VEL 12.722 PTH 2.31 VMP 11.413 DPA -10.60 RAP 239.56 ECC 1.6662
        UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 37 33 1341.98 6.82 351.04 133.49 117.55 12 59 55 742.0 10.45 344.25
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108.40 15 38 30
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                                                                                  21.91
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                                                        792.76
              90.00
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                                                     1181.52
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                                                                                                      337.58
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             100.00
                               13 27 13
                                                                                                        270.10 141.22 106.56 18 53 34
130.30 128.19 124.13 14 1 28
243.32 143.22 105.03 20 48 23
HTD-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                          27.27
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                                                                                                      270.10
                                                                                  25.24
             100.00
                                                     5716.49
                                17 16 18
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                              13 42 34 1133.33
19 19 26 5337.46
                                                                                  -2.09
                                                                                                      330.30
             110.00
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                                                                                 31.89
                                                                                                      243.32
             110.00
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                           ST 1502.0 SR 417.7 SS 354.5
CRT -.5435 CRS .3155 CST -.9672
                                                                                                          SGT 5348.5 SGR 448.9 SG3 103.9
RRT -.4623 RRF -.4369 RTF .9364
SGB 5367.3 R23 .0019 R13 -.9364
        TOE -.7285 TRA 4.4594 TC3-2.2186 BAU 1.2007
        ROE .4603 RRA -.1691 RC3 .0201 FAU .00903
FDE -.0786 FRA 1.1653 FC3 -.1932 BSP 17193
BOE .8617 BRA 4.4626 BC3 2.2187 FSP -344
                                                                                                                                                                                          LSA 1557.7 MSA 360.2 SSA 14.2
                                                                                                                                                                                            ELI 1520.1 EL2 346.5 ALF 170.93
                                                                                                           SG1 5352.6 SG2 397.8 THA 177.77
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LAUNCH DATE JUL 30 1967
                                                                                     FLIGHT TIME 198.00
                                                                                                                                                        ARRIVAL DATE FEB 13 1968
                                                                                    DISTANCE 577,000
    HÉLIOCENTRIC CONIC
     RL 151 RB LAL -.00 LOL 306.17 VL 24.947 GAL 10.52 A7L 90.79 MCA 298.48 SMA 117.94 ECC .33671 INC .7863 V1 29.334
RP 108.50 LAP .69 LOP 244.65 VP 36.348 GAP 19.15 A7P 90.38 TAL 157.69 TAP 96.17 RCA 78.23 APO 157.65 V2 34.929
RC 199.655 GL -2.85 GP 8.56 7AL 45.39 ZAP 170.89 ETS 106.76 ZAE 130.30 ETE 172.42 ZAC 24.07 ETC 12.47 CLP 176.88
    PLANETOCENTRIC CONTC
     C3 45.831 VHL 6.770 DLA -25.97 RAL 259.82 RAD 6568.7 VEL 12.930 PTH 2.36 VHP 11.858 DPA -11.33 RAP 241.84 ECC 1.7543
     LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      12 30 21 1430.66
15 52 17 766.64
                                                                                         137.06
                                                                                                            118.06 12 54 12
107.71 16 5 3
                                                                                                                                                 830.7
         90.00
                                                            4.00
                                                                           356.03
                                                                                                                                                                    7.72
                                                                                                                                                                                  349.33
         90.00
                                                            22.46
                                                                            316.14
                                                                                            145.01
                                                                                                                                                  166.6
                                                                                                                                                                   24.68
                                                                                                                                                                                   308.17
                                                                                                             119.87 13 45 36
106.23 19 15 42
123.94 14 4 33
103.17 21 6 8
                    13 24 43 1255.12
17 40 36 5705.44
13 44 41 1192.45
19 37 7 5340.88
        100.00
                                                            1.26
                                                                            341.62
                                                                                           135.54
                                                                                                                                                 655.1
                                                                                                                                                                    5.23
                                                                                                                                                                                  335.08
        100.00
                                                            25.45
                                                                           269.35
                                                                                           146.01
                                                                                                                                                 5105.4
                                                                                                                                                                   27.43
                                                                                                                                                                                  261.11
        110.00
                                                           -4.34
                                                                           333.39
                                                                                           132.05
                                                                                                                                                 592.5
                                                                                                                                                                                  327.18
                                                                                                                                                                     .15
        110.00
                                                           31.83
                                                                           243.57
                                                                                            147.92
                                                                                                                                                4740.9
                                                                                                                                                                   33.32
                                                                                                                                                                                  234.66
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SCT 5333.7 SCR 440.1 SC3 101.7
RRT -.4672 RRF -.4435 RTF .9417
SCB 5351.8 R23 .0013 R13 -.9417
SCI 5337.7 SC2 388.8 THA 177.78
                                                                                                                                           ST 1483.2 SR 405.1 SS 359.1
CRT -.4691 CRS .2577 CST -.9735
LSA 1535.9 MSA 365.8 SSA 13.5
     TDE -.6104 TRA 4.9152 TC3-1.9217 BAU 1.1775
    ROE .4745 RRA -.1897 RC3 .0179 FAU .00794
FOE -.0529 FRA 1.2309 FC3 -.1499 BSP 17217
BOE .7731 BRA 4.9189 BC3 1.9218 FSP -337
                                                                                                                                            EL1 1496.1 EL2 354.7 ALF 172.26
LAUNCH DATE JUL 30 1967
                                                                                     FLIGHT TIME 200.00
                                                                                                                                                         ARRIVAL DATE FEB 15 1968
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 581.351
    RL 151.88 LAL -.00 LOL 306.17 VL 24.901 GAL 11.70 AZL 90.59 MCA 301.66 SMA 117.70 ECC .34926 INC .5940 V1 29.334
RP 108.53 LAP .51 LOP 247.83 VP 36.305 GAP 19.97 AZP 90.31 TAL 156.21 TAP 97.87 RCA 76.59 APO 158.81 VZ 34.917
RC 201.315 GL -2.01 GP 8.44 ZAL 43.36 ZAP 170.69 ETS 111.85 ZAE 130.20 ETE 172.53 ZAC 21.88 ETC 13.93 CLP 176.05
   PLANETOCENTRIC CONIC
    C3 52.138 VML 7.221 OLA -25.25 RAL 262.09 RAD 6568.9 VEL 13.172 PTH
                                                                                                                  2.41 VHP 12.349 DPA -12.01 RAP 244.12 ECC 1.8581
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         140.59
                                                                                                             118.29 12 50 16
        90.00 12 25 4 1511.62
                                                            1.39
                                                                              - 55
                                                                                                                                                  911.6
                                                                                                                                                                    5.16
                                                                                                                                                                                  353.90
                                                                                                             107.26 16 28 10
119.87 13 44 45
106.04 19 35 45
123.62 14 7 16
103.41 21 22 36
                      16 15 40
                                                                           315.05
        90.00
                                        750 . OA
                                                            22.80
                                                                                           149.71
                                                                                                                                                  150.1
                                                                                                                                                                   24.95
                                                                                                                                                                                   307.04
                      13 22 40 1325.67
18 0 46 5699.30
13 46 25 1251.14
        100.00
                                                            -1.13
                                                                           345.49
                                                                                            139.19
                                                                                                                                                  725.7
                                                                                                                                                                     2.85
                                                                                                                                                                                   338.97
        100.00
                                                                           264.93
                                                                                         150.62
135.83
                                                                                                                                                                                 260.67
                                                            25.57
                                                                                                                                                 5099.3
                                                                                                                                                                   27.52
        110.00
                                                            -6.56
                                                                           336.48
                                                                                                                                                  651.1
                                                                                                                                                                   -2.10
                                                                                                                                                                                   330.24
                                                            31.74
        110.00
                   19 53 29
                                      5346.60
                                                                           243.99
                                                                                           152.47
                                                                                                                                               4746.6
                                                                                                                                                                   33.26
                                                                                                                                                                                   235.09
   DIFFERENTIAL CORRECTIONS
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SCT 5314.8 SCR 429.9 SC3 99.6
RRT -.4715 RRF -.4496 RTF .9471
SCB 5332.2 R23 .0009 R13 -.9471
SCI 5318.7 SC2 378.8 THA 177.80
                                                                                                                                           ST 1474.7 SR 391.6 SS 366.1
CRT -.3963 CRS .2054 CST -.9793
     TOE -.4880 TRA 5.3995 TC3-1.6468 BAU 1.1480
    RDE .4885 RRA -.2104 RC3 .0154 FAU .00683
FDE -.0281 FRA 1.3008 FC3 -.1154 BSP 17225
BDE .6905 BRA 5.4036 BC3 1.6469 FSP -331
                                                                                                                                           LSA 1525.7 MSA 366.3 SSA 12.8
                                                                                                                                           EL1 1483.4 EL2 357.4 ALF 173.62
                                                                                    FLIGHT TIME 202.00
                                                                                                                                                       ARRIVAL DATE FEB 17 1968
LAUNCH DATE JUL 30 1967
                                                                                   DISTANCE 585.467
   HELLOCENTRIC CONTC
    RL 151.88 LAL -.00 LOL 306.17 VL 24.856 GAL 12.97 AZL 90.39 MCA 304.84 SMA 117.47 ECC .36320 INC .3879 V1 29.334 RP 108.57 LAP .32 LOP 251.01 VP 36.263 GAP 20.87 AZP 90.22 TAL 154.79 TAP 99.63 RCA 74.80 APO 160.13 V2 34.905 RC 202.957 GL -1.22 GP 8.32 TAL 41.50 ZAP 170.39 ETS 116.84 ZAE 130.07 ETE 172.65 ZAC 19.74 ETC 15.74 CLP 175.18
   PLANETOCENTRIC CONIC
     C3 59.594 VHL 7.720 DLA -24.55 RAL 264.15 RAD 6569.1 VEL 13.452 PTH 2.46 VHP 12.893 DPA -12.64 RAP 246.38 ECC 1.9808
    CS 59.994 VNL 7.721 DLA -24.55 RAL 264.15 RAD 6569; VEL 13.432 PIH 2.46 VMP 12.893 DPA -12.64 RAP 246.5H ECC 1.9868 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 36 20 740.20 23.00 314.39 154.20 106.99 16 48 40 140.2 25.11 306.36 100.00 13 20 53 1393.57 -3.43 349.22 142.76 119.71 13 44 6 793.6 .55 342.70 100.00 18 19 1 5697.18 25.61 268.78 155.04 105.98 19 53 58 5097.2 27.55 260.52 110.00 13 47 48 1309.11 -8.73 339.56 139.50 123.18 14 9 37 709.1 -4.31 333.27 110.00 20 8 35 5354.40 31.62 244.57 156.86 103.73 21 37 49 4754.4 33.18 235.69
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SGT 5293.0 SGR 418.2 SG3 97.7
RRT -,4747 RRF -,4549 RTF .9525
SG8 5309.5 R23 .0006 R13 -,9525
SG1 5296.8 SG2 367.8 THA 177.84
    TOE -.3577 TRA 5.9192 TC3-1.3917 BAU 1.1088
                                                                                                                                           ST 1474.5 SR 377.1 SS 375.4
CRT -.3254 CRS .1567 CST -.9843
    ROE .5023 RRA -.2310 RC3 .0125 FAU .00566
FDE -.0031 FRA 1.3766 FC3 -.0823 BSP 17136
                                                                                                                                          LSA 1525.1 MSA 362.2 SSA 12.2-
EL1 1480.0 EL2 355.3 ALF 174.95
    BDE .6167 BRA 5.9237 BC3 1.3917 FSP -323
LAUNCH DATE JUL 30 1967
                                                                                    FLIGHT TIME 204.00
                                                                                                                                                        ARRIVAL DATE FEB 19 1968
                                                                                   DISTANCE 589.298
    RL 151.88 LAL -.00 LOL 306.17 VL 24.813 GAL 14.36 A7L 90.17 MCA 308.02 SNA 117.24 ECC .37871 INC .1652 V1 29.334
RP 108.60 LAP .13 LOP 254.18 VP 36.222 GAP 21.87 AZP 90.10 TAL 153.45 TAP 101.47 RCA 72.84 APO 161.64 V2 34.894
RC 204.581 GL -.48 GP 8.22 ZAL 39.81 ZAP 170.00 ETS 121.65 ZAE 129.89 ETE 172.77 ZAC 17.66 ETC 18.00 CLP 174.27
   PLANETOCENTRIC CONIC
    C3 64.434 VHL 4.273 OLA -23.47 RAL 266.02 RAD 6569.3 VEL 13.776 PTH 2.52 VMP 13.499 DPA -13.22 RAP 244.61 ECC 2.1263
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          118.15 12 44 59
106.86 17 7 0
119.41 13 43 32
106.01 20 10 31
122.62 14 11 37
104.12 21 51 49
                                                                                       147.48
                                                                                                                                                                     . 44
        90.00 12 17 21 1658.77
                                                           -3.35
                                                                            8.77
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        90.00
                     16 54 45
                                       735.35
                                                           23.10
                                                                           314.07
                                                                                           158.47
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       100.00
                    13 19 13
                                      1459.01
                                                           -5.62
                                                                           352.84
                                                                                         146.23
                                                                                                                                                859.0
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       100.00
                      18 35 33
                                      5698.37
                                                           25.58
                                                                          266.87
                                                                                           159.27
                                                                                                                                                5098.4
                                                                                                                                                                  27.53
                                                                                                                                                                                  260.61
                     13 48 51 1366.10
20 22 25 5364.05
       110.00
                                                         -10.84
                                                                           342.63
                                                                                           143.07
                                                                                                                                                766.1
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                                                                                                                                             4764.0
       110.00
                                                          31.46
                                                                          245.27
                                                                                           161.07
                                                                                                                                                                 33.00
                                                                                                                                                                                  236.42
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                             SCT 5266.1 SCR 405.2 SC3 95.7

RRT -.4770 RRF -.4594 RTF .9578

SCB 5281.7 R23 .0005 R13 -.9578

SCI 5269.7 SC2 355.9 TMA 177.89
                                                                                                                                          ST 1479.7 SR 362.1 SS 386.5

CRT -.2616 CRS .1158 CST -.9885

LSA 1531.2 MSA 354.0 SSA 11.6
    TOE -.2274 TRA 6.4703 TC3-1.1612 BAU 1.0625
    RDE .5163 RRA -.2509 RC3 .0096 FAU .00450
FDE .0201 FRA 1.4572 FC3 -.0570 BSP 17136
BDE .5641 BRA 6.4752 BC3 1.1613 FSP -317
                                                                                                                                          EL1 1482.9 EL2 348.7 ALF 176.12
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ARRIVAL CATE FEB 21 1968

EL1 1516.8 EL2 296.6 ALF 179.28

LAUNCH DATE JUL 30 1967

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DISTANCE 592.782
   HELIOCENTRIC CONIC
    RL 151.88 LAL -.00 LOL 306.17 VL 24.771 GAL 15.87 A7L 89.92 MCA 311.19 SMA 117.03 ECC .39604 INC .0753 V1 29.334
RP 108.64 LAP -.06 LOP 257.36 VP 36.183 GAP 22.99 A7P 89.95 TAL 152.20 TAP 103.39 RCA 70.68 APO 163.37 VZ 34.883
RC 206.187 GL .21 GP 8.12 ZAL 38.29 ZAP 169.50 ETS 126.26 ZAE 129.66 ETE 172.89 ZAC 15.67 ETC 20.84 CLP 173.32
   PLANETOCENTRIC CONIC
    C3 78.979 VML 8.887 DLA -23.22 RAL 267.69 RAD 6569.5 VEL 14.154 PTH 2.58 VMP 14.175 DPA -13.76 RAP 250.81 ECC 2.2998
    CS 78.979 VML 8.887 ULA -23.22 RAL 207.09 RAU 0309.7 VEL 141.74 TIME 2.3.22 RAL 207.09 RAU 0309.7 VEL 141.74 TIME 2.3.22 RAL 207.09 RAU 0309.7 VEL 141.74 TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 14 12 1726.69 -5.52 12.58 150.79 117.82 12 42 59 1126.7 -1.76 5.92
                   12 14 12 1726.69
                   17 11 12 734.39
13 17 36 1522.05
                                                                                                        17 23 27
                                                                                                                                                        305.95
        90.00
                                                   23.11
                                                                314.00
                                                                              162.53
                                                                                              106.83
                                                                                                                            134.4
                                                                                                                                          25.20
                                                                                                                                                        349.75
       100.00
                                                   -7.72
                                                                356.34
                                                                              149.50
                                                                                              118.97 13 42 58
                                                                                                                            922.1
                                                                                                                                           -3.80
                  18 50 30 5702.30
13 49 33 1421.87
20 35 2 5375.25
                                                                                             106.14 20 25 32
121.94 14 13 15
104.57 22 4 37
                                                                                                                                          27.48
                                                                                                                                                        260.89
       100.00
                                                  25.51
                                                                269.13
                                                                              163.30
                                                                                                                           5102.3
       110.00
                                                 -12.87
                                                                345.68
                                                                              146.52
                                                                                                                           821.9
                                                                                                                                          -8.56
                                                                                                                                                        339.23
      110.00
                                                31.27
                                                                246.09
                                                                             165.10
                                                                                                                          4775.2
                                                                                                                                         32.95
                                                                                                                                                       237.27
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 5235.3 SGR 390.8 SG3 93.8
RRT -.4779 RRF -.4626 RTF .9630
                                                                                                                      ST 1488.3 SR 346.4 SS 399.6
CRT -.2033 CRS .0796 CST -.9918
    TOE -.0928 TRA 7.0617 TC3 -.9516 BAU 1.0048
    RDE .5301 RRA -.2697 RC3 .0067 FAU .00327
                                                                                                                       LSA 1541.8 MSA 342.8 SSA 11.0
    FOE .0429 FRA 1.5446 FC3 -.0358 BSP 17115
                                                                    SGB 5249.8 R23 .0004 R13 -.9630
                                                                                                                       EL1 1490.1 EL2 338.8 ALF 177.14
    BDE .5382 BRA 7.0669 BC3 .9517 FSP -311
                                                                    SG1 5238.6 SG2 343.1 THA 177.95
                                                                                                                                 ARRIVAL DATE FEB 23 1968
LAUNCH DATE JUL 30 1967
                                                                        FLIGHT TIME 208,00
  HELIOCENTRIC CONIC
                                                                       DISTANCE 595.837
   RL 151.88 LAL -.00 LOL 306.17 VL 24.730 GAL 17.53 AZL 89.66 MCA 314.36 SNA 116.82 ECC .41544 INC .3433 V1 29.334 RP 108.67 LAP -.25 LOP 260.53 VP 36.146 GAP 24.24 AZP 89.76 TAL 151.06 TAP 105.43 RCA 68.29 APO 165.36 VZ 34.872
                          .85 GP 8.02 7AL 36.95 ZAP 168.91 ETS 130.63 ZAE 129.38 ETE 173.02 ZAC 13.78 ETC 24.43 CLP 172.31
    RC 207.774 GL
   PLANETOCENTRIC CONIC
    C3 91.611 VHL 9.571 DLA -22.60 RAL 269.16 RAD 6569.8 VEL 14.593 PTH 2.65 VMP 14.935 DPA -14.25 RAP 252.97 ECC 2.5077
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  12 11 17 1791.34
17 25 54 .736.50
                                                                                                                        1191.3
       90.00
                                                  -7.56
                                                                16.23
                                                                            153.99
                                                                                            117.37 12 41 8
                                                                                                                                         -3.63
                                                                                                                                                         9.54
        90.00
                                                   23.07
                                                                314.14
                                                                              166.36
                                                                                              106.89
                                                                                                         17 38 11
                                                                                                                            136.5
                                                                                                                                           25.17
                                                                                                                                                        306.10
                 13 15 56 1582.66
19 3 56 5708.45
13 49 54 1476.17
20 46 27 5387.71
                                                                                             118.41 13 42 19
106.33 20 39 5
121.17 14 14 30
105.06 22 16 15
      100.00
                                                  -9.70
                                                                359.75
                                                                              152.84
                                                                                                                            982.7
                                                                                                                                           -5.83
                                                                                                                                                        353.10
      100,00
                                                  25.39
                                                                269.55
                                                                              167.12
                                                                                                                           5108.5
                                                                                                                                          27.39
                                                                                                                                                        261.32
      110.00
                                                 -14.81
                                                                348.69
                                                                             149.85
                                                                                                                           876.2
                                                                                                                                         -10.57
                                                                                                                                                        342.15
                                                                                                                                         32.81
      110.00
                                                  31.05
                                                                247.00
                                                                              164.92
                                                                                                                           4787.7
                                                                                                                                                        238.22
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 5200.5 SGR 375.1 SG3 92.0
RRT -.4771 RRF -.4641 RTF .9680
SGB 5214.0 R23 .0005 R13 -.9681
SGI 5203.5 SG2 329.4 TMA 178.02
                                                                                                                       ST 1498.4 SR 330.4 SS 414.8
CRT -.1509 CRS .0477 CST -.9943
    TOE .0455 TRA 7.6985 TC3 -.7621 BAU .9334
    ROE .5439 RRA -.2869 RC3 .0039 FAU .00193
                                                                                                                       LSA 1554.9 MSA 329.4 SSA 10.4
    FOE .0654 FRA 1.6401 FC3 -.0182 BSP 17075
                                                                                                                       EL1 1499.2 EL2 326.4 ALF 178.00
    BOE .5458 BRA 7.7038 BC3 .7621 FSP -305
                                                                                                                                ARRIVAL DATE FEB 25 1968
LAUNCH DATE JUL 30 1967
                                                                       FLIGHT TIME 210.00
   HELIOCENTRIC CONIC
                                                                       DISTANCE 598.359
   RL 151.88 LAL -.00 LOL 306.17 VL 24.692 GAL 19.36 AZL 89.36 MCA 317.53 SMA 116.63 ECC .43724 INC .6407 VI 29.334
RP 108.70 LAP -.43 LOP 263.70 VP 36.110 GAP 25.65 AZP 89.53 TAL 150.06 TAP 107.60 RCA 65.63 APO 167.62 V2 34.862
RC 209.341 GL 1.44 GP 7.93 ZAL 35.78 ZAP 168.20 ETS 134.75 ZAE 129.02 ETE 173.16 ZAC 12.03 ETC 29.03 CLP 171.23
   PLANETOCENTRIC CONIC
    C3 106.846 VHL 10.337 DLA -22.00 RAL 270.44 RAD 6570.1 VEL 15.106 PTH 2.72 VHP 15.792 DPA -14.69 RAP 255.07 ECC 2.7584
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          157.04 116.81 12 39 19
169.95 107.01 17 51 18
                                                                                                                       1252.8
                                                                                                                                      -5.79
                                                                                                                                                        12.99
       90.00 12 8 26 1852.81
                                                 -9.47
                                                                19.74
                  17 38 57
                                   741.02
                                                  22.98
                                                               314.44
                                                                              169.95
                                                                                                                           141.0
                                                                                                                                          25.10
                                                                                                                                                       306.41
                                                                                             117.76 13 41 29
106.57 20 51 12
                 13 14 8
                                1640.75
                                                -11.56
                                                                 3.06
                                                                              155.94
                                                                                                                          1040.8
                                                                                                                                          -7.76
                                                                                                                                                       356.34
                                                                              170.70
                                                                                                                          5116.4
                                                                                                                                          27.27
                                                                                                                                                       261.88
      100.00
                  19 15 56
                                 5716.36
                                                 25.24
                                                               270.09
                                                                                             120.30 14 15 21
105.59 22 26 43
                                1528.72
                                                                                                                           928.7
                                                                                                                                                       345.02
                 13 49 52
                                                 -16.63
                                                               351.67
                                                                              153.04
                                                                                                                                        -12.49
                                                                                                                          4601.1
                                                                                                                                        32.54
                                                                                                                                                       239.23
                  20 56 41
                                 5401.14
                                                  30.81
                                                               247.97
                                                                              172.52
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   TOE .1907 TRA 8.3903 TC3 -.5903 BAU .6433
RDE .5577 RRA -.3019 RC3 .0013 FAU .00039
FOE .0884 FRA 1.7460 FC3 -.0032 BSP 16940
BOE .5894 BRA 8.3957 BC3 .5903 FSP -298
                                                                   SGT 5163.3 SGR 358.0 SG3 90.3
RRT -.4739 RRF -.4632 RTF .9728
                                                                                                                      ST 1508.9 SR 313.9 SS 432.4

CRT -.1030 CRS .0182 CST -.9961

LSA 1569.5 MSA 314.3 SSA 9.8
                                                                   SG8 5175.7 R23 .0005 R13 -.9728
                                                                   SGI 5166.1 SGZ 315.1 THA 178.11
                                                                                                                      EL1 1509.3 EL2 312.1 ALF 178.72
                                                                                                                                 ARRIVAL DATE FEB 27 1968
LAUNCH DATE JUL 30 1967
                                                                       FLIGHT TIME 212.00
                                                                       DISTANCE 600.214
  HELIOCENTRIC CONIC
   RL 151.88 LAL -.00 LOL 306.17 VL 24.656 GAL 21.39 A7L 89.02 MCA 320.70 SMA 116.45 ECC .46181 INC .9761 V1 29.334
RP 108.73 LAP -.62 LOP 266.87 VP 36.076 GAP 27.26 A7P 89.24 TAL 149.23 TAP 109.93 RCA 62.67 APO 170.23 V2 34.853
RC 210.889 GL 2.00 GP 7.85 ZAL 34.81 ZAP 167.36 ETS 138.63 ZAE 128.57 ETE 173.31 ZAC _10.45 ETC 34.91 CLP 170.07
  PLANETOCENTRIC CONIC
   C3 125.352 VHL 11.196 DLA -21.43 RAL 271.52 RAD 6570.3 VEL 15.706 PTH 2.79 VHP 16.765 DPA -15.08 RAP 257.09 ECC 3.0630
   LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 5 32 1911.09 -11.24 23.11 159.92 116.16 12 37 23 1311.1 -7.63 16.29
                                                                                            116.16 12 37 23
107.19 18 2 54
                                                                                                                           147.4
                                                                                                                                          24.99
                 17 50 26
                                                                314.87
                                                                              173.26
                                                                                                                                                        306.85
                                 747.37
                                                 22.86
                                                                                              117.02
                                                                                                         13 40 24
                                                                                                                           1096.1
                                                                                                                                          -9.57
                                                                                                                                                        359.45
                  13 12 8
                                1696.14
                                                 -13.30
                                                                 6.26
                                                                              158.87
                 19 26 31 5725.60
                                                                270.72
                                                                                              106.85 21 1 57
                                                                                                                           5125.6
                                                                                                                                         27.13
                                                                                                                                                        262.53
                                                 25.06
                                                                              174.02
                  13 49 25 1579.26
21 5 43 5415.24
                                                                                            119.36 14 15 44
106.14 22 35 59
                                                 -18.35
                                                                                                                           979.3
                                                                                                                                         -14.30
                                                                                                                                                        347.81
      110.00
                                                                354.59
                                                                             156.05
                                                                                                                         4815.2
                                                                                                                                        32.46
                                                                                                                                                       240.29
      110.00
                                                               248.99
                                                                              175.86
  DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                  MID-COURSE EXECUTION ACCUMACY

SGT 5120.3 SGR 339.7 SG3 68.6

RRT -.4677 RRF -.4592 RTF ..9773

SGB 5131.6 R23 .0006 R13 -.9773
                                                                                                                      ORBIT DETERMINATION ACCURACY
   TOE .3345 TRA 9.1356 TC3 -.4382 BAU .7343
RDE .5719 RRA -.3135 RC3 -.0009 FAU-.00132
                                                                                                                       ST 1516.7 SR 297.2 SS 452.2
                                                                                                                      CRT -.0617 CRS -.0070 CST -.9974
   FOE .1104 FRA 1.8618 FC3 .0091 BSP 16898
BOE .6626 BRA 9.1410 BC3 .4382 FSP -293
                                                                                                                    LSA 1582.5 MSA 298.2 SSA 9.2
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FLIGHT TIME 206.00

SG1 5122.8 SG2 300.1 THA 178.22

ARRIVAL DATE FEB 29 1968

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FLIGHT TIME 214.00
LAUNCH DATE JUL 30 1967
                                                                                                                       DISTANCE 601.223
     HELIOCENTRIC CONIC
      RE 151.88 LAL -.00 LOL 306.17 VL 24.623 GAL 23.66 A7L 88.64 HCA 323.86 SMA 116.28 ECC .48959 INC 1.3599 V1 29.334 RP 108.76 LAP -.80 LOP 270.04 VP 36.045 GAP 29.10 A7P 88.90 TAL 148.60 TAP 112.47 RCA 59.35 APO 173.21 V2 34.844 RC 212.418 GL 2.52 GP 7.76 7AL 34.03 ZAP 166.40 ETS 142.28 ZAE 128.02 ETE 173.48 ZAC 9.10 ETC 42.35 CLP 168.80
     PLANETOCENTRIC CONIC
       C3 148.010 VHL 12.166 DLA -20.90 RAL 272.38 RAD 6570.6 VEL 16.412 PTH
                                                                                                                                                                 2.87 VMP 17,874 DPA -15.43 RAP 259.01 ECC 3.4359
      LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                        INJ AZMTH INJ TIME

115.44 12 35 14

107.40 18 12 58

116.22 13 38 59

107.16 21 11 17

118.36 14 15 37

106.69 22 44 1
                         12 2 28 1966,08
18 0 22 755.10
13 9 50 1748.66
19 35 41 5735.79
13 48 29 1627.51
21 13 31 5429.71
                                                                                                                                                                                                                                 -9.34
                                                                                                                             162.60
                                                                                                                                                                                                        1366.1
                                                                                                          26.33
             90.00
                                                                                  -12.87
                                                                                                                                                                                                                                      24.87
                                                                                                                                                                                                                                                             307.38
                                                                                                                                                                                                              155.1
                                                                                                                                 176.31
                                                                                  22.70
                                                                                                           315.38
                                                                                                                                                                                                                                                               2.44
                                                                                                                                                                                                            1148.7
                                                                                                                                                                                                                                   -11.26
                                                                                                                                161759
           100.00
                                                                                  -14.90
                                                                                                             9.33
                                                                                                                            177.05
158.87
                                                                                                                                                                                                            5135.8
                                                                                                                                                                                                                                     26.97
                                                                                                                                                                                                                                                             263.25
                                                                                                          271.41
                                                                                 24.86
                                                                                                                                                                                                                                                             350.53
                                                                                                                                                                                                                                  -15.99
                                                                                -19.93
                                                                                                          357.43
                                                                                                                                                                                                                                 32.26
                                                                                                                                                                                                            4829.7
                                                                                                                                                                                                                                                            241.37
                                                                                                          250.02
                                                                                                                                 178.91
                                                                                30.27
           110.00
                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SGT 5075.4 SGZ 284.5 THA 178.34
                                                                                                                                                                                                     ST 1521.4 SR 280.5 SS 474.8
CRT -.0245 CRS -.0302 CST -.9983
      TDE .4804 TRA 9.9467 TC3 -.3026 BAU .5987 RDE .5866 RRA -.3207 RC3 -.0028 FAU-.00334
                                                                                                                                                                                                    LSA 1593.6 MSA 281.5 SSA 8.7
      FDE .1323 FRA 1.9908 FC3 .0195 BSP 16826
BDE .7582 BRA 9.9519 BC3 .3026 FSP -287
                                                                                                                                                                                                   ELI 1521.4 EL2 280.4 ALF 179.73
                                                                                                                                                                                                                        ARRIVAL DATE MAR 2 1968
                                                                                                                       FLIGHT TIME 216,00
LAUNCH DATE JUL 30 1967
    HELIOCENTRIC CONIC
                                                                                                                       DISTANCE 601.156
      RL 151.88 LAL -.00 LOL 306.17 VL 24.593 GAL 26.22 A7L 88.19 MCA 327.03 SMA 116.13 ECC .52104 INC 1.8064 V1 29.334 RP 108.78 LAP -.98 LOP 273.20 VP 36.016 GAP 31.21 AZP 88.48 TAL 148.23 TAP 115.25 RCA 55.62 APO 176.64 V2 34.836 RC 213.927 GL 3.01 GP 7.68 ZAL 33.46 ZAP 165.28 ETS 145.71 ZAE 127.34 ETE 173.66 ZAC 8.04 ETC 51.47 CLP 167.40
    PLANETOCENTRIC CONIC
      -21 ...
29 . 98
                                                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 5021.7 SGR 299.5 SG3 85.5

RRT -.4417 RRF -.4370 RTF .9850

SGB 5030.6 R23 .0008 R13 -.9850

SGI 5023.5 SG2 268.6 THA 178.49
                                                                                                                                                                                                      ST 1521.6 SR 263.8 SS 500.6
      TDE .6269 TRA10.8307 TC3 -.1826 BAU .4296
RDE .6020 RRA -.3218 RC3 -.0042 FAU-.00579
                                                                                                                                                                                                      CRT .0094 CRS -.0522 CST -.9989
                                                                                                                                                                                                    LSA 1601.7 HSA 264.5 SSA 8.1
       FOE .1541 FRA 2.1351 FC3 .0265 85P 16731
80E .8691 8RAIO.8355 BC3 .1826 FSP -283
                                                                                                                                                                                                   EL1 1521.6 EL2 263.8 ALF
                                                                                                                                                                                                                       ARRIVAL DATE MAR 4 1968
                                                                                                                       FLIGHT TIME 218.00
LAUNCH DATE JUL 30 1967
                                                                                                                     DISTANCE 599.709
      RL 151.88 LAL -.00 LOL 306.17 VL 24.567 GAL 29.13 AZL 87.66 HCA 330.18 SHA 116.00 ECC .55671 INC 2.3357 VI 29.334

RP 108.81 LAP -1.16 LOP 276.37 VP 35.991 GAP 33.66 AZP 87.97 TAL 148.16 TAP 118.34 RCA 51.42 APO 180.58 V2 34.828

RC 215.416 GL 3.45 GP 7.59 ZAL 33.14 ZAP 163.98 ETS 148.94 ZAE 126.50 ETE 173.87 ZAC 7.32 ETC 61.91 CLP 165.85
     PLANETOCENTRIC CONIC
       C3 210.869 VHL 14.521 OLA -19.95 RAL 273.38 RAD 6571.2 VEL 18.226 PTH 3.02 VHP 20.616 OPA -16.02 RAP 262.45 ECC 4.4704
      C3 210.869 VHL 14.521 OLA -19.95 RAL 273.38 RAO 6571.2 VEL 18.226 PTH 5.02 VMP 20.616 DPA -18.02 RAP 262.63 ECC 4.410 PA 20.616 DPA 20.616 DPA 20.616 PA 20.
                             19 49 33 5757.69
13 44 54 1715.89
21 25 8 5458.67
                                                                          -22.70
29.69
                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                             HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                SGT 4966.3 SGR 278.0 SG3 84.0
RRT -.4180 RRF -.4148 RTF .9882
SGB 4974.1 R23 .0008 R13 -.9882
SGI 4967.7 SG2 252.4 THA 178.66
                                                                                                                                                                                                    ST 1516.6 SR 247.2 SS 530.1
CRT .0415 CRS -.0744 CST -.9993
       TOE .7738 TRAI1.7970 TC3 -.0766 BAU .2165
ROE .6185 RRA -.3150 RC3 -.0052 FAU-.00886
                                                                                                                                                                                                                                                                 7.5
                                                                                                                                                                                                    LSA 1606.5 MSA 247.5 SSA
       FOE .1761 FRA 2.2977 FC3 .0364 BSP 16539
BOE .9906 BRA11.8012 BC3 .0768 FSP -277
                                                                                                                                                                                                     EL1 1516.7 EL2 247.0 ALF
                                                                                                                                                                                                                                                                      .40
                                                                                                                                                                                                                        ARRIVAL DATE MAR 5 1988
                                                                                                                       FLIGHT TIME 220.00
LAUNCH DATE JUL 30 1967
                                                                                                                       DISTANCE 596.485
     HELIOCENTRIC CONIC
      RL 151.88 LAL -.00 LOL 306.17 VL 24.546 GAL 32.45 AZL 87.02 MCA 333.34 SMA 115.89 ECC .59711 INC 2.9772 V1 29.334 RP 108.83 LAP -1.34 LOP 279.53 VP 35.969 GAP 36.52 AZP 87.34 TAL 148.48 TAP 121.81 RCA 46.69 APO 185.10 V2 34.821 RC 216.886 GL 3.87 GP 7.50 ZAL 33.09 ZAP 162.47 ETS 151.39 ZAE 125.47 ETE 174.11 ZAC 6.94 ETC 72.65 CLP 164.10
     PLANETOCENTRIC CONIC
                                                                                                                                                                  3.10 WHP 22.318 OPA -16.26 RAP 263.90 ECC 5.1923
       C3 254.734 VHL 15.960 DLA -19.54 RAL 273.47 RAD 6571.5 VEL 19.392 PTH
      C3 254.734 VHL 15.960 DLA -19.54 RAL 273.47 RAD 6571.5 VEL 19.392 PTH 3.10 VHP 22.318 DPA -16.26 RAP 263.90 ECC 5.1923
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 11 51 5 2109.45 -16.89 34.93 168.95 113.07 12 26 14 1509.4 -13.62 27.78
90.00 18 20 27 782.60 22.13 317.19 183.28 108.13 18 33 29 182.6 24.40 309.26
100.00 13 0 10 1886.50 -18.86 17.65 168.05 113.63 13 31 36 1286.5 -15.51 10.46
100.00 19 54 3 5768.82 24.17 273.63 184.00 108.14 21 30 11 5168.8 26.43 265.55
110.00 13 42 0 1755.41 -23.87 5.27 165.61 115.23 14 11 15 1155.4 -20.27 357.98
110.00 21 28 42 5472.68 29.39 253.06 185.93 108.29 22 59 55 4872.7 31.61 244.55
                                                                                                              MID-COURSE EXECUTION ACCURACY
SCT 4902.9 SGR 255.8 SG3 82.7
RRT -.3830 RRF -.3812 RTF .9909
SG8 4909.5 R23 .0008 R13 -.9909
SG8 4903.8 SG2 236.2 THA 178.85
SG1 1503.5 EL2 230.5 ALF .64
                                                                                                              MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
        TOE .9089 TRAIZ.8419 TC3 .0145 BAU .0530
        ROE .6368 RRA - .2973 RC3 - .0055 FAU- .01269
        FOE .1963 FRA 2.4796 FC3 .0431 BSP 16431
BOE 1.1098 BRA12.8453 BC3 .0156 FSP -273
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ARRIVAL DATE OCT 9 1967

JPL TM 33-99

LAUNCH DATE JUL 31 1967

DISTANCE 205.173 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 28.941 GAL -15.40 AZL 92.03 MCA 92.59 SMA 145.80 ECC .26855 INC 2.0307 V1 29.337 RP 108.22 LAP -2.03 LOP 39.71 VP 39.273 GAP -4.48 AZP 89.91 TAL 246.02 TAP 338.61 RCA 106.65 APO 184.95 V2 35.016 RC 68.382 GL -7.40 GP -19.84 ZAL 166.78 ZAP 57.67 ETS 13.33 ZAE 163.05 ETE 309.82 ZAC 104.99 ETC 10.14 CLP -55.35 PLANETOCENTRIC CONIC 2.45 VHP 5.293 DPA -9.02 RAP 159.25 ECC 1.9707 C3 58.984 VHL 7.680 DLA 8.35 RAL 138.26 RAD 6569.1 VEL 13.429 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 56 28 2745.24 -27.94 77.84 22.30 94.80 23 42 13 2145.2 -26.98 69.30 69.27 14 25 42 4265.3 16.73 203.46 15.81 13 4 36 4865.26 19.73 210.86 1 6 57 -28.32 48.80 1869.8 95.61 0 25 47 2469.83 -29.41 57.43 22.15 68.32 15 38 50 97.91 2 20 23 65.65 16 34 46 4015.9 17.97 184.56 14 21 54 4615.90 1 43 16 2227.38 15 20 55 4431.11 15.24 21.10 191.95 29.54 1627.4 -31.91 -33.36 38.47 21.60 110,00 3831.1 21.27 168.84 13.55 24.77 176.24 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 472.7 SGR 494.9 SG3 193.8 RRT .1976 RRF .5761 RTF .2912 SGB 684.4 R23 .1608 R13 .5821 SGI 530.7 SG2 432.1 THA 51.55 ST 198.0 SR 355.6 SS 184.7 CRT -.5752 CRS .4546 CST -.9784 TOE .1976 TRA - .5840 TC3 .0573 BAU .1271 RDE - .4644 RRA - .3543 RC3 - .1507 FAU .08805 LSA 395.5 MSA 207.1 SSA 20.6 FOE .3483 FRA-1.3409 FC3-1.2924 BSP 936 BOE .5046 BRA .6831 BC3 .1612 FSP -549 EL1 377.3 EL2 152.6 ALF 111.43 ARRIVAL DATE OCT 11 1967 FLIGHT TIME 72.00 LAUNCH DATE JUL 31 1967 DISTANCE 211.793 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 28.942 GAL -15.23 AZL 91.88 MCA 95.79 SNA 145.81 ECC .26577 INC 1.8829 V1 29.337 RP 108.18 LAP -1.87 LOP 42.92 VP 39.285 GAP -3.77 AZP 89.81 TAL 246.10 TAP 341.89 RCA 107.06 APO 184.56 V2 35.029 RC 70.443 GL -6.95 GP -20.81 ZAL 167.08 ZAP 62.49 ETS 11.66 ZAE 163.57 ETE 298.55 ZAC 106.85 ETC 9.42 CLP -60.39 C3 57.574 VHL 7.588 OLA 8.81 RAL 138.33 RAD 6569.0 VEL 13.377 PTH 2.44 VHP 5.082 OPA -9.27 RAP 157.26 ECC 1.9475 LNCH AZMTH LNCH TIME, L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 53 9 2753.92 -27.99 78.47 22.14 94.48 23 39 3 2153.9 -27.07 64 49 PLANETOCENTRIC CONIC 94.48 23 39 3 68.81 14 29 11 13 8 26 4244.7 16.18 19.23 209.56 15.38 90.00 4844.74 95.31 1 4 0 67.85 15 42 5 49.37 1877.7 -28.41 0 22 43 2477.74 58.01 21.99 100.00 -29.46 17.42 3996.2 14 25 29 4596.15 20.60 190.70 14.80 100.00 2 17 57 -32.01 1633.6 -33.42 38.95 21.46 97.63 2 17 57 65.14 16 37 31 1 40 44 2233.61 20.70 3613.1 110.00 15 23 58 4413.06 24.26 175.09 13.08 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 209.7 SR 350.2 SS 197.7 CRT -.5344 CRS .4743 CST -.9872 LSA 396.9 MSA 218.6 SSA 20.7 SGT 507.3 SGR 513.9 SG3 209.9 RRT .2911 RRF .6168 RTF .4065 SGB 722.2 R23 .1631 R13 .6404 SGI 580.3 SG2 429.9 THA 46.27 TOE .2006 TRA -.6322 TC3 .0218 BAU .1346 RDE -.4499 RRA -.3687 RC3 -.1735 FAU .09420 FOE .4012 FRA-1.4259 FC3-1.4165 BSP 1086 BDE .4927 BRA .7318 BC3 .1749 FSP -601 EL1 372.6 EL2 166.5 ALF 112.46 ARRIVAL DATE OCT 13 1967 FLIGHT TIME 74.00 LAUNCH GATE JUL 31 1967 DISTANCE 218.369 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 28.934 GAL -15.07 A7L 91.73 HCA 98.99 SHA 145.73 ECC .26318 INC 1.7334 V1 29.337 RP 108.14 LAP -1.71 LOP 46.12 VP 39.291 GAP -3.10 A7P 89.73 TAL 246.05 TAP 345.05 RCA 107.38 APO 184.09 V2 35.042 RC 72.534 GL -6.47 GP -21.77 7AL 167.33 7AP 67.39 ETS 9.94 7AE 163.53 ETE 286.37 7AC 108.78 ETC 8.62 CLP -65.54 PLANETOCENTRIC CONTC C3 56.215 VML 7.498 DLA 9.26 RAL 138.47 RAD 6569.0 VEL 13.326 PTH 2.44 VMP 4.909 DPA -9.47 RAP 155.20 ECC 1.9252 LNCH A7MTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 12 36 4824.24 18.72 208.27 15.05 68.36 14 33 0 4224.2 15.62 200.97 100.00 0 19 57 2485.73 -29.51 58.60 21.92 95.00 1 1 22 1885.7 -28.50 49.94 94.17 23 36 11 68.36 14 33 0 95.00 1 1 22 67.39 15 45 41 97.35 2 15 50 64.65 16 40 35 3976.4 16.85 182.16 189.46 14.46 4576.44 20.09 100.00 14 29 24 30.47 1639.9 -32.10 1 38 30 2239.88 15 27 20 4395.05 39.43 21.42 110.00 -33.48 166.67 12.71 3795.1 20.13 23.74 173.95 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 554.8 SGR 534.0 SG3 225.1 RRT .3825 RRF .6551 RTF .5112 SGB 770.1 R23 .1616 R13 .6947 SG1 640.6 SG2 427.3 THA 42.15 ST 224.5 SR 343.5 SS 210.1 CRT -.4969 CRS .4887 CST -.9907 LSA 399.4 MSA 229.4 SSA 20.8 TDE .2069 TRA -.6858 TC3 -.0197 BAU .1491 RDE -.4341 RRA -.3820 RC3 -.1974 FAU .09988 FOE .4523 FRA-1.4967 FC3-1.5362 BSP 1286 BOE .4809 BRA .7850 BC3 .1984 FSP -656 EL1 367.8 EL2 181.9 ALF 114.28 FLIGHT TIME 76.00 ARRIVAL DATE OCT 15 1967 LAUNCH DATE JUL 31 1967 DISTANCE 224.901 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 28.916 GAL -14.91 AZL 91.58 MCA 102.20 SMA 145.57 ECC .26072 INC 1.5811 V1 29.337 RP 108.10 LAP -1.55 LOP 49.33 VP 39.290 GAP -2.46 AZP 89.67 TAL 245.87 TAP 348.07 RCA 107.62 APO 183.53 V2 35.056 RC 74.652 GL -5.97 GP -22.70 ZAL 167.51 ZAP 72.31 ETS 8.16 ZAE 162.86 ETE 274.25 ZAC 110.76 ETC 7.75 CLP -70.77 PLANETOCENTRIC CONIC C3 54.891 VHL 7.409 DLA 9.71 RAL 138.69 RAD 6569.0 VEL 13.276 PTH 2.43 VHP 4.771 DPA -9.63 RAP 153.09 ECC 1.9034 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.05 93.84 23 33 35 2171.6 -27.25 71.19 22 47 24 2771.61 13 17 7 4803.59 -28.08 79.76 90.00 199.72 67.92 14 37 11 4203.6 15.04 18.20 206.98 14.81 90.00 50.53 0 59 1 1893.8 -28.59 2493.84 59.20 21.93 94.69 0 17 27 100.00 -29.56 180.97 15 49 37 3956.6 16.28 14.21 66.94 100.00 14 33 41 4556.59 19.57 188.22 30.95 97.07 2 14 0 1646.3 -32.19 39.92 21.45 1 36 34 2246.26 15 31 3 4376.94 -33.53 110.00 64.17 16 44 0 165.59 3776.9 19.54 15 31 3 172.81 12.43 23.21 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 242.0 SR 339.0 SS 222.5 CRT -.4610 CRS .5054 CST -.9905 SGT 616.5 SGR 553.3 SG3 258.3 RRT .4682 RRF .6885 RTF .6016 SGB 828.4 R23 .1593 R13 .7406 TOE .2155 TRA -.7456 TC3 -.0680 BAU .1699 RDE -.4162 RRA -.3928 RC3 -.2213 FAU .10460 FDE .5055 FRA-1.5498 FC3-1.6497 BSP 1525 BDE .4686 BRA .8427 BC3 .2316 FSP -699 LSA 403.7 MSA 236.5 SSA 20.9 EL1 362.5 EL2 198.5 ALF 117.17 SG1 712.1 SG2 423.3 THA 38.48

FLIGHT TIME 70.00

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51.13
179.77
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164.51
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178.54
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 163.40
73.26
195.86
 52.44
177.27
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FLIGHT TIME 78.00
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LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 231.390
    RL 151.86 LAL -.00 LOL 307.12 VL 28.891 GAL -14.76 AZL 91.43 MCA 105.41 SMA 145.34 ECC .25838 INC 1.4249 V1 29.337
RP 108.06 LAP -1.37 LOP 52.54 VP 39.283 GAP -1.85 AZP 89.62 TAL 245.58 TAP 350.98 RCA 107.79 APO 182.90 V2 35.069
RC 76.795 GL -5.45 GP -23.58 ZAL 167.62 ZAP 77.20 ETS 6.31 ZAE 161.58 ETE 263.12 ZAC 112.72 ETC 6.82 CLP -76.02
   PLANETOCENTRIC CONIC
    C3 53.593 VHL 7.321 DLA 10.17 RAL 138.99 RAD 6568.9 VEL 13.227 PTH 2.42 VHP 4.667 DPA -9.77 RAP 150.99 ECC 1.8820
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  171.67
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                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      $GT 691.3 $GR 572.5 $G3 249.7

RRT .5413 RRF .7190 RTF .6736

$GB 897.6 R23 .1583 R13 .7786
                                                                                                                           ST 262.9 SR 325.4 SS 253.7
CRT -.4313 CRS .5173 CST -.9879
    TOE .2280 TRA -.8093 TC3 -.1221 BAU .1965
    RDE - .3971 RRA - .4015 RC3 - .2455 FAU .10845
    FOE .5531 FRA-1,5828 FC3-1.7518 BSP 1804
BDE .4579 BRA .9034 BC3 .2742 FSP -743
                                                                                                                          LSA 410.9 MSA 245.5 SSA 21.0
                                                                      SG1 793.6 SG2 419.3 THA 35.34
                                                                                                                           EL1 358.8 EL2 215.1 ALF 121.77
                                                                                                                                       ARRIVAL DATE OCT 19 1967
                                                                           FLIGHT TIME 80.00
LAUNCH DATE JUL 31 1967
                                                                          DISTANCE 237.837
   HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 28.859 GAL -14.60 A7L 91.26 MCA 108.62 SMA 145.04 ECC .25614 INC 1.2638 V1 29.337
RP 108.02 LAP -1.20 LOP 55.75 VP 39.271 GAP -1.27 A7P 89.60 TAL 245.17 TAP 353.79 RCA 107.89 APO 182.19 V2 35.082
RC 78.958 GL -4.89 GP -24.42 ZAL 167.67 ZAP 82.02 ETS 4.40 ZAE 159.79 ETE 253.52 ZAC 114.63 ETC 5.84 CLP -81.23
   PLANETOCENTRIC CONIC
    C3 52.311 VHL 7.233 DLA 10.65 RAL 139.36 RAD 6568.9 VEL 13.178 PTH
                                                                                                     2.41 VHP 4.594 DPA -9.90 RAP 148.95 ECC 1.8609
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90,00 22 42 29 2790.35 -28.15 81.12 22.27 93.16 23 29 0 2190.4 -27.42 72.53
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67.07 14 46 42
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14 43 23 4515.72
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63.22 16 51 54
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   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 778.4 SGR 589.3 SG3 258.1
RRT .6024 RRF .7448 RTF .7295
SGB 976.3 R23 .1583 R13 .8083
SGI 884.1 SG2 414.1 THA 32.46
    TDE .2438 TRA -.8767 TC3 -.1819 BAU .2270 RDE -.3760 RRA -.4064 RC3 -.2688 FAU .11097
                                                                                                                           ST 286.9 SR 313.8 95 244.8

CRT - 4064 CRS .5319 CST - .9833

LSA 422.2 MSA 249.1 SSA 21.1
    FDE .6004 FRA-1.5895 FC3-1.8366 BSP 2110
BDE .4481 BRA .9663 BC3 .3246 FSP -771
                                                                                                                            EL1 357.6 EL2 230.1 ALF 128.76
                                                                                                                                      ARRIVAL DATE OCT 21 1967
                                                                          FLIGHT TIME 82.00
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 244.243_
    RL 151.86 LAL -.00 LOL 307.12 VL 28.820 GAL -14.44 AZL 91.10 MCA 111.83 SMA 144.69 ECC .25397 INC 1.0963 V1 29.337
RP 107.98 LAP -1.02 LOP 58.96 VP 39.253 GAP -.71 AZP 89.59 TAL 244.66 TAP 356.49 RCA 107.94 APO 181.43 V2 35.094
RC 81.139 GL -4.29 GP -25.21 ZAL 167.64 ZAP 86.72 ETS 2.42 ZAE 157.63 ETE 245.57 ZAC 116.43 ETC 4.85 CLP -86.37
   PLANETOCENTRIC CONIC
    C3 51.040 VML 7.144 OLA 11.14 RAL 139.80 RAD 6568.9 VEL 13.130 PTH 2.40 VMP 4.550 OPA -10.04 RAP 147.02 ECC 1.8400
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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66.65 14 52 7
93.68 0 53 5
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                                                                     MID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
    TOE .2638 TRA -.9455 TC3 -.2465 BAU .2606

ROE -.3540 RRA -.4086 RC3 -.2917 FAU .11244

FOE .6396 FRA-1.5771 FC3-1.9073 BSP 2446

BOE .4415 BRA 1.0300 BC3 .3819 FSP -799
                                                                      SCT 875.3 SGR 604.9 SG3 264.2
RRT .6513 RRF .7681 RTF .7713
SGB 1063.9 R23 .1606 R13 .8317
SG1 982.2 SG2 409.0 THA 29.94
                                                                                                                           ST 314.1 SR 301.3 88 254.6
CRT -.3879 CRS .5425 CST -.9787
                                                                                                                          LSA 437.7 MSA 249.4 SSA 21.2
                                                                                                                           EL1 362.8 EL2 240.4 ALF 136:04
                                                                          FLIGHT TIME 84.00
                                                                                                                                       ARRIVAL DATE OCT 23 1967
LAUNCH DATE JUL 31 1967
                                                                          DISTANCE 250.611
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.775 GAL -14.28 AZL 90.92 MCA 115.05 SMA 144.28 ECC .25186 INC .9209 VI 29.337
RP 107.94 LAP -.83 LOP 62.17 VP 39.232 GAP -.18 AZP 89.61 TAL 244.05 TAP 359.10 RCA 107.94 APO 180.62 VZ 35.107
RC 83.336 GL -3.64 GP -25.97 ZAL 167.54 ZAP 91.23 ETS .39 ZAE 155.25 ETE 239.11 ZAC 118.08 ETC 3.86 CLP -91.37
   PLANETOCENTRIC CONIC
    C3 49,776 VHL 7.055 DLA 11.65 RAL 140.32 RAD 6568.8 VEL 13.082 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
                                                                                                     2.39 VHP 4.534 DPA -10.20 RAP 145.22 ECC 1.8192
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                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 980.2 SCR 618.4 SC3 267.7
RRT .6904 RRF .7888 RTF .8026
SCB 1159.0 R23 .1649 R13 .8498
                                                                                                                         ST 344.4 SR 287.6 SS 263.6

CRT -.3747 CRS .5516 CST -.9745

LSA 457.9 MSA 246.3 SSA 21.3
    TOE .2880 TRA-1.0148 TC3 -.3154 BAU .2961
    ROE -.3310 RRA -.4075 RC3 -.3138 FAU .11277
    FOE .6726 FRA-1.5449 FC3-1.9613 BSP 2803
BOE .4388 BRA 1.0936 BC3 .4449 FSP -819
                                                                      SGI 1086.4 SG2 403.7 THA 27.68
                                                                                                                          EL1 376.7 EL2 243.8 ALF 147.91
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ARRIVAL DATE OCT 25 1967
                                                                          FLIGHT TIME 86.00
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                          DISTANCE 256.940
    RL 151.86 LAL -.00 LOL 307.12 VL 28.724 GAL -14.12 AZL 90.74 MCA 118.26 SNA 143.83 ECC .24982 INC .7360 VI 29.337 RP 107.91 LAP -.65 LOP 65.39 VP 39.206 GAP .32 AZP 89.65 TAL 243.36 TAP 1.62 RCA 107.90 APO 179.76 V2 35.119 RC 85.546 GL -2.94 GP -26.70 ZAL 167.36 ZAP 95.54 ETS 358.30 ZAE 152.74 ETE 233.90 ZAC 119.55 ETC 2.88 CLP -96.21
   PLANETOCENTRIC CONIC
    C3 48.517 VHL 6.965 DLA 12.20 RAL 140.90 RAD 6568.8 VEL 13.034 PTH 2.38 VMP 4.541 DPA -10.40 RAP 143.58 ECC 1.7985
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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61.79 17 6 58
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      100.00
                                                    16.54
                                                                                                                                                               33.73
                                                                                                                               1683.4
                                                                                                                                              -32.69
                                                   -33.81
                                                                   42.79
                                                                                  22.71
      110.00
                     1 29 33 2283.45
                                                                                                                                                              159.87
                                                                                                                               3678.4
                                                                                                                                               16.23
                   15 55 40 4278.43
                                                                  166.79
                                                                                  12.17
      110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 378.2 SR 271.6 SS 273.4

CRT -.3662 CRS .5647 CST -.9697

LSA 483.5 MSA 239.4 SSA 21.3

EL1 399.4 EL2 239.3 ALF 156.32
                                                                      SGT 1091.3 SGR 627.8 SG3 267.9
RRT .7213 RRF .8061 RTF .8255
SGB 1259.0 R23 .1708 R13 .8630
SGI 1194.7 SG2 397.2 THA 25.57
    TDE .3170 TRA-1.0831 TC3 -.3879 BAU .3320
    RDE -.3058 RRA -.4019 RC3 -.3340 FAU .11169
    FOE .7063 FRA-1.4873 FC3-1.9929 BSP 3161
BDE .4405 BRA 1.1552 BC3 .5119 FSP -819
                                                                                                                                       ARRIVAL DATE OCT 27 1967
                                                                          FLIGHT TIME 88.00
LAUNCH DATE: JUL 31 1967
                                                                          DISTANCE 263.234
  HELIOPENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 28.669 GAL -13.95 AZL 90.54 MCA 121.48 SMA 143.34 ECC .24783 INC .5393 V1 29.337
RP- 107.87 LAP -.46 LOP 68.61 VP 39.176 GAP .81 AZP 89.72 TAL 242.59 TAP 4.07 RCA 107.82 APO 178.86 V2 35.131
RC 87.767 GL -2.18 GP -27.43 ZAL 167.09 ZAP 99.61 ETS 356.15 ZAE 150.19 ETE 229.72 ZAC 120.82 ETC 1.92 CLP-100.84
   PLANETOCENTRIC CONIC
    C3 47.265 VHL 8.875 DLA 12.79 RAL 141.56 RAD 6568.8 VEL 12.986 PTH 2.37 VHP 4.571 DPA -10.68 RAP 142.14 ECC 1.7779
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                91.46 23 20 35
65.36 15 11 47
92.39 0 47 44
64.29 16 22 30
                                                                                                                             2237.0
       90.00 22 33 16 2637.03
90.00 13 54 3 4663.75
                                                                               23.57
                                                                                                                                              -27.78
                                                                                                                                                               75.90
                                                   -28.28
                                                                  84.53
                                                                                                                                               10.97
                                                                                                                                                               191.47
                                                                   196.46
                                                                                   14.96
                                                                                                                                4063.A
                                                     14.41
                     0 5 11 2553.38
15 8 47 4422.64
                                                                                                                                                                54.86
                                                                                   23.51
                                                                                                                                1953.4
                                                                                                                                              -29.16
       100.00
                                                    -29.81
                                                                    63.61
                                                                                                                                                              173.11
                   15 8 47
                                                    15.79
                                                                                   14.29
                                                                                                                                3422.6
                                                                                                                                              12.21
      100.00
                                                                  180.06
                   1 26 19 2293.24
16 2 9 4255.55
                                                                                                   94.95 2 6 33
61.30 17 13 4
                                                   -33.87
                                                                    43.55
                                                                                  23.20
                                                                                                                                1693.2
                                                                                                                                              -32.61
                                                                                                                                                                34.47
      110.00
      110.00
                                                    19.41
                                                                   165.43
                                                                                   12.34
                                                                                                                                3655.5
                                                                                                                                               15.43
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ST 415.4 SR 254.9 SS 281.9
CRT -.3608 CRS .5725 CST -.9665
                                                                      SGT 1206.8 SGR 636.3 SG3 266.2
RRT .7459 RRF .8226 RTF .8424
SGB 1364.2 R23 .1792 R13 .8733
    TOE .3506 TRA-1.1492 TC3 -.4636 BAU .3686
    ROE -. 2802 RRA -. 3940 RC3 -. 3540 FAU .10963
    FOE .7301 FRA-1.4190 FC3-2.0118 BSP 3545
BOE .4488 BRA 1.2148 BC3 .5853 FSP -822
                                                                                                                           LSA 513.3 MSA 230.3 SSA
                                                                                                                                                                 21.5
                                                                      SGI 1306.9 SGZ 391.3 THA 23.73
                                                                                                                           EL1 429.8 EL2 229.7 ALF 162.31
                                                                                                                                      ARRIVAL DATE OCT 29 1967
                                                                          FLIGHT TIME 90.00
LAUNCH DATE JUL 31 1967
                                                                          DISTANCE 269.494
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.610 GAL -13.77 A7L 90.33 MCA 124.70 SMA 142.82 ECC .24589 INC .3285 V1 29.337
RP 107.83 LAP -.27 LOP 71.83 VP 39.143 GAP 1.27 A7P 89.81 TAL 241.74 TAP 6.44 RCA 107.70 APO 177.93 V2 35.143
RC 89.996 GL -1.35 GP -28.17 7AL 166.73 ZAP 103.40 ETS 353.94 ZAE 147.65 ETE 226.37 ZAC 121.87 ETC 1.00 CLP-105.25
   PLANETOCENTRIC CONIC
    C3 46.020 VHL 6.784 DLA 13.44 RAL 142.30 RAD 6568.7 VEL 12.938 PTH 2.36 VHP 4.622 DPA -11.05 RAP 140.88 ECC 1.7574
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               90.89 23 18 12
64.92 15 19 50
91.83 0 45 45
63.82 16 30 9
94.43 2 5 25
60.79 17 19 51
                                                                              24.10
                                                                                                                           2252.5
                                                                                                                                            -27.88
                                                                                                                                                              77.02
                                                   -28.30
                                                                  85.66
        90.00 22 30 39 2852.49
                                                                  196.74
                                                                                  15.26
                                                                                                                               4034.9
                                                                                                                                               10.10
                                                                                                                                                              189.81
                                                    13.59
                   14 2 35 4634.90
0 2 57 2567.49
        90.00
                                                                                  24.06
                                                                                                                               1967.5
                                                                                                                                              -29.27
                                                                                                                                                               55.90
                                                                    64.65
                                                   -29.84
       100.00
                                                                                                                               3795.1
                                                                                                                                               11.34
                                                                                                                                                              171.53
                                                                                   14.58
                                                   14.97
                                                                  178.43
                   15 16 53 4395.14
       100.00
                    1 27 0 2304.50
                                                                                                                               1704.5
                                                                                                                                              -32.94
                                                                                                                                                               35.32
                                                   -33.93
                                                                    44.42
                                                                                  23.79
      110.00
                                                                                                                               3630.9
                                                                                                                                              14.56
                                                                                                                                                              157.19
                                                                                   12.59
                                                                  163.96
      110.00
                   16 9 20
                                  4230.89
                                                   18.60
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1325.2 SGR 642.4 SG3 262.3
RRT .7656 RRF .8378 RTF .8549
SGB 1472.7 R23 .1898 R13 .8809
SGI 1421.4 SG2 385.3 THA 22.07
                                                                                                                          ST 456.5 SR 236.6 SS 290.6

CRT -.3574 CRS .5786 CST -.9640

LSA 548.1 MSA 219.0 SSA 21.6
    TOE .3896 TRA-1.2117 TC3 -.5420 BAU .4049
    ROE -.2534 RRA -.3629 RC3 -.3732 FAU .10708
    FDE .7502 FRA-1.3371 FC3-2.0144 88P 3937
BDE .4647 BRA 1.2708 BC3 .6581 FSP -817
                                                                                                                           EL1 466.5 EL2 216.3 ALF 166.57
                                                                                                                                       ARRIVAL DATE OCT 31 1967
                                                                           FLIGHT TIME 92.00
LAUNCH DATE JUL 31 1967
                                                                           DISTANCE 275.721
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.547 GAL -13.59 A7L 90.10 MCA 127.93 SHA 142.26 ECC .24399 INC .0989 V1 29.337 RP 107.80 LAP -.08 LOP 75.05 VP 39.108 GAP 1.71 AZP 89.94 TAL 240.82 TAP 8.74 RCA 107.55 APO 176.98 VZ 35.154 RC 92.232 GL -.42 GP -28.96 TAL 166.26 ZAP 106.92 ETS 351.64 ZAE 145.16 ETE 223.70 ZAC 122.70 ETC .18 CLP-109.43
   PLANETOCENTRIC CONIC
    C3 44.786 VHL 6.692 DLA 14.15 RAL 143.11 RAD 6568.7 VEL 12.890 PTH 2.35 VHP 4.691 DPA -11.54 RAP 139.82 ECC 1.7371
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               24.73
                   22 27 37 2870.50
14 12 9 4603.23
0 0 25 2563.93
15 25 58 4365.04
                                                                                                   90.23 23 15 28
64.46 15 28 52
                                                                   86,98
                                                                                                                              2270.5
                                                                                                                                              -27.98
                                                                                                                                                               74.55
                                                    -28.32
        90.00
                                                                                                                                4003.2
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                                                    12.67
                                                                   194.88
                                                                                   15.66
        90.00
                                                                                                               0 43 29
                                                                                                                                1983.9
                                                                                                                                               -29.39
                                                                                                                                                                57.11
                                                    -29.87
                                                                    65.88
                                                                                   24.71
                                                                                                   91.19
       100.00
                                                                                                   63.35 16 38 43
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                                                                                                                                               10.37
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                                                    14.06
                                                                                   14.96
       100.00
                                                                   176.66
                                                                                                               2 4 8
                                                                                                                                1717.7
                                                                                                                                               -33.09
                                                                                                                                                                36.32
                                                   -33.99
                                                                    45.45
                                                                                   24.50
                                                                                                   93.83
       110.00
                     1 25 30
                                  2317.69
                                                                                                   60.27 17 27 26
                                                                                                                             3604.0
                                                                                                                                              13.61
                                                                                                                                                              155.70
                                                                  162.42
                                                                                   12.93
                    16 17 22
                                                    17.70
      110.00
                                   4204.04
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 502.3 SR 216.1 SS 300.7
CRT -.3540 CRS .5842 CST -.9616
LSA 588.9 MSA 205.3 SSA 21.7
                                                                      SCT 1444.8 SCR 645.3 SC3 256.2
RRT .7811 RRF .8514 RTF .8638
SCB 1582.4 R23 .2023 R13 .8862
    TOE .4350 TRA-1.2690 TC3 -.6221 BAU .4400
    ROE -.2245 RRA -.3679 RC3 -.3911 FAU .10340
FOE .7714 FRA-1.2403 FC3-1.9989 BSP 4311
BOE .4895 BRA 1.3213 BC3 .7349 FSP -797
                                                                      5G1 1536.4 SG2 379.0 THA 20.54
                                                                                                                           EL1 509.2 EL2 199.3 ALF 169.75
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ARRIVAL DATE NOV 2 1967

LSA 825.1 MSA 142.8 SSA 22.1

EL1 751.3 EL2 115.8 ALF 177.89

LAUNCH DATE JUL 31 1967

1

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DISTANCE 281.916
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.481 GAL -13.41 AZL 89.85 MCA 131.15 SMA 141.69 ECC .24216 INC .1475 V1 29.337
RP 107.77 LAP .11 LOP 78.27 VP 39.069 GAP 2.13 AZP 90.10 TAL 239.83 TAP 10.98 RCA 107.38 APO 176.00 V2 35.165
                                .62 CP -29.83 7AL 165.67 7AP 110.13 ETS 349.26 7AE 142.72 ETE 221.59 7AC 123.30 ETC 359.23 CLP-113.37
     RC 94.474 GL
   PLANETOCENTRIC CONIC
     C3 43.570 VHL 6.601 DLA 14.95 RAL 144.02 RAD 6568.7 VEL 12.843 PTH 2.34 VMP 4.778 DPA -12.16 RAP 138.93 ECC 1.7171
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-28.31 88.54 25.48 89.45 23 12 14 2291.9 -28.09 79.88
11.62 192.81 16.17 64.00 15 39 7 3968.0 8.03 185.97
-29.89 67.33 25.49 90.43 24 36 51 2003.5 -29.51 58.54
13.03 174.72 15.45 62.86 16 48 26 3731.7 9.29 167.92
    LNCH AZHTH LNCH TIME L-I TIME
                     22 24 2 2891.88
14 22 59 4568.02
23 53 28 2603.46
15 36 15 4331.67
         90.00
         90.00
       100.00
                     15 36 15
       100.00
                       1 23 42 2333.42
16 26 26 4174.46
                                                                                                                                                                                37.52
                                                                                                             93.11 2 2 35
59.73 17 36 0
                                                                                                                                             1735.4
       110.00
                                                        -34.06
                                                                           46.67
                                                                                           25.33
                                                                                                                                                             -33.25
                                                                          160.72
                                                                                           13.38
                                                                                                                                             3574.5
                                                                                                                                                             12.55
                                                                                                                                                                              154.06
       110.00
                     16 26 26
                                                         16.69
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 1566.1 SCR 648.3 SC3 249.1
RRT .7937 RRF .8650 RTF .8704
SCB 1695.0 R23 .2172 R13 .8902
SCI 1653.3 SC2 373.6 TMA 19.21
                                                                                                                                        ST 553.1 SR 194.5 SS 310.9
CRT -.3467 CRS .5815 CST -.9606
    TDE .4866 TRA-1.3210 TC3 -.7048 BAU .4748
    RDE -.1948 RRA -.3511 RC3 -.4095 FAU .09936
FOE .7868 FRA-1.1404 FC3-1.9743 BSP 4709
BDE .5242 BRA 1.3669 BC3 .8151 FSP -780
                                                                                                                                        LSA 635.3 MSA 190.7 SSA 21.9
EL1 557.7 EL2 180.9 ALF 172.23
                                                                                  FLIGHT TIME 96.00
                                                                                                                                                     ARRIVAL DATE NOV 4 1967
LAUNCH DATE JUL 31 1967
                                                                                  DISTANCE 288.083
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.412 GAL -13.22 ATL 89.58 MCA 134.37 SMA 141.10 ECC .24037 INC .4233 V1 29.337 RP 107.73 LAP .30 LOP 81.50 VP 39.028 GAP 2.54 AZP 90.30 TAL 238.79 TAP 13.17 RCA 107.18 APO 175.02 VZ 35.175 RC 96.719 GL 1.80 GP -30.80 ZAL 164.95 ZAP 113.03 ETS 346.75 ZAE 140.34 ETE 219.96 ZAC 123.67 ETC 358.37 CLP-117.09
   PLANETOCENTRIC CONIC
    C3 42.382 VHL 6.510 DLA 15.86 RAL 145.04 RAD 6568.6 VEL 12.796 PTH 2.53 VHP 4.884 DPA -12.95 RAP 138.21 ECC 1.6975 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   22 19 38 2917.69
14 35 28 4528.26
23 49 46 2627.04
15 48 1 4294.15
1 21 27 2352.48
16 36 45 4141.47
                                                         -28.28
                                                                                                             88.50 23 8 16
                                                                                                                                             2317.7
                                                                                                                                                                               81.76
                                                                          90.43
                                                                                           26.38
                                                                                                                                                            -28.19
         90.00
                                                                                                                         15 50 56
         90.00
                                                          10.43
                                                                          190.51
                                                                                            16.82
                                                                                                              63.52
                                                                                                                                              3928.3
                                                                                                                                                                 6.79
                                                                                                                                                                               183.72
                                                                                                              89.51 24 33 33
                                                                                                                                              2027.0
                                                                                                                                                                                60.29
                                                         -29.89
                                                                           69.06
                                                                                            26.41
                                                                                                                                                               -29.64
       100.00
                                                                                                             62.36 16 59 35
92.23 2 0 39
59.17 17 45 47
                                                                                           16.08
                                                                                                                                              3694.1
                                                                                                                                                                 8.07
                                                                                                                                                                               165.82
       100.00
                                                         11.86
                                                                          172.55
                                                                                                                                              1752.5
                                                                                                                                                              -33.43
                                                                                                                                                                                3A . 9A
                                                         -34.12
                                                                           48.15
                                                                                            26.33
       110.00
                                                         15.55
                                                                          150.84
                                                                                           13.95
                                                                                                                                              3541.5
                                                                                                                                                               11.35
                                                                                                                                                                               152.26
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SCT 1887.0 SCR 649.1 SC3 240.2
RRT .8035 RRF .8778 RTF .8750
SCB 1807.6 R23 .2359 R13 .8928
SCI 1769.6 SC2 368.4 THA 17.99
                                                                                                                                        ST 610.6 SR 170.5 SS 323.2

CRT -.3309 CRS .5705 CST -.9598

LSA 689.4 MSA 174.8 SSA 22.0
    TOE .5466 TRA-1.3655 TC3 -.7884 BAU .5081
RDE -.1629 RRA -.3307 RC3 -.4271 FAU .09467
    FOE .8040 FRA-1.0317 FC3-1.9338 BSP 5084
BOE .5704 BRA 1.4049 BC3 .8967 FSP -751
                                                                                                                                        EL1 613.4 EL2 160.2 ALF 174.33
                                                                                                                                                    ARRIVAL DATE NOV 6 1967
                                                                                  FLIGHT TIME 98.00
LAUNCH DATE JUL 31 1967
                                                                                  DISTANCE 294.222
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.341 GAL -13.02 ATL 89.27 MCA 137.60 SMA 140.50 ECC .23864 INC .7306 VI 29.337 RP 107.70 LAP .49 LOP 84.73 VP 38.985 GAP 2.93 ATP 90.54 TAL 237.69 TAP 15.29 RCA 106.97 APO 174.02 V2 35.185 RC 98.967 GL 3.14 GP -31.91 TAL 164.07 ZAP 115.60 ETS 344.11 TAE 138.01 ETE 218.73 TAC 123.84 ETC 357.51 CLP-120.60
   PLANETOCENTRIC CONIC
    C3 41.235 VML 6.421 DLA 16.91 RAL 146.16 RAD 6568.6 VEL 12.752 PTH 2.32 VMP 5.008 OPA -13.93 RAP 137.63 ECC 1.6786
    C3 41.235 VML 6.421 DLA 16.91

LNCH A7MTH LNCH TIME L-I TIME

90.00 22 14 5 2949.46

90.00 14 50 1 4482.65

100.00 23 45 4 2656.05

100.00 16 1 42 4251.29

110.00 16 18 32 2375.93

110.00 16 48 40 4104.18
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         87.34 23 3 14
63.05 16 4 43
88.37 24 29 20
61.85 17 12 34
                                                                                      27.44
                                                                                                                                        2349.5
                                                                                                                                                          -28.27
                                                                                                                                                                               84.09
                                                         -28.20
                                                                         92.75
                                                           9.03
                                                                         187.88
                                                                                           17.66
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                                                         -29.85
                                                                           71.24
                                                                                          27.51
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                                                                                                                                                                               62.43
                                                                                                                                             3651.3
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                                                                         170.10
                                                                                           16.88
                                                         10.49
                                                                                                                         1 58 8
                                                                                                                                             1775.9
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                                                                                                                                                                               40.78
                                                         -34.17
                                                                           49.99
                                                                                          27.53
                                                                                                             91.15
                                                                                                                                             3504.2
                                                                         156.75
                                                                                                             58.59 17 57 4
                                                                                                                                                               9.98
                                                                                                                                                                              150.24
                                                                                           14.69
                                                         14.24
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 1808.7 SGR 650.7 SG3 230.7
RRT .8110 RRF .8906 RTF .8784
SG8 1922.2 R23 .2526 R13 .8948
                                                                                                                                        ST 675.8 SR 145.5 SS 336.5

CRT -.2973 CRS .5398 CST -.9603

LSA 751.9 MSA 158.7 SSA 22.1
     TDE .6155 TRA-1.4023 TC3 -.8739 BAU .5407
     ROE -.1299 RRA -.3083 RC3 -.4455 FAU .08977
    FOE .8180 FRA -.9230 FC3-1.8848 85P
BOE .6290 BRA 1.4358 BC3 .9809 FSP
                                                            5484
-727
                                                                                                                                        EL1 677.2 EL2 138.6 ALF 176.18
                                                                             SGI 1887.3 SG2 364.9 THA 16.92
                                                                                                                                                     ARRIVAL DATE NOV 8 1967
                                                                                  FLIGHT TIME 100.00
LAUNCH DATE JUL 31 1967
                                                                                  DISTANCE 300.334
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.267 GAL -12.81 A7L 88.92 MCA 140.83 SMA 139.88 ECC .23696 INC 1.0787 V1 29.337
RP 107.67 LAP .68 LOP 87.96 VP 38.940 GAP 3.30 A7P 90.84 TAL 236.54 TAP 17.37 RCA 106.73 APO 173.02 V2 35.195
RC 101.218 GL 4.70 GP -33.20 ZAL 163.00 ZAP 117.83 ETS 341.28 ZAE 135.70 ETE 217.86 ZAC 123.80 ETC 356.63 CLP-123.91
   PLANETOCENTRIC CONIC
     C3 40.150 VHL 6.336 DLA 18.13 RAL 147.43 RAD 6568.5 VEL 12.709 PTH 2.31 VHP 5.153 DPA -15.14 RAP 137.15 ECC 1.6608
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-28.04 95.66 28.71 85.89 22 56 41 2389.4 -28.32 87.01
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                        28.71
                     22 6 52 2989.40
15 7 20 4429.26
         90.00
                                                                                                             62.58 16 21 9
86.96 24 23 51
                                                                                           18.75
                                                                                                                                              3829.3
                                                                                                                                                                3.64
                                                                                                                                                                               178.15
                                                           7.37
                                                                          184.84
         90.00
                     23 36 59 2692.36
16 17 54 4201.52
                                                                                                                                              2092.4
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                                                         -29.75
                                                                           73.93
                                                                                           28.83
       100.00
                                                                                                              61.34 17 27 56
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                                                          8.88
                                                                          167.29
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       100.00
                     1 14 41
17 2 36
                                                                                                             89.79
                                                                                                                          1 54 46
                                                                                                                                              1805.3
                                                                                                                                                             -33.83
                                                                                                                                                                                43.05
                                                         -34.18
                                                                           52.28
                                                                                           28.98
                                      2405.25
       110.00
                                                                                                              58.00 18 10 19
                                                                          154.36
                                                                                                                                             3461.4
                                                                                                                                                               8.39
                                                                                                                                                                               147.95
                                                                                           15.64
                                       4061.41
                                                          12.71
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 750.8 SR 119.0 SS 352.0
CRT -.2271 CRS .4733 CST -.9614
                                                                             SCT 1930.3 SGR 652.2 SG3 220.3
RRT .6160 RRF .9030 RTF .8808
SGB 2037.5 R23 .2729 R13 .8961
     TOE .6958 TRA-1.4295 TC3 -.9600 BAU .5723
     ROE -.0947 RRA -.2828 RC3 -.4639 FAU .08455
FOE .8324 FRA -.8117 FC3-1.8231 85P 5880
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FLIGHT TIME 94.00

BOE .7022 BRA 1.4572 BC3 1.0663 FSP -698

SG1 2004.9 SG2 362.9 THA 15.95

ARRIVAL DATE NOV 10 1967

LAUNCH DATE JUL 31 1967

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DISTANCE 306.422
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 28.192 GAL -12.60 A7L 88.52 MCA 144.06 SMA 139.25 ECC .23534 INC 1.4788 VI 29.337 RP 107.65 LAP .87 LOP 91.19 VP 38.894 GAP 3.66 A7P 91.20 TAL 235.35 TAP 19.40 RCA 106.48 APO 172.03 V2 35.204 RC 103.470 GL 6.52 GP -34.71 ZAL 161.69 ZAP 119.68 ETS 338.25 ZAE 133.38 ETE 217.30 ZAC 123.57 ETC 355.71 CLP-127.04
   PLANETOCENTRIC CONIC
                                                                                                                  2.30 VMP 5.323 OPA -16.60 RAP 136.74 ECC 1.6444
    C3 39.157 VHL 6.258 DLA 19.57 RAL 148.87 RAD 6568.5 VEL 12.670 PTH
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            99.39
                                                                                             30.23
                                                                                                               84.04 22 47 52
                                                                                                                                               2440.8
                                                                                                                                                                 -28.27
                                                                                                                                                                                     90.77
        90.00 21 57 11 3040.81
90.00 15 28 28 4365.20
                                                          -27.73
                                                                                                                62.15 16 41 14
                                                                                                                                                 3765.2
                                                                                                                                                                    1.58
                                                                                                                                                                                   174.57
                                                                                             20.15
                                                           5.35
                                                                           181.22
                                                                                                                85.16 24 16 28
                                                                                              30.42
                                                                                                                                                 2138.9
                                                                                                                                                                   -29.89
                                                                                                                                                                                     68.59
                      23 30 49 2738.88
16 37 32 4142.36
                                                                            77.37
       100.00
                                                          -29.53
                                                                                                                60.85 17 46 34
88.07 1 50 10
57,40 18 26 9
                                                                                                                                                 3542.4
                                                                                                                                                                    3.00
                                                                                                                                                                                   157.40
                                                                                              19.28
                                                                           163.97
       100.00
                                                            6.93
                                                                                                                                                                  -34.03
                                                                                                                                                 1842.5
                                                                                                                                                                                    45.94
                                                                                              30.74
       110.00
                       1 9 28 2442.53
                                                         -34,14
                                                                            55.19
                                                                                                                                                                   6.52
                                                                                                                                                                                   145.30
                                                                                                                                                 3411.5
       110.00
                                                                                             16.88
                      17 19 18
                                       4011.47
                                                           10.89
                                                                           151.66
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 2050.8 SGR 652.5 SG3 208.6
RRT .8185 RRF .9145 RTF .8823
SGB 2152.1 R23 .2940 R13 .8967
SG1 2121.4 SGZ 362.4 THA 15.05
                                                                                                                                            ST 839.3 SR 91.7 SS 371.6
CRT -. 0716 CRS .3229 CST -. 9629
    TOE .7917 TRA-1.4444 TC3-1.0449 BAU .6022
    ROE -.0561 RRA -.2529 RC3 -.4812 FAU .07890
                                                                                                                                            LSA 913.3 MSA 127.7 SSA 21.8
    FOE .8512 FRA -.6960 FC3-1.7445 BSP 6254
BOE .7937 BRA 1.4664 BC3 1.1504 FSP -661
                                                                                                                                            EL1 839.3 ELZ 91.4 ALF 179.55
                                                                                                                                                         ARRIVAL DATE NOV 12 1967
                                                                                    FLIGHT TIME 104.00
                                                                                    DISTANCE 312.485
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 28.115 GAL -12.36 AZL 88.05 HCA 147.28 SMA 138.63 ECC .23379 INC 1.9464 V1 29.337 RP 107.62 LAP 1.05 LOP 94.42 VP 38.846 GAP 4.01 AZP 91.64 TAL 234.11 TAP 21.39 RCA 106.22 APO 171.03 V2 35.212 RC 105.723 GL 8.67 GP -36.51 ZAL 160.08 ZAP 121.13 ETS 334.96 ZAE 131.01 ETE 217.02 ZAC 123.17 ETC 354.70 CLP-130.03
   PLANETOCENTRIC CONIC
    C3 38.304 VHL 6.189 OLA 21.29 RAL 150.51 RAD 6568.5 VEL 12.636 PTH 2.29 VHP 5.524 OPA -18.37 RAP 136.35 ECC 1.6304 LNCH A7MTH LNCH TIME L-I TIME IN. LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 43 36 3109.25 -27.15 104.31 32.03 81.64 22 35 25 2509.2 -28.03 95.76
                                                                                                                61.61 17 6 36
82.83 24 6 9
60.42 18 9 51
85.85 1 43 45
                                                                                                                                                                                     170.13
                                                                                                                                                  3685.6
                                                                                                                                                                     - .99
                      15 55 12
                                        4285.63
                                                            2.80
                                                                            176.76
                                                                                              22.05
         90.00
                                                                                                                                                                                     73.13
                                                                                                                                                  2200.1
                                        2800.11
                                                           -29.10
                                                                             81.87
                                                                                              32.33
       100.00
                      23 19 29
                                                                                                                                                                                    153.43
                                                                                                                                                  3470.0
                                                                                                                                                                       .55
                                        4070.00
                                                             4.52
                                                                            159.96
                                                                                              21.10
       100,00
                     17 2 1
                                                                                                                                                                                     49.71
                                                                                                                                                  1690.9
                        1 2 14
                                        2490.91
                                                          -33.96
                                                                             58.95
                                                                                              32.90
                                                                                                                           18 45 32
                                                                                                                                                  3352.0
                                                                                                                                                                     4.26
                     17 39 40
                                                            8.69
                                                                            148.45
                                                                                              18.54
                                                                                                                 56.81
                                       3951.97
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 2172.2 SGR 654.5 SGS 196.4
RRT .8181 RRF .9254 RTF .8837
SGB 2268.7 R23 .3153 R13 .8975
SGI 2239.1 SG2 365.2 THA 14.23
                                                                                                                                             ST 944.0 SR 69.5 SS 393.8
CRT .2596 CRS -.0181 CST -.9655
    TOE .9061 TRA-1.4463 TC3-1.1281 BAU .6315
     RDE -.0154 RRA -.2196 RC3 -.4983 FAU .07312
    FOE .8688 FRA -.5828 FC3-1.6526 BSP 6650
RDF .9062 BRA 1.4629 BC3 1.2333 FSP -627
                                                                                                                                             LSA 1018.6 MSA 114.8 SSA 21.1
                                                                                                                                             EL1 944.2 EL2 67.1 ALF 1.10
                                                                                                                                                         ARRIVAL DATE NOV 14 1967
                                                                                    FLIGHT TIME 106.00
LAUNCH DATE JUL 31 1967
                                                                                    DISTANCE 318.525
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 28.037 GAL -12.15 A7L 87.50 MCA 150.51 SMA 137.99 ECC .23230 INC 2.5044 VI 29.337 RP 107.60 LAP 1.23 LOP 97.66 VP 38.796 GAP 4.34 A7P 92.18 TAL 232.83 TAP 23.34 RCA 105.94 APO 170.05 V2 35.220 RC 107.975 GL 11.25 GP -38.67 7AL 158.07 ZAP 122.11 ETS 331.39 ZAE 128.52 ETE 216.98 ZAC 122.61 ETC 353.58 CLP-132.91
   PLANETOCENTRIC CONIC
    C3 37.665 VHL 6.137 DLA 23.38 RAL 152.44 RAC 6568.5 VEL 12.611 PTH 2.29 VHP 5.766 DPA -20.51 RAP 135.90 ECC 1.6199
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 21 23 14 3205.33
90.00 16 30 56 4181.03
100.00 23 2 52 2884.07
100.00 17 33 59 3977.52
110.00 0 51 54 2555.29
110.00 18 5 23 3879.07
                                                                                                                                              2605.3
                                                                                                                                                                -27.36 102.70
                                                                                         34.13
                                                                                                             78.41 22 16 40
61.69 17 40 37
79.74 23 50 56
                                                           -26.02
                                                                           111.12
                                                                                                                                                  3581.0
                                                                                                                                                                    -4.35
                                                                                                                                                                                    164.28
                                                              - .57
                                                                           170.92
                                                                                              24.74
                                                                                                                                                                   -29.36
                                                                                                                                                                                     79.34
                                                                                                                                                 2284.1
                                                                                              34,61
                                                           -28.23
                                                                             87.96
                                                                                                                                                 3377.5
                                                                                                                                                                    -2.59
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                                                                                                                 60.14 18 40 17
                                                            1.39
                                                                           154.87
                                                                                              23.64
                                                                                                                 82.93 1 34 29
56.28 19 10 2
                                                                                                                                                 1955.3
                                                                                                                                                                   -34.15
                                                                                                                                                                                      54.74
                                                           -33.53
                                                                             63.93
                                                                                              35.55
                                                                                                                                                                     1.48
                                                                                                                                                  3279.1
                                                                            144.58
                                                                                              20.81
                                                            5.95
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 2294.1 SGR 656.4 SG3 183.1
RRT .0139 RRF .09348 RTF .08050
SGB 2306.2 R23 .3357 R13 .6993
SG1 2357.1 SG2 371.2 THA 13.45
                                                                                                                                            ST 1070.8 SR 64.2 SS 420.3
CRT .7442 CRS -.5769 CST -.9688
    TOE 1.0461 TRA-1.4313 TC3-1.2056 BAU .6597
    LSA 1147.1 HSA 105.1 SSA 19.5
                                                                                                                                             EL1 1071.9 EL2 42.9 ALF 2.56
                                                                                                                                                          ARRIVAL DATE NOV 16 1967
                                                                                     FLIGHT TIME 108.00
LAUNCH DATE JUL 31 1967
                                                                                     DISTANCE 324.543
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 27.958 GAL -11.92 AZL 86.81 MCA 153.74 SMA 137.36 ECC .23087 INC 3.1861 VI 29.337 RP 107.58 LAP 1.41 LOP 100.89 VP 38.745 GAP 4.66 AZP 92.86 TAL 231.51 TAP 25.24 RCA 105.65 APO 169.07 V2 35.227 RC 110.226 GL 14.40 GP -41.26 ZAL 155.54 ZAP 122.56 ETS 327.48 ZAE 125.83 ETE 217.13 ZAC 121.90 ETC 352.29 CLP-135.72
   PLANETOCENTRIC CONIC
    C3 37.365 VHL 6.113 DLA 25.94 RAL 154.75 RAD 6566.5 VEL 12.599 PTH 2.29 VHP 6.066 DPA -23.06 RAP 135.31 ECC 1.6149
    C3 37.365 VHL 6.113 DLA 25.94 RAL 154.75 RAD 6568.5 VEL 12.599 PTH 2.29 VMP 6.066 DPA -23.06 RAP 135.31 ECC 1.6149 PNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 47 51 3357.12 -23.53 121.53 36.31 73.77 21 43 48 2757.1 -25.53 113.43 90.00 17 24 43 4025.21 -5.58 162.20 28.85 62.19 18 31 49 3425.2 -9.25 155.46 100.00 22 36 2 3008.36 -26.41 96.74 37.18 75.46 23 26 10 2408.4 -28.15 88.37 100.00 18 19 14 3849.20 -2.96 147.83 27.41 60.24 19 23 23 3249.2 -6.89 141.26 110.00 0 36 19 2644.30 -32.58 70.70 38.79 79.03 1 20 23 2044.3 -33.75 61.66 110.00 18 39 22 3786.02 2.42 139.70 24.06 55.89 19 42 28 3186.0 -2.08 133.50
                      18 39 22
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 1228.8 SR 86.1 SS 453.2
CRT .9707 CRS -.9126 CST -.9725
                                                                               SCT 2414.7 SCR 655.4 SG3 168.4
RRT .8042 RRF .9416 RTF .8864
SG8 2502.0 R23 .3542 R13 .8991
     TDE 1.2249 TRA-1.3924 TC3-1.2688 BAU .6851
     ROE .0778 RRA -.1336 RC3 -.5205 FAU .06043
FOE .9133 FRA -.3522 FC3-1.4002 BSP 7417
BOE 1.2273 BRA 1.3987 BC3 1.3714 FSP -543
                                                                                                                                           LSA 1308.6 MSA 100.4 SSA 16.9
ELI 1231.6 ELZ 20.6 ALF 3.89
                                                                               SG1 2473.0 SG2 380.4 THA 12.62
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FLIGHT TIME 102.00

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LAUNCH DATE JUL 31 1967
                                                                   FLIGHT TIME 110.00
                                                                                                                          ARRIVAL CATE NOV 18 1967
                                                                   DISTANCE 330.538
   HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 27.878 GAL -11.67 A7L 85.96 MCA 156.96 SMA 136.73 ECC .22951 INC 4.0439 V1 29.337 RP 107.56 LAP 1.58 LOP 104.13 VP 38.694 GAP 4.96 A7P 93.72 TAL 230.15 TAP 27.11 RCA 105.35 APO 168.11 V2 35.233
                      18.29 CP -44.41 TAL 152.30 TAP 122.38 ETS 323.20 TAE 122.84 ETE 217.39 TAC 121.06 ETC 350.74 CLP-138.56
    RC 112.475 GL
   PLANETOCENTRIC CONIC
    C3 37.630 VHL 6.134 OLA 29.11 RAL 157.59 RAD 6568.5 VEL 12.609 PTH 2.29 VHP 6.452 DPA -26.13 RAP 134.44 ECC 1.6193
   LNCH AZMTH LNCH TIME L-I TIME
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 18 19 22 3881 ....
14 3504.53
                                               -15.98
                                                            156.93
                                                                           36.67
                                                                                         65.34
                                                                                                   19 24 4
                                                                                                                    3281.4
       82.94
                                                                                                   21 14 19
                                                            129.28
                                                                           36.67
                                                                                          65.33
                                                                                                                    2904.5
                                                                                                                                 -19.16
                                               -15.96
       97.06
                                                            112.63
                                                                           39.09
                                                                                          68.58
                                                                                                   22 30 24
                                                                                                                    2646.7
                                                                                                                                 -24.08
                               3246.66
                                              -21.36
      100.00
                  21 36 17
                 21 36 17 3246.68
19 41 41 3614.45
                                                                                                  20 41 55
                                              -10.72
                                                            134.73
                                                                           34.00
                                                                                          61.93
                                                                                                                    3014.5
                                                                                                                                 -14.39
                                                                                                                                               127.67
      100.00
                   0 10 28
                                                                                                                                 - 32 . 39
                                2776.15
                                              - 30 . 46
                                                             80.39
                                                                           42.54
                                                                                          73.67
                                                                                                    0 56 44
                                                                                                                    2176.2
      110.00
                                                                                          55.90 20 28 53
                                                            133.01
                                                                           29.01
                                                                                                                    3057.7
                                                                                                                                  -6.95
      110.00
                 19 27 56
                                               -2.49
                               3657.75
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SCT 2537.7 SCR 652.5 SC3 152.5
RRT .7867 RRF .9444 RTF .8888
SCB 2620.3 R23 .3688 R13 .9009
                                                                                                               ST 1425.8 SR 124.5 SS 490.4
CRT .9878 CRS -.9883 CST -.9767
   TOE 1.4562 TRA-1.3246 TC3-1.3104 BAU .7090
   ROE .1290 RRA -.0769 RC3 -.5184 FAU .05356
   FOE .9371 FRA -.2385 FC3-1.2321 BSP 7817
                                                                                                               LSA 1509.5 MSA 100.3 SSA 13.7
                                                                SG1 2590.4 SG2 394.6 THA 11.71
                                                                                                                EL1 1431.0 EL2 19.3 ALF
                                                                                                                                                   4.93
                                                                                                                          ARRIVAL DATE NOV 20 1967
                                                                   FLIGHT TIME 112.00
LAUNCH DATE JUL 31 1967
                                                                   DISTANCE 336.509
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 27.798 GAL -11.42 A7L 84.84 MCA 160.18 SMA 136.10 ECC .22821 INC 5.1638 V1 29.337
RP 107.54 LAP 1.75 LOP 107.38 VP 38.641 GAP 5.26 A7P 94.86 TAL 228.76 TAP 28.94 RCA 105.04 APO 167.16 V2 35.239
RC 114.720 GL 23.16 GP -48.25 ZAL 148.11 ZAP 121.44 ETS 318.46 ZAE 119.39 ETE 217.65 ZAC 120.10 ETC 348.80 CLP-141.56
  PLANETOCENTRIC CONIC
                                                                                            2.30 WHP 6.973 OPA -29.78 RAP 133.10 ECC 1.6401
   C3 38.892 VHL 6.236 DLA 33.05 RAL 161.25 RAD 6568.5 VEL 12.659 PTH
   LNCH A7MTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
72.19 17 16 15 4135.56 -17.70 176.91 41.90 61.62 18 25 11 3535.6 -21.36 169.77
                  21 46 13 3267.00
                                               -17.69
                                                            112.35
                                                                           41.89
                                                                                          61.61
                                                                                                   22 42 40
                                                                                                                    2667.0
                                                                                                                                  -21.34
                                                                                                                                                105.22
      107.81
                                              -17.70
                                                                                         61.61 22 42 40
65.46 23 58 31
57.45 21 42
                                                                                                  16 25 11
                                                                                                                    3535.6
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                 17 16 15
                                4135.56
                                                            176.91
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                                                                                          61.62
       72.19
      107.81
                  21 48 13 3267.00
                                              -17.69
                                                            112.35
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                                                                                                                    2667.0
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                                                                                                                                               105.22
                 23 8 9
                                              -24.57
                                                             97.01
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                                                                                                                    2421.4
      110.00
                                3021.44
                  20 55 30
                               3429.12
                                                                           37.87
                                                                                                                    2829.1
                                                                                                                                 -15.29
      110.00
                                              -11.08
                                                            120.88
  DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SGI 2663.0 SGR 641.4 SG3 135.1
RRT .7551 RRF .9369 RTF .8929
SGB 2739.1 R23 .3781 R13 .9041
SGI 2707.7 SG2 413.5 THA 10.56
                                                                                                                ST 1675.3 SR 166.0 SS 533.1
CRT .9703 CRS -.9970 CST -.9812
   TOE 1.7702 TRA-1.2136 TC3-1.3116 BAU .7293
   RDE .1796 RRA -.0052 RC3 -.4969 FAU .04620
   FOE .9612 FRA -.1255 FC3-1.0285 BSP 8229
                                                                                                                LSA 1762.8 MSA 104.6 SSA 10.3
                                                                                                                EL1 1683.0 EL2 40.0 ALF 5.50
                                                                                                                         ARRIVAL DATE NOV 22 1967
                                                                   FLIGHT TIME 114.00
LAUNCH DATE JUL 31 1967
                                                                  DISTANCE 342.454
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 27.717 GAL -11.16 A7L 83.30 MCA 163.39 SMA 135.48 ECC .22697 INC 6.6972 V1 29.337
RP 107.52 LAP 1.91 LOP 110.62 VP 38.588 GAP 5.54 A7P 96.42 TAL 227.33 TAP 30.72 RCA 104.73 APO 166.23 V2 35.244
RC 116.961 GL 29.28 GP -52.94 7AL 142.65 7AP 119.58 ETS 313.12 7AE 115.28 ETE 217.62 7AC 119.07 ETC 346.22 CLP-145.00
  PLANETOCENTRIC CONTC
   C3. 42.054 VHL 6.485 DLA 37.92 RAL 166.21 RAD 6568.6 VEL 12.784 PTH 2.33 VHP 7,716 CPA -34.10 RAP 130.94 ECC 1.6921
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                       49.51
                                                                                       56.70 17 59 16
                 16 47 36 4300.81
22 56 24 3141.24
16 47 36 4300.81
                                                                                                                   3700.8
                                              -19.30
                                                           191.02
      63.64
                                                                          49.50
                                                                                          56.69 23 48 46
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                                                            103.39
      116.36
                                              -19.29
                                                                          49.51
                                                                                          56.70 17 59 16
                                                                                                                   3700.8
                                                           191.02
       63.64
                                             -19.30
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                                                                                          56.69 23 48 46
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                                                                                                                                -23.53
                                                                                                                                                96.52
                                             -19.29
                                                           103.39
      116.36
                 22 56 24 3141.24
                 16 47 36 4300.81
22 56 24 3141.24
                                                                          49.51
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                                                                                                                                 -23.55
                                                            191.02
       63.64
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                                                                                         56.69
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                                                                                                                   2541.2
                                                                                                                                 -23.53
                                             -19.29
                                                            103.39
                                                                          49.50
      116.36
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 2789.0 SCR 611.9 SC3 115.9
RRT .6915 RRF .9126 RTF .8997
SCB 2855.4 R23 .3803 R13 .9091
SCI 2821.7 SC2 436.9 THA 8.84
                                                                                                               ST 1993.6 SR 193.8 SS 581.2
   TOE 2.2213 TRA-1.0321 TC3-1.2409 BAU .7405
                                                                                                               CRT .9438 CRS -.9857 CST -.9855
   ROE .2158 RRA .0895 RC3 -.4416 FAU .03823
   FDE .9860 FRA -.0114 FC3 -.7869 BSP 8567
                                                                                                               LSA 2082.5 MSA 112.8 SSA
                                                                                                                                                   7.2
                                                                                                               EL1 2002.0 EL2 63.8 ALF
   BOE 2.2318 BRA 1.0360 BC3 1.3172 FSP
                                                  - 3A 7
                                                                                                                          ARRIVAL DATE NOV 24 1967
                                                                   FLIGHT TIME 116.00
LAUNCH DATE JUL 31 1967
                                                                   DISTANCE 348.368
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 27.636 GAL -10.88 AZL 81.06 MCA 166.58 SMA 134.87 ECC .22577 INC 8.9389 V1 29.337 RP 107.51 LAP 2.07 LOP 113.86 VP 38.534 GAP 5.81 AZP 98.70 TAL 225.87 TAP 32.45 RCA 104.42 APO 165.31 V2 35.248 RC 119.197 GL 36.93 GP -58.69 ZAL 135.54 ZAP 116.62 ETS 306.75 ZAE 110.22 ETE 216.70 ZAC 118.03 ETC 342.41 CLP-149.58
  PLANETOCENTRIC CONIC
   C3 49.269 VHL 7.019 DLA 45.72 RAL 173.34 RAD 6568.8 VEL 13.063 PTH 2.38 VHP 8.863 DPA -39.13 RAP 127.34 ECC 1.8108
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZHTH LNCH TIME L-I TIME
                                                                                                  17 52 25
                                                                           60.85
                                                                                          50.32
                                                                                                                   3846.0
                                                            204.08
                  16 38 19 4446.03
0 6 34 3075.52
       55.18
                 16 3A 19
                                              -20.11
                                                                                                    0 57 50
                                                                                                                    2475.5
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                                              -20.10
                                                            204.08
                                                                           60.85
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                                                                                                  17 52 25
                                                                                                                    3846.0
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       55.18
                 16 38 19
                               4446.03
                                              -20.11
                                                                                          50.31
                                                                                                    0 57 50
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                  0 6 34
                               3075.52
                                              -20.10
                                                             96.41
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                                                                                                                                               197.71
                 16 36 19
                                                            204.08
                                                                           60.85
       55.18
                                4446.03
                                              -20.11
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                                                             96.41
      124.82
                  0 6 34
                               3075.52
                                              -20.10
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 2919.3 SCR 553.8 SC3 95.8
RRT .5349 RRF .8140 RTF .9118
SCB 2971.3 R23 .3711 R13 .9181
SCI 2934.6 SC2 465.4 THA 5.94
                                                                                                               ST 2377.3 SR 165.2 SS 628.8
CRT .8465 CRS -.9148 CST -.9894
    TOE 2.8959 TRA -.7341 TC3-1.0678 BAU .7380
    ROE .1812 RRA .2127 RC3 -.3395 FAU .02991
                                                                                                               LSA 2461.5 MSA 123.6 SSA 4.8
   FOE 1.0047 FRA .0993 FC3 -.5256 BSP 8975
                                                                                                               EL1 2381.4 EL2 87.8 ALF
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BOE 2.9015 BRA .7643 BC3 1.1204 F5P -327

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ARRIVAL DATE NOV 26 1967
                                                                                        FLIGHT TIME 118,00
LAUNCH CATE JUL 31 1967
                                                                                        DISTANCE 354.234
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 27.556 GAL -10.60 AZL 77.46 HCA 169.74 SHA 134.26 ECC .22458 INCI2.5408 V1 29.337 RP 107.50 LAP 2.22 LOP 117.11 VP 38.479 GAP 6.06 AZP 102.35 TAL 224.37 TAP 34.12 RCA 104.11 APO 164.41 V2 35.252 RC 121.426 GL 46.11 GP -65.61 ZAL 126.54 ZAP 112.40 ETS 297.94 ZAE 103.75 ETE 213.16 ZAC 117.17 ETC 335.71 CLP-157.32
   PLANETOCENTRIC CONIC
     C3 66.593 VML 8.160 DLA 49.89 RAL 184.25 RAD 6569.3 VEL 13.709 PTH 2.51 VMP 10.817 DPA -44.67 RAP 121.10 ECC 2.0960
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                              216.69
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                                                            -18.70
        132.96
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1 19 12 3075.74
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        132.96
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                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2768.5 SR 151.0 SS 673.8

CRT -.6501 CRS .5532 CST -.9926

LSA 2849.9 MSA 140.0 SSA 3.0

EL1 2770.2 EL2 114.7 ALF 177.97
                                                                                   SGT 3039.0 SGR 499.9 SG3 76.0
RRT .0178 RRF .3611 RTF .9329
     TOE 3.9417 TRA -.1893 TC3 -.7589 BAU .6952
    RDE -.1363 RRA .3561 RC3 -.1840 FAU .02121
FOE 1.0217 FRA .2182 FC3 -.2757 BSP 9288
                                                                                   SG8 3079.9 R23 .3441 R13 .9330
                                                                                    SG1 3039.0 SG2 499.9 THA
     BDE 3.9441 BRA .4033 BC3 .7808 FSP -262
                                                                                                                                                                ARRIVAL DATE NOV 28 1967
                                                                                        FLIGHT TIME 120.00
LAUNCH DATE JUL 31 1967
                                                                                        DISTANCE 360.011
    RL 151.86 LAL -.00 LOL 307.12 VL 27.475 GAL -10.29 A7L 70.75 MCA 172.83 SMA 133.65 ECC .22328 INC19.2529 V1 29.337 RP 107.49 LAP 2.36 LOP 120.35 VP 38.424 GAP 6.29 A7P 109.11 TAL 222.82 TAP 35.65 RCA 103.81 APO 163.50 V2 35.255 RC 123.648 GL 55.83 GP -73.11 7AL 115.85 7AP 106.85 ETS 280.61 7AE 94.95 ETE 200.59 7AC 117.08 ETC 319.64 CLP-176.41
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                         2.75 VHP 14.665 DPA -49.78 RAP 109.65 ECC 2.9104
     C3 116.084 VHL 10.774 OLA 54.32 RAL 200.71 RAD 6570.2 VEL 15.408 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                         2 41 45 3160.92
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        138.51
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 2820.5 SR 893.6 SS 721.7
CRT -.9847 CRS .9647 CST -.9958
     TOE 5.2814 TRA .9416 TC3 -.3439 BAU .5350
ROE-1.6745 RRA .2714 RC3 -.0240 FAU .01204
                                                                                   SCT 3028.9 SGR 925.7 SG3 59.3
RRT -.8025 RRF -.6348 RTF .9688
                                                                                    3G8 3167.2 R23 - .2811 R13 - .9575
                                                                                                                                                   LSA 3040.8 MSA 166.4 SSA
                                                                                                                                                                                                 1.7
     FOE 1.0532 FRA .3792 FC3 -.0898 85P 9632
BOE 5.5405 BRA .9799 BC3 .3447 FSP -205
                                                                                    SG1 3121.5 SG2 535.9 THA 165.79
                                                                                                                                                   EL1 2954.9 EL2 148.4 ALF 162.63
                                                                                                                                                                ARRIVAL DATE NOV 30 1967
                                                                                        FLIGHT TIME 122.00
LAUNCH DATE JUL 31 1967
                                                                                        DISTANCE 365.535
     RL 151.86 LAL -.00 LOL 307.12 VL 27.394 GAL -9.92 A7L 54.68 MCA 175.69 SMA 133.06 ECC .22147 INC35.3158 V1 29.337 RP 107.48 LAP 2.49 LOP 123.60 VP 38.368 GAP 6.43 A7P 125.24 TAL 221.14 TAP 36.83 RCA 103.59 APO 162.53 V2 35.257 RC 125.861 GL 61.14 GP -74.06 7AL 104.67 7AP 100.32 ETS 231.90 7AE 81.06 ETE 155.94 7AC 119.84 ETC 269.95 CLP 130.74
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 317.238 VHL 17.811 OLA 51.74 RAL 219.12 RAD 6571.8 VEL 20.941 PTH 3.19 VHP 24.163 CPA -50.41 RAP 88.33 ECC 6.2209
     ENCH AZHTH ENCH TIME E-I TIME INJ EAT INJ CONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                      -10.61
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          44.70
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3 45 39 3341.29
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                                                                                                                                    4 41 21
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                                                                                                125.67
                                                                -4.35
                                                                                107.20
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         135.30
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 1703.1 SGR 2683.0 SG3 48.7
RRT -.9358 RRF -.9632 RTF ..9951
                                                                                                                                                   ST 1174.9 SR 2350.4 SS 866.2
     TOE 3.4479 TRA 2.4863 TC3 - .0129 BAU .3039
                                                                                                                                                   CRT -.9863 CR6 .9925 CST -.9991
L3A 2760.3 MSA 188.6 SSA 1.3
      RDE-7.2002 RRA-2.5616 RC3 -.0705 FAU-.00238
                                                                                    SG8 3177.9 R23 -.1676 R13 -.9851
     FOE 1.2347 FRA .7699 FC3 .0065 BSP 9411
BDE 7.9832 BRA 3.5698 BC3 .0717 FSP -158
                                                                                    SG1 3136.2 SG2 513.5 THA 121.66
                                                                                                                                                   EL1 2621.9 EL2 173.5 ALF 116.37
      BOE 7.9832 BRA 3.5698 BC3 .0717 FSP
                                                                                                                                                                 ARRIVAL DATE DEC 2 1967
LAUNCH DATE JUL 31 1967
                                                                                         FLIGHT TIME 124,00
                                                                                         DISTANCE 369.853
    HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 27.314 GAL -9.30 AZL 5.96 MCA 177.37 SMA 132.48 ECC .21674 INCR4.0386 VI 29.337
RP 107.48 LAP 2.62 LOP 126.85 VP 36.312 GAP 6.23 AZP 174.03 TAL 218.92 TAP 36.29 RCA 103.77 APO 161.19 V2 35.258
RC 128.066 GL 44.94 GP -49.03 ZAL 96.36 ZAP 94.76 ETS 190.05 ZAE 52.52 ETE 120.44 ZAC 131.57 ETC 215.91 CLP 97.27
    PLANETOCENTRIC CONIC
     C31440.636 VHL 37.956 DLA 31.02 RAL 223.24 RAD 6573.2 VEL 39.521 PTH 3.56 VHP 50.327 DPA -31.64 RAP 59.96 ECC24.7092
     C31440.636 VHL 37.956 DLA 31.UE RAL 223.24 NAD 6973.2 VEL 39.321 PIN 37.957 DTA 51.04 NAT 51.02 TO 51.04 NAT 51.
                                                                                                                                   2 33 8
                                                                                                                                                         3281.6
                         1 28 26
                                           3881.56
                                                                    .72
                                                                                148.09
                                                                                                  134.42
                                                                                                                       58.99
         103.22
                                                                                                                                     5 0 12
                                                                                                                                                         2798.1
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                                                                                                                                                                                             112.55
                                                                                                                       57.82
                                                                                                 142.36
                           4 3 34
                                           3398.09
                                                              -12.21
                                                                                119.19
                                                                                                                                                        3488.1
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                                                                                                                                    1 30 37
                                                                                                  126.50
                           0 22 28
                                           4088.08
                                                               13.67
                                                                                155.86
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 636.3 SR 1448.1 SS 1225.9
CRT .9427 CRS .9984 CST .9225
                                                                                     SGT #31.0 SGR 2504.0 SG3 45.3
       TOE-4.2138 TRA -.0402 TC3 -.0704 BAU 3.6361
                                                                                     RRT .7638 RRF -.9975 RTF -.7179
      RDE-9.0283 RRA-9.2325 RC3 -.1752 FAU-.05934
                                                                                    SGB 2638.3 R23 -.1211 R13 -.9925
                                                                                                                                                    LSA 1988.8 MSA 222.1 SSA
                                                                                                                                                                                                  1.0
      FDE 1.7197 FRA 2.0756 FC3 .0357 BSP 7599
BDE 9.9633 BRA 9.2326 BC3 .1888 FSP -140
                                                                                     SG1 2586.7 SG2 519.2 THA 75.17
                                                                                                                                                    EL1 1569.5 EL2 195.9 ALF 67.12
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LAUNCH DATE JUL 31 1967
                                                                        FLIGHT TIME 126.00
                                                                                                                                  ARRIVAL DATE DEC 4 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 379.229
    RL 151.86 LAL -.00 LOL 307.12 VL 27.234 GAL -9.71 AZL 132.64 MCA 184.04 SMA 131.90 ECC .22515 INC42.6400 V1 29.337 RP 107.48 LAP 2.74 LOP 130.10 VP 38.256 GAP 7.49 AZP 47.43 TAL 218.81 TAP 42.85 RCA 102.21 APO 161.60 V2 35.259
    RC 130.261 GL -59.89 GP 71.72 7AL 102.04 7AP 101.07 ETS 154.43 7AE 78.46 ETE 227.47 7AC 93.91 ETC 108.04 CLP 127.75
   PLANETOCENTRIC CONIC
    C3 441.846 VHL 21.020 DLA -56.83 RAL 153.50 RAD 6572.2 VEL 23.731 PTH 3.30 VHP 25.975 DPA 80.69 RAP 318.11 ECC 8.2717 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           146.79 3 5 11
146.78 11 51 36
146.78 11 51 36
146.78 11 51 36
146.79 3 5 11
146.78 11 51 36
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                    2 26 29 2322.17
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                  2 26 29 2322.17
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                    2 26 29 2322.17
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   DIFFERENTIAL CORRECTIONS
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 537.2 SGR 3283.1 SG3 52.3
RRT .4275 RRF .9890 RTF .5532
SGB 3326.8 R23 -.1338 R13 .9905
                                                                                                                      ST 506.8 SR 2424.6 SS 1115.7
CRT .9283 CRS -.9979 CST -.9503
LSA 2709.9 MSA 191.7 SSA 1.3
    TOE-1.8501 TRA .3363 TC3 -.0188 BAU
                                                      .8003
    ROE-8.5451 RMA-4.5046 RC3 .1342 FAU-.00759
FOE-1.7810 FRA -.7167 FC3 .0149 8SP 9786
80E 8.7431 BRA 4.5172 BC3 .1355 FSP -160
                                                                    SG1 3291.3 SG2 484.5 THA 85.91
                                                                                                                       EL1 2470.1 EL2 184.9 ALF 78.96
                                                                        FLIGHT TIME 128.00
                                                                                                                                  ARRIVAL DATE DEC 6 1967
LAUNCH DATE JUL 31 1967
                                                                        DISTANCE 384.665
  HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 27.154 GAL -9.51 AZL 114.63 MCA 186.84 SMA 131.34 ECC .22348 INC24.6288 V1 29.337 RP 107.48 LAP 2.85 LOP 133.35 VP 38.199 GAP 7.60 AZP 65.53 TAL 217.06 TAP 43.91 RCA 101.99 APO 160.69 V2 35.259
    RC 138.447 GL -59.79 GP 70.86 ZAL 108.89 ZAP 109.10 ETS 100.82 ZAE 93.54 ETE 176.18 ZAC 89.69 ETC 54.32 CLP 176.50
   PLANETOCENTRIC CONIC
    C3 166.992 WHL 12.925 DLA -51.50 RAL 143.83 RAD 6570.8 VEL 16.980 PTH
                                                                                                 2.92 WHP 15.417 DPA 76.99 RAP 226.33 ECC 3.7483
    LNON APHTH LINCH TIME L-1 TIME. INJ. LAT. INJ. LONG. INJ. AT ASC. INJ. AZHTH. INJ. TIME. PO. CST. TIM. INJ. 2 LAT. INJ. 2 LONG.
       49.00
                    2 6 53 2155.95
                                                   9.16
                                                                57.68
                                                                               46.43
                                                                                             140.91
                                                                                                           2 42 49
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2 6 53 2155.95
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                                                                                                                                                         290.09
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
    TOE-4.2290 TRA-3.3463 TC3 -.1420 BAU
                                                                   SGT 3054.6 SGR 1810.4 SG3 66.6
RRT .9498 RRF .8969 RTF .9893
SG8 3550.8 R23 -.2159 R13 .9750
                                                      .3209
                                                                                                                       ST 2006.8 SR 815.1 55 742.9
    ROE-1.4375 RRA-2.3777 RC3 -.0224 FAU .01175
                                                                                                                       CRT .9527 CRS -.9276 CST -.9973
    FOE-1.2052 FRA -.7470 FC3 -.0609 BSP 10799
                                                                                                                      LSA 2276.7 MSA 244.6 SSA 1.5
    80E 4.4666 BRA 4.1050 BC3 .1437 FSP -211
                                                                   $61 3516.6 $62 491.9 THA 30.02
                                                                                                                       EL1 2153.6 EL2 230.7 ALF 21.41
                                                                                                                                 ARRIVAL DATE DEC 8 1967
                                                                        FLIGHT TIME 130.00
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 390.367
    RL 151.86 LAL -.00 LOL 307.12 VL 27.076 GAL -8.96 AZL 107.36 HCA 189.92 SMA 130.79 ECC .22265 INC17.3604 VL 29.337 RP 107.48 LAP 2.95 LOP 136.60 VP 38.143 GAP 7.80 AZP 72.88 TAL 215.41 TAP 45.53 RCA 101.67 APO 159.91 VZ 35.258 RC 134.624 GL -55.29 GP 62.29 ZAL 114.38 ZAP 116.97 ETS 78.00 ZAE 102.86 ETE 156.44 ZAC 88.84 ETC 31.73 CLP-167.20
   PLANETOCENTRIC CONIC
    C3 94.254 VHL 9.708 DLA -45.84 RAL 143.78 RAD 6569.8 VEL 14.683 PTH 2.66 VHP 11.357 DPA 67.52 RAP 204.18 ECC 2.5512
    LNCH AZHTH LNCH TIME L-| TIME IN| LAT IN| LONG IN| RT ASC IN| AZHTH IN| TIME PO CST TIM IN| 2 LAT IN| 2 LONG 52.31 2 31 15 1984.37 13.76 45.86 40.00 134.18 3 4 19 1384.4 19.26 40.21 127.69 10 17 44 5843.97 13.78 272.81 40.02 134.17 11 55 8 5244.0 19.27 267.16
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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 3608.2 SGR 676.5 SG3 84.8
RRT .7359 RRF .5206 RTF .9582
SGB 3671.1 R23 -2892 R13 .9533
SGI 3643.0 SG2 453.7 THA 7.98
                                                                                                                      ST 2001.5 SR 231.5 SS 662.5
CRT -.0647 CRS .2458 CST -.9832
LSA 2105.2 MSA 257.8 SSA 2.3
    TOE-3.0318 TRA-3.5276 TC3 -.4849 BAU .6111
    ROE .1981 RRA -.7862 RC3 -.0080 FAU .02201
FOE-1.0990 FRA -.7361 FC3 -.2021 BSR 11232
    BOE 3.0382 BRA 3.6141 BC3 .4850 FSP
                                                       -271
                                                                                                                      ELI 2001.6 ELZ 231.0 ALF 179.57
LAUNCH DATE JUL 31 1967
                                                                        FLIGHT TIME 132.00
                                                                                                                                  ARRIVAL DATE DEC 10 1967
                                                                       DISTANCE 396.142
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 26.997 GAL -8.61 A7L 103.54 MCA 193.08 SMA 130.25 ECC .22217 INC13.5410 V1 29.337 RP 107.48 LAP 3.04 LOP 139.85 VP 36.086 GAP 8.01 A7P 76.80 TAL 213.77 TAP 46.85 RCA 101.31 APO 159.18 V2 35.256 RC 136.791 GL -50.70 GP 54.10 7AL 118.35 7AP 123.98 ETS 69.54 7AE 109.48 ETE 151.84 7AC 88.59 ETC 23.62 CLP-162.36
  PLANETOCENTRIC CONIC
    C3 65.229 VHL 8.076 DLA -41.30 RAL 145.73 RAD 6569.2 VEL 13.660 PTH 2.50 VHP 9.430 OPA 59.08 RAP 195.85 ECC 2.0735
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.58 3 4 5 1832.88 16.27 34.57 36.30 128.50 3 34 38 1232.9 21.14 28.28
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  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 3748.6 SGR 432.2 SG3 102.9
RRT .2542 RRF -.0861 RTF .9342
SG8 3771.4 R23 -.3377 R13 .9331
SG1 3748.2 SG2 417.8 THA 1.70
                                                                                                                     ST 1894.3 SR 304.1 SS 637.2
CRT -.6786 CRS .8384 CST -.9693
    TOE-2.3327 TRA-3.2511 TC3 -.8473 BAU .7396
    RDE .4073 RRA -.3346 RC3 .0363 FAU .02955
    FOE-1.0651 FRA -.7077 FC3 -.3921 BSP 11561
BDE 2.3680 BRA 3.2662 BC3 .8481 FSP -330
                                                                                                                      LSA 2004,4 MSA 263.2 SSA 3.2
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EL1 1905.7 EL2 222.0 ALF 173.70

ARRIVAL DATE DEC 12 1967

JPL TM 33-99

LAUNCH DATE JUL 31 1967

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DISTANCE 401.941
  HELIOCENTRIC CONIC
   RL 151.86 LAL -.00 LOL 307.12 VL 26.920 GAL -8.27 AZL 101.19 MCA 196.27 SMA 129.71 ECC .22189 INC11.1941 V1 29.337
RP 107.49 LAP 3.12 LOP 143.10 VP 38.029 GAP 8.23 AZP 79.24 TAL 212.13 TAP 48.40 RCA 100.93 APO 158.50 V2 35.254
RC 138.949 GL -46.75 GP 47.15 ZAL 121.05 ZAP 129.96 ETS 65.00 ZAE 114.33 ETE 151.53 ZAC 88.23 ETC 19.53 CLP-160.82
   PLANETOCENTRIC CONIC
    C3 50.423 VHL 7.101 DLA -37.80 RAL 148.12 RAD 6568.9 VEL 15.107 PTH
                                                                                                          2.39 VMP 8.397 OPA 51.84 RAP 191.89 ECC 1.8298
    LNCM AZMTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 63,84 3 38 16 1699,87 17.52 24.34 34.09 124.05 4 6 36 1099.9 21.86 17.62
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124.04 11 22 37
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       116.16
                                                        17.55
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          SCT 3844.4 SGR 386.1 SG3 118.1
RRT -.0725 RRF -.8311 RTF .9164
SCB 3863.7 R23 .3650 R13 -.9167
SCI 3844.5 SGZ 385.0 THA 179.58
                                                                                                                                   ST 1815.5 SR 332.1 SS 620.6
CRT -.7661 CRS .9195 CST -.9570
    TOE-1.9382 TRA-3.0055 TC3-1.2020 BAU .8114
   ROE .4060 RRA -.1789 RC3 .0644 FAU .03497
FDE-1.0298 FRA -.6574 FC3 -.6005 BSP 11868
BDE 1.9803 BRA 3.0109 BC3 1.2037 FSP -378
                                                                                                                                  LSA 1928.9 MSA 266.1 SSA
                                                                                                                                 ELI 1833.5 ELZ 211.4 ALF 171.91
                                                                                                                                               ARRIVAL DATE DEC 14 1967
                                                                               FLIGHT TIME 136.00
AUNCH DATE JUL 31 1967
  HELIOCENTRIC CONIC
                                                                               DISTANCE 407.746
   RL 151.86 LAL -.00 LÓL 307.12 VL 26.843 GAL -7.92 AZL 99.60 HCA 199.48 SMA 129.19 ECC .22178 INC 9.6021 V1 29.337 RP 107.50 LAP 3.19 LOP 148.35 VP 37.971 GAP 8.45 AZP 80.94 TAL 210.48 TAP 49.96 RCA 100.54 APO 157.84 V2 35.251 RC 141.095 GL -43.45 GP 41.40 ZAL 122.76 ZAP 135.00 ETS 61.91 ZAE 117.92 ETE 152.71 ZAC 87.59 ETC 16.95 CLP-160.52
  PLANETOCENTRIC CONIC
   C3 41,990 WHL 6,449 DLA -35,14 RAL 150.61 RAD 6568.6 VEL 12,765 PTH 2,32 WHP 7,804 DPA 45.69 RAP 189.97 ECC 1.6845 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                          SGT 3939.6 SGR 366.8 SG3 130.0
RRT -.2226 RRF -.5685 RTF .9034
                                                                                                                                   ST 1760.8 SR 333.7 SS 605.9
CRT -.7922 CRS .9467 CST -.9464
    TOE-1.6927 TRA-2.8039 TC3-1.5467 BAU
                                                            .8610
    RDE .3754 RRA -.1125 RC3 .0758 FAU .03869
FDE -.9871 FRA -.5932 FC3 -.8054 89P 12180
BDE 1.7334 BRA 2.8062 BC3 1.5485 FSP -417
                                                                          SGB 3956.6 R23 .3751 R13 -.9041
SG1 3940.5 SG2 357.5 THA 178.80
                                                                                                                                   LSA 1872.7 MSA 267.8 SSA 5.3
                                                                                                                                  ELI 1780.8 EL2 201.4 ALF 171.35
                                                                                                                                               ARRIVAL DATE DEC 16 1967
LAUNCH DATE JUL 31 1967
                                                                               FLIGHT TIME 138.00
                                                                               DISTANCE 413.551
    RL 151.86 LAL -.00 LOL 307.12 VL 26.767 GAL -7.56 AZL 98.45 MCA 202.70 SMA 128.68 ECC .22182 INC 8.4466 V1 29.337 RP 107.51 LAP 3.25 LOP 149.60 VP 37.914 GAP 8.68 AZP 82.20 TAL 208.82 TAP 51.53 RCA 100.14 APO 157.23 V2 35.247 RC 143.232 GL -40.70 GP 36.67 TAL 123.67 ZAP 139.23 ETS 59.53 ZAE 120.57 ETE 154.39 ZAC 86.67 ETC 15.09 CLP-160.78
   PLANETOCENTRIC CONIC
    C3 35.721 VHL 5.977 DLA -33.13 RAL 153.11 RAD 6568.4 VEL 12.534 PTH 2.27 VHP 7.453 DPA 40.45 RAP 189.21 ECC 1.5879
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.04 4 44 36 1473.56 18.42 6.97 32.41 118.04 5 9 9 873.6 22.02 359.78 107.96 9 18 50 5886.03 18.44 279.80 32.42 118.03 10 56 56 5286.0 22.04 272.60
                    4 44 36 1473.56
9 18 50 5886.03
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       110.00
                                                       24.98
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 1723.1 SR 328.6 SS 591.6

CRT -.8052 CRS .9612 CST -.9373

LSA 1831.6 MSA 268.4 SSA 6.4
                                                                          SGT 4033.2 SGR 351.2 SG3 138.6
RRT -.2997 RRF -.6166 RTF .8934
SG8 4048.5 R23 .3719 R13 -.8942
SG1 4034.5 SG2 336.0 THA 178.54
    TDE-1.5292 TRA-2.6291 TC3-1.8817 BAU .8994
    RDE .3416 RRA -.0786 RC3 .0747 FAU .04097
FDE -.9394 FRA -.5199 FC3 -.9930 BSP 12482
BDE 1.5869 BRA 2.6302 BC3 1.8832 FSP -445
                                                                                                                                   EL1 1743.5 EL2 192.6 ALF 171.16
                                                                                                                                               APRIVAL DATE DEC 18 1967
                                                                               FLIGHT TIME 140.00
LAUNCH DATE JUL 31 1967
                                                                               DISTANCE 419.351
  HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 26.692 GAL -7.20 ATL 97.57 MCA 205.93 SMA 128.18 ECC .22201 INC 7.5655 V1 29.337 RP 107.53 LAP 3.30 LOP 152.85 VP 37.857 GAP 8.90 AZP 83.19 TAL 207.16 TAP 53.09 RCA 99.73 APO 156.64 V2 35.243 RC 145.356 GL -38.40 GP 32.77 ZAL 123.96 ZAP 142.80 ETS 57.60 ZAE 122.56 ETE 156.18 ZAC 85.49 ETC 13.65 CLP-161.30
   PLANETOCENTRIC CONIC
    C3 31.509 WHL 5.613 OLA -31.64 RAL 155.62 RAD 6566.3 VEL 12.365 PTH 2.23 VMP 7.244 OPA 35.95 RAP 189.16 ECC 1.5186
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                       255.52
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                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1699.3 SR 323.9 SS 578.5

CRT -.8163 CRS .9713 CST -.9298

LSA 1804.3 MSA 268.0 SSA 7.6

EL1 1720.0 EL2 184.8 ALF 171.05
                                                                           SGT 4125.6 SGR 538.7 SG3 144.6
    TOE-1.4175 TRA-2.4701 TC3-2.2102 BAU .9314
                                                                           RRT -.3194 RRF -.6237 RTF .8858
SGB 4139.5 RZ3 .3578 R13 -.8865
SG1 4127.0 SG2 320.9 THA 178.49
    RDE .3166 RRA -.0577 RC3 .0659 FAU .04215
    FOE -.8913 FRA -.4430 FC3-1.1581 BSP 12783
BDE 1.4522 BRA 2.4708 BC3 2.2112 FSP -464
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FLIGHT TIME 134.00

ARRIVAL DATE DEC 20 1967

LAUNCH DATE JUL 31 1967

HELIOCENTRIC CONIC DISTANCE 425.143 RL 151.86 LAL -.00 LOL 307.12 VL 26.618 GAL -6.83 AZL 96.87 MCA 209.16 SMA 127.69 ECC .22235 INC 6.8677 V1 29.337 RP 107.54 LAP 3.34 LOP 156.10 VP 37.800 GAP 9.13 AZP 84.00 TAL 205.48 TAP 54.64 RCA 99.30 APO 156.09 V2 35.237 RC 147.469 GL -36.44 GP 29.52 ZAL 123.73 ZAP 145.84 ETS 56.02 ZAE 124.05 ETE 157.92 ZAC 84.11 ETC 12.48 CLP-161.97 PLANETOCENTRIC CONIC C3 28.310 VHL 5.321 DLA -30.57 RAL 158.17 RAD 6568.1 VEL 12.235 PTH 2.20 VHP 7.125 DPA 32.04 RAP 189.59 ECC 1.4659 LNCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 687.9 21.94 18.79 32.97 114.56 6 6 51 345.65 5 45 23 1287.94 353.08 77.98 32.98 9 9 30 66.7 21.96 299.87 307.30 114.55 8 58 24 666.69 18.80 102.02 18.79 353.08 32.97 114.56 6 6 51 687.9 21.94 345.65 5 45 23 1287.94 77.98 9 9 30 8 7 58 666.69 66.7 21.96 299.87 18.80 307.30 32.98 8 58 24 102.02 7 53 27 870.90 7.90 316.54 26.79 123.37 270.9 12.23 310.12 110.00 106.31 13 19 50 249.31 37.75 4819.8 32.40 240.63 30.46 11 49 31 5419.77 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4233.6 SGR 332.0 SG3 149.7 RRT -.3395 RRF -.6148 RTF .8814 SG8 4246.5 R23 .3338 R13 -.8821 SG1 4235.1 SG2 312.2 THA 178.47 ST 1696.6 SR 323.1 SS 572.0 CRT -.8307 CRS .9795 CST -.9250 TOE-1.3488 TRA-2.3270 TC3-2.5466 BAU .9641 RDE .2997 RRA -.0412 RC3 .0549 FAU .04283 FOE -.8521 FRA -.3722 FC3-1.3099 BSP 13270 LSA 1799.7 MSA 266.6 SSA 8.8 EL1 1718.0 EL2 177.6 ALF 170.91 BDE 1.3817 BRA 2.3274 BC3 2.5472 FSP -490 FLIGHT TIME 144.00 ARRIVAL DATE DEC 22 1967 LAUNCH DATE JUL 31 1967 DISTANCE 430.932 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 26.545 GAL -6.44 AZL 96.30 MCA 212.39 SMA 127.22 ECC .22282 INC 6.2982 VI 29.337 RP 107.56 LAP 3.37 LOP 159.35 VP 37.742 GAP 9.35 AZP 84.68 TAL 203.79 TAP 56.18 RCA 98.87 APO 155.56 V2 35.231 RC 149.570 GL -34.75 GP 26.81 ZAL 123.07 ZAP 148.45 ETS 54.71 ZAE 125.19 ETE 159.52 ZAC 82.55 ETC 11.52 CLP-162.72 PLANETOCENTRIC CONIC C3 25.775 VHL 5.077 DLA -29.82 RAL 160.77 RAD 6568.0 VEL 12.131 PTH 2.17 VHP 7.065 DPA 28.61 RAP 190.37 ECC 1.4242 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.22 6 12 33 1211.24 19.00 347.46 33.84 113.43 6 32 45 611.2 22.00 339.96 8 52 1 8 36 44 19.01 309.64 33.85 113.42 9 3 38 96.8 22.02 302.14 696.76 99.78 8 49 9 9 21 10 8 7 17 745.60 312.58 33.16 114.60 145.6 20.72 305.22 17.55 100.00 637.63 885 21 112.27 37.6 23.31 298.25 9 10 32 20.47 305.90 34.51 100.00 8 7 17 285.2 11.71 310.91 7.36 317.30 27.38 123.48 7 52 32 110.00 103.90 13 40 32 4758.8 33.13 236.03 38.52 5358.83 31.55 244.89 110.00 12 11 13 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4221.0 SGR 320.2 SG3 145.2 RRT -.2939 RRF -.5575 RTF .8662 SG8 4233.1 R23 .3155 R13 -.8667 ST 1644.8 SR 315.7 SS 537.3 CRT -.8371 CRS .9862 CST -.9146 LSA 1739.2 MSA 262.8 SSA 10.1 TOE-1.2544 TRA-2.1345 TC3-2.8034 BAU .9660 RDE .2794 RRA -.0365 RC3 .0286 FAU .04093 FOE -.7740 FRA -.2588 FC3-1.3746 BSP 12482 BOE 1.2852 BRA 2.1348 BC3 2.8035 FSP -422 SG1 4222.0 SG2 306.0 THA 178.72 EL1 1666.1 EL2 170.5 ALF 170.78 FLIGHT TIME 146.00 ARRIVAL DATE DEC 24 1967 LAUNCH DATE JUL 31 1967 **DISTANCE 436.704** HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 26.472 GAL -6.05 A7L 95.82 MCA 215.62 SMA 126.75 ECC .22346 INC 5.8220 V1 29.337 RP 107.58 LAP 3.39 LOP 162.60 VP 37.685 GAP 9.58 A7P 85.26 TAL 202.10 TAP 57.72 RCA 98.43 APO 155.07 V2 35.225 RC 151.657 GL -33.26 GP 24.52 7AL 122.03 7AP 150.74 ETS 53.65 7AE 126.08 ETE 160.98 7AC 80.86 ETC 10.70 CLP-163.51 PLANETOCENTRIC CONIC C3 23.711 VHL 4.869 DLA -29.35 RAL 163.46 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 7.047 DPA 25.56 RAP 191.39 ECC 1.3902 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 35.04 112.59 6 55 51 547.6 22.15 335.30 342.86 81.95 6 36 43 1147.64 19.25 22.16 303.86 35.04 112.58 9 1 16 119.3 719.32 98.05 8 49 16 19.26 311.42 116.03 8 30 8 317.32 18.62 310.16 224.7 8 16 23 824.73 15.24 33.14 100.00 109.18 11 29 3 123.49 8 11 16 102.12 13 57 18 5205.5 25.78 268.08 9 52 17 5805.50 276.06 36.72 23.37 100.00 311.03 7.27 28.50 287.5 11.63 7 56 28 887.47 317.42 4715.5 33.54 232.71 12 28 42 5315.53 39.52 32.21 241.69 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4365.4 SGR 325.2 SG3 150.5 RRT -.3217 RRF -.5451 RTF .8667 SGB 4377.5 R23 .2791 R13 -.8692 SGI 4366.7 SG2 307.8 THA 178.62 ST 1684.4 SR 323.5 SS 546.0 CRT -.8601 CRS .9916 CST -.9165 LSA 1781.2 MSA 258.9 SSA 11.4 TOE-1.2502 TRA-2.0128 TC3-3.1666 BAU 1.0038 ROE .2748 RRA -.0215 RC3 .0199 FAU .04132 FOE -.7579 FRA -.2074 FC3-1.5087 8SP 13394 EL1 1707.4 EL2 162.8 ALF 170.53 BOE 1.2801 BRA 2.0129 BC3 3.1667 FSP -470 ARRIVAL DATE DEC 26 1967 FLIGHT TIME 148,00 LAUNCH DATE JUL 31 1967 DISTANCE 442.468 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 26.400 GAL -5.65 AZL 95.42 MCA 218.85 SMA 126.29 ECC .22425 INC 5.4155 VI 29.337 RP 107.60 LAP 3.39 LOP 165.85 VP 37.628 GAP 9.81 AZP 85.78 TAL 200.40 TAP 59.25 RCA 97.97 APO 154.62 V2 35.217 RC 153.730 GL -31.92 GP 22.57 ZAL 120.66 ZAP 152.75 ETS 52.83 ZAE 126.77 ETE 162.28 ZAC 79.05 ETC 10.01 CLP-164.32 PLANETOCENTRIC CONIC C3 21.992 VHL 4.690 DLA -29.09 RAL 166.25 RAD 6567.9 VEL 11.974 PTH 2.13 VHP 7.058 DPA 22.82 RAP 192.61 ECC 1.3619 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.03 6 56 24 1101.88 19.56 339.61 36.54 111.97 7 14 45 501.9 22.37 332.01 304.63 36.54 111.96 22.39 728.45 19.56 312.23 96.97 8 51 52 34,31 116.26 8 31 27 239.0 18.23 311.03 8 17 28 838.96 14.82 318.17 100.00 107.73 11 49 24 5154.6 264.56 5754.64 24.47 272.68 38.45 100.00 10 13 29 30.05 123.44 8 18 50 100.85 14 11 23 280.8 11.87 310.67 317.07 880.85 7.52 8 4 9 33.,77 230.40 4685.5 12 43 17 5285.52 40.80 110.00 32.62 239.44 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4455.3 SGR 329.6 SG3 151.3 RRT -.3227 RRF -.5151 RTF .8665 SGB 4467.5 R23 .2473 R13 -.8669 ST 1707.3 SR 329.2 SS 543.6 CRT -.8801 CRS .9955 CST -.9168 TDE-1.2394 TRA-1.8655 TC3-3.4963 BAU 1.0280 ROE .2694 RRA -.0116 RC3 .0056 FAU .04054 FOE -.7270 FRA -.1392 FC3-1.5960 BSP 13739 BOE 1.2684 BRA 1.8655 BC3 3.4963 FSP -476 LSA 1804.1 MSA 253.0 SSA 12.7 SG1 4456.6 SG2 311.9 THA 178.63 EL1 1732.0 EL2 154.1 ALF 170.29

FLIGHT TIME 142.00

JPL TM 33-99

ARRIVAL DATE DEC 28 1967 FLIGHT TIME 150.00 LAUNCH DATE JUL 31 1967 DISTANCE 448.221 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 26.330 GAL -5.24 AZL 95.06 MCA 222.08 SMA 125.85 ECC .22521 INC 5.0624 V1 29.337 RP 107.63 LAP 3.39 LOP 169.09 VP 37.571 GAP 10.04 AZP 86.24 TAL 198.69 TAP 60.77 RCA 97.51 APO 154.19 V2 35.210 RC 155.789 GL -30.70 GP 20.90 ZAL 118.99 ZAP 154.55 ETS 52.22 ZAE 127.32 ETE 163.43 ZAC 77.15 ETC 9.40 CLP-165.13 PLANETOCENTRIC CONIC C3 20.541 VHL 4.532 OLA -29.02 RAL 169.17 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 7.092 OPA 20.32 RAP 193.99 ECC 1.3381 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 111.54 7 28 37 111.53 9 12 54 330.29 38.33 477.0 22.6A 7 10 40 1077.04 19.93 337.94 83.36 304.15 9 0 54 720.47 19.95 311.80 38.34 120.5 22.70 96.64 116.13 8 40 29 106.99 12 3 7 123.34 8 29 20 100.00 14 23 38 310.52 100,00 8 26 38 830.58 15.07 317.67 36.08 230.6 18.46 100.00 10 27 36 5730.19 24.97 271.03 40.24 5130.2 27.06 262.85 8 14 52 8.02 31.98 267.6 12.35 309.94 867.61 316.36 237.97 42.40 4665.9 35.89 228.88 110,00 12 55 52 5265.93 32.86 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4533.4 SGR 336.2 SG3 151.0 RRT -.3211 RRF -.4846 RTF .8642 SGB 4545.9 R23 .2172 R13 -.8646 .SG1 4534.7 SG2 318.3 THA 178.63 ST 1735.3 SR 336.0 SS 541.1 CRT -.9002 CRS .9979 CST -.9183 LSA 1832.1 MSA 245.4 SSA 14.0 TDE-1.2382 TRA-1.7105 TC3-3.8195 BAU 1.0489 RDE .2658 RRA -.0033 RC3 -.0080 FAU .03943 FDE -.6971 FRA -.0713 FC3-1.6618 BSP 13999 BDE 1.2664 BRA 1.7105 BC3 3.8195 FSP -476 EL1 1761.7 ELZ 144.2 ALF 170.04 ARRIVAL DATE DEC 30 1967 FLIGHT TIME 152.00 HELIOCENTRIC CONIC DISTANCE 453.960 RL 151.86 LAL -.00 LOL 307.12 VL 26.260 GAL -4.82 AZL 94.75 MCA 225.31 SMA 125.41 ECC .22633 INC 4.7511 V1 29.337 RP 107.65 LAP 3.38 LOP 172.34 VP 37.515 GAP 10.27 AZP 86.65 TAL 196.97 TAP 62.28 RCA 97.03 APO 153.80 V2 35.201 RC 157.834 GL -29.55 GP 19.45 ZAL 117.04 ZAP 156.16 ETS 51.82 ZAE 127.77 ETE 164.45 ZAC 75.17 ETC 8.88 CLP-165.95 PLANETOCENTRIC CONIC 19.310. VHL 4.394 DLA -29.10 RAL 172.23 RAD 6567.8 VEL 11.861 PTH 2.10 VHP 7.144 DPA 18.03 RAP 195.48 ECC 1.3178 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 19 54 1071.98 20.35 337.74 40.43 111.26 7 37 46 472.0 23.06 330.06 82.98 20.36 310.18 40.43 111.25 9 27 44 96.1 23.07 302.49 97.02 9 16 8 696.13 8 41 45 15.78 38.34 115.72 8 55 11 206.5 309.04 100.00 806.54 316.24 19.11 106.83 12 12 23 123.19 8 42 20 99.53 14 34 36 10 36 58 5724,84 25.07 42.20 5124.8 27.14 262.48 100.00 270.67 849.23 8.71 315.38 34.26 249.2 13.01 308.93 110.00 8 28 11 13 7 1 5254.92 32.99 237.13 44.31 4654.9 33.95 228.03 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4611.2 SGR 344.9 SG3 150.4 RRT -.3215 RRF -.4578 RTF .8630 ST 1773.6 SR 344.4 SS 540.6 CRT -.9201 CRS .9986 CST -.9214 TDE-1.2489 TRA-1.5511 TC3-4.1424 BAU 1.0694 RDE .2641 RRA .0041 RC3 -.0199 FAU .03821 SGB 4624.1 R23 .1889 R13 -.8633 SG1 4612.6 SG2 326.4 THA 178.62 FDE -.6708 FRA -.0068 FC3-1.7131 BSP 14267 LSA 1870.9 MSA 236.2 SSA 15.4 BOE 1.2765 BRA 1.5511 BC3 4.1424 FSP -475 EL1 1801.8 EL2 132.8 ALF 169.82 ARRIVAL DATE JAN 1 1968 FLIGHT TIME 154.00 LAUNCH DATE JUL 31 1967 DISTANCE 459.687 RL 151.86 LAL -.00 LOL 307.12 VL 26.191 GAL -4.39 AZL 94.47 MCA 228.54 SMA 124.99 ECC .22763 INC 4.4728 V1 29.337 RP 107.68 LAP 3.35 LOP 175.58 VP 37.458 GAP 10.51 AZP 87.04 TAL 195.24 TAP 63.78 RCA 96.54 APO 153.44 V2 35.192 RC 159.863 GL -28.46 GP 18.20 ZAL 114.82 ZAP 157.63 ETS 51.62 ZAE 128.14 ETE 165.35 ZAC 73.13 ETC 8.43 CLP-166.76 PLANETOCENTRIC CONIC C3 18.267 VHL 4.274 DLA -29.31 RAL 175.47 RAD 6567.7 VEL 11.817 PTH 2.09 VHP 7.210 OPA 15.91 RAP 197.08 ECC 1.3006 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 111.11 7 43 54 111.10 9 46 56 115.02 9 15 23 107.21 12 17 32 122.98 8 57 36 99.36 14 44 40 330.88 481.1 23.50 7 25 53 1081.11 20.81 338.61 42.83 82.11 9 35 55 660.86 20.82 307.77 42.84 60.9 23.51 300.04 97.89 167.8 20.15 306.62 100.00 9 2 35 767.75 16.91 313.92 41.08 100.00 10 41 54 5737.49 24.82 271.52 44.34 5137.5 26.94 263.36 110.00 8 43 49 826.82 9.54 314.18 36.88 226.8 13.82 307.69 5251.19 4651.2 53.97 227.74 110.00 13 17 9 33.03 236.85 46.55 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4685.2 SCR 354.9 SC3 149.4 RRT -.3232 RRF -.4347 RTF .8624 SCB 4698.6 R23 .1633 R13 -.8627 SCI 4686.6 SC2 335.8 THA 178.59 ST 1819.8 SR 353.7 SS 541.1 TOE-1.2682 TRA-1.3855 TC3-4.4585 BAU 1.0888 RDE .2638 RRA .0105 RC3 -.0301 FAU .03688 FDE -.6467 FRA .0550 FC3-1.7479 BSP 14524 CRT -.9388 CRS .9976 CST -.9256 LSA 1917.9 MSA 225.6 SSA 16.9 BDE 1.2953 BRA 1.3855 BC3 4.4586 FSP EL1 1850.0 EL2 119.9 ALF 169.62 ARRIVAL DATE JAN 3 1968 LAUNCH DATE JUL 31 1967 FLIGHT TIME 156,00 **DISTANCE 465.399** HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 26.124 GAL -3.94 AZL 94.22 MCA 231.77 SNA 124.57 ECC .22912 INC 4.2211 V1 29.337 RP 107.71 LAP 3.31 LOP 178.82 VP 37.402 GAP 10.75 AZP 87.39 TAL 193.51 TAP 65.28 RCA 96.03 APO 153.11 V2 35.183 RC 161.876 GL -27.39 GP 17.10 ZAL 112.36 ZAP 158.96 ETS 51.62 ZAE 128.45 ETE 166.15 ZAC 71.03 ETC 8.04 CLP-167.56 PLANETOCENTRIC CONIC C3 17.388 VHL 4.170 DLA -29.61 RAL 178.87 RAD 6567.7 VEL 11.780 PTH 2.08 VHP 7.289 DPA 13.92 RAP 198.76 ECC 1.2862 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 498.1 111.07 7 48 55 111.05 10 8 44 45.54 7 30 37 1098.06 21.29 340.06 7 48 55 23.97 332.31 9 58 23 520.98 21.31 305.02 45.55 21.0 23.98 297.26 44.35 9 42 50 108.5 21.65 302.86 708.49 310.31 113.84 113.84 9 42 50 108.25 12 16 53 122.72 9 14 56 99.47 14 54 9 5773.82 24.07 46.62 5173.8 26.34 265.90 100.00 10 40 39 273.96 108.25 801.33 10.48 39.85 122.72 201.3 14.72 306.27 110.00 9 1 35 312.81 110.00 13 26 36 5253.75 33.00 237.04 49.13 4653.7 33.95 227.93 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 1870.0 SR 363.5 SS 540.7 CRT -.9554 CRS .9950 CST -.9300 LSA 1968.5 MSA 214.0 SSA 18.4 TOE-1.2924 TRA-1.2103 TC3-4.7579 BAU 1.1061 SGT 4749.4 SGR 365.7 SG3 147.8 RRT -.3248 RRF -.4143 RTF .8617 SGB 4763.4 R23 .1406 R13 -.8620 SGI 4750.9 SG2 345.7 THA 178.56 ROE .2645 RRA .0153 RC3 -.0386 FAU .03541 FOE -.6228 FRA .1162 FC3-1.7628 BSP 14711 BOE 1.3192 BRA 1.2104 BC3 4.7581 FSP -465

EL1 1902.0 EL2 105.5 ALF 169.45

ARRIVAL DATE JAN 5 1968

LAUNCH DATE JUL 31 1967

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DISTANCE 471.096
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 26.057 GAL -3.48 AZL 93.99 HCA 235.00 SHA 124.16 ECC .23080 INC 3.9909 V1 29.337 RP 107.74 LAP 3.27 LOP 182.06 VP 37.346 GAP 11.00 AZP 87.71 TAL 191.77 TAP 66.77 RCA 95.51 APO 152.82 V2 35.172 RC 163.875 GL -26.32 GP 16.14 TAL 109.66 ZAP 160.19 ETS 51.81 ZAE 128.71 ETE 166.85 ZAC 68.88 ETC 7.70 CLP-168.36
   PLANETOCENTRIC CONIC
    C3 16.662 VHL 4.082 DLA -29.97 RAL 182.47 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 7.378 DPA 12.06 RAP 200.51 ECC 1.2742
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
79.75 7 35 29 1118.53 21.79 341.78 48.58 111.11 7 54 8 518.5 24.46 334.00
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                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 1929.5 SR 374.3 SS 542.0

CRT -.9696 CRS ..9908 CST -.9552

LSA 2028.7 MSA 201.7 SSA 20.0
                                                                                  SGT 4818.1 SGR 377.2 SG3 146.4
RRT - 3299 RRF - 3997 RTF .8626
SGB 4832.9 R23 .1203 R13 - .8628
     TOE-1.3246 TRA-1.0303 TC3-5.0461 BAU 1.1241
    RDE .2666 RRA .0193 RC3 -.0441 FAU .03399
FDE -.6019 FRA .1731 FC3-1.7661 BSP 14960
                                                                                                                                                 EL1 1963.4 EL2 90.0 ALF 169.32
    BOE 1.3511 BRA 1.0305 BC3 5.0463 FSP -462
                                                                                   SG1 4819.7 SG2 356.0 THA 178.51
                                                                                                                                                               ARRIVAL DATE JAN 7 1968
                                                                                        FLIGHT TIME 160.00
LAUNCH DATE JUL 31 1967
                                                                                       DISTANCE 476.775
  HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 25.991 GAL -3.01 AZL 93.78 MCA 238.22 SMA 123.77 ECC .23269 INC 3.7783 V1 29.337
RP 107.78 LAP 3.21 LOP 185.29 VP 37.290 GAP 11.25 AZP 88.01 TAL 190.03 TAP 68.25 RCA 94.97 APO 152.57 V2 35.162
RC 165.860 GL -25.25 GP 15.29 ZAL 106.75 ZAP 161.33 ETS 52.20 ZAE 128.94 ETE 167.48 ZAC 66.70 ETC 7.42 CLP-169.15
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.51 7 41 22 1139.89 22.27 343.58 51.93 111.22 8 0 22 539.9 24.95 335.77 101.49 10 46 37 5831.29 22.28 277.54 51.94 111.20 12 23 48 5231.3 24.97 269.73
    C3 16.081 VHL 4.010 DLA -30.38 RAL 186.27 RAD 6567.6 VEL 11.725 PTH
                                                                                                                        2.07 VHP 7.478 OPA 10.30 RAP 202.33 ECC 1.2646
                      7 41 22 1139.89
10 46 37 5831.29
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        110.00
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                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 4882.9 SGR 389.0 SG3 144.8
RRT -.3358 RRF -.3884 RTF ..8640
SGB 4898.3 R23 .1026 R13 -.8642
SG1 4884.6 SG2 366.3 THA 178.46
                                                                                                                                                ST 1991.4 SR 385.6 SS 542.3
CRT -.9809 CRS .9852 CST -.9402
    TDE-1.3598 TRA -.8420 TC3-5.3081 BAU 1.1412
     ROE .2697 RRA .0219 RC3 -.0473 FAU .03254
                                                                                                                                                LSA 2091.0 MSA 189.3 SSA 21.7
EL1 2027.1 EL2 73.6 ALF 169.23
    FOE -.5813 FRA .2282 FC3-1.7519 BSP 15194
BOE 1.3863 BRA .8422 BC3 5.3083 FSP -458
                                                                                                                                                              ARRIVAL DATE JAN 9 1968
                                                                                       FLIGHT TIME 162.00
LAUNCH DATE JUL 31 1967
                                                                                      DISTANCE 482.437
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOU 307.12 VL 25.926 GAL -2.52 ATL 93.58 MCA 241.45 SMA 123.38 ECC .23479 INC 3.5802 VI 29.337
RP 107.81 LAP 3.14 LOP 188.52 VP 37.234 GAP 11.51 ATP 88.29 TAL 188.28 TAP 69.73 RCA 94.41 APO 152.35 V2 35.151
RC 167.829 GL -24.14 GP 14.53 TAL 103.64 TAP 162.38 ETS 52.80 TAE 129.14 ETE 168.03 TAC 64.48 ETC 7.17 CLP-169.92
   PLANETOCENTRIC CONIC
                                                                                                                                                         8.63 RAP 204.20 ECC 1.2574
     C3 15.640 VHL 3.955 DLA -30.80 RAL 190.25 RAD 6567.6 VEL 11.706 PTH 2.06 VHP 7.587 DPA
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.36 12 47 42
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        102.66
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                       7 48 44 1160.67
11 11 4 5797.90
                                                                                                                                                       560.7
                                                                                                 55.61
                                                                                                                  111.38
                                                                                                                                8 8 4
                                                              22.72
                                                                              345.33
         77.34
                                                                                                                  267.40
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                                                                                                                                                      5197.9
                                                              22.74
                                                                              275.23
                                                                                                 55.62
        102.66
                                                                                                                                                                         17.67
                                                                                                                                                       116.1
                                                              13.57
                                                                              308.14
                                                                                                 50.81
                      10 5 20
13 53 38
                                           716.09
        110.00
                                       5290.48
                                                                                                                                                                          33.73
                                                                                                 58.83
                                                                                                                                                      4690.5
                                                                              239.82
                                                              32.55
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                  RRT - 3423 RRF - 3801 RTF .8659
SGB 4958.7 R23 .0873 R13 - .8661
SG1 4944.4 SG2 376.2 THA 178.40
                                                                                                                                                ST 2052.6 SR 397.0 SS 541.1
CRT -.9893 CRS .9781 CST -.9449
     TDE-1.3958 TRA -.6447 TC3-5.5337 BAU 1.1571
    ROE .2739 RRA .0231 RC3 -.0483 FAU .03106
FDE -.5605 FRA .2818 FC3-1.7193 BSP 15408
                                                                                                                                                 LSA 2152.1 MSA 177.5 SSA 23.4
                                                                                                                                                 EL1 2089.8 EL2 57.0 ALF 169.16
     BOE 1.4224 BRA .6452 BC3 5.5339 FSP
                                                                -452
                                                                                                                                                              ARRIVAL DATE JAN 11 1968
                                                                                        FLIGHT TIME 164.00
LAUNCH DATE JUL 31 1967
                                                                                       DISTANCE 488.078
   HELTOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 25.862 GAL -2.02 A7L 93.39 MCA 244.67 SMA 123.00 ECC .23713 INC 3.3940 V1 29.337 RP 107.84 LAP 3.07 LOP 191.76 VP 37.179 GAP 11.78 A7P 88.55 TAL 186.53 TAP 71.20 RCA 93.83 APO 152.17 V2 35.139 RC 169.783 GL -23.00 GP 13.85 ZAL 100.34 ZAP 163.36 ETS 53.60 ZAE 129.32 ETE 168.53 ZAC 62.23 ETC 6.97 CLP-170.69
    PLANE TOCENTRIC CONIC

C3 15.339 VHL 3.916 DLA -31.22 RAL 194.43 RAD 6567.6 VEL 11.693 PTH 2.06 VHP 7.706 DPA 7.05 RAP 206.12 ECC 1.2524

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG

76.28 7 57 50 1180.08 23.12 346.96 59.61 111.56 8 17 30 580.1 25.85 339.11

76.28 7 57 90 1180.08 23.12 346.96 59.61 111.56 13 11 25 5169.7 25.86 265.43

76.28 7 57 90 1180.08 23.12 346.96 59.61 111.58 8 17 30 580.1 25.85 339.11

103.72 11 35 15 5769.73 23.14 273.28 59.61 111.56 13 11 25 5169.7 25.86 265.43

110.00 10 29 4 688.55 14.55 306.61 55.12 121.28 10 40 32 88.5 18.59 299.82

110.00 14 3 12 5309.26 32.30 241.22 62.72 101.85 15 31 42 4709.3 33.59 232.23
   PLANETOCENTRIC CONIC
                                                                                273.28 59.61 111.56 13 11 25
306.61 55.12 121.28 10 40 32
241.22 62.72 101.85 15 31 42
HID-COURSE EXECUTION ACCURACY
SGT 4992.6 SGR 411 4
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                  SCT 4992.6 SGR 411.4 SG3 140.6
RRT - 3481 RRF - 3730 RTF .8675
SGB 3009.5 R23 .0739 R13 - .8676
                                                                                                                                                ST 2105.2 SR 408.1 SS 536.1
CRT -.9947 CRS .9690 CST -.9485
     TDE-1.4279 TRA -.4357 TC3-5.7103 BAU 1.1710
     RDE .2788 RRA .0226 RC3 -.0474 FAU .02952
     FOE -.5759 FRA .3357 FC3-1.6661 B9P 15558
BOE 1.4549 BRA .4363 BC3 5.7105 FSP -444
                                                                                                                                                LSA 2203.9 MSA 167.0 SSA 25.1
                                                                                                                                                ELI 2144.0 EL2 41.0 ALF 169.08
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FLIGHT TIME 158.00

SG1 4994.6 SG2 385.5 THA 178.35

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ARRIVAL DATE JAN 13 1968
                                                                                 FLIGHT TIME 166.00
LAUNCH DATE JUL 31 1967
                                                                                 DISTANCE 493.698
   RL 151.86 LAL -.00 LOL 307.12 VL 25.799 GAL -1.50 A7L 93.22 MCA 247.89 SMA 122.63 ECC .23972 INC 3.2176 V1 29.337 RP 107.88 LAP 2.98 LOP 194.98 VP 37.124 GAP 12.06 AZP 88.79 TAL 184.78 TAP 72.67 RCA 93.23 APO 152.03 V2 35.128 RC 171.722 GL -21.81 GP 13.25 TAL 96.90 ZAP 164.27 ETS 54.61 ZAE 129.48 ETE 168.96 ZAC 59.96 ETC 6.81 CLP-171.45
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                                5.53 RAP 208.08 ECC 1.2498
    C3 15.181 VHL 3.896 DLA -31.59 RAL 198.77 RAD 6567.6 VEL 11.686 PTH
                                                                                                              2.06 VHP 7.834 OPA
    C3 15.181 VHL 3.896 DLA -31.59 RAL 198.77 RAD 6567.6 VEL 11.686 PTH 2.06 VMP 7.834 DPA 5.53 RAP 208.08 ECC 1.236 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.38 8 852 1197.54 23.44 348.42 63.91 111.80 8 28 50 597.5 26.19 340.55 104.62 11 58 53 5747.63 23.46 271.75 63.91 111.80 8 28 50 597.5 26.19 340.55 104.62 11 58 53 5747.63 23.44 348.42 63.91 111.80 8 28 50 597.5 26.19 340.55 104.62 11 58 53 5747.63 23.46 271.75 63.91 111.79 13 34 40 5147.6 26.20 263.89 110.00 10 53 16 663.93 15.42 305.23 59.70 120.89 11 4 20 63.9 19.40 296.37 110.00 14 13 39 5329.23 32.01 242.71 66.91 102.69 15 42 29 4729.2 33.42 233.76
       110.00
                     14 13 39
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5049.3 SGR 422.2 SG3 138.7
RRT -.3566 RRF -.3705 RTF .8711
SGB 5066.9 R23 .0620 R13 -.8713
SGI 5051.5 SG2 394.3 THA 178.28
                                                                                                                                       ST 2154.5 SR 419.4 S5 530.6
CRT -.9975 CRS .9588 CST -.9520
    TOE-1.4601 TRA -.2215 TC3-5.8441 BAU 1.1861
    ROE .2851 RRA .0210 RC3 -.0434 FAU .02811
FOE -.5148 FRA .3853 FC3-1.6028 BSP 15779
BOE 1.4877 BRA .2225 BC3 5.8442 FSP -440
                                                                                                                                       LSA 2252.5 MSA 158.1 SSA 26.6
                                                                                                                                        EL1 2194.8 EL2 29.3 ALF 169.01
                                                                                                                                                    ARRIVAL DATE JAN 15 1968
                                                                                  FLIGHT TIME 168.00
LAUNCH DATE JUL 31 1967
                                                                                 DISTANCE 499.293
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 25.737 GAL -.97 AZL 93.05 MCA 251.11 SMA 122.27 ECC .24258 INC 3.0492 V1 29.337 RP 107.92 LAP 2.88 LOP 198.21 VP 37.070 GAP 12.34 AZP 89.01 TAL 183.02 TAP 74.13 RCA 92.61 APO 151.93 V2 35.116 RC 173.647 GL -20.58 GP 12.71 ZAL 93.32 ZAP 165.12 ETS 55.86 ZAE 129.63 ETE 169.36 ZAC 57.66 ETC 6.70 CLP-172.20
   PLANETOCENTRIC CONIC
                                                                                                                                                 4.08 RAP 210.08 ECC 1.2497
                                                                                                               2.06 VHP 7.972 DPA
    C3 15.171 VHL 3.895 DLA -31.90 RAL 203.26 RAD 6567.6 VEL 11.686 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                            26.45
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                                                                                                                                              612.7
                                      1212.74
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         74.66
                        8 21 52
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                     12 21 40 5732.14
                                                          23.68
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       105.34
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103.49 15 54 35
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                     12 21 40 5732.14
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       105.34
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                      11 17 16
                                        644.13
       110.00
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                      14 25 27 5348.75
                                                        31.71
                                                                         244.15
                                                                                           71.38
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5098.6 SGR 432.2 SG3 136.4

RRT -.3644 RRF -.3692 RTF .8744

SGB 5116.9 R23 .0522 R13 -.8745

SGI 5101.0 SG2 402.3 THA 178.22
                                                                                                                                        ST 2189.5 SR 430.1 SS 521.4
CRT -.9976 CRS .9464 CST -.9545
     TDE-1.4855 TRA .0038 TC3-5.9134 BAU 1.1994
RDE .2923 RRA .0178 RC3 -.0381 FAU .02664
                                                                                                                                        LSA 2286.2 MSA 152.4 SSA 27.8
     FOE -.4904 FRA .4351 FC3-1.5203 BSP 15982
BOE 1.5140 BRA .0182 BC3 5.9155 FSP -435
                                                                                                                                        EL1 2231.2 EL2 29.1 ALF 168.91
                                                                                                                                                    ARRIVAL DATE JAN 17 1968
                                                                                  FLIGHT TIME 170.00
LAUNCH DATE JUL 31 1967
                                                                                DISTANCE 504.863
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 25.676 GAL -.41 AZL 92.89 HCA 254.33 SMA 121.92 ECC .24572 INC 2.8872 V1 29.337 RP 107.96 LAP 2.78 LOP 201.43 VP 37.015 GAP 12.64 AZP 89.22 TAL 181.26 TAP 75.59 RCA 91.96 APO 151.88 V2 35.103 RC 175.555 GL -19.30 GP 12.22 ZAL 89.64 ZAP 165.92 ETS 57.34 ZAE 129.76 ETE 169.71 ZAC 55.35 ETC 6.62 CLP-172.95
   PLANETOCENTRIC CONIC
                                                                                                                                                2.68 RAP 212.12 ECC 1.2521
     C3 15.318 VHL 3.914 DLA -32.12 RAL 207.85 RAD 6567.6 VEL 11.692 PTH 2.06 VHP 8.121 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          26.58 342.82
                                                                                                        112.27 8 57 13
112.26 14 18 47
112.27 8 57 13
                                                                                                                         8 57 13
                                                                                        73.29
                      8 36 48 1225.50
12 43 24 5723.69
                                                          23.77
                                                                         350.68
         74.16
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                                                           23.78
                                                                         270.08
                                                                                           73.30
        105.84
                                                                                                                                             625.5
                                                                                                                                                               26.58
                                                                                                                                                                              342.82
                                                                                           73.29
                      8 36 48 1225.50
12 43 24 5723.69
                                                          23.77
                                                                         350.68
         74.16
                                                                                                          112.26 14 18 47
120.34 11 50 48
104.19 16 8 31
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        105.84
                      12 49 2
11 40 17 631.2.
70 5 5365.92
                                                                                                                                               31.3
                                                                                                                                                               20.46
                                                           16.55
                                                                         303.37
                                                                                            69.49
        110.00
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                                                                                                                                                                              236.56
                                                                                                                                            4765.9
                                                                                           76.13
                                                                         245.41
        110.00
                                                          31.43
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5144.0 SGR 441.1 SG3 134.0
RRT -.3721 RRF -.3690 RTF .8782
SGB 5162.9 R23 .0432 R13 -.8783
SG1 5146.6 SG2 409.2 THA 178.16
                                                                                                                                       ST 2205.1 SR 439.9 SS 508.2
CRT -.9953 CRS .9314 CST -.9560
     TDE-1.5009 TRA .2390 TC3-5.9185 BAU 1.2120
     RDE .3005 RRA .0131 RC3 -.0311 FAU .02522
FDE -.4636 FRA .4838 FC3-1.4255 BSP 16140
                                                                                                                                       LSA 2300.2 MSA 150.1 SSA 28.4
EL1 2248.2 EL2 41.6 ALF 168.77
     BOE 1.5307 BRA .2393 BC3 5.9185 FSP -429
                                                                                                                                                     ARRIVAL DATE JAN 19 1968
                                                                                   FLIGHT TIME 172.00
LAUNCH DATE JUL 31 1967
                                                                                 DISTANCE 510.403
    HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 25.616 GAL .16 A7L 92.73 MCA 257.54 SMA 121.57 ECC .24916 INC 2.7304 V1 29.337
RP 107.99 LAP 2.67 LOP 204.65 VP 36.962 GAP 12.95 A7P 89.41 TAL 179.50 TAP 77.05 RCA 91.28 APO 151.87 V2 35.091
RC 177.448 GL -17.98 GP 11.78 ZAL 85.91 ZAP 166.65 ETS 59.08 ZAE 129.89 ETE 170.02 ZAC 53.02 ETC 6.59 CLP-173.68
    PLANETOCENTRIC CONIC
                                                                                                                                                 1.35 RAP 214.20 ECC 1.2572
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.89 8 53 37 1235.56 23.74 351.44 78.30 112.49 9 14 12 635.6 26.57 343.59
     C3 15.630 VHL 3.954 OLA -32.24 RAL 212.51 RAD 6567.6 VEL 11.705 PTH 2.06 VHP 8.280 DPA
                                                                                                            112.48
                                                                                                                         14-39 7
                                     5722.75
1235.56
5722.75
                                                           23.75
                                                                          269.99
                                                                                            78.31
                      13 3 44
        106.11
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                        8 53 37
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                      13 3 44
12 1 30
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        106.11
                                                                                                            120.28 12 11 58
104.71 16 24 40
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                                                                                            74.58
                                                           16.68
                                                                          303.15
                                         627.41
        110.00
                                                                                                                                              4778.9
                                                                                                                                                               32.91
                                                                                                                                                                              237.55
                      14 55 1
                                       5378.90
                                                           31.21
                                                                          246.36
                                                                                            81.13
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2192.2 SR 447.3 SS 487.0
                                                                              SGT 5168.1 SGR 447.9 SG3 130.7
RRT - .3750 RRF - .3649 RTF .8775
SGB 5187.4 R23 .0363 R13 - .8776
     TDE-1,4995 TRA .4917 TC3-5.8336 BAU 1.2190
                                                                                                                                         CRT -.9904 CRS .9098 CST -.9545
     RDE .3086 RRA .0060 RC3 -.0261 FAU .02343
FDE -.4287 FRA .5378 FC3-1.2980 BSP 16192
BDE 1.5309 BRA .4917 BC3 5.8336 FSP -417
                                                                                                                                        LSA 2284.4 MSA 154.0 SSA 28.4
                                                                                                                                         EL1 2236.5 EL2 60.6 ALF 168.57
                                                                               SG1 5170.8 SG2 415.0 THA 178.13
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FLIGHT TIME 174.00
LAUNCH DATE JUL 31 1967
                                                                                                                                        ARRIVAL DATE JAN 21 1968
                                                                           DISTANCE 515.912
   HELIOCENTRIC CONIC
    RL 131.86 LAL -.00 LOL 307.12 VL 25.557 GAL .76 AZL 92.58 MCA 260.75 SMA 121.24 ECC .25294 INC 2.5775 V1 29.337
RP 108.03 LAP 2.54 LOP 207.87 VP 36.909 GAP 13.28 AZP 89.59 TAL 177.75 TAP 78.50 RCA 90.57 APO 151.90 V2 35.078
RC 179.325 GL -16.63 GP 11.38 ZAL 82.15 ZAP 167.34 ETS 61.09 ZAE 130.00 ETE 170.31 ZAC 50.68 ETC 6.60 CLP-174.42
   PLANETOCENTRIC CONTC
    C3 16.123 VHL 4.015 DLA -32.25 RAL 217.18 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 8.451 DPA .07 RAP 216.30 ECC 1.2653 ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                83.46
                                                                                                112.69
                                                                                                  112.69 9 32 54
112.68 14 57 56
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                    9 12 12 1242.78
13 22 27 5729.59
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        73.66
                                                     23.56
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       106.12
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        73.66
                      9 12 12
                                  1242.78
                                                     23.56
                                                                   351.91
                                                                      0.43 83.46 112.68 14 57 56

13.53 79.69 120.39 12 30 50

6.90 86.35 105.01 16 43 19

MID-COURSE EXECUTION ACCURACY

9CT 5214.2 SCR 454 0 472
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       110.00
                    15 13 33
                                                     31.08
                                                                   246.90
                                                                                                                                 4786.3
                                                                                                                                                 32.82
                                                                                                                                                               238.11
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SCT 5214.2 SCR 455.9 SC3 128.8

RRT -.3862 RRF .3720 RTF .8844

SCB 5234.1 R23 .0306 R13 -.8845

SCI 5217.2 SC2 420.3 THA 178.05
                                                                                                                            ST 2174.8 SR 455.7 SS 473.5
CRT -.9830 CRS .8899 CST -.9558
    TOE-1.4978 TRA .7469 TC3-5.7108 BAU 1.2309
    ROE .3193 RRA -.0015 RC3 -.0160 FAU .02226
    FOE -.4041 FRA .5834 FC3-1.1954 BSP 16373
BDE 1.5314 BRA .7469 BC3 5.7108 FSP -411
                                                                                                                            LSA 2266.1 MSA 159.4 SSA 27.7
                                                                                                                             EL1 2220.5 EL2 82.0 ALF 168.35
LAUNCH DATE JUL 31 1967
                                                                            FLIGHT TIME 176.00
                                                                                                                                        ARRIVAL DATE JAN 23 1968
  HELIOCENTRIC CONIC
                                                                           DISTANCE 521.384
    RL 151.86 LAL -.00 LOL 307.12 VL 25.499 GAL 1.38 AZL 92.43 MCA 263.96 SMA 120.91 ECC .25708 INC 2.4275 V1 29.337 RP 108.07 LAP 2.41 LOP 211.08 VP 36.856 GAP 13.62 AZP 89.74 TAL 176.00 TAP 79.96 RCA 89.82 APO 151.99 V2 35.065 RC 181.185 GL -15.27 GP 11.02 ZAL 78.41 ZAP 167.97 ETS 63.39 ZAE 130.10 ETE 170.56 ZAC 48.33 ETC 6.66 CLP-175.14
   PLANETOCENTRIC CONIC
    C3 16.810 VHL 4.100 DLA -32.13 RAL 221.82 RAD 6567.7 VEL 11.756 PTH
                                                                                                      2.07 VHP 8.634 OPA
                                                                                                                                    -1.17 RAP 218.44 ECC 1.2767
    LNOH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                   352.08
        74.14
                     9 32 23 1247.09
                                                     23.22
                                                                                   88.71
                                                                                                112.86
                                                                                                                9 53 10
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                                                                                                                                                26.12
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       105.46
                   13 39 16 5744.38
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120.69 12 47 6
105.07 17 4 23
                   13 39 16 5744.38
12 36 14 651.69
15 34 35 5387.77
       105.86
                                                     23.24
                                                                   271.41
                                                                                   88.72
                                                                                                                                 5144.4
                                                                                                                                                  26.13
                                                                                                                                                               263.61
                                                                                   84.77
                                                                                                                                   51.7
       110.00
                                                    15.84
                                                                   304.53
                                                                                                                                                 19.40
                                                                                                                                                               297.64
                                                                                                                               4787.8
       110.00
                                                    31.05
                                                                  247.00
                                                                                   91.73
                                                                                                                                                 32.81
                                                                                                                                                               238.22
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5248.6 SGR 461.6 SG3 126.3
RRT -.3942 RRF .3753 RTF .8890
SG8 5268.9 R23 .0246 R13 -.8890
SG1 5251.8 SG2 424.0 THA 178.00
                                                                                                                            ST 2130.2 SR 461.3 SS 453.2
CRT -.9723 CRS .8626 CST -.9547
    TOE-1.4781 TRA 1.0150 TC3-5.5183 BAU 1.2401
    RDE .3300 RRA -.0108 RC3 -.0074 FAU .02093
    FDE -.3724 FRA .6307 FC3-1.0780 BSP 16540
BDE 1.5145 BRA 1.0151 BC3 5.5183 FSP -407
                                                                                                                           LSA 2219.5 MSA 170.3 SSA 26.4
                                                                                                                             EL1 2177.0 EL2 105.5 ALF 168.08
                                                                          FLIGHT TIME 178.00
                                                                                                                                       ARRIVAL DATE JAN 25 1968
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC

RL 151.86 LAL -.00 LOL 307.12 VL 25.441 GAL 2.03 AZL 92.28 HCA 267.17 SMA 120.59 ECC .26161 INC 2.2794 V1 29.337

RP 108.11 LAP 2.28 LOP 214.29 VP 36.804 GAP 13.98 AZP 89.89 TAL 174.25 TAP 81.42 RCA 89.04 APO 152.13 V2 35.052

RC 183.028 GL -13.90 GP 10.69 ZAL 74.71 ZAP 168.54 ETS 66.00 ZAE 130.19 ETE 170.79 ZAC 45.98 ETC 6.77 CLP-175.87
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.712 VHL 4.209 DLA -31.90 RAL 226.38 RAD 6567.7 VEL 11.794 PTH 2.09 VHP 8.831 DPA -2.35 RAP 220.60 ECC 1.2915
    LNCH ATMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                112.99 10 14 54
112.98 15 30 0
112.99 10 14 54
112.98 15 30 0
121.14 13 0 48
104.92 17 27 26
                                                                                                                                             25.66
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        74.66
                     9 54 6 1248.06
                                                     22.74
                                                                  351.94
                                                                                94.02
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       105.34
                   13 53 53
                                  5767.57
                                                     22.76
                                                                  272.95
                                                                                   94.02
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        74.66
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                                  1248.06
                                                     22.74
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                                                                                   94.02
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                                                     31.12
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                                                                                                                                                              237.94
       110.00
  DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SCT 5272.0 SCR 466.0 SC3 123.6
RRT -.4009 RRF -.3786 RTF .8926
SC8 5292.5 R23 .0201 R13 -.8927
SC1 5275.3 SC2 426.6 THA 177.96
                                                                                                                            ST 2064.4 SR 464.8 SS 431.9
CRT -.9575 CRS .8277 CST -.9526
    TDE-1.4419 TRA 1.2991 TC3-5.2598 BAU 1.2455
    RDE .3413 RRA -.0218 RC3 -.0000 FAU .01952
FDE -.3388 FRA .6802 FC3 -.9541 BSP 16590
                                                                                                                            LSA 2151.5 MSA 185.9 SSA 24.9
EL1 2112.0 EL2 131.0 ALF 167.79
    BDE 1.4817 BRA 1.2993 BC3 5.2598 FSP
                                                       - 398
LAUNCH DATE JUL 31 1967
                                                                           FLIGHT TIME 180.00
                                                                                                                                       ARRIVAL DATE JAN 27 1968
                                                                          DISTANCE 532.202
   RL 151.86 LAL -.00 LOL 307.12 VL 25.385 GAL 2.71 AZL 92.13 MCA 270.38 SMA 120.27 ECC .26656 INC 2.1322 V1 29.337 RP 108.16 LAP 2.13 LOP 217.50 VP 36.752 GAP 14.36 AZP 90.01 TAL 172.50 TAP 82.88 RCA 88.21 APO 152.33 V2 35.039 RC 184.853 GL -12.55 GP 10.39 ZAL 71.09 ZAP 169.07 ETS 68.92 ZAE 130.28 ETE 171.00 ZAC 43.62 ETC 6.94 CLP-176.59
  PLANETOCENTRIC CONIC
    C3 18.852 VHL 4.342 OLA -31.55 RAL-230.80 RAD 6567.8 VEL 11.842 PTH 2.10 VMP 9.043 DPA -3.48 RAP 222.78 ECC 1.3103
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.07 15 42 39
113.07 15 42 39
113.07 15 42 39
121.68 13 12 12
104.62 17 51 48
                 10 17 18 1245.29
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        75.47
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                                                     22.12
                                                                  351.44
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       104.53
                   14 5 59
                                  5799.53
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        75.47
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                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5297.9 SGR 469.3 SG3 121.1
RRT -.4087 RRF -.3839 RTF .8973
SGB 5318.7 R23 .0161 R13 -.8974
                                                                                                                          ST 1989.2 SR 466.6 SS 412.1
CRT -.9381 CRS .7875 CST -.9506
LSA 2074.2 MSA 204.4 SSA 23.3
    TOE-1.3960 TRA 1.5921 TC3-4.9660 BAU 1.2516
    ROE .3534 RRA -.0340 RC3 .0073 FAU .01825
FDE -.3063 FRA .7281 FC3 -.8383 BSP 16728
BDE 1.4400 BRA 1.5924 BC3 4.9661 FSP -393
                                                                                                                         ELI 2037.1 EL2 157.8 ALF 167.51
                                                                      SG1 5301.4 SG2 428.1 THA 177.91
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ARRIVAL DATE JAN 29 1968
                                                                                                   FLIGHT TIME 182.00
LAUNCH DATE JUL 31 1967
                                                                                                   DISTANCE 537.537
    HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 25.329 GAL 3.41 A7L 91.99 HCA 273.58 SHA 119.97 ECC .27199 INC 1.9850 V1 29.337 RP 108.20 LAP 1.98 LOP 220.71 VP 36.701 GAP 14.77 AZP 90.12 TAL 170.77 TAP 84.35 RCA 87.34 APO 152.60 V2 35.025 RC 186.660 GL -11.22 GP 10.12 TAL 67.58 ZAP 169.53 ETS 72.17 ZAE 130.35 ETE 171.19 ZAC 41.26 ETC 7.17 CLP-177.32
    PLANETOCENTRIC CONIC
     C3 20.258 VHL 4.501 DLA -31.10 RAL 235.06 RAD 6567.8 VEL 11.901 PTH 2.11 VMP 9.272 DPA -4.57 RAP 224.99 ECC 1.3334 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.13 15 52 35
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           76.58 10 42 1 1238.02
103.42 14 15 14 5840.89
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113.13 15 52 35
122.25 13 21 43
104.24 18 16 49
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         110.00
                                               5367.01
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                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 5317.7 SGR 471.3 SG3 118.5
RRT -.4160 RRF -.3892 RTF .9016
SGB 5338.6 R23 .0129 R13 -.9016
SGI 5321.4 SG2 428.3 THA 177.87
                                                                                                                                                                     ST 1905.0 SR 466.3 SS 393.6
CRT -.9127 CRS .7389 CST -.9483
      TDE-1.3368 TRA 1.8994 TC3-4.6352 BAU 1.2553
     ROE .3659 RRA -.0477 RC3 .0132 FAU .01696
FDE -.2730 FRA .7774 FC3 -.7250 BSP 16840
BDE 1.3859 BRA 1.9000 BC3 4.6352 FSP -386
                                                                                                                                                                    LSA 1987.4 MSA 226.0 SSA 21.7
                                                                                                                                                                     EL1 1952.4 EL2 185.9 ALF 167.29
                                                                                                                                                                                     ARRIVAL DATE JAN 31 1968
                                                                                                    FLIGHT TIME 184.00
LAUNCH DATE JUL 31 1967
                                                                                                   DISTANCE 542.813
   HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 25.275 GAL 4.15 AZL 91.84 MCA 276.78 SMA 119.67 ECC .27792 INC 1.8370 V1 29.337 RP 108.24 LAP 1.82 LOP 223.91 VP 36.651 GAP 15.20 AZP 90.22 TAL 169.05 TAP 85.83 RCA 86.41 APO 152.93 V2 35.012 RC 188.449 GL -9.93 GP 9.87 ZAL 64.20 ZAP 169.93 ETS 75.76 ZAE 130.41 ETE 171.37 ZAC 38.91 ETC 7.47 CLP-178.04
    PLANETOCENTRIC CONIC
                                                                                                                                                                               -5.61 RAP 227.22 ECC 1.3614
      C3 21.963 VHL 4.686 DLA -30.56 RAL 239.12 RAD 6567.9 VEL 11.973 PTH
                                                                                                                                       2.13 VHP 9.518 DPA
     21.963 VIL 4.686 DLA 30.56 AL 23.12 AND 1.57 AND
                          11 8 28 1225.00
14 21 10 604.69
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113.17 11 28 53
113.16 14 31 15
122.80 13 29 44
103.83 18 41 50
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14 21 10 604.69
13 16 15 808.82
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                          17 12 33 5356.91
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                                                                                                            113.91
         110.00
                                                                       31.58
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                                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5333.0 SGR 472.0 SG3 116.0
RRT - .4232 RRF - .3952 RTF .9063
SGB 5353.9 R23 .0102 R13 - .9063
SGI 5336.8 SG2 427.4 THA 177.84
                                                                                                                                                                     ST 1817.9 SR 464.0 SS 377.7
CRT -.8799 CRS .6833 CST -.9469
      TOE-1.2658 TRA 2.2212 TC3-4.2810 BAU 1.2570
      ROE .3789 RRA -. 0627 RC3 .0179 FAU .01573
                                                                                                                                                                     LSA 1897.3 MSA 249.6 SSA
                                                                                                                                                                                                                         20.2
      FOE -.2405 FRA .8273 FC3 -.6200 BSP 16935
                                                                                                                                                                     EL1 1863.8 EL2 215.0 ALF 167.17
      BOE 1.3213 BRA 2.2221 BC3 4.2811 FSP -380
                                                                                                                                                                                    ARRIVAL DATE FEB 2 1968
                                                                                                    FLIGHT TIME 186.00
LAUNCH DATE JUL 31 1967
                                                                                                   DISTANCE 548.023
    HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 25.221 GAL 4.93 AZL 91.69 MCA 279.98 SMA 119.38 ECC .28442 INC 1.6870 V1 29.337 RP 108.28 LAP 1.66 LOP 227.11 VP 36.601 GAP 15.66 AZP 90.29 TAL 167.34 TAP 87.31 RCA 85.42 APO 153.33 V2 34.999 RC 190.221 GL -8.68 GP 9.65 ZAL 60.97 ZAP 170.27 ETS 79.68 ZAE 130.46 ETE 171.53 ZAC 36.55 ETC 7.85 CLP-178.77
    PLANETOCENTRIC CONIC
      C3 24.006 VHL 4.900 DLA -29.95 RAL 242.96 RAD 6568.0 VEL 12.058 PTH 2.16 VHP 9.785 DPA -6.61 RAP 229.47 ECC 1.3951
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                113.16 11 57 22
113.14 14 34 8
113.16 11 57 22
113.14 14 34 8
123.29 13 36 34
103.44 19 6 22
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            79.82 11 37 18 1203.65
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          100.18
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13 22 13 5347.45
                           14 22 59
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                                                                         8.24
          110.00
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                                                                                                              119.37
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                                                                                         244.05
                                                                       31.73
          110.00
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 1731.3 SR 459.5 SS 364.4

CRT -.8379 CRS .6186 CST -.9459

LSA 1807.1 MSA 274.8 SSA 18.9
                                                                                              SGT 5341.7 SGR 471.1 SG3 113.6
RRT -,4296 RRF -,4008 RTF .,9107
SGB 5362.4 R23 .0079 R13 -,9107
SGI 5345.5 SG2 425.1 THA 177.82
      TOF-1.1814 TRA 2.5613 TC3-3.9094 BAU 1.2547
      ROE .3920 RRA -.0791 RC3 .0210 FAU .01447
FOE -.2073 FRA .8795 FC3 -.5218 BSP 16941
                                                                                                                                                                     EL1 1774.4 EL2 244.7 ALF 167.21
      BOE 1.2448 BRA 2.5625 BC3 3.9095 FSP -372
                                                                                                                                                                                      ARRIVAL DATE FEB 4 1968
                                                                                                     FLIGHT TIME 188.00
 LAUNCH DATE JUL 31 1967
                                                                                                    DISTANCE 553.156
    HERIOCENTRIC CONIC
      RL 151.86 LAL -.00 LOL 307.12 VL 25.169 GAL 5.75 AZL 91.53 MCA 283.17 SMA 119.09 ECC .29154 INC 1.5342 V1 29.337 RP 108.32 LAP 1.49 LOP 230.30 VP 36.553 GAP 16.16 AZP 90.35 TAL 165.64 TAP 88.82 RCA 84.37 APO 153.82 V2 34.986 RC 191.975 GL -7.49 GP 9.44 ZAL 57.91 ZAP 170.55 ETS 83.91 ZAE 130.49 ETE 171.68 ZAC 34.21 ETC 8.33 CLP-179.51
     PLANETOCENTRIC CONIC
      C3 26.435 VHL 5.142 DLA -29.29 RAL 246.57 RAD 6568.1 VEL 12.158 PTH 2.18 VHP 10.074 DPA -7.55 RAP 231.73 ECC 1.4351
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                113.11 12 29 40
113.10 14 31 26
116.59 13 59 40
109.69 17 3 30
123.69 13 42 28
103.11 19 30 4
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          110.00
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                                                                                                MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 1654.8 SR 453.5-SS 355.0
CRT -.7875 CRS .5514 CST -.9472
LSA 1726.4 MSA 299.0 SSA 17.7
                                                                                               SCT 5348.4 SGR 469.0 SG3 111.2
RRT -.4363 RRF -.4075 RTF .9156
SGB 5368.9 R23 .0061 R13 -.9156
       TDE-1.0912 TRA 2.9144 TC3-3.5413 BAU 1.2516
      RDE .4056 RRA -.0964 RC3 .0231 FAU .01329
FDE -.1763 FRA .9319 FC3 -.4354 BSP 17021
BDE 1.1641 BRA 2.9160 BC3 3.5414 FSP -366
                                                                                                                                                                   EL1 1694.0 EL2 273.1 ALF 167.49
                                                                                               SG1 5352.3 SG2 421.7 THA 177.79
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FLIGHT TIME 190.00
                                                                                                                                                                 ARRIVAL DATE FEB 6 1968
  AUNCH DATE JUL 31 1967
                                                                                         OISTANCE 558.200
    HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 25.117 GAL 6.62 AZL 91.38 MCA 286.37 SMA 118.82 ECC .29936 INC 1.3774 V1 29.337 RP 108.36 LAP 1.32 LOP 233.49 VP 36.505 GAP 16.69 AZP 90.39 TAL 163.97 TAP 90.34 RCA 83.25 APO 154.39 V2 34.973 RC 193.712 GL -6.36 GP 9.25 ZAL 55.01 ZAP 170.74 ETS 88.41 ZAE 130.52 ETE 171.82 ZAC 31.88 ETC 8.92 CLP 179.74
    PLANETOCENTRIC CONIC
     C3. 29.309 VHL 5.414 DLA -28.58 RAL 249.94 RAD 6568.2 VEL 12.275 PTH 2.21 VHP 10.389 OPA -8.45 RAP 234.01 ECC 1.4824 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             124.79
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         85.93
                       12 53 53 1096.45
14 2 6 875.50
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113.02 14 16 42
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108.26 17 39 43
123.98 13 47 36
102.87 19 52 42
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13 31 22 974.40
        100,00
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129.96
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   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                    SCT 5351.4 SCR 465.6 SC3 108.9

RRT -.4428 RRF -.4142 RTF .9205

SCB 5371.6 R23 .0046 R13 -.9205

SCI 5355.3 SC2 417.1 THA 177.78
                                                                                                                                                   ST 1589.8 SR 445.7 SS 349.1
CRT -.7280 CRS .4813 CST -.9502
     TOE -.9933 TRA 3.2859 TC3-3.1790 BAU 1.2457
     ROE .4193 RRA -.1147 RC3 .0240 FAU .01215
FDE -.1461 FRA .9864 FC3 -.3588 BSP 17079
BDE 1.0782 BRA 3.2879 BC3 3.1791 FSP -359
                                                                                                                                                   LSA 1656.6 MSA 321.5 SSA 16.7
                                                                                                                                                    EL1 1623.7 EL2 299.2 ALF 168.05
                                                                                         FLIGHT TIME 192.00
                                                                                                                                                                  ARRIVAL DATE FEB 8 1968
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 563.141
    RL 151.86 LAL -.00 LOL 307.12 VL 25.066 GAL 7.54 AZL 91.22 MCA 289.56 SMA 118.55 ECC .30796 INC 1.2155 V1 29.337
RP 108.40 LAP 1.15 LOP 236.68 VP 36.457 GAP 17.27 AZP 90.41 TAL 162.32 TAP 91.88 RCA 82.04 APO 155.06 V2 34.960
RC 195.431 GL -5.29 GP 9.08 ZAL 52.29 ZAP 170.87 ETS 93.15 ZAE 130.52 ETE 171.95 ZAC 29.57 ETC 9.64 CLP 178.99
   PLANETOCENTRIC CONIC
     C3 32.697 VHL 5.718 OLA -27.86 RAL 253.08 RAD 6568.3 VEL 12.412 PTH
                                                                                                                          2.24 VHP 10.732 DPA
                                                                                                                                                             -9.31 RAP 236.29 ECC 1.5381
    C3 32.697 WHL 5.718 DLA -27.86 RAL 253.08 RAD 6568.3 VEL 12.412 PTH 2.24 VMP 10.732 DPA -9.31 RAP 236.29 ECC_1.5381
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 55 45 1158.95 12.41 340.50 127.75 115.66 13 15 4 558.9 15.77 333.43
90.00 14 25 16 867.95 20.22 322.72 131.19 110.26 14 39 44 268.0 22.79 315.00
100.00 13 29 28 1049.94 8.14 330.27 125.51 118.86 13 46 58 449.9 11.93 323.53
100.00 16 34 14 5740.24 24.77 271.71 132.86 107.30 18 9 54 5140.2 26.90 263.56
110.00 13 34 54 1032.86 1.76 325.06 121.59 124.14 13 52 7 432.9 6.22 318.82
110.00 18 45 17 5330.08 32.00 242.77 135.07 102.72 20 14 7 4730.1 33.42 233.83
DIFFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5347.6 SGR 460.6 SG3 106.6
RRT -.4488 RRF -.4210 RTF .9256
SGB 5367.4 R23 .0034 R13 -.9256
SGI 5351.6 SG2 411.3 THA 177.77
                                                                                                                                                  ST 1537.1 SR 436.5 SS 346.5
CRT -.6603 CRS .4111 CST -.9551
     TOE -.8875 TRA 3.6762 TC3-2.8263 BAU 1.2355
    ROE .4332 RRA -.1338 RC3 .0237 FAU .01102
FOE -.1171 FRA 1,0452 FC3 -.2917 8SP 17133
                                                                                                                                                   LSA 1599.0 MSA 340.9 SSA 15.7
    BOE .9876 BRA 3.6787 BC3 2.8264 FSP -353
                                                                                                                                                   EL1 1565.1 EL2 321.9 ALF 168.90
                                                                                                                                                                ARRIVAL DATE FEB 10 1968
                                                                                         FLIGHT TIME 194.00
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 567.961
    RL 151.86 LAL -.00 LOL 307.12 VL 25.017 GAL 8.32 ATL 91.05 MCA 292.75 SMA 118.29 ECC .31742 INC 1.0472 VI 29.337 RP 108.44 LAP .97 LOP 239.87 VP 36.411 GAP 17.90 AZP 90.41 TAL 160.70 TAP 93.45 RCA 80.74 APO 155.83 VZ 34.947 RC 197.134 GL -4.28 GP 8.92 ZAL 49.75 ZAP 170.91 ETS 98.06 ZAE 130.50 ETE 172.08 ZAC 27.28 ETC 10.52 CLP 178.22
   PLANETOCENTRIC CONIC
     C3 36.683 VHL 6.057 OLA -27.12 RAL 255.98 RAD 6568.4 VEL 12.572 PTH 2.28 VHP_11.106 OPA -10.11 RAP 238.59 ECC 1.6037
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 39 53 1278.29 8.80 347.41 131.18 117.02 13 1 11 678.3 12.36 340.54 90.00 15 4 17 806.69 21.61 318.77 136.76 108.76 15 17 44 206.7 23.97 310.89
                                                                                                                  117.02 13 1 11
108.76 15 17 44
119.43 13 44 32
106.62 18 36 28
124.18 13 56 6
102.68 20 34 15
                                      1130.28
5717.97
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                                                                                                129.38
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        100.00
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                                                                5.47
                     17 1 10
                                                              25.21
                                                                               270.20
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                                                                                             125.67
                       13 37 54 1091.93
19 5 26 5329.08
        110.00
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                     19 5 26
                                                                               242.70
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                                                                                                                                                                                            233.75
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5340.2 SGR 454.2 SG3 104.5
RRT -.4542 RRF -.4274 RTF ..9308
SGB 5359.4 R23 ..0024 R13 -.9308
SGI 5344.2 SGZ 404.4 THA 177.77
                                                                                                                                                  ST 1498.0 SR 425.7 SS 347.2
CRT -.5851 CRS .3414 CST -.9611
     TOE -. 7725 TRA 4.0910 TC3-2.4871 BAU 1.2198
    RDE .4470 RRA -.1538 RC3 .0224 FAU .00986
FDE -.0883 FRA 1.1037 FC3 -.2327 BSP 17100
                                                                                                                                                   LSA 1555.2 MSA 356.2 SSA 14.9
EL1 1519.6 EL2 340.3 ALF 170.06
     BOE .8925 BRA 4.0939 BC3 2.4872 FSP -344
LAUNCH DATE JUL 31 1967
                                                                                         FLIGHT TIME 196.00
                                                                                                                                                                 ARRIVAL DATE FEB #2 1968
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 572.639
    RL 151.86 LAL -.00 LOL 307.12 VL 24.968 GAL 9.56 AZL 90.87 MCA 295.93 SMA 118.03 ECC .32785 INC .8711 V1 29.337
RP 108.48 LAP .78 LOP 243.06 VP 36.366 GAP 18.59 AZP 90.38 TAL 159.12 TAP 95.05 RCA 79.33 APO 156.75 V2 34.935
RC 198.819 GL -3.34 GP 8.77 ZAL 47.38 ZAP 170.86 ETS 103.07 ZAE 130.46 ETE 172.20 ZAC 25.01 ETC 11.60 CLP 177.43
   PLANETOCENTRIC CONIC
    C3 41.372 VHL 6.432 OLA -26.38 RAL 258.66 RAD 6568.6 VEL 12.757 PTH 2.32 VHP 11.517 DPA -10.87 RAP 240.88 ECC 1.6809
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 30 59 1373.90 5.81 352.84 134.77 117.76 12 53 53 773.9 9.48 346.08
         90.00
                       15 34 31
                                           771.85
                                                              22.35
                                                                               316.49
                                                                                                141.91
                                                                                                                     107.85
                                                                                                                                  15 47 23
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106.16 19 0 17
124.08 13 59 38
102.75 20 53 5
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                     13 22 57 1206.07
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        100.00
                                                                2.93
                                        5702.95
                                                              25.50
                                                                               269.18
                                                                                                142.96
                                                                                                                                                         5103.0
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        100.00
                        17 25 14
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                       13 40 27
                                       1151.17
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                                                                               242.81
        110.00
                       19 24 14 5330.62
                                                              31.99
                                                                                                 144.87
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                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5328.9 SCR 446.5 SC3 102.4
RRT -.4594 RRF -.4340 RTF .9362
SCB 5347.5 R23 .0018 R13 -.9362
                                                                                                                                                  ST 1473.5 SR 414.0 SS 350.5

CRT -.5086 CRS .2789 CST -.9678

LSA 1526.9 MSA 365.6 SSA 14.1
     TOE -.6563 TRA 4.5255 TC3-2.1720 BAU 1.2014
    ROE .4611 RRA -.1741 RC3 .0206 FAU .00878
FDE -.0618 FRA 1.1661 FC3 -.1837 BSP 17145
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SG1 5332.8 SG2 396.3 THA 177.78

ELI 1489.3 EL2 352.6 ALF 171.38

BOE .8020 BRA 4.5288 BC3 2.1721 FSP -339

ARRIVAL DATE FEB 14 1968 LAUNCH DATE JUL 31 1967 FLIGHT TIME 198.00 DISTANCE 577.148 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 24.921 GAL 10.68 A7L 90.69 MCA 299.11 SMA 117.78 ECC .33939 INC .6851 V1 29.337
RP 108.51 LAP .60 LOP 246.24 VP 36.322 GAP 19.34 AZP 90.33 TAL 157.59 TAP 96.70 RCA 77.81 APO 157.76 V2 34.923
RC 200.487 GL -2.45 GP 8.64 ZAL 45.19 ZAP 170.73 ETS 108.10 ZAE 130.39 ETE 172.32 ZAC 22.78 ETC 12.92 CLP 176.62 PLANETOCENTRIC CONIC 2.37 VHP 11.970 DPA -11.58 RAP 243.17 ECC 1.7717 C3 45.892 VHL 5.848 DLA -25.65 RAL 261.11 RAD 6568.8 VEL 12.971 PTH C3 46.892 VHL 6.848 OLA -25.65 RAL 261.11 RAD 6568.8 VEL 12.971 PTH 2.57 VHP 11.970 UPA -11.58 RAP 243.17 ECC 14.77 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 0 12 749.69 22.81 315.02 146.79 107.25 16 12 42 149.7 24.96 307.01 100.00 13 20 50 1278.48 .47 342.90 136.93 119.89 13 42 8 678.5 4.45 336.37 100.00 17 46 57 5693.57 25.67 268.54 147.73 105.86 19 21 51 5093.6 27.60 260.27 110.00 13 42 35 1210.22 -5.01 334.32 133.52 123.86 14 2 45 610.2 -5.53 328.10 110.00 19 41 41 5334.59 31.93 243.11 149.56 102.91 21 10 36 4734.6 33.37 234.17 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5313.2 SGR 437.3 SG3 100.3 RRT -.4636 RRF -.4402 RTF .9417 SGB 5331.2 R23 .0013 R13 -.9417 SGI 5317.1 SG2 367.1 THA 177.80 ST 1460.6 SR 401.2 SS 356.3 CRT -.4317 CRS .2212 CST -.9744 TDE -.5341 TRA 4.9862 TC3-1.8776 BAU 1.1771 ROE .4751 RRA -.1946 RC3 .0182 FAU .00770 FOE -.0360 FRA 1.2324 FC3 -.1421 BSP 17163 BOE .7148 BRA 4.9900 BC3 1.8777 FSP -333 LSA 1511.4 MSA 369.6 SSA 13.4 EL1 1471.5 EL2 359.2 ALF 172.81 ARRIVAL DATE FEB 16 1968 FLIGHT TIME 200.00 LAUNCH DATE JUL 31 1967 HELIOCENTRIC CONIC **DISTANCE 581.454** RL 151.86 LAL -.00 LOL 307.12 VL 24.875 GAL 11.88 AZL 90.49 MCA 302.29 SHA 117.54 ECC .35217 INC .4876 V1 29.337 RP 108.55 LAP .41 LOP 249.42 VP 36.279 GAP 20.17 AZP 90.26 TAL 156.11 TAP 98.40 RCA 76.15 APO 158.94 V2 34.911 RC 202.138 GL -1.62 GP 8.52 ZAL 43.17 ZAP 170.51 ETS 113.07 ZAE 130.29 ETE 172.44 ZAC 20.60 ETC 14.56 CLP 175.79 PLANETOCENTRIC CONIC C3 53.404 VHL 7.308 OLA -24.93 RAL 263.35 RAD 6568.9 VEL 13.220 PTH 2.41 VHP 12.470 OPA -12.24 RAP 245.45 ECC 1.8789 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.31 12 45 54 106.87 16 34 58 119.84 13 41 31 105.71 19 41 26 123.50 14 5 29 103.17 21 26 50 937.9 355.38 12 20 17 1537.86 2.02 141.95 4,33 . 55 90.00 306.05 735.72 23.09 314.09 151.45 135.7 25.18 90.00 16 22 43 340.20 13 19 3 140.60 748.1 2.10 1348.09 -1.89 346.72 100.00 18 6 37 5688.76 13 44 20 1268.78 259.93 5088.8 27.67 100.00 25.76 268.21 152.31 -2.77 331.16 -7.22 337.41 137.30 668.8 110.00 154.09 4740.8 33.32 234.65 19 57 49 31.83 243.57 110.00 5340.84 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 5293.7 SGR 426.7 SG3 98.3 RRT -.4675 RRF -.4459 RTF ..9473 SGB 5310.9 R23 .0009 R13 -.9473 SGI 5297.5 SG2 377.0 THA 177.83 ST 1457.6 SR 387.4 SS 364.3 CRT -.3573 CRS .1695 CST -.9804 TDE -.4073 TRA 5.4762 TC3-1.6052 BAU 1.1461 RDE .4890 RRA -.2152 RC3 .0154 FAU .00660 FDE -.0111 FRA 1.3033 FC3 -.1070 89P 17161 BDE .6364 BRA 5.4804 BC3 1.6053 FSP -326 LSA 1507.2 MSA 368.3 SSA 12.7 EL1 1464.5 EL2 360.1 ALF 174.22 ARRIVAL DATE FEB 18 1968 FLIGHT TIME 202.00 LAUNCH DATE JUL 31 1967 DISTANCE 585.518 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 24.830 GAL 13.18 AZL 90.28 MCA 305.47 SMA 117.31 ECC .36637 INC .2755 V1 29.337 RP 108.59 LAP .22 LOP 252.60 VP 36.237 GAP 21.08 AZP 90.16 TAL 154.69 TAP 100.17 RCA 74.33 APO 160.29 V2 34.899 RC 203.771 GL -.85 GP 8.40 ZAL 41.33 ZAP 170.19 ETS 117.93 ZAE 130.16 ETE 172.56 ZAC 18.47 ETC 16.59 CLP 174.92 PLANETOCENTRIC CONIC C3 61.107 VML 7,817 DLA -24.23 RAL 265.39 RAD 6569.1 VEL 13.508 PTH 2.47 VMP 13.024 DPA -12.85 RAP 247.71 ECC 2.0057 C3 61.107 VML 7,817 OLA -24.23 RAL 265.39 RAD 6569.1 VEL 13.508 PTM 2.47 VMP 13.024 DPA -12.85 RAP 247.71 ECC 2.0057
LNCM AZMTM LNCM TIME L-F TIME INJLAT INJLONG INJRT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 16 32 1611.92 -1.84 6.15 145.46 118.26 12 43 24 1011.9 1.95 359.52 90.00 16 42 42 727.73 23.24 313.56 155.89 106.64 16 54 50 127.7 25.31 305.49 100.00 13 17 29 1415.20 -4.16 350.41 144.18 119.63 13 41 4 815.2 -.18 343.88 100.00 18 24 27 5687.74 25.78 268.14 156.70 105.68 19 59 14 5087.7 27.68 259.85 110.00 13 45 44 1326.58 -9.38 340.50 140.97 123.02 14 751 726.6 -4.97 334.19 110.00 20 12 40 5349.13 31.70 244.18 158.46 103.51 21 41 50 4749.1 33.23 235.29 DISSERBETIAL CORRECTIONS ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5271.0 SCR 414.7 SC3 96.4 RRT -.4701 RRF -.4507 RTF .9527 SCB 5287.3 R23 .0007 R13 -.9527 SCI 5274.6 SC2 365.7 THA 177.87 ST 1462.3 SR 372.8 SS 374.7 TOE -.2730 TRA 6.0015 TC3-1.3531 BAU 1.1054 CRT -.2861 CRS .1219 CST -.9854 LSA 1512.0 MSA 362.5 SSA 12.1 EL1 1466.4 EL2 356.2 ALF 175.57 RDE .5027 RRA -.2355 RC3 .0124 FAU .00544 FOE .0139 FRA 1.3801 FC3 -.0771 BSP 17076 BOE .5721 BRA 6.0061 BC3 1.3531 FSP -318 ARRIVAL DATE FEB 20 1968 LAUNCH DATE JUL 31 1967 FLIGHT TIME 204,00 DISTANCE 589.287 HELIOCENTRIC CONIC RL 151.86 LAL -.00 LOL 307.12 VL 24.786 GAL 14.59 A7L 90.05 MCA 308.65 SMA 117.09 ECC .38219 INC .0442 V1 29.337
RP 108.62 LAP .04 LOP 255.77 VP 36.196 GAP 22.10 A7P 90.03 TAL 153.36 TAP 102.01 RCA 72.34 APO 161.84 V2 34.888
RC 205.386 GL -.13 GP 8.30 ZAL 39.66 ZAP 169.78 ETS 122.62 ZAE 129.98 ETE 172.68 ZAC 16.42 ETC 19.16 CLP 174.01 PLANETOCENTRIC CONIC C3 TO 254 VHL 8.382 DLA -23.55 RAL 267.23 RAD 6569.4 VEL 13.842 PTH 2.53 VHP 13.641 DPA -13.41 RAP 249.95 ECC 2.1562 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.04 12 41 23 106.55 17 12 38 119.28 13 40 40 105.75 20 15 25 122.42 14 9 51 103.92 21 55 36 148.88 1082.2 90.00 12 13 20 1682.19 -4.10 10.08 124.3 25.36 90.00 17 0 34 724.33 23.31 313.33 160.13 -2.37 879.9 13 16 0 1479.93 -6.32 354.00 147.66 27.65 18 40 35 5689.87 25.74 268.28 160.90 5089.9 100.00 -7.11 337.18 1303.35 783.3 13 46 48 -11.47 343.57 144.55 110.00 33.13 4759.2 20 26 17 5359.22 110.00 31.54 244.92 162.65 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1471.4 SR 357.7 SS 386.6 CRT -.2224 CRS .0820 CST -.9894 SGT 5243.2 SGR 401.3 SG3 94.5 RRT -.4717 RRF -.4545 RTF .9582 SGB 5258.6 R23 .0006 R13 -.9582 SGI 5246.7 SG2 353.6 THA 177.92 TOE -.1381 TRA 6.5590 TC3-1.1256 BAU 1.0572 ROE .5166 RRA -.2549 RC3 .0093 FAU .00428 FOE .0374 FRA 1.4618 FC3 -.0528 BSP 17072 BOE .5347 BRA 6.5639 BC3 1.1256 FSP -313 LSA 1522.4 MSA 353.0 SSA 11.5 ELI 1473.7 EL2 348.2 ALF 176.72

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FLIGHT TIME 206.00
LAUNCH DATE JUL 31 1967
                                                                                                                                       ARRIVAL DATE FEB 22 1968
                                                                           DISTANCE 592.694
  HELIOCENTRIC CONIC
    RL 151.86 LAL -.QD LOL 307.12 VL 24.744 GAL 16.13 AZL 89.80 MCA 311.82 SNA 116.87 ECC .39988 INC .2031 V1 29.337 RP 108.65 LAP -.15 LOP 258.94 VP 36.158 GAP 23.24 AZP 89.86 TAL 152.12 TAP 103.94 RCA 70.14 APO 163.61 V2 34.678 RC 206.983 GL .54 GP 8.20 ZAL 38.17 ZAP 169.27 ETS 127.11 ZAE 129.74 ETE 172.80 ZAC 14.45 ETC 22.41 CLP 173.05
   PLANETOCENTRIC CONIC
    C3 81.169 VHL 9.009 DLA -22.90 RAL 268.87 RAD 6569.6 VEL 14.231 PTH
                                                                                                     2.59 VMP 14.332 DPA -13.92 RAP 252.15 ECC 2.3358
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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121.71 14 11 30
104.39 22 8 11
                                                     -6.23
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                   12 10 27 1749.05
        90.00
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                                                     23.31
                                                                   313.35
                                                                                  164.15
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        90.00
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                                  724.55
                                                                   357.48
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                  13 14 31 1542.29
18 55 10 5694.59
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      100.00
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      100.00
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                   13 47 31 1438.83
20 38 40 5370.82
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      110.00
                                                  -13.46
                                                                   346.61
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                                                  31.35
                                                                  245.77
                                                                                  166.66
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                      RIT - 4718 RRF - 4569 RTF . 9635
SGB 5226.0 R23 .0005 R13 - 9635
SGI 5214.9 SGZ 340.6 THA 177.99
                                                                                                                           ST 1483.3 SR 342.0 SS 400.6
CRT -.1648 CRS .0468 CST -.9926
    TOE .0012 TRA 7.1578 TC3 -.9190 BAU .9973
   RDE .5304 RRA -.2731 RC3 .0064 FAU .00304
FOE .0606 FRA 1.5508 FC3 -.0325 BSP 17047
                                                                                                                            LSA 1536.7 MSA 340.6 SSA 10.9
    BOE .5304 BRA 7.1630 BC3 .9191 FSP -307
                                                                                                                            EL1 1484.4 EL2 337.1 ALF 177.71
                                                                                                                                       ARRIVAL DATE FEB 24 1968
                                                                           FLIGHT TIME 208.00
LAUNCH DATE JUL 31 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 595.655
   RL 151.86 LAL -.00 LOL 307.12 VL 24.704 GAL 17.82 AZL 89.52 MCA 314.99 SMA 116.67 ECC .41969 INC .4793 VI 29.337
RP 108.69 LAP -.34 LOP 262.12 VP 36.120 GAP 24.52 AZP 89.66 TAL 151.00 TAP 105.99 RCA 67.70 APO 165.64 VZ 34.867
RC 208.560 GL 1.16 GP 8.10 ZAL 36.85 ZAP 168.65 ETS 131.37 ZAE 129.45 ETE 172.94 ZAC 12.61 ETC 26.61 CLP 172.03
  PLANETOCENTRIC CONIC
                                                                                                      2.66 VHP 15.108 DPA -14.39 RAP 254.30 ECC 2.5514
    C3 94.266 VHL 9.709 DLA -22.28 RAL 270.32 RAD 6569.8 VEL 14.684 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 7 44 1812.75 -8.23 17.45 155.39 117.19 12 37 56 1212.7 -4.52 10.73
                  12 7 44 1812.73
                    17 30 49
                                                                                                              17 42 56
                                   727.63
                                                     23.25
                                                                   313.55
                                                                                  167.95
                                                                                                  106.64
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                                                                                                                                                                305.49
       90.00
                  17 30 49 727.63
13 12 57 1602.24
19 8 17 5701.42
13 47 52 1492.75
20 49 51 5383.64
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106.11 20 43 18
120.91 14 12 44
104.90 22 19 35
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                                                                                  154.27
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      100.00
                                                    -10.33
                                                                      .86
                                                                                                                                                 27.49
                                                                                                                                5101.4
                                                                                                                                                               260.82
      100.00
                                                   25.53
                                                                   269.07
                                                                                  168.68
                                                    -15.39
                                                                   349.63
                                                                                  151.33
                                                                                                                                 892.8
                                                                                                                                               -11.18
                                                                                                                                                               343.05
      110.00
                                                                   246.70
                                                                                  170.45
                                                                                                                                4783.6
                                                                                                                                                32.86
                                                                                                                                                               237.91
                                                   31.13
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   TDE .1445 TRA 7.8030 TC3 -.7324 BAU .9230 ROE .5442 RRA -.2894 RC3 .0036 FAU .00169
                                                                      SGT 5176.3 SGR 370.5 SG3 90.9
RRT -.4699 RRF -.4574 RTF .9686
                                                                                                                           ST 1495.9 SR 325.9 SS 416.6
CRT -.1134 CRS .0157 CST -.9949
LSA 1552.7 MSA 326.3 SSA 10.3
    FOE .0835 FRA 1.6481 FC3 -.0155 BSP 17003
BDE .5631 BRA 7.8084 BC3 .7324 FSP -301
                                                                      SG8 5189.5 R23 .0006 R13 -.9686
SG1 5179.2 SG2 326.9 THA 178.07
                                                                                                                           EL1 1496.4 EL2 323.7 ALF 178.52
                                                                                                                                       ARRIVAL DATE FER 26 1968
                                                                          FLIGHT TIME 210.00
LAUNCH DATE JUL 31 1967
                                                                          DISTANCE 598.062
  HELTOCENTRIC CONTC
   RL 151.86 LAL -.00 LOL 307.12 VL 24.666 GAL 19.69 AZL 89.21 HCA 318.16 SMA 116.48 ECC .44198 INC .7879 V1 29.337
RP 108.72 LAP -.53 LOP 265.29 VP 36.085 GAP 25.97 AZP 89.41 TAL 150.02 TAP 108.18 RCA 65.00 APO 167.96 V2 34.858
RC 210.118 GL 1.74 GP 8.02 ZAL 35.71 ZAP 167.92 ETS 135.40 ZAE 129.07 ETE 173.08 ZAC 10.92 ETC 32.03 CLP 170.94
  PLANETOCENTRIC CONIC
    C3 110.083 VHL 10.492 DLA =21.69 RAL 271.56 RAD 6570.1 VEL 15.213 PTH 2.73 VHP 15.985 DPA -14.81 RAP 256.39 ECC 2.8117
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              116.60 12 36 15
106.79 17 55 41
117.52 13 38 54
106.37 20 55 7
120.01 14 13 34
105.44 22 29 48
                                                                                                                            1273.3 -6.44
133.0 25.22
                                                                              158.43
                   12 5 2 1873.25
                                                    -10.09
                                                                   20.92
        90.00
                                  732.96
1659.58
                                                                                                                                                              305.86
                                                                                 171.50
        90.00
                  17 43 28
                                                    23.14
                                                                  313.91
                                                                                                                                                -8.38
                                                                                                                                1059.6
                                                                                157.36
                   13 11 14
                                                    -12.16
                                                                    4.14
       100.00
                                                                                                                                5109.9
                                                                                                                                                27.36
                                                                                                                                                              261.42
                   19 19 57
                                 5709.91
                                                   25.36
                                                                  269.65
                                                                                172.22
                    13 47 50 1544.87
20 59 50 5397.38
                                                                                                                                944.9
                                                                                                                                              -13.07
                   13 47 50
                                                    -17.19
                                                                  352.59
                                                                                 154.51
                                                                                                                                4797.4
                                                                                  174.01
                                                                                                                                                 32.69
                                                  30.88
                                                                  247.70
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 5138.1 SGR 353.1 SG3 89.3
RRT -.4654 RRF -.4552 RTF .9733
SGB 5150.2 R23 .0006 R13 -.9734
SG1 5140.8 SG2 312.3 THA 178.16
   TOE .2949 TRA 8.5036 TC3 -.5635 BAU .8294
RDE .5581 RRA -.3033 RC3 .0010 FAU .00013
FDE .1072 FRA 1.7558 FC3 -.0010 BSP 16874
BDE .6312 BRA 8.5090 BC3 .5635 FSP -294
                                                                                                                            ST 1508.3 SR 309.4 SS 435.1
                                                                                                                            CRT -. 0666 CRS -. 0131 CST -. 9965
                                                                                                                          LSA 1569.6 MSA 310.6 SSA
                                                                                                                                                                   9.7
                                                                                                                            EL1 1508.5 EL2 308.7 ALF 179.18
                                                                                                                                       ARRIVAL DATE FEB 28 1968
LAUNCH DATE JUL 31 1967
                                                                           FLIGHT TIME 212.00
                                                                           DISTANCE 599.770
   RL 151.86 LAL -.00 LOL 307.12 VL 24.631 GAL 21.77 A7L 88.86 MCA 321.33 SMA 116.30 ECC .46712 INC 1.1369 V1 29.337
RP 108.74 LAP -.71 LOP 268.45 VP 36.052 GAP 27.62 AZP 89.11 TAL 149.21 TAP 110.54 RCA 61.97 APO 170.62 V2 34.848
RC 211.656 GL 2.29 GP 7.93 ZAL 34.76 ZAP 167.07 ETS 139.20 ZAE 128.61 ETE 173.24 ZAC 9.43 ETC 39.06 CLP 169.76
   PLANETOCENTRIC CONIC
    C3 129.327 VHL 11.372 DLA -21.13 RAL 272.61 RAD 6570.4 VEL 15.832 PTH 2.80 VHP 16.981 DPA -15.18 RAP 258.40 ECC 3.1284
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                115.92 12 34 26
106.98 18 6 54
                                                                               161.30
                                                                                                                               1330.6
                                1930.59
                                                                   24.25
        90.00 12 2 15
                                                    -11.82
                                                                                                                                 140.0
                                                                                                                                                25.11
                                                                                 174.7A
        90.00
                   17 54 34
                                   740.01
                                                    23.00
                                                                  314.38
                                                                                                  116.75 13 37 52
106.67 21 5 32
                                                                                                                                              -10.15
                                                                                                                                1114.2
                                                                                160.27
                  13 9 18
                                 1714.22
                                                    -13.85
                                                                     7.31
       100.00
                                                                                                                                5119.7
                                                                                                                                               27.22
                   19 30 12
                                  5719.66
                                                   25.18
                                                                  270.32
                                                                                  175.50
       100.00
                                                                                                  119.05 14 13 57
106.00 22 38 49
                                                                                                                                               -14.85
32.50
                                                                                                                                 994.9
                                                                                                                                                               348.69
                                 1594.89
5411.74
                                                   -18.87
                                                                  355.50
                                                                                 157.51
                    13 47 22
       110.00
                                                                                                                              4811.7
                                                                  248.73
                                                                                  177.30
       110.00
                    21 8 37
                                                    30.62
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
SGT 5094.3 SGR 334.4 SG3 87.7
RRT -.4577 RRF -.4497 RTF .9778
SGB 5105.3 R23 .0007 R13 -.9778
SGI 5096.6 SG2 297.2 THA 178.27
    TDE .4444 TRA 9.2593 TC3 -.4142 BAU .7161
                                                                                                                            ST 1517.3 SR 292.8 SS 455.6
    RDE .5724 RRA -.3135 RC3 -.0012 FAU-.00161
FDE .1298 FRA 1.8740 FC3 .0108 BSP 16830
BDE .7247 BRA 9.2646 BC3 .4142 FSP -289
                                                                                                                            CRT -.0262 CRS -.0378 CST -.9977
                                                                                                                           LSA 1584.0 MSA 294.1 SSA 9.1
                                                                                                                           EL1 1517.3 EL2 292.7 ALF 179.70
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ARRIVAL DATE MAR 1 1968
LAUNCH DATE JUL 31 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 600.594
    RL 151.86 LAL -.00 LOL 307.12 VL 24.598 GAL 24.10 AZL 88.46 HCA 324.49 SMA 116.13 ECC .49554 INC 1.5372 VI 29.337
RP 108.77 LAP -.89 LOP 271.62 VP 36.021 GAP 29.50 AZP 88.75 TAL 148.62 TAP 113.11 RCA 58.58 APO 173.68 V2 34.840
RC 213.175 GL 2.79 GP 7.85 ZAL 34.01 ZAP 166.08 ETS 142.78 ZAE 128.04 ETE 173.41 ZAC 8.21 ETC 47.97 CLP 168.47
   PLANETOCENTRIC CONIC
    C3 152.928 VHL 12.366 DLA -20.61 RAL 273.43 RAD 6570.7 VEL 16.561 PTH 2.88 VHP 18.120 DPA -15.51 RAP 260.31 ECC 3.5168
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            115.18 12 32 22
107.21 18 16 35
115.93 13 36 29
107.00 21 14 32
                                                                                                                                              1384.6
                                                                                                                                                                    -9.90
                                                          -13.41
                                                                            27.42
                                                                                          163.96
                       11 59 17 1984.61
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                                                                                             177.76
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         90.00
                       18 4 6
                                          748.34
                                                           22.84
                                                                            314.93
                                                                                                                                                                                       3.43
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                       13 7 3 1765.92
                                                            -15.42
                                                                             10.35
                                                                                             162.97
        100.00
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                       19 39 1
                                        5730.30
                                                           24.97
                                                                            271.04
                                                                                             178.48
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       100.00
                       19 39 1 5730.30
13 46 25 1642.54
                                                                                                               118.03 14 13 47
106.57 22 46 35
                                                                                                                                                                                     351.38
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                                                                                                                                                                  -16.51
       110.00
                                                           -20.42
                                                                            358.33
                                                                                            160.29
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  110.00 21 16 9 5
                                       5426.45
                                                            30.34
                                                                            249.79
                                                                                             180.30
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                                             ST 1522.6 SR 276.2 SS 479.3
CRT .0103 CRS -.0608 CST -.9985
     TDE .5965 TRAID.0820 TC3 -.2812 BAU .5749
                                                                                SGT 5046.5 SGR 314.6 SG3 86.1
RRT -.4454 RRF -.4394 RTF ..9818
SGB 5056.3 R23 .0008 R13 -.9818
    ROE .5873 RRA -.3188 RC3 -.0030 FAU-.00370
                                                                                                                                             LSA 1596.1 MSA 277.1 SSA 8.6
    FOE .1526 FRA 2.0058 FC3 .0209 BSP 16753
BOE .8371 BRA10.0870 BC3 .2812 FSP -285
                                                                                                                                             EL1 1522.6 EL2 276.2 ALF
                                                                                 SG1 5048.4 SG2 281.6 THA 178.40
                                                                                                                                                                                            . 11
                                                                                                                                                          ARRIVAL DATE HAR 3 1968
                                                                                     FLIGHT TIME 216.00
LAUNCH DATE JUL 31 1967
                                                                                     DISTANCE 600.290
   HELIOCENTRIC CONTC
    RL 151.86 LAL -.00 LOL 307.12 VL 24.568 GAL 26.72 AZL 88.00 MCA 327.65 SMA 115.99 ECC .52775 INC 2.0046 V1 29.337
RP 108.80 LAP -1.07 LOP 274.79 VP 35.993 GAP 31.68 AZP 88.31 TAL 148.29 TAP 115.94 RCA 54.77 APO 177.20 V2 34.832
RC 214.674 GL 3.26 GP 7.76 ZAL 33.48 ZAP 164.94 ETS 146.16 ZAE 127.34 ETE 173.60 ZAC 7.33 ETC 58.73 CLP 167.05
   PLANETOCENTRIC CONIC
                                                                                                                    2.96 VHP 19.427 OPA -15.81 RAP 262.08 ECC 3.9974
     C3 182.129 VHL 13.496 DLA -20.13 RAL 274.02 RAD 6571.0 VEL 17.420 PTH
    LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      LNCH TIME L-1 TIME
11 56 1 2035.11
18 12 4 757.55
13 4 24 1814.43
19 46 22 5741.51
13 44 54 1687.48
21 22 21 5441.23
                                                                                                                                                                  -11.43
                                                            -14.85
                                                                                            166.36
                                                                                                               114.39 12 29 56
                                                                                                                                               1435.1
                                                                                                                                                                                       23.42
         90.00
                                                                             30.43
                                                                                                               107.46 18 24 42
115.07 13 34 38
107.33 21 22 4
116.98 14 13 2
107.13 22 53 2
                                                                                                                                                   157.6
                                                                                                                                                                   24.83
                                                                                                                                                                                     307.55
                                                           22.65
                                                                            315-54
                                                                                             180.40
         90.00
                                                                                                                                                   1214.4
                                                                                                                                                                   -13.32
                                                                                                                                                                                        6.23
                                                            -15.84
                                                                              13.25
                                                                                             165.40
        100.00
                                                                                                                                                                                     263.65
                                                                                                                                                  5141.5
                                                                                                                                                                  26.88
                                                            24.74
                                                                            271.79
                                                                                             181.12
        100.00
                                                                                            162.82
                                                                                                                                                  1087.5
                                                                                                                                                                  -18.04
                                                                                                                                                                                     353.97
                                                           -21.83
                                                                              1.05
        110.00
                       21 22 21
                                                                                                                                                 4841.2
                                                                                                                                                                    32.09
                                                                                                                                                                                     242.23
                                                         30.04
                                                                            250.84
                                                                                             182.97
        110.00
                                        5441.23
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 1522.9 SR 259.7 SS 506.0
CRT .0437 CRS -.0828 CST -.9991
     TOE .7491 TRAID.9786 TC3 -.1637 BAU .3988
                                                                                SGT 4994.0 SGR 293.8 SG3 84.6
RRT - .4269 RRF - .4227 RTF .9855
     RDE .6031 RRA -.3176 RC3 -.0043 FAU-.00623
     FOE .1754 FRA 2.1532 FC3 .0296 BSP 16656
                                                                                SGB 5002.7 R23 .0009 R13 -.9855
                                                                                                                                             LSA 1604.7 MSA 260.0 SSA 8.0
     BDE .9617 BRA10.9832 BC3 .1638 FSP -280
                                                                                 SG1 4995.6 SG2 265.6 THA 178.56
                                                                                                                                             EL1 1523.0 EL2 259.4 ALF
                                                                                                                                                                                            . 44
                                                                                                                                                         ARRIVAL DATE MAR 5 1968
                                                                                     FLIGHT TIME 218.00
LAUNCH DATE JUL 31 1967
                                                                                    DISTANCE 598.539
   HELIOCENTRIC CONIC
    RL 151.86 LAL -.00 LOL 307.12 VL 24.543 GAL 29.71 AFL 87.44 MCA 330.81 SMA 115.86 ECC .56428 INC 2.5608 V1 29.337
RP 108.82 LAP -1.25 LOP 277.95 VP 35.968 GAP 34.20 AFP 87.76 TAL 148.28 TAP 119.09 RCA 50.48 APO 181.24 V2 34.824
RC 216.153 GL 3.69 GP 7.67 ZAL 33.21 ZAP 163.61 ETS 149.34 ZAE 126.47 ETE 173.82 ZAC 6.82 ETC 70.57 CLP 165.47
   PLANETOCENTRIC CONIC
     C3 218.588 VHL 14.785 DLA -19.69 RAL 274.35 RAD 6571.2 VEL 18.437 PTH 3.04 VHP 20.937 DPA -16.07 RAP 263.70 ECC 4.5974
    C3 218.588 VHL 14.785 OLA -19.69 RAL 274.35 RAD 6571.2 VEL 18.437 PTH 3.04 VMP 20.937 DPA -16.07 RAP 263.70 ELC 4.3974 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 18 22 767.32 22.45 316.19 182.67 107.73 18 31 10 167.3 24.66 308.22 100.00 13 1 14 1859.47 -18.12 15.99 167.53 114.19 13 32 13 1259.5 -14.70 8.86 100.00 19 52 8 5752.99 24.51 272.57 183.39 107.68 21 28 1 5153.0 26.69 264.45 110.00 13 42 44 1729.41 -23.10 3.64 165.05 115.93 14 11 34 1129.4 -19.42 356.43 110.00 21 27 7 5455.82 29.75 251.87 185.26 107.67 22 58 3 4855.8 31.87 243.31
                     13 1 14 1859.47
19 52 8 5752.99
13 42 44 1729.41
21 27 7 5455.82
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS.
                                                                                RET -.3995 RRF -.3968 RTF -.9886
SGB 4945.0 R23 .0010 R13 -.9886
                                                                                                                                             ST 1517.4 SR 243.3 SS 536.5
CRT .0756 CRS -.1054 CST -.9994
     TOE .9023 TRA11.9581 TC3 -.0602 BAU .1767
     ROE .6202 RRA - .3078 RC3 - .0051 FAU- .00942
FDE .1985 FRA 2.3195 FC3 .0373 BSP 16456
BDE 1.0949 BRA11.9621 BC3 .0605 FSP -274
                                                                                                                                             LSA 1609.5 MSA 243.0 55A 7.4
                                                                                SG1 4938.7 SG2 249.4 THA 178.74
                                                                                                                                             EL1 1517.5 EL2 242.6 ALF
                                                                                                                                                           ARRIVAL DATE MAR 7 1968
                                                                                     FLIGHT TIME 220,00
LAUNCH DATE JUL 31 1967
                                                                                     DISTANCE 594.925
   HELIOCENTRIC CONIC
     RL 151.86 LAL -.00 LOL 307.12 VL 24.522 GAL 33.12 AZL 86.76 MCA 333.96 SMA 115.76 ECC .60565 INC 3.2385 VI 29.337
RP 108.84 LAP -1.42 LOP 281.12 VP 35.948 GAP 37.14 AZP 87.09 TAL 148.67 TAP 122.63 RCA 45.65 APO 185.87 V2 34.817
RC 217.613 GL 4.09 GP 7.58 ZAL 33.21 ZAP 162.06 ETS 152.36 ZAE 125.40 ETE 174.06 ZAC 6.67 ETC 81.97 CLP 163.69
   PLANETOCENTRIC CONIC
     C3 264.527 VHL 16.264 DLA -19.29 RAL 274.37 RAD 6571.5 VEL 19.643 PTH
                                                                                                                    3.12 VHP 22.689 DPA -16.30 RAP 265.11 ECC 5.3534
     C3 264.527 VHL 16.264 OLA -19.29 RAL 274.37 RAO 6571.5 VEL 19.643 PTH 3.12 VHP 22.889 DPA -16.50 RAP 265.11 ECC 3.5354 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 48 2 2124.62 -17.29 35.86 170.17 112.78 12 23 27 1524.6 -14.05 26.68 90.00 18 22 53 777.37 22.24 316.85 184.51 108.00 18 35 50 177.4 24.49 308.90 100.00 12 57 24 1900.76 -19.25 18.53 169.29 113.32 13 29 5 1300.8 -15.93 11.31 100.00 19 56 12 5764.50 24.27 273.34 185.22 108.01 21 32 16 5164.5 26.50 265.25 110.00 13 39 46 1768.00 -24.23 6.07 166.89 114.89 14 9 14 1168.0 -20.67 358.73 110.00 21 30 19 5470.03 29.45 252.87 187.12 108.20 23 1 29 4670.0 31.65 244.35
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE 1.0434 TRA13.0161 TC3 .0286 BAU .1029
                                                                                                                                              ST 1503.1 SR 227.5 SS 570.€
                                                                                 SGT 4872.8 SGR 249.9 SG3 82.0
                                                                                RRT -.3596 RRF -.3582 RTF .9913
SGB 4879.2 R23 .0010 R13 -.9913
                                                                                                                                            CRT .1055 CRS -.1277 CST -.9997
     RDE .6394 RRA -.2863 RC3 -.0054 FAU-.01342
                                                                                                                                            LSA 1607.8 MSA 226.5 SSA 6.9
     FOE .2199 FRA 2.5055 FC3 .0439 BSP 16341
BDE 1.2237 BRA13.0193 BC3 .0291 FSP -271
                                                                                SG1 4873.7 SG2 233.2 THA 178.94
                                                                                                                                           EL1 1503.2 EL2 226.2 ALF .94
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FLIGHT TIME 214.00

ARRIVAL DATE OCT 10 1967

EL1 361.5 EL2 206.4 ALF 119.71

LAUNCH DATE AUG 1 1967

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DISTANCE 206.416
    HELIOCENTRIC CONIC
     RL 151.85 LAL -.00 LOL 308.08 VL 29.068 GAL -15.70 AZL 91.95 MCA 93.23 SMA 146.96 ECC .27249 INC 1.9549 V1 29.341
RP 108.20 LAP -1.95 LOP 41.32 VP 39.370 GAP -4.08 AZP 89.89 TAL 247.55 TAP 340.79 RCA 106.91 APO 187.00 V2 35.023
RC 69.409 GL -7.00 GP -20.35 ZAL 167.67 ZAP 60.79 ETS 12.20 ZAE 163.75 ETE 301.98 ZAC 106.64 ETC 9.60 CLP -58.64
    PLANETOCENTRIC CONIC
                                                    8.69 RAL 138.52 RAD 6569.1 VEL 13.516 PTH 2.47 VMP 5.253 DPA -8.89 RAP 157.57 ECC 2.0091
     C3 61.316 VHL 7.830 DLA
     NCH AZMTH LNCH TIME L-I TIME

90.00 22 50 54 2765.48

90.00 13 4 19 4863.89

100.00 0 20 24 2489.50

100.00 14 21 26 4615.10
                                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  23.44
                                                                                                                       94.06 23 36 59
69.24 14 25 23
                                                                                                                                                                               -27.19
                                                                                                                                                            2165.5
                                                                -28.05
                                                                                    79.31
                                                                                                                                                                                                       70.75
                                                                 19.70
                                                                                   210.77
                                                                                                       16.63
                                                                                                                                                                4263.9
                                                                                                                                                                                  16.70
                                                                                                                                                                                                     203.38
                                                                -29.53
                                                                                    58.88
                                                                                                       23.31
                                                                                                                            94.86
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                                                                                                                                                                1889.5
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                                                                21.08
                                                                                   191.90
                                                                                                       16.05
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                                                                                                                            97.09 2 15 42
65.67 16 33 55
                          1 38 16 2245.81
                                                               -33.53
                                                                                    39.89
                                                                                                                                                                1645.8
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        110.00
                                                                                                       22.82
                        15 20 3
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                                                                                                                                                               3831.6
                                                                                                                                                                                  21.29
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        110.00
                                           4431.56
                                                                24.78
                                                                                   176.27
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 491.0 SGR 497.4 SG3 193.6
RRT .2570 RRF .5833 RTF .3735
SGB 698.9 R23 .1575 R13 .6074
SGI 554.1 SG2 425.9 THA 46.43
                                                                                                                                                          ST 204.1 SR 351.5 SS 188.8
CRT -.5527 CRS .4924 CST -.9868
     TOE .2055 TRA -.6287 TC3 .0308 BAU .1285
     RDE -.4674 RRA -.3637 RC3 -.1537 FAU .08982
                                                                                                                                                          LSA 395.7 MSA 209.4 SSA 20.3
     FOE .3860 FRA-1.3485 FC3-1.2682 BSP
                                                                      987
                                                                     -548
                                                                                                                                                          EL1 373.6 EL2 160.0 ALF 112.04
     BOE .5098 BRA .7263 BC3 .1567 FSP
                                                                                                                                                                         ARRIVAL DATE OCT 12 1967
LAUNCH DATE AUG 1 1967
                                                                                             FLIGHT TIME 72.00
                                                                                             DISTANCE 213.013
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 29.060 GAL -15.53 AZL 91.80 MCA 96.44 SMA 146.89 ECC .26970 INC 1.8048 VI 29.341 RP 108.16 LAP -1.79 LOP 44.52 VP 39.376 GAP -3.38 AZP 89.80 TAL 247.54 TAP 343.98 RCA 107.27 APO 186.50 VZ 35.036 RC 71.485 GL -6.55 GP -21.29 ZAL 167.94 ZAP 65.65 ETS 10.51 ZAE 163.90 ETE 289.93 ZAC 108.53 ETC 8.84 CLP -63.74
   PLANETOCENTRIC CONIC
     C3 59.829 VHL 7.735 OLA
                                                    9.13 RAL 138.63 RAD 6569.1 VEL 13.461 PTH
                                                                                                                               2.46 VHP 5.061 OPA -9.09 RAP 155.55 ECC 1.9846
    C3 59,829 VHL 7.735 OLA 9.13 RAL 138.63 RAD 6569.1 VEL 13.461 PTH 2.46 VHP 5.061 OPA -9.09 RAP 155.55 ECC 1.9846
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 47 52 2773.79 -28.09 79.91 23.33 93.76 23 34 6 2173.8 -27.27 71.34
90.00 13 8 17 4843.64 19.20 209.49 16.26 68.78 14 29 1 4243.6 16.15 202.14
100.00 0 17 36 2497.05 -29.57 59.44 23.20 94.57 0 59 13 1897.1 -28.63 50.76
100.00 14 25 10 4595.62 20.59 190.67 15.67 67.84 15 41 46 3995.6 17.40 183.32
110.00 1 36 0 2251.69 -33.58 40.34 22.73 96.83 2 13 32 1651.7 -32.27 31.35
110.00 15 23 15 4413.74 24.28 175.13 13.94 65.16 16 36 49 3813.7 20.72 167.79
                                                                                       96.83 2 13 32

96.83 2 13 32

13.94 65.16 16 36 49

MID-COURSE EXECUTION ACCURACY

SCT 333.2 SCR 516.1 SCT
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 533.2 SGR 516.1 SG3 208.6

RRT .3448 RRF .6227 RTF .4777

SGB 742.0 R23 .1563 R13 .6647

SG1 608.8 SG2 424.3 THA 42.30
                                                                                                                                                         ST 217.7 SR 346.0 SS 201.0 CRT -.5170 CRS .5064 CST -.9904
     TOE .2091 TRA -.6799 TC3 -.0059 BAU .1406
     RDE -.4527 RRA -.3771 RC3 -.1757 FAU .09564
     FOE .4359 FRA-1.4249 FC3-1.3839 BSP 1169
ADE .4987 BRA .7775 BC3 .1758 FSP -602
                                                                                                                                                         LSA 398.1 MSA 220.5 SSA 20.4
ELI 369.7 EL2 174.4 ALF 113.57
                                                                                            FLIGHT TIME 74.00
                                                                                                                                                                       ARRIVAL DATE OCT 14 1967
LAUNCH DATE AUG 1 1967
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 219.565
    RL 151.85 LAL -.00 LOL 308.08 VL 29.043 GAL -15.36 AZL 91.65 MCA 99.64 SMA 146.73 ECC .26705 INC 1.6528 V1 29.341 RP 108.12 LAP -1.63 LOP 47.72 VP 39.375 GAP -2.72 AZP 89.72 TAL 247.40 TAP 347.04 RCA 107.54 APO 185.91 V2 35.049 RC 73.590 GL -6.07 GP -22.20 TAL 168.14 ZAP 70.56 ETS 8.76 ZAE 163.43 ETE 277.62 ZAC 110.48 ETC 8.00 CLP -68.93
    PLANETOCENTRIC CONIC
     C3 58.390 VHL 7.641 DLA 9.57 RAL 138.83 RAD 6569.1 VEL 13.407 PTH 2.45 VHP 4.906 DPA -9.25 RAP 153.48 ECC 1.9610
    C3 58.390 VML 7.641 OLA 9.57 RAL 138.83 RAD 6569.1 VEL 13.407 PTM 2.45 VMP 4.906 DPA -9.25 RAP 153.48 ECC 1.9610 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 45 8 2782.19 -28.12 80.53 23.28 93.46 23 31 30 2182.2 -27.35 71.95 90.00 13 12 35 4823.36 18.70 208.22 15.98 68.34 14 32 59 4223.4 15.59 200.92 100.00 0 15 6 2504.67 -29.61 60.00 23.17 94.27 0 56 51 1904.7 -28.71 51.31 100.00 14 29 14 4576.12 20.08 189.44 15.38 67.38 15 45 30 3976.1 16.84 182.14 110.00 1 34 3 2257.63 -33.62 40.80 22.72 96.56 2 11 40 1657.6 -32.35 31.79 110.00 15 26 46 4395.92 23.76 174.00 13.62 64.67 16 40 2 3795.9 20.15 166.72
   DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                                                        ST 234.0 SR 338.7 SS 213.2
CRT -.4824 CRS .5230 CST -.9904
LSA 401.8 MSA 230.3 SSA 20.5
ELI 365.1 EL2 190.2 ALF 115.95
                                                                                       SGT 588.7 SGR 534.2 SG3 222.0
RRT .4296 RRF .6574 RTF .5703
SGB 794.9 R23 .1540 R13 .7142
SGI 674.2 SG2 421.2 THA 38.61
     TOE .2169 TRA -.7375 TC3 -.0492 BAU .1591
     RDE -.4358 RRA -.3882 RC3 -.1978 FAU .10061
     FOE .4882 FRA-1.4815 FC3-1.4917 BSP 1389
     BOE .4868 BRA .8334 BC3 .2038 FSP
                                                                                                                                                                        ARRIVAL DATE OCT 16 1967
LAUNCH DATE AUG I 1967
                                                                                             FLIGHT TIME 76.00
                                                                                            DISTANCE 226.072
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 29.018 GAL -15.20 AZL 91.50 HCA 102.85 SHA 146.49 ECC .26453 INC 1.4977 V1 29.341
RP 108.08 LAP -1.46 LOP 50.93 VP 39.368 GAP -2.09 AZP 89.67 TAL 247.13 TAP 349.98 RCA 107.74 APO 185.24 V2 35.062
RC 75.721 GL -5.56 GP -23.06 ZAL 168.29 ZAP 75.45 ETS 6.95 ZAE 162.33 ETE 266.04 ZAC 112.44 ETC 7.10 CLP -74.16
   PLANETOCENTRIC CONIC
     C3 56.986 VHL 7.549 DLA 10.02 RAL 139.10 RAD 6569.0 VEL 13.355 PTH 2.44 VHP 4.785 DPA -9.37 RAP 151.40 ECC 1.9378
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 42 37 2790.76 -28.16 81.15 23.32 93.15 23 29 8 2190.8 -27.42 72.56 90.00 13 17 15 4802.87 18.18 206.94 15.78 67.91 14 37 17 4202.9 15.02 199.68
                                         2512.44
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                                                                -29.65
        100.00
                                                                19.56
                                                                                   188.21
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        100.00
                        14 33 36
                                           4556.42
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16 43 36
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                          1 32 21
                                         2263.69
                                                                -33.67
                                                                                    41.26
                                                                                                                            96.29
                                                                                                                                                                                  -32.43
        110.00
                                                                                                                                                               3777.9
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        110.00
                        15 30 36
                                           4377.94
                                                                 23.23
                                                                                   172.87
                                                                                                       13.36
                                                                                                                            64.19
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ST 253.4 SR 330.2 SS 224.4

CRT -.4532 CRS .5352 CST -.9879

LSA 407.8 MSA 238.6 SSA 20.6
     TOE .2284 TRA -.7993 TC3 -.0979 BAU .1837
                                                                                        SGT 656.8 SGR 552.2 SG3 233.7
                                                                                       RRT .5042 RRF .6893 RTF .6462
SGB 858.2 R23 .1526 R13 .7560
     ROE -.4177 RRA -.3974 RC3 -.2203 FAU .10479
     FDE .5359 FRA-1.5218 FC3-1.5921 BSP 1648
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FLIGHT TIME 70.00

-690

BDE .4761 BRA .8927 BC3 .2411 FSP

SG1 749.5 SG2 418.0 THA 35.46

ARRIVAL DATE OCT 18 1967

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FLIGHT TIME 78.00
LAUNCH DATE AUG 1 1967
                                                                            DISTANCE 232.535
    RL 151.85 LAL -.00 LOL 308.08 VL 28.985 GAL -15.04 AZL 91.34 MCA 106.06 SMA 146.18 ECC .26211 INC 1.3384 V1 29.341
RP 108.04 LAP -1.29 LOP 54.14 VP 39.356 GAP -1.49 AZP 89.63 TAL 246.76 TAP 352.81 RCA 107.87 APO 184.50 V2 35.075
RC 77.874 GL -5.03 GP -23.88 7AL 168.36 ZAP 80.29 ETS 5.08 ZAE 160.69 ETE 255.90 ZAC 114.35 ETC 6.16 CLP -79.37
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 55.606 VHL 7.457 DLA 10.47 RAL 139.44 RAD 6569.0 VEL 13.303 PTH 2.43 VHP 4.698 DPA -9.48 RAP 149.37 ECC 1.9151
    ENCH AZENTH LNCH TIME L-I TIME: INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                2199.6
                                                                                                                                                  -27.50
                                                                                                     92.82 23 26 58
67.48 14 41 59
                   22 40 19 2799.62
13 22 17 4781.96
0 10 48 2520.48
                                                                    81.80
                                                                                 23.42
                                                     -28.19
        90.00
                                                                                                                                                   14.43
                                                                                                                                   4182.0
                                                                    205.64
                                                                                     15.66
                                                      17.64
         90.00
                                                                                                      93.66 0 52 48
66.50 15 54 1
                                                                                                                                                   -28.86
                                                                                                                                   1920.5
                                                                                     23.32
                                                                     61.17
       100.00
                                                     -29.69
                                                                                     15.04
                                                                                                                                   3936.3
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                   14 38 25 4536.33
1 30 51 2269.94
15 34 51 4359.63
                                                      19.02
                                                                    186.96
       100,00
                                                                                                      96.00 2 8 41
63.72 16 47 30
                                                                                                                                                                    32.72
                                                                                                                                   1669.9
                                                                                                                                                  -32.52
                                                                                     22.92
                                                                      41.74
       110.00
                                                     -33.72
                                                                                                                                                  18.97
                                                                                                                                   3759.6
                                                                                     13.22
                                                                     171.73
       110.00
                                                      22.69
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 275.8 SR 320.4 SS 234.8

CRT -.4290 CRS .5467 CST -.9840

LSA 416.8 MSA 244.4 55A 20.7
                                                                        SGT 737.0 SGR 569.1 SG3 243.3
RRT .5674 RRF .7176 RTF .7060
SGB 931.1 R23 .1528 R13 .7895
SGI 834.0 SG2 414.1 THA 32.64
    TOE .2432 TRA -.8650 TC3 -.1520 BAU .2128
    ROE -.3981 RRA -.4037 RC3 -.2426 FAU .10793
    FOE .5801 FRA-1.5410 FC3-1.6804 BSP 1939
BOE .4666 BRA .9545 BC3 .2862 FSP -727
                                                                                                                               EL1 359.9 EL2 221.8 ALF 125.35
                                                                                                                                           ARRIVAL DATE OCT 20 1967
                                                                             FLIGHT TIME 80.00
LAUNCH DATE AUG 1 1967
                                                                             DISTANCE 238.957
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 28.946 GAL -14.87 A7L 91.17 HCA 109.27 SMA 145.81 ECC .25977 INC 1.1738 VI 29.341 RP 108.00 LAP -1.11 LOP 57.35 VP 39.338 GAP -.92 A7P 89.61 TAL 246.27 TAP 355.54 RCA 107.93 APO 183.69 V2 35.088 RC 80.046 GL -4.46 GP -24.66 7AL 168.37 ZAP 85.02 ETS 3.15 ZAE 158.65 ETE 247.42 ZAC 116.17_ETC 5.20 CLP -84.52
   PLANETOCENTRIC CONIC
    C3 54.243 VHL 7.365 DLA 10.93 RAL 139.85 RAD 6569.0 VEL 13.252 PTH 2.42 VHP 4.640 DPA -9.59 RAP 147.42 ECC 1.8927 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  -27.57
                                                                                                      92.49 23 24 57
67.06 14 47 5
93.34 0 51 2
         90.00 22 38 8 2808.91
90.00 13 27 45 4760.43
                                                      -28.22
                                                                      82.47
                                                                                    23.59
                                                                                                                                                                    197.15
                                                                                                                                    4160.4
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                                                                                      15.61
                                                                     204.31
                                                       17.07
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                                                                                                                                    1928.9
                                                                                                                                                    -28.94
                                                                                      23.51
                                                                      61.79
        100.00
                       0 8 53 2528.90
                                                      -29.72
                                                                                                      93.34 0 51 2
66.06 15 58 52
95.71 2 7 29
63.25 16 51 47
                                                                                                                                                                    178.54
                                                                                                                                    3915.7
                                                                                                                                                    15.06
                                                                                      14.98
                    14 43 36
                                    4515.66
                                                      18.45
                                                                     185.69
        100.00
                                                                                                                                                                    33.21
                                                                                                                                    1676.5
                                                                                                                                                   -32.60
                      1 29 33 2276.51
                                                     -33.76
                                                                      42.25
                                                                                      23.13
       110.00
                                                                                                                                                                   163.47
                                                                                                                                   3740.8
                                                                                                                                                    18.35
                                                                     170.57
                                                                                      13.13
                    15 39 26 4340.82
                                                      22.12
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 301.2 SR 308.7 SS 245.2

CRT - 4098 CRS .5609 CST - .9788

LSA 430.0 MSA 246.6 SSA 20.8
                                                                        SCT 827.7 SCR 583.4 SCJ 250.0

RRT .6197 RRF .7415 RTF .7520

SCB 1012.6 R23 .1542 R13 .8154

SCI 926.3 SCZ 409.1 THA 30.03
     TOE .2616 TRA -.9333 TC3 -.2112 BAU .2450
     ROE -.3767 RRA -.4062 RC3 -.2637 FAU .10976
     FOE .6231 FRA-1.5348 FC3-1.7517 BSP 2253
BOE .4586 BRA 1.0178 BC3 .3379 FSP -750
                                                                                                                                EL1 362.2 EL2 234.2 ALF 133.28
                                                                                                                                           ARRIVAL DATE OCT 22 1967
                                                                             FLIGHT TIME 82.00
 LAUNCH DATE AUG 1 1967
                                                                             DISTANCE 245.337
     RL 151.85 LAL -.00 LOL 308.08 VL 28.900 GAL -14.71 A7L 91.00 MCA 112.48 SMA 145.39 ECC .25750 INC 1.0026 V1 29.341 RP 107.96 LAP -.93 LOP 60.56 VP 39.316 GAP -.37 A7P 89.62 TAL 245.69 TAP 358.17 RCA 107.95 APO 182.83 V2 35.101 RC 82.236 GL -3.86 GP -25.39 ZAL 168.30 ZAP 89.60 ETS 1.16 ZAE 156.34 ETE 240.50 ZAC 117.86 ETC 4.23 CLP -89.55
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 52.892 VHL 7.273 OLA 11.42 RAL 140.33 RAD 6568.9 VEL 13.200 PTH 2.41 VHP 4.610 OPA -9.72 RAP 145.60 ECC 1.8705
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     92.12 23 23 2
66.64 14 52 39
92.99 0 49 23
65.62 16 4 10
                                                                                                                                                -27.65
                                                                                    23.84
                                                                                                                                 2218.8
                      22 36 3 2818.84
                                                      -28.24
                                                                     83.20
         90.00
                                                                                                                                                                    195.82
                                                                                                                                    4138.0
                                                                                                                                                    13.17
                    13 33 41
                                                       16.47
                                                                     202.94
                                                                                      15.63
                                     4738.02
         90.00
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                                                                                                                                                   -29.02
                                                                                      23.76
                       0 7 5 2537.91
                                                      -29.76
                                                                       62.46
        100.00
                                                                                                                                                                   177.27
                                                                                                                                    3894.2
                                                                                                                                                    14.42
                     14 49 15 4494.18
1 28 22 2283.54
15 44 27 4321.31
                                                                     184.37
                                                                                      14.99
                                                       17.86
        100.00
                                                                                                       95.39 2 0 2 77 16 56 29
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                                                                                                                                    1683.5
                                                                                                                                                    -32.69
                                                       -33.81
                                                                       42.80
                                                                                      23.41
                                                                                                                                               17.69
        110.00
                                                                                                                                    3721.3
                                                                                                                                                                   162.33
                                                                     169.38
                                                                                      13.11
                                                       21.51
        110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 329.7 SR 296.2 SS 254.3

CRT -.3965 CRS .5713 CST -.9743

LSA 447.4 MSA 245.8 SSA 20.9

EL1 371.9 EL2 241.0 ALF 142.58
                                                                         SGT 926.7 SGR 596.3 SG3 254.5
RRT .6616 RRF .7634 RTF .7864
SGB 1102.0 R23 .1579 R13 .8358
     TDE .2842 TRA-1.0024 TC3 -.2746 BAU .2795
     ROE -.3544 RRA -.4060 RC3 -.2844 FAU .11057
FOE .6576 FRA-1.5117 FC3-1.8098 BSP 2592
BOE .4543 BRA 1.0815 BC3 .3953 FSP -772
                                                                          SG1 1025.2 SG2 404.2 THA 27.73
                                                                                                                                            ARRIVAL DATE OCT 24 1967
                                                                              FLIGHT TIME 84.00
 LAUNCH DATE AUG 1 1967
                                                                             DISTANCE 251.679
     RL 151.85 LAL -.00 LOL 308.08 VL 28.849 GAL -14.54 AZL 90.82 MCA 115.70 SMA 144.92 ECC .25529 INC .8230 VI 29.341
RP 107.92 LAP -.74 LOP 63.78 VP 39.289 GAP .15 AZP 89.64 TAL 245.02 TAP .72 RCA 107.92 APO 181.92 V2 35.113
RC 84.440 GL -3.20 GP -26.09 ZAL 168.15 ZAP 93.98 ETS 359.13 ZAE 153.88 ETE 234.92 ZAC 119.38 ETC 3.27 CLP -94.43
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                         2.40 VHP 4.606 DPA -9.88 RAP 143.93 ECC 1.8484
     C3 51.549 VHL 7.180 OLA 11.93 RAL 140.89 RAD 6568.9 VEL 13.150 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 33 58 2829.63 -28.27 83.99 24.15 91.73 23 21 7 2229.6 -27.73 75.36
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                                                                      201.51
                     13 40 10 4714.46
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          90.00
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                    0 5 19 2547.71
14 55 26 4471.62
1 27 17 2291.22
15 49 57 4300.87
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                                                       -29.79
                                                                       63.19
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         100.00
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95.04 2 5 28
62.29 17 1 38
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                                                                      183.00
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                                                                       43.39
                                                                                      23.76
         110.00
                                                       -33.85
                                                                                                                                                     17.00
                                                                                                                                                                     161.16
                                                                                                                                     3700.9
                                                                                      13.17
                                                       20.87
                                                                      168.14
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 361.4 SR 281.5 SS 263.6
CRT - 3882 CRS .5851 CST - .9692
LSA 470.0 MSA 241.2 SSA 21.0
                                                                          SGT 1032.3 SGR 605.6 SG3 255.9
      TOE .3113 TRA-1.0712 TC3 -.3417 BAU .3150
                                                                          RRT .6952 RRF .7819 RTF .8119
SGB 1196.9 R23 .1629 R13 .8510
      ROE -.3302 RRA -.4017 RC3 -.3035 FAU .11004
      FDE .6919 FRA-1.4647 FC3-1.8480 BSP 2935
                                                                                                                                 EL1 389.9 EL2 240.5 ALF 151.51
                                                                          SG1 1128.7 SG2 398.2 THA 25.60
      BDE .4538 BRA 1.1440 BC3 .4570 FSP
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ARRIVAL DATE OCT 26 1967
 LAUNCH DATE AUG I 1967
                                                                           FLIGHT TIME 86.00
    HELIOCENTRIC CONIC
                                                                          DISTANCE 257.983
     RL 151.85 LAL -.00 LOL 308.08 VL 28.792 GAL -14.37 AZL 90.63 MCA 118.92 SMA 144.41 ECC .25313 INC .6332 V1 29.341 RP 107.89 LAP -.55 LOP 67.00 VP 39.258 GAP .64 AZP 89.69 TAL 244.26 TAP 3.18 RCA 107.85 APO 180.96 V2 35.125 RC 86.655 GL -2.49 GP -26.78 ZAL 167.92 ZAP 98.13 ETS 357.04 ZAE 151.36 ETE 230.43 ZAC 120.71 ETC 2.34 CLP -99.11
    PLANETOCENTRIC CONIC
     C3 50.214 VHL 7.086 DLA 12.48 RAL 141.51 RAD 6568.8 VEL 13.099 PTH 2.39 VMP 4.624 DPA -10.10 RAP 142.44 ECC 1.8264
     LNCH AZMTH LNCH TIME L-I TIME
90.00 22 31 48 2841.62
90.00 13 47 16 4689.42
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              24.53
                                                   -28.29
                                                                                                                                           -27.81
                                                                   84.86
                                                                                                91.29 23 19 10
                                                                                                                           2241.6
                                                                  200.00
                                                    15.14
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                                                                                                            15 5 26
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        100,00
                      0 3 30 2558.60
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                                                                    63.99
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                     1 26 12
                                                   -33.90
                                 2299.79
                                                                    44.06
                                                                                                   94.65
                                                                                                             2 4 32
                                                                                 24.19
                                                                                                                               1699.8
                                                                                                                                              -32.89
                                                                                                                                                              34.96
                                                                  166.84
                                                                                                            17 7 18
                    15 55 59
                                    4279.24
                                                   20.18
                                                                                  13.29
                                                                                                   61.81
                                                                                                                               3679.2
                                                                                                                                               16.25
                                                                                                                                                             159.92
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 396.3 SR 266.3 S9 271.9

CRT - 3838 CRS .5938 CST - 9659

LSA 496.6 MSA 234.3 SSA 21.1

EL1 416.1 EL2 234.2 ALF 158.38
                                                                      SGT 1142.9 SGR 613.9 SG3 255.6
RRT .7220 RRF .7996 RTF .8310
SGB 1297.4 R23 .1708 R13 .8629
     TOE .3427 TRA-1.1384 TC3 -.4119 BAU .3512
     ROE -.3057 RRA -.3950 RC3 -.3224 FAU .10874
                                                       3306
- 784
     FOE .7155 FRA-1.4068 FC3-1.8748 BSP
     BOE .4593 BRA 1.2050 BC3 .5231 FSP
                                                                      SG1 1236.6 SG2 392.6 THA 23.74
                                                                           FLIGHT TIME 88.00
                                                                                                                                      ARRIVAL DATE OCT 28 1967
                                                                          DISTANCE 264.251
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 28.732 GAL -14.19 AZL 90.43 MCA 122.14 SMA 143.86 ECC .25103 INC .4314 V1 29.341
RP 107.85 LAP -.37 LOP 70.22 VP 39.225 GAP 1.12 AZP 89.77 TAL 243.43 TAP 5.57 RCA 107.75 APO 179.98 V2 35.137
RC 88.880 GL -1.72 GP -27.48 ZAL 167.60 ZAP 102.03 ETS 354.90 ZAE 148.83 ETE 226.83 ZAC 121.83 ETC 1.44 CLP-103.59
   PLANETOCENTRIC CONIC
         48.888 VHL
                         6.992 DLA 13.07 RAL 142.20 RAD 6568.8 VEL 13.048 PTH
                                                                                                     2.38 VHP
                                                                                                                  4.663 OPA -10.40 RAP 141.15 ECC 1.8046
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  22 29 30 2855.17
13 55 8 4662.51
0 1 34 2570.93
15 9 41 4421.98
1 25 6 2309.55
16 2 38 4256.13
                                                   -28.31
                                                                                                            23 17
        90.00
                                                                   85.86
                                                                                 25.00
                                                                                                  90.79
                                                                                                                               2255.2
                                                                                                                                              -27.90
                                                                                                                                                              77.21
                                                                                                   65.34 15 12 50
        90.00
                                                   14.38
                                                                  198.39
                                                                                  16.14
                                                                                                                               4062.5
                                                                                                                                                             191.40
                                                                                                                                              10.93
       100,00
                                                   -29.85
                                                                    64.91
                                                                                  24.96
                                                                                                   91.70
                                                                                                              0 44 25
                                                                                                                               1970.9
                                                                                                                                              -29.29
                                                                                                                                                               56.15
                                                                                                            16 23 23
       100.00
                                                   15.77
                                                                  180.02
                                                                                  15.46
                                                                                                   64.28
                                                                                                                               3822.0
                                                                                                                                                             173.07
                                                                                                                                             12.18
                                                  -33.95
                                                                                  24.71
                                                                                                              2 3 35
       110.00
                                                                    44.81
                                                                                                   94.20
                                                                                                                                              -33.00
                                                                                                                                                              35.70
       110.00
                                                                                                   61.31 17 13 34
                                                                  165.47
                                                                                 13.49
                                                                                                                              3656.1
                                                                                                                                             15.45
                                                                                                                                                             158.61
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 1257.1 SGR 620.0 SG3 253.1
RRT .7435 RRF .8157 RTF .8450
SGB 1401.6 R23 .1808 R13 .8717
     TOE .3791 TRA-1.2029 TC3 -.4849 BAU .3873
                                                                                                                          ST 434.8 SR 249.6 SS 280.0
CRT -.3821 CRS .6021 CST -.9632
    RDE -. 2800 RRA -. 3851 RC3 -. 3405 FAU . 10652
    FOE .7356 FRA-1.3343 FC3-1.8863 BSP 3685
BDE .4713 BRA 1.2630 BC3 .5925 FSP -783
                                                                                                                           LSA 528.0 NSA 224.8 SSA 21.2
                                                                      SG1 1347.2 SG2 386.8 THA 22.05
                                                                                                                           EL1 448.8 ELZ 223.5 ALF 163.40
LAUNCH DATE AUG 1 1967
                                                                          FLIGHT TIME 90.00
                                                                                                                                     ARRIVAL DATE OCT 30 1967
                                                                         DISTANCE 270.486
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 28.667 GAL -14.01 AZL 90.21 MCA 125.36 SMA 143.29 ECC .24898 INC .2140 VI 29.341 RP 107.82 LAP -.17 LOP 73.44 VP 39.188 GAP 1.57 AZP 89.88 TAL 242.53 TAP 7.89 RCA 107.61 APO 178.96 VZ 35.149
                         -.86 GP -28.20 ZAL 167.19 ZAP 105.66 ETS 352.69 ZAE 146.35 ETE 223.95 ZAC 122.73 ETC
    RC 91.113 GL
   PLANETOCENTRIC CONIC
    C3 47.572 VHL 6.897 DLA 13.72 RAL 142.97 RAD 6568.8 VEL 12.997 PTH 2.37 VHP 4.722 DPA -10.81 RAP 140.05 ECC 1.7829
    LNCM AZMYTH LNCM TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMYTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 26 54 2870.78 -28.32 87.00 25.56 90.22 23 14 45 2270.8 -27.99 78.35 90.00 14 3 53 4633.24 13.54 196.65 16.47 64.89 15 21 6 4033.2 10.05 189.71
                                                                                                90.22 23 14 45
64.89 15 21 6
91.14 24 38 33
63.81 16 31 14
                                                                                                                              1985.2
       100.00
                    23 55 28
                                 2585.15
4394.11
                                                   -29.87
                                                                   65.97
                                                                                 25.54
                                                                                                                                            -29.39
                   15 18 0
                                                   14.94
                                                                178.37
                                                                                 15.77
                                                                                                                              3794.1
                                                                                                                                             11.30
                                                                                                                                                            171.47
                     1 23 52 2320.87
16 10 1 4231.15
       110.00
                                                   -34.01
                                                                   45.69
                                                                                 25.33
                                                                                                 93.68
                                                                                                             2 2 33
                                                                                                                              1720.9
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                                                                                                                                            -33.12
                                                                                                          17 20 32
                   16 10 1
                                                                 164.00
                                                                                 13.77
                                                                                                  60.79
       110.00
                                                   18.61
                                                                                                                              3631.2
                                                                                                                                              14.57
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     RET .7608 RRF .8301 RTF .8551
SGB 1507.6 R23 .1924 R13 .8780
SGI 1458.8 SGZ 380.4 THA 20.50
                                                                                                                          ST 477.5 SR 230.7 SS 289.4

CRT - 3822 CRS .6111 CST - 9606

LSA 564.9 MSA 212.9 SSA 21.4
    TOE .4213 TRA-1.2629 TC3 -.5598 BAU .4224
    ROE -.2522 RRA -.3717 RC3 -.3573 FAU .10335
FOE .7563 FRA-1.2470 FC3-1.8608 BSP 4050
BOE .4910 BRA 1.3164 BC3 .6642 FSP -768
                                                                                                                          EL1 487.4 EL2 208.8 ALF 167.14
LAUNCH DATE AUG 1 1967
                                                                         FLIGHT TIME 92.00
                                                                                                                                     ARRIVAL DATE NOV 1 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 276.688
    RL 151.85 LAL -.00 LOL 308.08 VL 28.599 GAL -13.83 AZL 89.98 MCA 128.58 SMA 142.69 ECC .24697 INC .0171 V1 29.341 RP 107.78 LAP .02 LOP 76.66 VP 39.148 GAP 2.00 AZP 90.01 TAL 241.56 TAP 10.14 RCA 107.45 APO 177.93 V2 35.160 RC 93.352 GL .08 GP -28.99 ZAL 166.66 ZAP 108.99 ETS 350.39 ZAE 143.92 ETE 221.66 ZAC 123.40 ETC 359.74 CLP-111.84
   PLANETOCENTRIC CONIC
    C3 46.272 VHL 6.802 OLA 14.45 RAL 143.83 RAD 6568.7 VEL 12.947 PTH 2.36 VHP 4.798 DPA -11.34 RAP 139.13 ECC 1.7615
    LNCH ATMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ ATMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90,00 22 23 53 2889.12 -28.31 88.34 26.22 89.55 23 12 2 2289.1 -28.08 79.68
                                                                                                89.55 23 12 2
64.43 15 30 24
90.49 24 36 19
63.32 16 40 3
93.07 2 1 19
60.26 17 28 21
                                                                                                                                           -28.08
                                                                               26.22
                    14 13 42
                                  4601.02
                                                   12.60
                                                                 194.75
                                                                                 16.90
                                                                                                                              4001.0
                                                                                                                                               9.06
        90.00
                                                                                                                                                            187.86
                    23 52 57 2601.87
                                                                   67.21
                                                                                                                              2001.9
       100.00
                                                   -29.89
                                                                                 26.22
                                                                                                                                             -29.50
                    15 27 19
                                  4363.50
                                                   14.02
                                                                                                                              3763.5
                                                                                                                                             10.32
                                                                                                                                                            169.73
       100.00
                                                                 176.57
                                                                                  16.19
                                2334.25
                                                                   46.73
                     1 22 25
                                                   -34.06
                                                                                 26.07
                                                                                                                              1734.3
                                                                                                                                             -33.26
      110.00
                                  4203.88
                                                   17.69
                                                                 162.41
                                                                                  14.14
                                                                                                                              3603.9
      110.00
                   16 18 17
                                                                                                                                              13.61
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
    TOE .4691 TRA-1.3183 TC3 -.6372 BAU .4572
                                                                    SGT 1490.7 SGR 625.3 SG3 242.5
RRT .7748 RRF .8446 RTF .8627
SGB 1616.6 R23 .2065 R13 .8827
                                                                                                                         ST 524.5 SR 210.8 SS 298.4

CRT - .3812 CRS .6145 CST - .9593

LSA 606.9 MSA 199.6 SSA 21.5
    ROE -.2239 RRA -.3562 RC3 -.3745 FAU .09974
    FOE .7707 FRA-1.1554 FC3-1.8662 BSP 4437
BOE .5198 BRA 1.3655 BC3 .7391 FSP -755
                                                                     SG1 1572.5 SG2 374.8 THA 19.13
                                                                                                                         EL1 531.6 EL2 192.3 ALF 169.96
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ARRIVAL DATE NOV 3 1967
                                                                                 FLIGHT TIME 94.00
LAUNCH DATE AUG 1 1967
                                                                                 DISTANCE 282.860
    RL 151.85 LAL -.00 LOL 308.08 VL 28.529 GAL -13.63 AZL 89.72 HCA 131.81 SMA 142.07 ECC .24503 INC .2777 V1 29.341 RP 107.75 LAP .21 LOP 79.88 VP 39.106 GAP 2.42 AZP 90.19 TAL 240.53 TAP 12.33 RCA 107.26 APO 176.88 V2 35.170 RC 95.596 GL 1.15 GP -29.85 ZAL 166.01 ZAP 112.03 ETS 348.00 ZAE 141.55 ETE 219.86 ZAC 123.85 ETC 358.92 CLP-115.63
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 44.995 VHL 6.708 DLA 15.26 RAL 144.77 RAD 6568.7 VEL 12.898 PTH 2.35 VHP 4.892 DPA -12.01 RAP 138.38 ECC 1.7405
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                             81.28
                                                                                                                                            2311.0
                                                                                                           88.74 23 8 46
                   22 20 15 2911.02
14 24 53 4565.06
                                                         -28.29
                                                                         89.94
                                                                                         27.00
         90.00
                                                                                                                        15 40 58
                                                                                                                                                               7.94
                                                                                                                                                                             185.81
                                                                                                                                            3965.1
                                                                                          17.45
                                                                                                             63.96
                                                         11.54
                                                                         192.64
         90.00
                                                                                                                                                             -29.61
                                                                                                                                                                               59.90
                     23 49 55 2621.86
15 37 54 4329.45
1 20 38 2350.32
16 27 37 4173.76
                                                                                                                       24 33 37
                                                                                                                                            2021.9
                                                                          68.70
                                                                                           27.03
                                                                                                            89.71
                                                         -29.89
        100.00
                                                                                                                                            3729.5
                                                                                                                                                                9.22
                                                                                                                                                                             167.80
                                                                                                             62.83 16 50 4
                                                                                          16,71
                                                        12.97
                                                                         174.59
        100.00
                                                                                                            92.33 1 59 49
59.72 17 37 10
                                                                                                                                            1750.3
                                                                                                                                                             -33.41
                                                        -34.11
                                                                           47.99
                                                                                          26.94
        110.00
                                                                                                                                            3573.8
                                                                                                                                                              12.52
                                                                                                                                                                              154.03
                                                                         160.68
                                                                                          14.62
                      16 27 37
                                                         16.67
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       CRT - 3766 CRS .6126 CST - .9587
LSA 655.1 MSA 185.1 SSA 21.7
EL1 581.8 EL2 173.8 ALF 172.27
                                                                         SCT 1609.3 SGR 626.9 SG3 235.4
RRT .7861 RRF .8586 RTF .8682
SGB 1727.1 R23 .2229 R13 .8861
     TOE .5238 TRA-1.3676 TC3 -.7163 BAU
                                                             .4911
    ROE -.1941 RRA -.3381 RC3 -.3915 FAU .09565
FOE .7835 FRA-1.0577 FC3-1.8404 BSP 4824
                                                                             SG1 1687.0 SG2 369.6 THA 17.91
     BDE .5586 BRA 1.4087 8C3 .8163 FSP -738
                                                                                                                                                    ARRIVAL DATE NOV 5 1967
                                                                                  FLIGHT TIME 96.00
LAUNCH DATE AUG 1 1967
                                                                                  DISTANCE 289.003
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 28.455 GAL -13.44 AZL 89.44 MCA 135.03 SMA 141.44 ECC .24313 INC .5630 VI 29.341 RP 107.72 LAP .40 LOP 83.11 VP 39.061 GAP 2.82 AZP 90.40 TAL 239.44 TAP 14.47 RCA 107.05 APO 175.82 VZ 35.180 RC 97.843 GL 2.36 GP -30.84 ZAL 165.22 ZAP 114.76 ETS 345.48 ZAE 139.25 ETE 218.49 ZAC 124.09 ETC 358.11 CLP-119.20
    PLANETOCENTRIC CONIC
C3 43.751 VHL 6.614 DLA 16.19 RAL 145.82 RAD 6568.7 VEL 12.850 PTH 2.34 VHP 5.003 DPA -12.86 RAP 137.79 ECC 1.7200
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 15 45 2937.66 -28.24 91.89 27.93 87.77 23 4 43 2337.7 -28.25 83.22
90.00 14 37 46 4524.32 10.31 190.28 18.14 63.48 15 53 10 3924.5 6.66 183.49
100.00 23 46 8 2646.17 -29.87 70.50 27.99 88.76 24 30 14 2046.2 -29.72 61.70
100.00 15 50 4 4291.05 11.76 172.37 17.39 62.32 17 1 35 3691.0 7.96 165.66
110.00 16 38 15 4140.06 15.50 158.76 15.23 59.14 17 47 15 3540.1 11.30 152.18
   PLANETOCENTRIC CONIC
                                                                                                              59.15 17 47 15
                      16 38 15 4140.06
                                                                          158.76
                                                                                           15.23
        110.00
                                                         15.50
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 636.6 SR 165.1 SS 320.9

CRT - 3633 CRS .6029 CST - .9583

LSA 711.5 MSA 169.4 SSA 21.8
                                                                             SGT 1727.4 SGR 626.4 SG3 226.8
RRT .7948 RRF .6717 RTF .8719
SGB 1837.5 R23 .2409 R13 .8882
     TDE .5874 TRA-1.4090 TC3 -.7964 BAU .5234
     RDE -.1619 RRA -.3165 RC3 -.4079 FAU .09099
     FOE .7994 FRA -.9523 FC3-1.8004 BSP 5192
BOE .6093 BRA 1.4441 BC3 .8948 FSP -710
                                                                             SG1 1800.9 SG2 364.6 THA 16.79
                                                                                                                                        ELI 639.6 EL2 153.1 ALF 174.29
                                                                                                                                                    ARRIVAL DATE NOV 7 1967
                                                                                  FLIGHT TIME 98.00
LAUNCH DATE AUG 1 1967
                                                                                  DISTANCE 295.119
     RL 151.85 LAL -.00 LOL 308.08 VL 28.379 GAL -13.23 A7L 89.12 MCA 138.26 SMA 140.79 ECC .24129 INC .8820 V1 29.341 RP 107.69 LAP .59 LOP 86.34 VP 39.015 GAP 3.20 A7P 90.66 TAL 238.30 TAP 16.56 RCA 106.82 APO 174.76 V2 35.190 RC 100.092 GL 3.74 GP -31.98 TAL 164.27 TAP 117.16 ETS 342.80 TAE 136.99 ETE 217.49 TAC 124.12 ETC 357.29 CLP-122.56
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 42.558 VML 6.524 OLA 17.26 RAL 146.99 RAD 6568.6 VEL 12.803 PTH 2.33 VMP 5.133 OPA -13.91 RAP 137.32 ECC 1.7004
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        2370.7
                                                                                                          86.57 22 59 30
63.00 16 7 28
                                                                                       29.04
                      22 10 0 2970.65
14 52 51 4477.39
                                                         -28.13
                                                                          94.30
         90.00
                                                                                                                                                                              180.85
                                                                                           19.03
                                                                                                                                             3877.4
                                                                                                                                                               5.18
                                                                         187.58
                                                            8.87
          90.00
                                                                                                                                                                                63.93
                     23 41 18 2676.23
16 4 14 4247.04
1 15 23 2394.17
16 50 34 4101.87
                                                                                                                                             2076.2
                                                                                                             87.58 24 25 54
                                                                                                                                                             -29.82
                                                                          72.74
                                                                                           29.13
                                                          -29.80
        100.00
                                                                                                                                                                              163.19
                                                                                                                      17 15 1
                                                                                                                                             3647.0
                                                                                                                                                               6.51
                                                                                                              61.80
                                                                                           18.24
        100.00
                                                         10.36
                                                                          169.86
                                                                                                                      1 55 17
17 58 56
                                                                                                                                                                                42.19
                                                                                                                                             1794.2
                                                                                                                                                             -33.76
                                                                                                              90.31
                                                                                           29.23
                                                          -34.18
                                                                           51.41
        110.00
                                                                                                                                            3501.9
                                                                                                                                                               9.89
                                                                                                              58.56
                                                          14.16
                                                                          156.62
                                                                                           16.01
        110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                             SGT 1846.4 SGR 627.0 SG3 217.7
RRT .8013 RRF .8852 RTF .8747
SGB 1949.9 R23 .2610 R13 .8898
SGI 1916.2 SG2 361.4 THA 15.80
                                                                                                                                        ST 703.9 SR 140.0 95 334.2
CRT -.3325 CRS .5739 CST -.9591
LSA 776.3 M9A 153.7 95A 21.8
     TOE .6599 TRA-1.4426 TC3 -.8782 BAU .5551
     ROE - .1287 RRA - .2931 RC3 - .4251 FAU .08617
     FOE .8118 FRA -.8481 FC3-1.7529 BSP 5583
BDF .6723 BRA 1.4721 BC3 .9757 FSP -686
                                                                                                                                         EL1 705.5 EL2 131.7 ALF 176.08
     BOE .6723 BRA 1.4721 BC3 .9757 FSP
                                                                                                                                                     ARRIVAL DATE NOV 9 1967
                                                                                   FLIGHT TIME 100.00
 LAUNCH DATE AUG 1 1967
                                                                                   DISTANCE 301.209
     RL 151.85 LAL -.00 LOL 308.08 VL 28.302 GAL -13.02 AZL 88.76 MCA 141.49 SNA 140.14 ECC .23952 INC 1.2445 V1 29.341
RP 107.66 LAP .78 LOP 89.57 VP 38.967 GAP 3.56 AZP 90.97 TAL 237.12 TAP 18.60 RCA 106.57 APO 173.70 V2 35.199
RC 102.344 GL 5.34 GP -33.31 ZAL 163.11 ZAP 119.22 ETS 339.94 ZAE 134.74 ETE 216.81 ZAC 123.97 ETC 356.45 CLP-125.74
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 41.437 VHL 6.437 DLA 18.51 RAL 148.30 RAD 6568.6 VEL 12.759 PTH 2.32 VHP 5.284 DPA -15.19 RAP 136.94 ECC 1.6819
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.92 97.33 30.35 85.06 22 52 39 2412.4 -28.31 88.69
     LNCH AZMTH LNCH TIME L-I TIME
90.00 22 2 26 3012.38
90.00 15 10 52 4422.20
                                                                                                                                                                               177.75
                                                                                                                                                                 3.41
                                                                                                              62.53 16 24 35
                                                                                                                                              3822.2
                                                                                            20.18
                                                                           184.44
                                                            7.15
                                                                                                                        24 20 10
                                                                                                                                                                                 66.75
                                                                                                                                              2114.1
                                                                                                                                                              -29.89
                                                                                                              86.11
                      23 34 56 2714.13
16 21 4 4195.68
                                                                           75.54
                                                                                            30.50
                                                          -29.66
         100.00
                                                                                                              61.29 17 31 0
88.90 1 51 47
57.95 18 12 40
                                                                                                                                                                               160.34
                                                                                                                                                                4.79
                                                                                                                                              3595.7
                                                            8.69
                                                                           166.96
                                                                                            19.35
         100.00
                      16 21 4
                                                                                                                                                                                44.55
                                                                                            30.74
                                                                                                                                              1824.7
                                                                                                                                                              -33.94
                         1 11 23 2424.67
17 5 2 4057.91
                                                          -34.17
                                                                            53.79
         110.00
                                                                                                                                                                 8.26
                                                                                                                                              3457.9
                                                                                            17.02
                                                                          154.19
         110.00
                                                           12.58
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 781.8 SR 113.3 SS 350.0
CRT -.2647 CRS .5094 CST -.9605
                                                                             SGT 1965.5 SGR 627.8 SG3 207.7
RRT .8056 RRF .8982 RTF .8767
SGB 2063.3 R23 .2824 R13 .8910
      TOE .7447 TRA-1.4663 TC3 -.9606 BAU
                                                               . 5859
      RDE -.0934 RRA -.2667 RC3 -.4425 FAU .08108
                                                                                                                                        LSA 852.6 MSA 138.3 SSA 21.8
ELI 782.4 EL2 109.2 ALF 177.76
      FOE .8253 FRA -.7423 FC3-1.6940 BSP 5975
BOE .7505 BRA 1.4904 BC3 1.0577 FSP -659
                                                                               561 2031.7 SG2 359.8 THA 14.91
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LAUNCH DATE AUG 1 1967
                                                                                     FLIGHT TIME 102.00
                                                                                                                                                         ARRIVAL DATE NOV 11 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 307.274
     RL 151.85 LAL -.00 LOL 308.08 VL 28.223 GAL -12.80 A7L 88.34 HCA 144.71 SMA 139.48 ECC .25780 INC 1.6625 V1 29.341 RP 107.63 LAP .96 LOP 92.80 VP 38.917 GAP 3.91 AZP 91.36 TAL 235.88 TAP 20.60 RCA 106.31 APO 172.65 V2 35.208 RC 104.596 GL 7.21 GP -34.88 ZAL 161.70 ZAP 120.90 ETS 336.86 ZAE 132.47 ETE 216.42 ZAC 123.63 ETC 355.55 CLP-128.75
    PLANETOCENTRIC CONIC
     C3 40.422 VHL 6.358 DLA 19.99 RAL 149.79 RAD 6568.6 VEL 12.720 PTH 2.31 VHP 5.460 DPA -16.74 RAP 136.61 ECC 1.6852
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 8 LONG
                                                                                                            83.13 22 43 17
62.10 16 45 36
84.24 24 12 22
60.79 17 50 28
67.10 1 46 58
57.34 18 29 9
         90.00
                     21 52 11
                                       3066.50
                                                           -27.54
                                                                            101.24
                                                                                             31.92
                                                                                                                                               2466.5
                                                                                                                                                                 -28.20
                                                                                                                                                                                   92.64
                     15 33 1
         90.00
                                       4355.56
                                                            5.04
                                                                            180.68
                                                                                              21.69
                                                                                                                                                 3755.6
                                                                                                                                                                    1.27
                                                                                                                                                                                    174.03
                                                                                                                                                                  -29.87
2.72
                                                                                                                                                                                     70.38
        100.00
                       23 26 19 2762.96
                                                           -29.38
                                                                             79.15
                                                                                              32.15
                                                                                                                                                 2163.0
                    16 41 34 4134.34
                                                              6.67
                                                                           163,53
                                                                                              20.80
                                                                                                                                                 3534.3
        100.00
                                                                                                                                                                                    156.96
                     1 5 55 2463.65
17 22 23 4006.41
                                                                                                                                                                                    47.59
                                                           -34.07
                                                                             56.83
                                                                                              32.57
                                                                                                                                                 1863.7
        110.00
                                                                                                                                                                  -34.10
                                                                                                                                              3406.4
                                                                           151.38
                                                                                            18.35
        110.00
                                                           10.71
                                                                                                                                                                     6.32
                                                                                                                                                                                   145.03
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 2083.6 SCR 627.4 SC3 196.7

RRT .8069 RRF .9102 RTF .8778

SCB 2176.0 R23 .3046 R13 .8914

SCI 2146.0 SC2 359.8 THA 14.06
                                                                                                                                            ST 873.7 SR 85.7 SS 369.8
CRT -.1086 CRS .3590 CST -.9624
     TOE .8459 TRA-1.4777 'C3-1.0413 BAU .6149
     RDE -.0548 RRA -.2357 RC3 -.4586 FAU .07557
    FDE .8434 FRA -.6320 FC3-1.6186 BSP 6339
BDE .8477 BRA 1.4959 BC3 1.1378 FSP -624
                                                                                                                                            LSA 944.3 MSA 124.0 SSA 21.4
                                                                                                                                            EL1 873.8 EL2 85.2 ALF 179.38
                                                                                     FLIGHT TIME 104.00
LAUNCH DATE AUG 1 1967
                                                                                                                                                         ARRIVAL DATE NOV 13 1967
                                                                                    DISTANCE 313.316
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 28.143 GAL -12.57 AZL 87.85 MCA 147.94 SMA 138.82 ECC .23615 INC 2.1530 V1 29.341
RP 107.61 LAP 1.14 LOP 96.04 VP 38.866 GAP 4.25 AZP 91.82 TAL 234.61 TAP 22.55 RCA 106.04 APO 171.60 V2 35.216
RC 106.849 GL 9.44 GP -36.75 ZAL 159.97 ZAP 122.16 ETS 333.51 ZAE 130.14 ETE 216.27 ZAC 123.13 ETC 354.56 CLP-131.64
   PLANETOCENTRIC CONIC
    C3 39.568 VHL 6.290 DLA 21.77 RAL 151.51 RAD 6568.5 VEL 12.686 PTH 2.30 VHP 5.670 DPA -18.61 RAP 136.28 ECC 1.6512 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 37 36 3139.28 -26.84 106.45 33.78 80.61 22 29 55 2539.3 -27.86 97.94 90.00 18 1 15 4272.01 2.36 176.00 23.74 61.77 17 12 27 3672.0 -1.43 169.37
                                                                                                               80.61 22 29 55
61.77 17 12 27
81.80 24 1 20
60.37 18 14 59
84.77 1 40 10
56.75 18 49 27
                    25 14 12 2827.76
17 7 20 4058.75
0 58 16 2514.53
17 43 42 3944.76
        100.00
                                                           -28.85
                                                                             83.89
                                                                                              34.13
                                                                                                                                                 2227.8
                                                                                                                                                                   -29.68
        100.00
                                                            4.14
                                                                           159.34
                                                                                              22.75
                                                                                                                                                 3458.8
                                                                                                                                                                      .16
        110.00
                                                           -33.83
                                                                             60.79
                                                                                              34.82
                                                                                                                                                 1914.5
                                                                                                                                                                  -34.18
                                                                                                                                                                    3.99
        110.00
                                                            8.42
                                                                            148.07
                                                                                              20.12
                                                                                                                                                 3344.8
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 2202.8 SCR 628.6 SC3 185.0
RRT .8050 RRF .9214 RTF .8791
SCB 2290.8 R23 .3266 R13 .8921
SCI 2261.8 SC2 363.2 THA 13.29
                                                                                                                                            ST 982.8 SR 63.1 SS 392.4
CRT .2443 CRS -.0027 CST -.9652
    TOE .9670 TRA-1,4745 TC3-1,1199 BAU .6434
    RDE -.0140 RRA -.2011 RC3 -.4743 FAU .06995
    FOE .8606 FRA -.5245 FC3-1.5305 BSP 6732
BOE .9671 BRA 1.4861 BC3 1.2162 FSP -591
                                                                                                                                            LSA 1053.9 MSA 111.9 SSA 20.5
                                                                                                                                            EL1 982.9 EL2 61.2 ALF
                                                                                    FLIGHT TIME 106.00
                                                                                                                                                        ARRIVAL DATE NOV 15 1967
LAUNCH DATE AUG 1 1967
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 319.335
    RL 151.85 LAL -.00 LOL 308.08 VL 28.061 GAL -12.34 AZL 87.26 MCA 151.17 SMA 138.16 ECC .23457 INC 2.7409 VI 29.341 RP 107.59 LAP 1.32 LOP 99.28 VP 38.814 GAP 4.58 AZP 92.40 TAL 233.29 TAP 24.46 RCA 105.75 APO 170.57 V2 35.223 RC 109.101 GL 12.12 GP -39.00 ZAL 157.82 ZAP 122.96 ETS 329.87 ZAE 127.66 ETE 216.35 ZAC 122.49 ETC 353.44 CLP-134.43
   PLANETOCENTRIC CONIC
    C3 38.961 VHL 6.242 OLA 23.93 RAL 153.51 RAD 6568.5 VEL 12.662 PTH 2.30 VHP 5.923 DPA -20.85 RAP 135.86 ECC 1.6412
    LNCH AZHTH LNCH TIME L-I TIME INJLAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 21 15 13 3243.25
90.00 16 39 39 4160.22
100.00 22 56 10 2917.75
100.00 17 41 23 3960.95
                                                                                                           77.20 22 9 16
61.71 17 49 0
78.54 23 44 48
60.12 18 47 24
81.71 1 30 14
                                                                                                                                           2643.2
                                                                                        35.91
                                                          -25.47
                                                                                                                                                             -26.98 105.42
                                                                         113.76
                                                            -1.25
                                                                          169.76
                                                                                             26.66
                                                                                                                                                3560.2
                                                                                                                                                                  -5.02
       100.00
                                                          -27.80
                                                                            90.37
                                                                                            36.46
                                                                                                                                                2317.8
                                                                                                                                                                 -29.10
                                                                                             25.51
                                                                                                                                                3360.9
       100.00
                                                              .83
                                                                          153.96
                                                                                                                                                                  -3.15
                       0 47 11 2582.73
                                                          -33.28
                                                                                                                                                                 -34.07
       110.00
                                                                            66.03
                                                                                            37.57
                                                                                                                                                1982.7
                                                                                                                         19 15 16
                                                                                                               56.22
                                                                                                                                                3268.7
                                                                                                                                                                1.09
       110.00
                     18 10 47
                                       3868.74
                                                          5.56
                                                                          144.04
                                                                                             22.57
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              SGT 2322.4 SGR 629.6 SG3 172.4
RRT .7968 RRF .9308 RTF .8805
SGB 2406.3 R23 .3474 R13 .8930
SGI 2377.6 SG2 370.0 THA 12.53
    TOE 1.1160 TRA-1.4836 TC3-1.1917 BRD .6705
                                                                                                                                           ST 1115.0 SR 58.5 SS 419.3
    ROE .0299 RRA -.1606 RC3 -.4870 FAU .06401
FOE .8601 FRA -.4164 FC3-1.4224 83P 7130
BOE 1.1164 BRA 1.4625 BC3 1.2873 FSP -556
                                                                                                                                           CRT .7678 CRS -.6091 CST -.9687
                                                                                                                                           LSA 1188.0 MSA 103.4 SSA 18.8
                                                                                                                                           EL1 1115.9 EL2 37.5 ALF 2.31
                                                                                                                                                        ARRIVAL DATE NOV 17 1967
LAUNCH DATE AUG 1 1967
                                                                                    FLIGHT TIME 108.00
                                                                                    DISTANCE 325.333
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 27.979 GAL -12.10 AZL 86.54 MCA 154.39 SMA 137.50 ECC .23305 INC 3.4633 VI 29.341 RP 107.57 LAP 1.50 LOP 102.51 VP 38.761 GAP 4.89 AZP 93.12 TAL 231.94 TAP 26.34 RCA 105.46 APO 169.54 VZ 35.230 RC 111.351 GL 15.40 GP -41.71 ZAL 155.11 ZAP 123.20 ETS 325.88 ZAE 124.96 ETE 216.59 ZAC 121.71 ETC 352.14 CLP-137.18
   PLANETOCENTRIC CONIC
    C3 38.745 VHL 6.225 DLA 26.59 RAL 155.93 RAD 6568.5 VEL 12.654 PTH 2.30 VHP 6.240 DPA -23.53 RAP 135.27 ECC 1.6377
    LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 33 48 3416.18 -22.35 125.46 37.94 72.14 21 30 44 2816.2 -24.58 117.50 90.00 17 40 20 3984.49 -6.86 159.90 31.28 62.46 18 46 45 3384.5 -10.50 153.11 100.00 22 25 57 3054.63 -25.58 99.93 39.02 73.98 23 16 51 2454.6 -27.53 91.67 100.00 18 30 52 3821.27 -3.90 146.29 29.66 60.34 19 34 33 3221.3 -7.82 139.70
                                                                            73.22
                                                                                             40.91
                                                                                                               77.61
                                                                                                                             1 14 52
                                                                                                                                                2078.0
                                                                                                                                                                -33.49
       110.00
                       0 30 14
                                      2678.02
                                                          -32.12
                                                                                                                                                                                    64.26
                                                                                                               55.86 19 49 50
                                                                                                                                             3170.6
                     18 47 0
                                                                          138.90
                                                                                           26.09
                                                                                                                                                                -2.66
       110.00
                                                          1.83
                                                                                                                                                                                 132.70
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                             SGT 2441.5 SGR 627.7 SG3 158.3 ST 1279.6 SR 81.7 SS 452.5
RRT .7861 RRF .9369 RTF .8821 CRT .9771 CRS -.9321 CST -.9726
SG8 2520.9 R23 .3659 R13 .8941 LSA 1355.9 MSA 99.8 SSA 16.1
SG1 2492.1 SG2 380.1 THA 11.70 ELI 1282.1 EL2 17.4 ALF 3.57
    TOE 1.3065 TRA-1.4078 TC3-1.2483 BAU .6951
    ROE .0780 RRA -.1112 RC3 -.4924 FAU .05759
FDE .9045 FRA -.3057 FC3-1.2867 BSP 7491
BDE 1.3088 BRA 1.4122 BC3 1.3419 FSP -512
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ARRIVAL DATE NOV 19 1967

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FLIGHT TIME 110.00
LAUNCH DATE AUG 1 1967
                                                                       DISTANCE 331.307
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 27.896 GAL -11.84 A7L 85.62 HCA 157.62 SMA 136.84 ECC .23161 INC 4.3783 V1 29.341
RP 107.55 LAP 1.67 LOP 105.75 VP 38.707 GAP 5.19 AZP 94.05 TAL 230.56 TAP 28.18 RCA 105.15 APO 168.54 V2 35.236
RC 113.598 GL 19.45 GP -45.00 ZAL 151.66 ZAP 122.79 ETS 321.50 ZAE 121.93 ETE 216.92 ZAC 120.81 ETC 350.55 CLP-139.99
  PLANETOCENTRIC CONIC
   C3 39.187 WHL 6.260 DLA 29.88 RAL 158.93 RAD 6568.5 VEL 12.671 PTH 2.30 VMP 6.651 DPA -26.72 RAP 134.36 ECC 1.6449 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ.RT ASC INJ.AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                2.30 VHP 6.651 DPA -26.72 RAP 134.36 ECC 1.6449
                                                                                              64.47 19 4 16
64.46 21 37 14
                                                                                                                          3363.9
                                                                                                                                        -19.38
       80.06 17 58 12
99.94 20 39 51
                                                                               38.85
                                                 -16.07
                                                               163.08
                                 3963.95
                                                                                                                          2842.4
                                                                               38.84
                                 3442.45
                                                 -16.05
                                                               124.73
                               3413.87
3467.74
                                                                                               64.94 21 45 42
63.99 21 29 44
                                                                                                                          2813.9
                                                                                                                                         -20.09
                                                                               39.24
      100.00
                   20 46 48
                                                 -16.85
                                                               123.00
                                                                                                                          2867.8
                                                                                                                                         -18.65
      100.00
                   20 31 56
                                 3467.75
                                                 -15.27
                                                               126.22
                                                                               38.45
                                                                                                      0 46 12
20 40 32
                                                                                                                          2222.5
                                                                                                                                         -31.70
      110.00
                   0 1 9 2822.47
19 40 1 3631.92
                                 2822.47
                                                 -29.52
                                                                 83.67
                                                                               44.67
                                                                                               71.93
                                                                                               55.97
                                                                                                                          3031.9
                                                                                                                                          -7.91
      110.00
                                                   -3.47
                                                               131.66
                                                                               31.56
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1485.2 SR 119 D SS 490.1
CRT .9817 CRS -.9924 CST -.9770
                                                                   SGT 2562.9 SGR 623.1 SG3 143.1
RRT .7637 RRF .9378 RTF .8850
SGB 2637.6 R23 .3800 R13 .8963
    TOE 1.5552 TRA-1.3304 TC3-1.2805 BAU
                                                      .7177
   RDE .1272 RRA -.0516 RC3 -.4870 FAU .05085
FDE .9281 FRA -.1975 FC3-1.1234 BSP 7886
                                                                                                                      LSA 1565.2 MSA 100.7 SSA 12.8
                                                                                                                      EL1 1489.8 EL2 22.6 ALF
                                                                                                                                                           4.50
                                                                    SG1 2607.8 SG2 395.3 THA 10.77
    BOE 1.5604 BRA 1.3314 BC3 1.3700 FSP
                                                    -468
                                                                                                                                  ARRIVAL DATE NOV 21 1967
                                                                        FLIGHT TIME 112.00
                                                                       DISTANCE 337.259
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 27.813 GAL -11.59 AZL 84.42 MCA 160.83 SMA 136.19 ECC .23022 INC 5.5831 VI 29.341 RP 107.53 LAP 1.83 LOP 109.00 VP 36.632 GAP 5.48 AZP 95.28 TAL 229.14 TAP 29.97 RCA 104.84 APO 167.55 V2 35.241 RC 115.842 GL 24.52 GP -49.01 ZAL 147.21 ZAP 121.59 ETS 316.64 ZAE 118.39 ETE 217.19 ZAC 119.82 ETC 348.53 CLP-143.01
  PLANETOCENTRIC CONIC
    C3 40.799 VHL 6.367 DLA 33.96 RAL 162.81 RAD 6568.6 VEL 12.734 PTH
                                                                                                 2.32 VHP 7.213 DPA -30.53 RAP 132.91 ECC 1.6715
    LNON AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          3581.5
                                                                                                                                        -21.53
       70.42
                  17 7 33 4181.46
                                                 -17.74
                                                               180.49
                                                                              44.47
                                                                                               60.56 18 17 14
                                                                                                                                                        173.42
                                                                                               60.55 22 55 37
60.56 18 17 14
60.55 22 55 37
62.24 23 26 7
58.80 22 30 2
                                                                                                                           2645.3
                                                                                                                                                        103.63
                  22 1 32 3245.30
                                                 -17.73
                                                               110.69
                                                                               44.46
                                                                                                                                          -21.51
      109.58
       70.42
                                                                                                                                                        173.42
                   17 7 33
                                 4181.46
                                                 -17.74
                                                                180.49
                                                                                44,47
                                                                                                                           3581.5
                                                                                                                                          -21.53
                  22 1 32 3245.30
                                                                                                                          2645.3
                                                                                                                                                        103.63
      109.58
                                                 -17,73
                                                                110.69
                                                                                44.46
                                                                                                                                         -21.51
                                                                                                                                                         97.47
                                                                                                                          2547.2
      110.00
                   22 33 40
                                3147.23
                                                 -20.79
                                                                104.82
                                                                                46.23
                                                                                                                                        -24.34
      110.00
                  21 34 35
                               3327.52
                                                 -14.73
                                                                115.28
                                                                               42.63
                                                                                                                          2727.5
                                                                                                                                         -18.76
                                                                                                                                                        108.47
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 2684.8 SCR 608.0 SC3 126.2
RRT .7223 RRF .9270 RTF .8897
SCB 2752.8 R23 .3884 R13 .8999
SCI 2721.4 SG2 414.8 THA 9.51
                                                                                                                      ST 1747.1 SR 156.8 SS 534.1
CRT .958Z CRS -.9938 CST -.9815
    TOE 1.8977 TRA-1.2035 TC3-1.2663 BAU .7348
    RDE .1735 RRA .0253 RC3 -.4596 FAU .04352
                                                                                                                      LSA 1830.5 MSA 106.2 SSA
ELI 1753.6 ELZ 44.7 ALF
    FOE .9540 FRA -.0878 FC3 -.9234 BSP 8233
                                                                                                                                                             9.4
    BOE 1.9056 BRA 1,2037 BC3 1.3471 FSP
                                                                                                                                                            4.97
                                                       -415
                                                                                                                                 ARRIVAL DATE NOV 23 1967
                                                                       FLIGHT TIME 114.00
LAUNCH DATE AUG 1 1967
                                                                       DISTANCE 343.183
   RL 151.85 LAL -.00 LOL 308.08 VL 27.730 GAL -11.32 AZL 82.75 MCA 164.04 SMA 135.55 ECC .22890 INC 7.2522 VI 29.341
RP 107.32 LAP 1.99 LOP 112.24 VP 38.596 GAP 5.75 AZP 96.98 TAL 227.69 TAP 31.73 RCA 104.52 APO 166.58 V2 35.246
RC 118.080 GL 30.90 GP -53.92 TAL 141.41 ZAP 119.44 ETS 311.12 ZAE 114.14 ETE 217.07 ZAC 118.77 ETC 345.78 CLP-146.58
  PLANETOCENTRIC CONIC
    C3 44.885 VHL 8.685 DLA 38.98 RAL 168.13 RAD 6568.7 VEL 12.886 PTH 2.35 VHP 8.028 DPA -35.02 RAP 130.52 ECC 1.7354
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                            55.40 17 55 41
55.39 24 0 23
55.40 17 55 41
55.39 24 0 23
55.40 17 55 41
55.39 24 0 23
55.40 17 55 41
55.39 24 0 23
                                                                                                                                       -23.58
                                                                                                                        3739.1
                                                                                                                                                      187.34
                 16 43 21 4339.15
23 8 9 3133.47
                                                               194.10
                                                                               52.68
       62.01
                                                 -19.19
                                                                                                                                                         95.91
                                                               102.67
                                                                               52.67
                                                                                                                          2533.5
                                                                                                                                         -23.57
                                                  -19.17
      117.99
                  16 43 21 4339.15
23 8 9 3133.47
                                                                                                                                                        187.34
                                                                                                                          3739.1
                                                                                                                                        -23.58
                                                 -19.19
                                                               194.10
                                                                                52.68
       62.01
                                                                                                                                                         95.91
                                                 -19.17
                                                               102.67
                                                                               52.67
                                                                                                                          2533.5
                                                                                                                                        -23.57
      117.00
                                                                                                                                                       187.34
                   16 43 21 4339.15
                                                               194.10
                                                                                52.68
                                                                                                                          3739.1
                                                                                                                                        -23.58
                                                 -19.19
       62.01
                   25 8 9
                                                                                                                          2533.5
                                                                                                                                        -23.57
                                                                                                                                                         95.91
                                                               102.67
                                                                                52.67
                                 3133.47
                                                 -19.17
      117.99
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2810.7 SGR 575.7 SG3 107.9
RRT .6376 RRF .8858 RTF .8982
SGB 2869.1 R23 .3878 R13 .9064
SGI 2835.2 SGZ 439.6 THA 7.62
                                                                                                                       ST 2074.5 SR 172.2 SS 580.8
    TOE 2.3886 TRA-1.0015 TC3-1.1801 BAU .7443
   RDE .1942 RRA .1243 RC3 -.3992 FAU .03580
FDE .9764 FRA .0186 FC3 -.6935 BSP 8628
                                                                                                                      CRT .9180 CRS -.9709 CST -.9859
                                                                                                                                                            6.6
                                                                                                                      LSA 2158.1 MSA 114.5 SSA
                                                                                                                       EL1 2080.5 EL2 68.1 ALF 4.36
    BOE 2.3965 BRA 1.0092 BC3 1.2458 FSP
                                                       -362
                                                                        FLIGHT TIME 116.00
                                                                                                                                  ARRIVAL DATE NOV 25 1967
LAUNCH DATE AUG 1 1967
                                                                       DISTANCE 349.073
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 27.647 GAL -11.04 AZL 80.27 MCA 167.23 SMA 134.91 ECC .22762 INC 9.7317 V1 29.341 RP 107.30 LAP 2.14 LOP 115.48 VP 38.540 GAP 6.02 AZP 99.50 TAL 226.20 TAP 33.43 RCA 104.21 APO 165.62 V2 35.250 RC 120.312 GL 38.82 GP -59.91 ZAL 133.92 ZAP 116.16 ETS 304.41 ZAE 108.85 ETE 215.81 ZAC 117.77 ETC 341.57 CLP-151.56
  PLANETOCENTRIC CONIC
   C3 53.539 WHL 7.317 OLA 44.86 RAL 175.88 RAO 6568.9 VEL 13.225 PTH 2.42 VHP 9.308 OPA -40.18 RAP 126.50 ECC 1.8811
    LNCH AZMTH LNCH TIME L-I TIME
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        -24.76
                                                                                            48.81 17 53 12
                 16 36 30
                                                                                                                                                        200.75
       53.63
                                  4482.54
                                                  -19.62
                                                                206.95
                                                                               64.91
                                                                                                                           3442.5
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                                                                                                                                          -24.75
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      126.37
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                                  3080.34
                                                  -19.60
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       53.63
                   16 36 30
                                  4482.54
                                                  -19.62
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                                                                   MID-COURSE EXECUTION ACCURACY
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                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE 3.1334 TRA -. 6602 TC3 -. 9838 BAU .7343
                                                                    SGT 2936.8 SGR 517.4 SG3 88.7
                                                                                                                       ST 2463.7 SR 124.2 SS 628.4
                                                                                                                       CRT .6688 CRS -.7674 CST -.9898
    ROE .1158 RRA .2532 RC3 -.2909 FAU .02761
FDE .9962 FRA .1261 FC3 -.4465 BSP 8987
BDE 3.1356 BRA .7071 BC3 1.0259 FSP -303
                                                                   RRT .4155 RRF .7298 RTF .9128
SGB 2982.0 R23 .3745 R13 .9173
                                                                                                                      LSA 2542.5 MSA 126.0 SSA 4.3
                                                                                                                       EL1 2465.1 EL2 92.3 ALF 1.93
                                                                    SG1 2944.9 SG2 469.3 THA 4.30
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ARRIVAL DATE NOV 27 1967
                                                                                      FLIGHT TIME 118.00
AUNCH DATE AUG 1 1967
                                                                                      DISTANCE 354.911
   HELLOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 27.563 GAL -10.74 AZL 76.19 MCA 170.38 SMA 134.29 ECC .22633 INC13.8138 VI 29.341 RP 107.49 LAP 2.29 LOP 118.73 VP 38.483 GAP 6.26 AZP 103.63 TAL 224.68 TAP 35.06 RCA 103.89 APO 164.68 V2 35.253
                            48.18 GP -67.05 TAL 124.55 TAP 111.58 ETS 294.57 TAE 102.00 ETE 211.19 TAC 117.06 ETC 333.74 CLP-160.62
    RC 122.538 GL
   PLANETOCENTRIC CONIC
     C3 75.274 VHL 8.676 OLA 50.83 RAL 187.77 RAD 6569.5 VEL 14.022 PTH
                                                                                                                     2.56 VHP 11.545 DPA -45.74 RAP 119.43 ECC 2.2388
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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        134.15
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 3042.4 SGR 522.8 SG3 70.3
RRT -.2553 RRF .0825 RTF .9378
                                                                                                                                               ST 2820.9 SR 264.7 SS 674.7
CRT -.8903 CRS .8310 CST -.9931
     TOE 4.2712 TRA -.0264 TC3 -.6569 BAU
                                                                 .6751
     RDE -.3565 RRA .3852 RC3 -.1360 FAU .01907
                                                                                  SG8 3087.0 R23 -.3399 R13 -.9353
SG1 3045.4 SG2 505.0 THA 177.42
                                                                                                                                                LSA 2909.0 MSA 143.8 SSA 2.7
    FDE 1.0175 FRA .2457 FC3 -.2193 BSP 9301
                                                                                                                                                EL1 2830.7 EL2 120.1 ALF 175.22
     BDE 4.2861 BRA .3861 BC3 .6708 FSP -242
                                                                                                                                                             ARRIVAL DATE NOV 29 1967
LAUNCH DATE AUG 1 1967
                                                                                       FLIGHT TIME 120.00
                                                                                      DISTANCE 360.641
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 27.480 GAL -10.42 AZL 68.27 HCA 173.43 SMA 133.67 ECC .22488 INC21.7271 V1 29.341 RP 107.49 LAP 2.43 LOP 121.98 VP 38.426 GAP 6.47 AZP 111.60 TAL 223.09 TAP 36.53 RCA 103.61 APO 163.73 V2 35.256 RC 124.755 GL 57.54 GP -74.23 ZAL 113.63 ZAP 105.71 ETS 273.26 ZAE 92.50 ETE 194.49 ZAC 117.41 ETC 313.41 CLP 175.18
   PLANETOCENTRIC CONIC
                                                                                                                     2.84 WHP 16.120 DPA -50.38 RAP 106.34 ECC 3.3140
    C3 140.605 VHL 11.858 DLA 54.30 RAL 205.18 RAD 6570.5 VEL 16.184 PTH 2.84 VHP 16.120 DPA -50.38 RAP 106.34 ECC 3.3140 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 41.52 17 55 26 4792.06 -11.23 228.45 106.99 36.51 19 15 18 4192.1 -17.61 223.89 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12 138.48 2 55 32 3198.29 -11.21 100.69 106.97 36.51 3 48 50 2598.3 -17.60 96.12
     C3 140,605 VHL 11.858 DLA 54.30 RAL 205.18 RAD 6570.5 VEL 16.184 PTH
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 2673.2 SR 1211.9 SS 735.3
CRT -.9902 CRS .9757 CST -.9967
                                                                                  SGT 2924.7 SGR 1213.8 SG3 55.5
RRT -.8822 RRF -.7687 RTF ..9781
     TOE 5.4910 TRA 1.3120 TC3 -,2437 BAU .4582
    ROE-2.5077 RRA .0861 RC3 -.0041 FAU .00967
FOE 1.0701 FRA .4287 FC3 -.0595 8SP 9529
8DE 6.0365 BRA 1.3148 BC3 .2438 FSP -189
                                                                                                                                                LSA 3020.9 MSA 171.3 SSA 1.5
                                                                                  SG8 3166.6 R23 -.2631 R13 -.9631
                                                                                  SG1 3120.9 SG2 535.7 THA 159.25
                                                                                                                                                EL1 2931.0 EL2 154.3 ALF 155.75
                                                                                                                                                            ARRIVAL DATE DEC 1 1967
                                                                                      FLIGHT TIME 122.00
LAUNCH DATE AUG 1 1967
                                                                                      DISTANCE 366.030
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 27.398 GAL -10.02 AZL 48.12 MCA 176.17 SMA 133.06 ECC .22268 INC41.8766 VI 29.341
RP 107.48 LAP 2.56 LOP 125.22 VP 38.369 GAP 6.58 AZP 131.81 TAL 221.35 TAP 37.52 RCA 103.43 APO 162.69 V2 35.258
RC 126.964 GL 60.21 GP -71.21 ZAL 102.67 ZAP 99.08 ETS 218.60 ZAE 76.67 ETE 143.86 ZAC 121.64 ETC 256.76 CLP 119.34
   PLANETOCENTRIC CONIC
     C3 430.648 VHL 20.752 DLA 49.07 RAL 222.10 RAD 6572.2 VEL 23.494 PTH 3.29 VHP 27.993 DPA -48.55 RAP 82.75 ECC 8.0874
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.09 19 23 10 4899.40 -2.58 228.89 129.87 40.98 20 44 50 4299.4 -8.60 224.01 131.91 3 42 47 3398.24 -2.56 110.89 129.86 40.98 4 39 25 2798.2 -8.58 106.01
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        131.91
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   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 1100.7 SGR 2926.2 SG3 47.0
RRT -.8722 RRF -.9787 RTF .9525
SGB 3126.4 R23 -.1471 R13 -.9884
                                                                                                                                               ST 587.0 SR 2415.1 SS 937.3

CRT -.9509 CRS .9948 CST -.9775

LSA 2649.3 MSA 192.2 SSA 1.4
     TDE 1.8428 TRA 2.3154 TC3 -.0055 BAU .6641
     RDE-8.5598 RRA-3.9342 RC3 -.1152 FAU-.00824
     FOE 1.3369 FRA .9339 FC3 .0166 BSP 9275
BDE 8.7559 BRA 4.5650 BC3 .1153 FSP -151
                                                                                  SG1 3084.4 SG2 510.7 THA 108.70
                                                                                                                                                EL1 2479.1 EL2 177.0 ALF 103.08
                                                                                                                                                             ARRIVAL DATE DEC 3 1967
LAUNCH DATE AUG 1 1967
                                                                                       FLIGHT TIME 124.00
                                                                                       DISTANCE 375.249
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 27.315 GAL -10.40 AZL 171.63 MCA 182.71 SMA 132.46 ECC .23088 INC81.6314 VI 29.341 RP 107.48 LAP 2.68 LOP 128.47 VP 38.311 GAP 7.79 AZP 8.38 TAL 221.04 TAP 43.75 RCA 101.88 APO 163.05 V2 35.259 RC 129.165 GL -45.78 GP 52.31 ZAL 97.30 ZAP 96.33 ETS 176.49 ZAE 55.61 ETE 245.34 ZAC 106.38 ETC 131.67 CLP 100.40
   PLANETOCENTRIC CONIC
     C31375.441 VHL 37.087 DLA -51.81 RAL 181.02 RAD 6573.1 VEL 38.688 PTH 3.55 VMP 47.169 DPA 62.68 RAP 13.25 ECC23.6363
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 44.61 4 30 5 2350.39 -1.01 65.35 91.80 141.80 5 9 16 1750.4 5.27 60.81
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         44.61
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                       13 8 11
                                           796.65
        135.39
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                                                                                                                 141.60
                                        2350.39
                                                              -1.01
                                                                               65.35
                                                                                                91.80
          44.61
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                                                               - .99
                                                                              301.99
                                                                                                91.82
        135.39
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 624.0 $R 2133.0 SS 1892.5
                                                                                  SGT 1059.0 SUR 2536.6 SG3 46.3
     TOE 3.8635 TRA 2.4157 TC3 -.0854 BAU 3.6487
                                                                                 RRT -.8683 RRF .9985 RTF -.8438
SGB 2748.8 R23 -.1150 R13 .9929
                                                                                                                                               CRT -.9705 CRS -.9999 CST .9676
LSA 2915.1 MSA 151.2 SSA 1.8
     RO-13.7861 RRA-1.4591 RC3 .1791 FAU-.05569
FOE-3.0031 FRA -.2441 FC3 .0350 BSP 7950
BDE14.3172 BRA 2.8222 BC3 .1984 FSP -141
                                                                                  SG1 2704.3 SG2 492.7 THA 110.64
                                                                                                                                                EL1 2217.7 EL2 144.7 ALF 105.92
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ARRIVAL DATE DEC 5 1967 FLIGHT TIME 126.00 LAUNCH DATE AUG 1 1967 **DISTANCE 379.759** HELIOCENTRIC CONIC RL 151.85 LAL -.00 LOL 308.08 VL 27.234 GAL -9.81 AZL 127.51 MCA 184.59 SMA 131.88 ECC .22649 INC37.5051 V1 29.341
RP 107.48 LAP 2.79 LOP 131.72 VP 38.253 GAP 7.64 AZP 52.58 TAL 218.98 TAP 43.57 RCA 102.01 APO 161.75 V2 35.259
RC 131.355 GL -60.65 GP 73.04 ZAL 103.65 ZAP 102.76 ETS 143.76 ZAE 82.30 ETE 216.92 ZAC 92.66 ETC 96.29 CLP 139.19 PLANETOCENTRIC CONTC C3 351.344 VHL 18.744 DLA -56.22 RAL 150.45 RAD 6571.9 VEL 21.740 PTH 3.22 VHP 23.010 OPA 82.19 RAP 291.72 ECC 6.7822 LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3.96 2 50 39 1695.6 10.59 2 12 24 2295.56 66.08 57.76 146.13 30.17 11 33 13 10.60 291.00 57.80 146.13 140.63 11 22 0 673.62 3.98 295.10 57.78 1695.6 10.59 61.97 3.96 66.08 146.13 2 50 39 39.17 2 12 24 2295.56 11 33 13 - 291.00 73.6 10.60 140.83 11 22 0 673.62 3.98 295.10 57.80 146.13 2 50 39 61.97 1695.6 10.59 39.17 2 12 24 2295.56 3.96 66.08 57.7A 146.13 146.13 2 50 39 146.13 11 33 13 73.6 10.60 140.83 11 22 0 673.62 3.98 295.10 57.80 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 990.6 SGR 3232.0 SG3 54.2 RRT .8579 RRF .9615 RTF .9369 SGB 3380.4 R23 -.1496 R13 .9881 SGI 3344.4 SGZ 491.8 THA 74.93 ST 933.8 SR 2188.2 SS 982.0 CRT .9728 CRS -.9953 CST -.9906 TDE-3.0360 TRA -.6267 TC3 -.0099 BAU .4551 ROE-6.7374 RRA-4.829 RC3 .0964 FAU-.00185 FDE-1.5665 FRA -.7350 FC3 .0046 BSP 10218 BDE 7.3898 BRA 4.5265 BC3 .0969 FSP -170 LSA 2565.4 MSA 207.4 SSA 1.2 EL1 2370.7 EL2 199.7 ALF 67.29 ARRIVAL DATE DEC 7 1967 LAUNCH DATE AUG 1 1967 FLIGHT TIME 128.00 **DISTANCE 365.267** HELIOCENTRIC CONIC RL 151.85 LAL -.00 LOL 308.08 VL 27.153 GAL -9.42 AZL 112.86 HCA 187.48 SMA 131.30 ECC .22498 INC22.8621 VI 29.341 RP 107.48 LAP 2.90 LOP 134.97 VP 38.195 GAP 7.77 AZP 67.31 TAL 217.26 TAP 44.73 RCA 101.76 APO 160.84 V2 35.259 RC 133.537 GL -58.85 GP 69.13 ZAL 110.35 ZAP 110.87 ETS 94.47 ZAE 95.67 ETE 170.04 ZAC 89.39 ETC 47.01 CLP-178.99 PLANETOCENTRIC CONIC 2.87 VHP 14.460 OPA 74.93 RAP 218.97 ECC 3.4337 C3 147.880 VHL 12.161 DLA -50.38 RAL 144.00 RAD 6570.6 VEL 16.408 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 43 29 1524.2 2 8 5 2124.21 10 34 51 5884.68 45.47 139.62 16.19 46.42 10.15 55.56 139.62 12 12 55 5284.7 16.20 267.86 133.58 10.16 272.83 45.48 50.59 2 8 5 2124.21 10 34 51 5884.68 139.62 2 43 29 1524.2 16.19 46.42 10.15 55.56 45.47 139.62 12 12 55 5284.7 16.20 267.86 133.56 10.16 272.83 45.48 2 43 29 1524.2 45.47 139.62 16.19 46.42 2 8 5 2124.21 10.15 55.56 12 12 55 139.62 5284.7 16.20 267.A6 133.56 10 34 51 5884.68 10.16 272.83 45.48 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3242.2 SCR 1480.5 SC3 68.8 RRT .9346 RRF .8555 RTF .9825 SCB 3564.3 R23 -.2347 R13 .9702 SCI 3531.3 SC2 483.6 THA 23.58 ST 2019.6 SR 581.1 SS 707.8 CRT .9093 CRS -.8615 CST -.9947 TOE-3.9513 TRA-3.5315 TC3 -.2010 BAU .4014 RDE -.8350 RRA-1.9296 RC3 -.0289 FAU .01405 FOE-1.1505 FRA -.7420 FC3 -.0823 BSP 10867 BDE 4.0386 BRA 4.0243 BC3 .2030 FSP -219 LSA 2203.4 MSA 250.2 SSA 1.7 FL 1 2088.5 FL 2 233.8 ALF 14.85 ARRIVAL DATE DEC 9 1967 FLIGHT TIME 130.00 LAUNCH DATE AUG 1 1967 DISTANCE 390.978 HELIOCENTRIC CONIC RL 151.85 LAL -.00 LOL 308.08 VL 27.072 GAL -9.07 AZL 106.53 HCA 190.57 SMA 130.74 ECC .22417 INC16.5327 V1 29.341 RP 107.48 LAP 2.99 LOP 138.22 VP 38.137 GAP 7.97 AZP 73.73 TAL 215.60 TAP 46.17 RCA 101.43 APO 160.04 V2 35.257 RC 135.709 GL -54.17 GP 60.49 ZAL 115.57 ZAP 118.59 ETS 76.28 ZAE 104.31 ETE 155.10 ZAC 88.63 ETC 29.09 CLP-166.31 PLANETOCENTRIC CONIC C3 88.050 VHL 9.383 OLA -44.89 RAL 144.60 RAD 6569.7 VEL 14.471 PTH 2.63 VHP 10.987 OPA 65.53 RAP 202.09 ECC 2.4491 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 2 35 25 1956.90 10 12 16 5841.42 2 35 25 1956.90 1356.9 19.60 14.23 43.78 39.83 133.03 3 A 2 53.59 133.03 11 49 38 19.62 267.25 126.41 14.25 273.03 39.85 5241.4 37.99 1356.9 19.60 3 8 2 14.23 43.78 39.83 133.03 53.59 133.03 11 49 38 267.25 19.62 5241.4 126.41 10 12 16 5841.42 14.25 273.03 39.85 2 35 25 1956.90 10 12 16 5841.42 1556.9 19.60 53.59 14.23 43.78 39.83 133.03 3 A 2 133.03 11 49 38 19.62 273.03 39.85 5241.4 126.41 14.25 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 3630.9 SCR 610.2 SC3 86.6 RRT .6787 RRF .4326 RTF .9519 SCB 3681.8 R23 -.3042 R13 .9478 SCI 3654.8 SG2 445.2 THA 6.61 ST 1952.9 SR 239.1 SS 644.5 CRT -.2543 CRS .4439 CST -.9795 TOE-2.8324 TRA-3.5061 TC3 -.5493 BAU .6466 RDE .2640 RRA - .6829 RC3 - .0022 FAU .02350 LSA 2053.8 MSA 260.9 SSA 2.5 EL1 1953.8 EL2 231.1 ALF 178.19 FOE-1.0685 FRA -.7254 FC3 -.2311 BSP 11330 BDE 2.8447 BRA 3.5720 BC3 .5493 FSP -278 ARRIVAL DATE DEC 11 1967 LAUNCH DATE AUG 1 1967 FLIGHT TIME 132,00 DISTANCE 396.748 HELIOCENTRIC CONIC RL 151.85 LAL -.00 LOL 308.08 VL 26.992 GAL -8.72 ATL 103.07 MCA 193.74 SMA 130.18 ECC .22366 INC13.0704 V1 29.341
RP 107.49 LAP 3.08 LOP 141.48 VP 38.078 GAP 8.18 AZP 77.29 TAL 213.95 TAP 47.69 RCA 101.07 APO 159.30 V2 35.255
RC 137.871 GL -49.67 GP 52.58 ZAL 119.31 ZAP 125.39 ETS 68.96 ZAE 110.51 ETE 151.73 ZAC 88.26 ETC 22.17 CLP-162.37 PLANETOCENTRIC CONIC C3 62.653 VHL 7.915 DLA -40.53 RAL 146.70 RAD 6569.2 VEL 13.565 PTH 2.48 VHP 9.282 DPA 57.32 RAP 195.19 ECC 2.0311 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 127.60 3 39 6 127.59 11 32 39 3 8 56 1209.5 21.19 59.69 1809.50 16.42 32.68 36.52 5230.3 21.20 120.31 9 55 28 5830.31 16.43 273.98 36.53 3 39 6 11 32 39 26.30 1209.5 59.69 3 8 56 1809.50 16.42 32.68 36.52 127.60 21.19 120.31 9 55 28 5830.31 16.43 273.98 36.53 127.59 5230.3 21.20 267.60 3 39 6 1209.5 21.19 26.30 59.69 3 8 56 1809.50 16.42 32.68 36.52 127.60 11 32 39 5230.3 21.20 120.31 9 55 28 5830.31 16.43 273.98 36.53 127.59 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3752.6 SGR 421.4 SG3 103.4 RRT .2290 RRF -.1250 RTF .9284 SGB 3776.2 R23 -.3494 R13 .9274 ST 1849.1 SR 305.3 SS 620.4 CRT -.6823 CRS .8500 CST -.9650 TDE-2.2127 TRA-3.2301 TC3 -.9049 BAU .7586 RDE .4035 RRA -.3128 RC3 .0383 FAU .03043 FDE-1.0332 FRA -.6892 FC3 -.4205 BSP 11587 BDE 2.2492 BRA 3.2452 BC3 .9057 FSP -332 LSA 1956.1 MSA 265.9 SSA ELI 1860.9 ELZ 221.8 ALF 173.48 SG1 3753.9 SG2 410.1 THA 1.49

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FLIGHT TIME 134.00
                                                                                                                                                                                                       ARRIVAL DATE DEC 13 1967
LAUNCH DATE AUG 1 1967
                                                                                                             DISTANCE 402.538
    HELIOCENTRIC CONIC
     RL 151.85 LAL -.00 LOL 308.08 VL 26.913 GAL -8.37 AZL 100.89 MCA 196.94 SMA 129.64 ECC .22335 INC10.8907 V1 29.341
RP 107.50 LAP 3.16 LOP 144.73 VP 38.020 GAP 8.40 AZP 79.57 TAL 212.29 TAP 49.23 RCA 100.69 APO 158.60 V2 35.253
RC 140.023 GL -45.83 GP 45.92 ZAL 121.84 ZAP 131.17 ETS 64.81 ZAE 115.07 ETE 151.80 ZAC 87.76 ETC 18.50 CLP-161.13
    PLANETOCENTRIC CONIC
      C3 49.198 VML 7.014 DLA -37.19 RAL 149.12 RAD 6568.8 VEL 13.060 PTH 2.38 VMP 8.349 DPA 50.32 RAP 191.86 ECC 1.8097 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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75.72 34.57 123.35 11 17 52
22.65 34.56 123.36 4 11 16
75.72 34.57 123.35 11 17 52
HID-COURSE EXECUTION ACCURACY OR
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    DIFFERENTIAL CORRECTIONS
                                                                                                       SCT 3851.1 SCR 379.0 SC3 117.4
RRT -.0562 RRF -.4245 RTF .9110
SCB 3869.7 R23 .3735 R13 -.9112
SCI 3851.2 SC2 378.4 THA 179.68
                                                                                                                                                                                    ST 1775.5 8R 325.8 SS 603.3

CRT -.7556 CRS .9194 CST -.9523

LSA 1884.3 MSA 268.7 SSA 4.4
      TDE-1.8567 TRA-2.9959 TC3-1.2538 BAU .8256
      ROE .3932 RRA -.1770 RC3 .0618 FAU .03538
      FOE -.9949 FRA -.6345 FC3 -.6226 BSP 11891
BOE 1.8979 BRA 3.0011 BC3 1.2553 FSP -376
                                                                                                                                                                                      EL1 1792.8 EL2 211.3 ALF 171.99
                                                                                                              FLIGHT TIME 136.00
                                                                                                                                                                                                       ARRIVAL DATE DEC 15 1967
                                                                                                             DISTANCE 408.333
   HELIOCENTRIC CONIC
     RL 151.85 LAL -.00 LOL 308.08 VL 26.835 GAL -8.01 AZL 99.59 HCA 200.15 SMA 129.11 ECC .22321 INC 9.3880 V1 29.341
RP 107.51 LAP 3.22 LOP 147.98 VP 37.961 GAP 8.62 AZP 81.18 TAL 210.63 TAP 50.78 RCA 100.29 APO 157.93 V2 35.249
RC 142.165 GL -42.63 GP 40.42 ZAL 123.42 ZAP 136.02 ETS 61.89 ZAE 118.44 ETE 153.09 ZAC 87.00 ETC 16.12 CLP-160.94
    PLANETOCENTRIC CONIC
     C3 40.963 VHL 6.400 DLA -34.65 RAL 151.61 RAO 6566.6 VEL 12.741 PTH 2.32 VHP 7.808 OPA 44.36 RAP 190.28 ECC 1.6741 LNCH AZNTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 69.14 4 17 2 1562.19 18.02 13.64 33.52 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 13.64 33.52 120.11 4 43 4 962.2 21.89 6.60 110.86 9 26 37 5866.59 18.04 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 13.64 33.52 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 13.64 33.52 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 18.02 278.06 33.55 120.10 11 4 24 5266.6 21.90 271.02 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.14 4 17 2 1562.19 69.1
      C3 40.963 VHL 6.400 DLA -34.65 RAL 151.61 RAD 6568.6 VEL 12.741 PTH
                                                                                                                                                      2.32 VHP 7.808 OPA
                                                                                                                                                                                                 44.36 RAP 190.28 ECC 1.6741
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
ST 1723.6 SR 326.3 SS 587.9
CRT -.7802 CRS .9456 CST -.9411
LSA 1830.3 MSA 270.3 SSA 5.5
ELI 1742.6 EL2 201.9 ALF 171.48
                                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                      SCT 3946.3 SCR 359.0 SC3 128.2

RRT -.1924 RRF -.5479 RTF .8981

SCB 3962.6 R23 .3609 R13 -.8987

SCI 3946.9 SC2 352.2 THA 178.99
      TOE-1.6308 TRA-2.8005 TC3-1.5921 BAU .8727
      ROE .3620 RRA -.1155 RC3 .0700 FAU .03669
FOE -.9506 FRA -.5679 FC3 -.8178 BSP 12204
      BOE 1.6704 BRA 2.8029 BC3 1.5937 FSP -410
                                                                                                                                                                                                       ARRIVAL DATE DEC 17 1967
                                                                                                              FLIGHT TIME 138.00
LAUNCH DATE AUG 1 1967
                                                                                                             DISTANCE 414.127
     RL 151.85 LAL -.00 LOL 308.08 VL 26.758 GAL -7.65 AZL 98.28 HCA 203.37 SMA 128.60 ECC .22323 INC 8.2847 VI 29.341 RP 107.52 LAP 3.28 LOP 151.23 VP 37.903 GAP 8.84 AZP 82.39 TAL 208.96 TAP 52.33 RCA 99.89 APO 157.30 VZ 35.245 RC 144.295 GL -39.97 GP 35.88 ZAL 124.23 ZAP 140.10 ETS 59.63 ZAE 120.95 ETE 154.78 ZAC 85.96 ETC 14.38 CLP-161.24
    PLANETOCENTRIC CONIC
      C3 35.391 VHL 5.949 DLA -32.74 RAL 154.11 RAD 6568.4 VEL 12.520 PTH 2.27 VHP 7.484 DPA 39.29 RAP 189.73 ECC 1.5825
      ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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117.63 9 24 2
117.64 5 14 0
117.63 9 24 2
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113.06 12 19 48
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            72.63
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                                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    ST 1687.2 SR 322.1 SS 573.3

CRT -.7939 CRS .9604 CST -.9315

LSA 1790.4 MSA 271.0 SSA 6.7

EL1 1706.7 EL2 193.6 ALF 171.27
                                                                                                      SGT 4038.6 SGR 343.9 SG3 136.0
RRT -.2568 RRF -.5923 RTF .8883
SG8 4053.2 R23 .3753 R13 -.8890
SG1 4039.6 SG2 332.3 THA 178.74
      TOE-1.4781 TRA-2.6285 TC3-1.9212 BAU .9096
      RDE .3332 RRA -.0822 RC3 .0674 FAU .04068
FDE -.9028 FRA -.4941 FC3 -.9951 B3P 12497
      BOE 1.5152 BRA 2.6298 BC3 1.9224 FSP -436
                                                                                                                                                                                                       ARRIVAL DATE DEC 19 1967
                                                                                                               FLIGHT TIME 140.00
LAUNCH DATE AUG 1 1967
                                                                                                             DISTANCE 419.917
    HELIOCENTRIC CONIC
      RL 151.85 LAL -.00 LOL 308.08 VL 26.682 GAL -7.28 ATL 97.44 MCA 206.59 SMA 128.09 ECC .22339 INC 7.4360 VL 29.341 RP 107.53 LAP 3.32 LOP 154.48 VP 37.845 GAP 9.06 ATP 83.34 TAL 207.28 TAP 53.87 RCA 99.48 APO 156.70 V2 35.240 RC 146.414 GL -37.73 GP 32.13 TAL 124.43 ZAP 143.55 ETS 57.78 TAE 122.83 ETE 156.54 TAC 84.70 ETC 13.02 CLP-161.78
    PLANETOCENTRIC CONIC
      C3 31.338 VML 5.598 DLA -31.33 RAL 156.63 RAD 6568.2 VEL 12.358 PTH 2.23 VMP 7.291 DPA 34.92 RAP 189.82 ECC 1.5157
      LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.00 5 21 8 1358.22 18.48 358.21 33.31 115.76 5 43 46 758.2 21.80 350.87
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254.12 38.04 108.84 12 57 52
MID-COURSE EXECUTION ACCURACY
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           110.00
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    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    5T 1664.4 SR 318.7 SS 560.1
CRT -.8062 CRS .9710 CST -.9237
                                                                                                       SGT 4130.0 SGR 332.6 SG3 141.3
RRT - 2870 RRF - 5982 RTF .8806
SGB 4143.3 R23 .3591 R13 - .8813
       TDE-1.3734 TRA-2.4705 TC3-2.2450 BAU .9409
       ROE .3106 RRA -.0609 RC3 .0580 FAU .04165
      FOE -.8554 FRA -.4176 FC3-1.1506 BSP 12780
BDE 1.4081 BRA 2.4712 BC3 2.2458 FSP -452
                                                                                                                                                                                     LSA 1764.2 MSA 270.5 SSA 7.9
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SG1 4131.1 SG2 318.5 THA 178.67

EL1 1684.4 EL2 186.3 ALF 171.12

ARRIVAL DATE DEC 21 1967

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FLIGHT TIME 142.00
                                                                           DISTANCE 425.698
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 26.606 GAL -6.90 AZL 96.76 HCA 209.82 SMA 127.60 ECC .22371 INC 6.7594 V1 29.341 RP 107.55 LAP 3.36 LOP 157.73 VP 37.786 GAP 9.28 AZP 84.13 TAL 205.59 TAP 55.41 RCA 99.05 APO 156.14 V2 35.234 RC 148.521 GL -35.81 GP 29.01 ZAL 124.14 ZAP 146.49 ETS 56.26 ZAE 124.25 ETE 158.23 ZAC 83.24 ETC 11.92 CLP-162.44
   PLANETOCENTRIC CONIC
    C3 28.229 VML 5.313 DLA -30.31 RAL 159.18 RAD 6568.1 VEL 12.231 PTH 2.20 VHP 7.181 DPA 31.12 RAP 190.35 ECC 1.4646
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2-LAT INJ 2 LONG
                                                                                                                                  670.3
                                                                                                                                                               344.27
                                                                                                 114.33 6 12 0
                                                                                                                                                21.79
                     5 50 50 1270.30
                                                     18.66
                                                                   351.70
                                                                                   33.87
        78.70
                                                                                                  114.32 9 4 33
114.33 6 12 0
114.32 9 4 33
123.46 8 4 17
                                                                                                                                                                301.01
                                                                                                                                   82.9
                                                                   308.45
                                                                                   33.88
                                    682.88
                                                     18.68
                    8 53 11
       101.30
                                                                                                                                                                344.27
                                                                                                                                                  21.79
                                                                                                                                  670.3
                                   1270.30
                                                     18.66
                                                                   351.70
                                                                                   33.67
                    5 50 50
        74.70
                                                                                                                                                 21.80
                                                                                                                                                                301.01
                                                                                                                                   82.9
                                                                                   33,88
                                                     18.68
                                                                   308.45
                    8 53 11
                                    682.88
       101.30
                                                                                                                                  283.4
                                                                                                                                                 11.78
                                                                                                                                                                310.81
                                                                   317.20
                                                                                   27.52
                     7 49 34
                                    563.36
                                                      7.45
       110.00
                                                                                                  105.77 13 23 43
                                                                                                                                4805.8
                                                                                                                                                  32.5A
                                                                                                                                                                239.58
                                                                                   36.71
                                                     30.73
                                                                   248.31
                   11 53 37
                                   5405.84
      110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SCT 4236.5 SGR 327.2 SG3 146.0
RRT -.3090 RRF -.5895 RTF .8763
SGB 4249.1 R23 .3336 R13 -.8769
SGI 4237.7 SG2 511.1 THA 178.63
                                                                                                                            ST 1662.2 SR 319.1 SS 553.5
CRT -.8220 CRS .9796 CST -.9188
    TOE-1.3099 TRA-2.3272 TC3-2.5775 BAU .9729
   ROE .2955 RRA -.0437 RC3 .0470 FAU .04218
FOE -.8174 FRA -.3478 FC3-1.2936 BSP 13259
                                                                                                                            LSA 1760.3 MSA 269.0 SSA
                                                                                                                             EL1 1683.0 EL2 179.5 ALF 170.93
    BOE 1.3428 BRA 2.3276 BC3 2.5779 FSP
                                                                                                                                        ARRIVAL DATE DEC 23 1967
                                                                            FLIGHT TIME 144.00
LAUNCH DATE AUG 1 1967
                                                                           DISTANCE 431.476
   RL 151.85 LAL -.00 LOL 308.08 VL 26.532 GAL -6.51 AZL 96.20 MCA 213.05 SNA 127.11 ECC .22416 INC 6.2042 VI 29.341 RP 107.57 LAP 3.38 LOP 160.98 VP 37.728 GAP 9.50 AZP 84.79 TAL 203.89 TAP 56.94 RCA 98.62 APO 155.61 V2 35.228 RC 150.615 GL -34.16 GP 26.40 ZAL 123.42 ZAP 149.03 ETS 55.02 ZAE 125.34 ETE 159.79 ZAC 81.62 ETC 11.01 CLP-163.18
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 25.745 VHL 5.074 OLA -29.62 RAL 161.79 RAD 6568.0 VEL 12.129 PTH 2.17 VHP 7.127 OPA 27.77 RAP 191.19 ECC 1.4237 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                6 38 7
                                                                                                                                   593.3
                                                                                                                                                 21.86
                     6 18 13 1193.31
                                                                   346.07
                                                                                 34.79
                                                                                                 113.25
                                                     18.88
        80.94
                                                                                                                                                  21.88
                                                                                    34.80
                                                                                                   113.24
                                                                                                                 8 58 33
                                                                                                                                   114.1
                                    714.13
                                                      18.89
                                                                   310.87
        99.06
                      A 46 39
                                                                                                  115.61 8 33 2
110.91 11 5 42
123.55 8 4 36
103.48 13 43 30
                                                                                                                                                                308.65
                                                                                                                                   200.4
                                                                                                                                                  19.28
                                                      15.96
                                                                   315.88
                                                                                    33.40
                      8 19 41
                                     800.37
       100.00
                                                                                                                                                                272.48
                                                                                                                                  5270.3
                                                                                                                                                  24.51
                    9 27 52 5670.34
                                                                                    36.08
       100.00
                                                     21.86
                                                                   280.28
                                                                                                                                                                311.44
                                                                                                                                                  11.36
                                                                                    28.22
                                                                                                                                  295.0
                      7 49 41
                                    894.96
                                                       6.99
                                                                   317.81
       110.00
                                                                                                                                                  33.24
                                                                                                                                  4748.5
                                   5348.51
                                                     31.71
                                                                   244.13
                                                                                    39.49
                    12 14 22
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 1624.4 SR 315.2 SS 526.2
CRT -.8320 CRS .9866 CST -.9097
LSA 1716.0 MSA 265.2 SSA 10.4
                                                                       SGT 4250.1 SGR 319.3 SG3 143.2
RRT -.2794 RRF -.5415 RTF .8637
    TOE-1.2309 TRA-2.1460 TC3-2.8495 BAU .9808
    RDE .2786 RRA -.0361 RC3 .0246 FAU .04067
    FOE -.7511 FRA -.2468 FC3-1.3675 BSP 12759
BDE 1.2621 BRA 2.1463 BC3 2.8496 FSP -428
                                                                       SGB 4262.1 R23 .3113 R13 -.8642
SG1 4251.0 SG2 306.5 THA 178.79
                                                                                                                            EL1 1645.7 EL2 172.6 ALF 170.73
                                                                                                                                        ARRIVAL DATE DEC 25 1967
                                                                           FLIGHT TIME 146.00
LAUNCH DATE AUG- 1 1967
                                                                           DISTANCE 437.239
    RL 151.85 LAL -.00 LOL 308.08 VL 26.458 GAL -6.12 A7L 95.74 MCA 216.28 SMA 126.64 ECC .22478 INC 5.7378 V1 29.341 RP 107.59 LAP 3.39 LOP 164.22 VP 37.670 GAP 9.73 A7P 85.37 TAL 202.19 TAP 58.47 RCA 98.17 APO 155.11 V2 35.221 RC 152.696 GL -32.69 GP 24.19 7AL 122.33 7AP 151.25 ETS 54.03 7AE 126.19 ETE 161.20 7AC 79.88 ETC 10.24 CLP-163.96
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.711 VHL 4.869 DLA -29.18 RAL 164.49 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 7.113 DPA 24.79 RAP 192.28 ECC 1.3902
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                36.03
                                                                                                                                  529.7
                                                                                                                                              22.02
                                                                                                 112.45 7 1 20
                      6 42 30 1129.73
                                                     19.15
                                                                   341.49
        82.66
                                                                                                  112.43 8 56 11
116.39 8 23 46
108.55 11 35 49
                                                                                                                                                                305.14
                                                                                    36.03
                                                                                                                                   137.2
                                                                                                                                                  22.03
                                   737.23
                                                                   312.70
                      8 43 54
                                                     19.16
                                                                                                                                                                311.53
                                                                                    33.86
                                                                                                                                  247.2
                                                                                                                                                  18.00
                                                                   318.65
                      8 9 39
                                     847.16
                                                     14.57
                                                                                                                                 5183.1
                                                                                                                                                  25.1A
                                                                                                                                                                266.54
                                                                                    37.92
                                                     23.87
                                                                   274.57
       100.00
                      9 59 26 5783.07
                                                                                                              8 9 17
                                                                                                                                                                311.46
                                                                                                                                  295.3
                                                                                                                                                  11.34
                                                                                                   123.55
                                                                   317.63
                                                                                    29.41
       110.00
                      7 54 21
                                    895.32
                                                       6.98
                                                                                                   101.79 13 59 41
                                                                                                                                                                232.11
                    12 31 13 5307.67
                                                                                                                                 4707.7
                                                                                                                                                  33.61
                                                                                    40.52
                                                     32.32
                                                                   241.10
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 4369.4 SCR 323.6 SC3 146.7

RRT -.2991 RRF -.5237 RTF .8639

SCB 4381.4 R23 .2767 R13 -.8643

SCI 4370.5 SC2 308.7 THA 178.72
                                                                                                                             ST 1651.8 SR 322.0 SS 529.2
CRT -.8545 CRS .9920 CST -.9103
LSA 1744.7 MSA 261.0 SSA 11.7
    TDE-1.2192 TRA-2.0124 TC3-3.1946 BAU 1.0127
    RDE .2736 RRA -.0222 RC3 .0139 FAU .04061
FDE -.7280 FRA -.1882 FC3-1.4826 BSP 13412
BDE 1.2495 BRA 2.0125 BC3 3.1946 FSP -458
                                                                                                                             EL1 1674.8 EL2 165.0 ALF 170.45
                                                                                                                                         ARRIVAL DATE DEC 27 1967
                                                                            FLIGHT TIME 148.00
    TELIOCENINIC CONIL

UISTANCE 442.992

RL 151.85 LAL -.00 LOL 308.08 VL 26.386 GAL -5.71 AZL 95.34 MCA 219.51 SMA 126.18 ECC .22556 INC 5.3382 VI 29.341

RP 107.62 LAP 3.39 LOP 167.47 VP 37.612 GAP 9.95 AZP 85.88 TAL 200.47 TAP 59.98 RCA 97.72 APO 154.64 V2 35.214

RC 154.762 GL -31.38 GP 22.30 ZAL 120.91 ZAP 153.21 ETS 53.26 ZAE 126.86 ETE 162.45 ZAC 78.03 ETC 9.58 CLP-164.76
                                                                           DISTANCE 442.992
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                      2.13 VHP 7.126 DPA 22.09 RAP 193.54 ECC 1.3622
    C3 22.010 VHL 4.691 DLA -28.95 RAL 167.30 RAD 6567.9 VEL 11.975 PTH
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
19.47 338.31 37.56 111.86 7.20 7 484.8 22.27 330.71
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                   111.86 7 20 7
111.85 8 59 12
        83.70
                      7 2 3 1084.77
                                                                                                                                                                 305.87
                                                                                                                                   145.9
                                                                                                                                                   22.28
                                                                    313.48
                                                                                     37.57
                                                      19.48
         96.30
                     8 46 46
                                     745.95
                                                                                                                                                                 312.01
                                                                                                                 8 27 8
                                                                                                                                   254.9
                                                                                                                                                   17.78
                                                                                     35.15
                                                                                                    116.52
                                                                    319.11
        100.00
                      8 12 53
                                     854.93
                                                      14.33
                                                                                                   107.26 11 54 16
123.49 8 17 21
100.58 14 13 25
                                                                                                                                                                 263.47
                                                                                                                                  5139.1
                                                                                                                                                   26.92
                                                                                     39.60
        100.00
                     10 18 37
                                    5739.06
                                                      24.79
                                                                    271.63
                                                                                                                                                                 311.02
                                                                                                                                  287.4
                                                                                                                                                   11.63
                                                                                    31.01
                                                        7.28
                                                                    317.41
        110.00
                      8 2 34
                                     887.39
                                                                                                                                                                 229.92
                                                                                                                                                   33.81
                                                                                                                                 4679.4
                                                                    238.98
                                                                                     41.84
        110.00
                     12 45 25
                                    5279.37
                                                      32.69
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1674.5 SR 328.5 S5 526.9

CRT -.8757 CRS ..9959 CST -.9109

LSA 1767.6 MSA 254.7 SSA 13.0

EL1 1699.2 EL2 156.3 ALF 170.17
                                                                       SCT 4458.2 SCR 328.9 SC3 147.5
RRT - 3035 RRF - 4959 RTF .8618
SC8 4470.3 R23 .2445 R13 - .8622
     TOE-1.2104 TRA-1.8637 TC3-3.5226 BAU 1.0365
     RDE .2689 RRA -.0118 RC3 .0007 FAU .03980 FDE -.6985 FRA -.1221 FC3-1.5655 BSP 13752
                                                                        SG1 4459.3 SG2 313.3 THA 178.71
     BOE 1.2399 BRA 1.8637 BC3 3.5226 FSP -464
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LAUNCH DATE AUG 1 1967

ARRIVAL DATE DEC 29 1967

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HELIOCENTRIC CONIC
                                                                      DISTANCE 448.735
    RL 151.85 LAL -.00 LOL 308.08 VL 26.314 GAL -5.30 AZL 94.99 MCA 222.74 SMA 125.73 ECC .22650 INC 4.9899 V1 29.341
RP 107.64 LAP 3.38 LOP 170.71 VP 37.554 GAP 10.18 AZP 86.33 TAL 198.75 TAP 61.49 RCA 97.25 APO 154 21 V2 35.205
RC 156.813 GL -30.17 GP 20.68 ZAL 119.20 ZAP 154.96 ETS 52.71 ZAE 127.40 ETE 163.57 ZAC 76.09 ETC 9.01 CLP-165.56
   PLANETOCENTRIC CONIC
    C3 20.569 VHL 4.535 DLA -28.91 RAL 170.24 RAD 6567.8 VEL 11.914 PTH 2.12 VMP 7.161 DPA 19.64 RAP 194.95 ECC 1.3385
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  7 15 40 1062.40
8 56 37 735.76
8 23 6
       83.93
                                                 19.85
                                                              336.83
                                                                              39.40
                                                                                          111.46
                                                                                                        7 33 22
                                                                                                                         462.4
                                                                                                      9 8 52
        96.07
                                                 19.86
                                                               312.89
                                                                              39.40
                                                                                            111.44
      100.00
                                                 14.68
                                                               318.44
                                                                              37.00
                                                                                            116.34
                                                                                                        8 37 10
                                                                                                                         243.6
                                                                                                                                                     511.31
                                                                                           106.62 12 7 9
123.38 8 28 15
99.79 14 25 26
                  10 31 52 5717.H6
                                                 25.21
                                                               270.19
                                                                              41.40
                                                                                                                        5117.9
                                                                                                                                        27.25
                    8 13 41
                                  673,17
                                                               316.66
                                                                            32.99
                                                   7.61
                                                                                                                         273.2
                                                                                                                                                     310.25
                  12 57 45
                                5261.03
                                                              237,60
                                                                              43.47
                                                                                                                       4661.0
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 4536.0 SGR 336.2 SG3 147.2
RRT -.3050 RRF -.4677 RTF .8597
SGB 4548.5 R23 .2143 R13 -.8601
SGI 4537.2 SG2 320.1 THA 178.70
                                                                                                                   ST 1702.5 SR 336.0 SS 524.7
CRT -.8970 CRS .9980 CST -.9128
    TOE-1.2112 TRA-1.7072 TC3-3.8451 BAU 1.0574
    ROE .2660 RRA -.0031 RC3 -.0120 FAU .03869
    FOE -.6700 FRA -.0561 FC3-1.6283 BSP 14009
                                                                                                                    LSA 1796.0 MSA 246.8 SSA 14.4
                                                                                                                    EL1 1729.2 EL2 146.3 ALF 169.89
    BOE 1,2401 BRA 1,7072 BC3 3,8451 FSP -463
LAUNCH DATE AUG 1 1967
                                                                      FLIGHT TIME 152.00
                                                                                                                               ARRIVAL DATE DEC 31 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 454,465
   RL 151.85 LAL -.00 LOL 308.08 VL 26.244 GAL -4.87 AZL 94.68 MCA 225.97 SMA 125.29 ECC .22762 INC 4.6819 VI 29.341 RP 107.67 LAP 3.36 LOP 173.96 VP 37.496 GAP 10.41 AZP 86.74 TAL 197.02 TAP 62.99 RCA 96.77 APO 153.81 VZ 35.197 RC 158.850 GL -29.03 GP 19.28 ZAL 117.21 ZAP 156.53 ETS 52.37 ZAE 127.84 ETE 164.55 ZAC 74.08 ETC 8.52 CLP-166.36
  PLANETOCENTRIC CONIC
    C3 19.345 VML 4.398 DLA -29.01 RAL 173.33 RAD 6567.8 VEL 11.863 PTH
                                                                                               2.10 VHP 7.213 DPA 17.38 RAP 196.48 ECC 1.3184
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  7 23 57 1060.79
                                                 20.28
                                                              336.89
                                                                          41.53
                                                                                          111.20
                                                                                                      7 41 38
                                                                                                                          460.8
       83.43
       96.57
                   9 12 59
                                  708.16
                                                               311.04
                                                                              41.54
                                                                                                        9 24 47
                                                 20.29
                                                                                                                          108.2
                                                                                                                                        22.99
                                                                                           111.19 9 24 47
115.92 8 52 25
106.50 12 16 5
123.23 8 41 35
99.35 14 36 17
      100.00
                    8 34 47
                                  818.09
                                                              316.93
                                                 15.44
                                                                              39.32
                                                                                                                         218.1
                  10 40 51 5714.14
      100.00
                                                25.28
                                                              269.94
                                                                              43.38
                                                                                                                        5114.1
                                                                                                                                        27.30
                                                                                                                                                     261.72
      110.00
                   8 27 21
                                 854.05
                                                  8.53
                                                              315.64
                                                                              35.31
                                                                                                                         254.1
                                                                                                                                        12.84
                                                                                                                                                     309.20
                              5250.94
      110.00
                  13 8 46
                                                 33.03
                                                              236.83
                                                                             45.42
                                                                                                                        4650.9
                                                                                                                                        33.97
                                                                                                                                                     227.72
  DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 4612.2 SGR 345.5 SG3 146.6
RRT - 3080 RRF - .4430 RTF .8565
SGB 4625.1 R23 .1863 R13 - .8588
SG1 4613.4 SG2 328.6 THA 178.67
                                                                                                                    ST 1740.3 SR 344.8 SS 524.3
CRT -.9179 CRS .9985 CST -.9163
    TOE-1.2233 TRA-1.5458 TC3-4.1662 BAU 1,0775
   RDE .2647 RRA .0045 RC3 -.0230 FAU .03746
FDE -.6449 FRA .0066 FC3-1.6764 BSP 14271
                                                                                                                    LSA 1834.6 MSA 237.3 SSA 15.8
    BOE 1.2516 BRA 1.5458 BC3 4.1663 FSP -462
                                                                                                                    EL1 1769.0 ELZ 134.6 ALF 169.63
                                                                                                                              ARRIVAL DATE JAN 2 1968
LAUNCH DATE AUG 1 1967
                                                                     FLIGHT TIME 154.00
  HELIOCENTRIC CONTC
                                                                     DISTANCE 460.181
   RL 151.85 LAL -.00 LOL 308.08 VL 26.174 GAL -4.43 AZL 94.41 MCA 229.20 SMA 124.86 ECC .22891 INC 4.4059 VI 29.341 RP 107.70 LAP 3.33 LOP 177.20 VP 37.439 GAP 10.65 AZP 87.12 TAL 195.28 TAP 64.49 RCA 96.28 APO 153.44 V2 35.187 RC 160.871 GL -27.94 GP 18.06 ZAL 114.95 ZAP 157.96 ETS 52.23 ZAE 128.20 ETE 165.43 ZAC 72.01 ETC 8.09 CLP-167.16
  PLANETOCENTRIC CONIC
    C3 18.305 VHL 4.278 DLA -29.22 RAL 176.59 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 7.280 DPA 15.29 RAP 198.10 ECC 1.3013
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         43,97
                                                                                        111.06 7 47 1
111.05 9 44 58
                                                                                                                                   23.42
                                                                                                                    473.0
       82.45 7 29 8 1072.96
                                                20.74
                                                            337.98
                                                                                                                                                    330.26
                              669.99
779.12
5727.11
                   9 33 48
                                                 20.75
                                                              308.41
                                                                             43.97
                                                                                           111.05
                                                                                                                          70.0
                                                                                                                                       23.43
                                                                                                                                                    300.69
                                                                                          115.23 9 12 46
106.90 12 21 17
123.02 8 57 7
99.22 14 46 18
                    8 59 47
                                                16.59
                                                              314.60
                                                                             42.09
                                                                                         115.23
                                                                                                                        179.1
                                                                                                                                       19.85
                                                                                                                                                    307.33
                                                              270.82
                                                                             45.57
                                                                                                                        5127.1
                                                                                                                                       27.10
                                                                                                                                                    262.64
                  10 45 50
                                                25.03
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                                                                             37.98
                                                                                                                        231.1
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                   8 43 16
                                  831.11
                                                  9.38
                                                              314.41
                  13 18 50
                              5247.88
                                                                             47.70
                                                                                                                        4647.9
                                                                                                                                       33.98
                                                                                                                                                    227.48
                                                33.06
                                                              236.60
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SCT 4685.7 SCR 356.0 SC3 145.7
RRT -.3124 RRF -.4223 RTF .8582
SCB 4699.2 R23 .1609 R13 -.8585
SCI 4687.1 SC2 338.1 THA 178.63
                                                                                                                   ST 1786.4 SR 354.6 SS 525.2

CRT -.9374 CRS .9972 CST -.9210

LSA 1881.8 MSA 226.3 SSA 17.3
   TOE-1.2440 TRA-1.3782 TC3-4.4818 BAU 1.0968
   ROE .2648 RRA .0109 RC3 -.0320 FAU .03615
FOE -.6222 FRA .0666 FC3-1.7099 BSP 14528
    BOE 1.2719 BRA 1.3783 BC3 4.4820 FSP -460
                                                                                                                   EL1 1817.2 EL2 121.4 ALF 169.41
                                                                                                                               ARRIVAL DATE JAN 4 1968
AUNCH DATE AUG 1 1967
                                                                      FLIGHT TIME 156.00
  HELIOCENTRIC CONIC
                                                                     DISTANCE 465.884
   RL 151.85 LAL -.00 LOL 308.08 VL 26.106 GAL -3.98 AZL 94.16 MCA 232.43 SMA 124.44 ECC .23040 INC 4.1556 V1 29.341 RP 107.73 LAP 3.29 LOP 180.44 VP 37.382 GAP 10.89 AZP 87.46 TAL 193.54 TAP 65.97 RCA 95.77 APO 153.11 V2 35.178 RC 162.878 GL -26.87 GP 17.00 ZAL 112.45 ZAP 159.27 ETS 52.28 ZAE 128.51 ETE 166.20 ZAC 69.89 ETC 7.72 CLP-167.95
  PLANETOCENTRIC CONIC
   C3 17.430 VHL 4.175 DLA -29.53 RAL 180.03 RAD 6567.7 VEL 11.782 PTH
                                                                                              2.08 VMP 7.358 DPA 13.33 RAP 199.81 ECC 1.2869
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               1092.16
                                                                          46.72
                    7 33 19
                                                 21.23
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                  9 57 4
                                  627,99
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                    9 27 38
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      110.00
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                SGT 4748.0 SGR 367.0 SG3 144.2
RRT -.3157 RRF -.4036 RTF .8575
SGB 4762.2 R23 .1385 R13 -.8578
                                                                                                                   ST 1835.2 SR 364.7 SS 524.6
CRT -.9546 CRS .9942 CST -.9258
   TOE-1.2686 TRA-1.2005 TC3-4.7796 BAU 1.1138
   ROE .2697 RRA .0158 RC3 -.0396 FAU .03469
FDE -.5989 FRA .1265 FC3-1.7230 BSP 14705
                                                                                                              LSA 1931.3 MSA 214.3 SSA 18.9
FL1 1868.1 FL2 106.7 ALF 169.22
                                                                  SG1 4749.5 SG2 348.1 THA 178.59
                                                                                                                   EL1 1868.1 EL2 106.7 ALF 169.22
    BDE 1.2961 BRA 1.2006 BC3 4.7797 FSP -452
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FLIGHT TIME 150.00

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ARRIVAL DATE JAN 6 1968
                                                                          FLIGHT TIME 158.00
LAUNCH DATE AUG 1 1967
                                                                          DISTANCE 471.570
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 26.038 GAL -3.51 A7L 93.93 MCA 235.66 SMA 124.03 ECC .23208 INC 3.9263 V1 29.341 RP 107.76 LAP 3.24 LOP 183.67 VP 37.325 GAP 11.13 A7P 87.78 TAL 191.79 TAP 67.45 RCA 95.25 APO 152.81 V2 35.167 RC 164.869 GL -25.81 GP 16.06 ZAL 109.72 ZAP 160.47 ETS 52.53 ZAE 128.78 ETE 136.88 ZAC 67.72 ETC 7.40 CLP-168.74
   PLANETOCENTRIC CONIC
    C3 16.707 VML 4.087 DLA -29.91 RAL 183.67 RAD 6567.7 VEL 11.751 PTH 2.07 VMP 7.448 DPA 11.49 RAP 201.58 ECC 1.2750
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                   13 37 25 5259.14
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                                                     32.94
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                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4815.2 SGR 378.8 SG3 142.8

RRT -.3224 RRF -.3904 RTF .8586

SGB 4830.1 R23 .1184 R13 -.8588

SGI 4816.8 SG2 358.4 THA 178.54
                                                                                                                            ST 1893.6 SR 375.8 SS 525.8
CRT -.9693 CRS .9896 CST -.9314
    TOE-1.3011 TRA-1.0183 TC3-5.0657 BAU 1.1315
    RDE .2680 RRA .0197 RC3 -.0442 FAU .03329
                                                                                                                            LSA 1990.5 MSA 201.6 SSA 20.5
    FOE -.5787 FRA .1818 FC3-1.7251 8SP 14946
                                                                                                                            EL1 1928.4 EL2 90.8 ALF 169.09
    BOE 1.3284 BRA 1.0185 BC3 5.0658 FSP -449
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                                                                           FLIGHT TIME 160.00
LAUNCH DATE AUG 1 1967
                                                                           DISTANCE 477.240
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 25.972 GAL -3.03 AZL 93.71 MCA 238.88 SMA 123.63 ECC .23397 INC 3.7142 V1 29.341
RP 107.79 LAP 3.18 LOP 186.91 VP 37.269 GAP 11.39 AZP 88.08 TAL 190.04 TAP 68.92 RCA 94.70 APO 152.56 V2 35.156
RC 166.846 GL -24.73 GP 15.23 ZAL 106.77 ZAP 161.58 ETS 52.98 ZAE 129.01 ETE 167.49 ZAC 65.52 ETC 7.13 CLP-169.51
   PLANETOCENTRIC CONIC
    C3 16.130 VHL 4.016 DLA -30.32 RAL 187.50 RAD 6567.6 VEL 11.727 PTH 2.07 VHP 7.547 DPA 9.75 RAP 203.41 ECC 1.2655 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4880.0 SGR 390.6 SG3 141.3
RRT -.3298 RRF -.3807 RTF .8602
SGB 4895.6 R23 .1010 R13 -.8604
SGI 4881.7 SGZ 368.6 THA 178.48
                                                                                                                            ST 1955.3 SR 387.2 SS 526.2
CRT -.9809 CRS .9835 CST -.9369
     TOE-1.3370 TRA -.8279 TC3-5.3263 BAU 1.1486
    RDE .2713 RRA .0221 RC3 -.0464 FAU .03187
                                                                                                                            LSA 2052.8 MSA 188.9 SSA 22.2
    FOE -.5590 FRA .2357 FC3-1.7106 BSP 15189
BOE 1.3643 BRA .8282 BC3 5.3265 FSP -446
                                                                                                                            EL1 1991.9 EL2 74.0 ALF 168.99
                                                                                                                                       ARRIVAL DATE JAN 10 1968
LAUNCH DATE AUG 1 1967
                                                                           FLIGHT TIME 162.00
                                                                          DISTANCE 482.892
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.906 GAL -2.54 AZL 93.52 MCA 242.11 SMA 123.24 ECC .23609 INC 3.5161 VI 29.341 RP 107.83 LAP 3.11 LOP 190.14 VP 37.212 GAP 11.64 AZP 88.35 TAL 188.28 TAP 70.39 RCA 94.14 APO 152.34 V2 35.145 RC 168.808 GL -23.62 GP 14.49 ZAL 103.61 ZAP 162.61 ETS 53.64 ZAE 129.21 ETE 168.03 ZAC 63.28 ETC. 6.91 CLP-170.28
   PLANETOCENTRIC CONIC
    C3 15.694 VHL 3.962 DLA -30.74 RAL 191.52 RAD 6567.6 VEL 11.708 PTH 2.06 VHP 7.656 DPA
                                                                                                                                   8.10 RAP 205.30 ECC 1.2583
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.35 8 10 20

111.35 12 47 42

111.35 12 47 42

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       102.49
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                                     720.29
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       110.00
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                    13 55 48
                                                                   239.62
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                                   5287.85
                                                     32.59
       110.00
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                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2010.5 SR 398.5 SS 523.3
CRT -.9894 CRS .9756 CST -.9414
                                                                       SGT 4931.6 SGR 401.9 SG3 139.3
    TDE-1.3698 TRA -.6253 TC3-5.5430 BAU 1.1630
                                                                       RRT -.3361 RRF -.3721 RTF .8616
SGB 4947.9 R23 .0858 R13 -.8618
SGI 4933.4 SGZ 378.3 THA 178.42
    RDE .2754 RRA .0228 RC3 -.0470 FAU .03035
FDE -.5368 FRA .2897 FC3-1.6745 BSP 15333
BOE 1.3972 BRA .6258 BC3 5.5432 FSP -438
                                                                                                                            LSA 2107.8 MSA 176.9 SSA 24.0
                                                                                                                            EL1 2048.8 EL2 56.9 ALF 168.90
                                                                                                                                        ARRIVAL DATE JAN 12 1968
                                                                            FLIGHT TIME 164.00
LAUNCH DATE AUG 1 1967
                                                                           DISTANCE 488.523
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.842 GAL -2.03 AZL 93.33 MCA 245.33 SMA 122.86 ECC .23844 INC 3.3295 VI 29.341

RP 107.86 LAP 3.03 LOP 193.37 VP 37.157 GAP 11.91 AZP 88.61 TAL 186.52 TAP 71.85 RCA 93.56 APO 152.15 V2 35.134

RC 170.755 GL -22.47 GP 13.83 ZAL 100.28 ZAP 163.57 ETS 54.50 ZAE 129.39 ETE 168.50 ZAC 61.02 ETC 6.72 CLP-171.04
   PLANETOCENTRIC CONIC
                                                                                                                                     6.52 RAP 207.24 ECC 1.2534
    C3 15.400 VHL 3.924 DLA -31.15 RAL 195.73 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 7.775 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.45 8 0 19 1177.19 23.05 346.71 60.95 111.55 8 19 56 577.2 25.77 338.86
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121.35 10 40 41
101.73 15 34 7
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        103.55
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                                                                    306.88
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                                     693.39
                                                      14.30
        110.00
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                     14 5 41
                                   5306.22
                                                                   241.00
                                                                                   64.09
       110.00
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                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 4988.1 SGR 413.0 SG3 137.4
RRT -.3444 RRF -.3675 RTF .8644
SG8 5005.1 R23 .0724 R13 -.8646
SG1 4990.1 SG2 387.6 THA 178.36
                                                                                                                             ST 2065.6 SR 409.9 SS 519.E
CRT -.9948 CRS .9663 CST -.9457
     TDE-1.4041 TRA -.4173 TC3-5.7223 BAU 1.1782
     ROE .2807 RRA .0224 RC3 -.0448 FAU .02891
FOE -.5155 FRA .3402 FC3-1.6253 BSP 15545
BOE 1.4319 BRA .4179 BC3 5.7225 FSP -434
                                                                                                                             LSA 2162.5 MSA 166.0 SSA
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EL1 2105.5 EL2 40.8 ALF 168.83

LAUNCH DATE AUG 1 1967

ARRIVAL DATE JAN 14 1968

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FLIGHT TIME 166.00
                                                                                        DISTANCE 494.132
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.778 GAL -1.51 AZL 93.15 HCA 248.55 SMA 122.49 ECC .24104 INC 3.1526 VI 29.341
RP 107.90 LAP - 2.93 LOP 196.60 VP 37.101 GAP 12.18 AZP 88.85 TAL 184.76 TAP 73.30 RCA 92.96 APO 152.01 VZ 35.122
RC 172.886 GL -21.28 GP 13.24 ZAL 96.80 ZAP 164.46 ETS 55.59 ZAE 129.56 ETE 168.93 ZAC 58.73 ETC 6.58 CLP-171.79
   PLANETOCENTRIC CONIC
     C3 15.252 WHL 3.905 DLA -31.51 RAL 200.11 RAD 6567.6 VEL 11.689 PTH 2:08 VHP 7.904 DPA
                                                                                                                                                           5.02 RAP 209.22 ECC 1.2510
    C3 19.292 VHL 3.905 DLA -31.51 RAL ZUU.11 RAD 6567.6 VEL 11.889 PTM Z.UG VMP 7.904 DPA 5.UZ RAP ZU9.22 ECC 1.2510 LNCM AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 75.56 8 11 33 1194.63 23.36 348.16 65.30 111.77 8 31 28 594.6 26.11 340.30 104.44 11 59 2 5752.63 23.38 272.10 65.30 111.76 13 34 55 5152.6 26.12 264.24 110.00 10 53 13 669.73 15.22 305.55 61.02 120.99 11 4 23 69.7 19.21 298.71 110.00 14 16 33 5325.52 32.06 242.43 66.33 102.54 15 45 18 4725.5 33.46 233.48
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5042.3 SGR 423.7 SG3 135.5
RRT -.3531 RRF -.3656 RTF .8679
SGB 5060.1 R23 .0612 R13 -.8680
SG1 5044.5 SG2 396.3 TMA 178.29
                                                                                                                                                  ST 2112.4 SR 421.2 SS 513.9
CRT -.9975 CRS .9553 CST -.9493
    TOE-1.4350 TRA -. 2002 TC3-5.8494 BAU 1.1927
    RDE .2870 RRA .0204 RC3 -.0404 FAU .02749
    FOE -.4937 FRA .3695 FC3-1.5606 BSP 15760
BOE 1.4635 BRA .2012 BC3 5.8495 FSP -430
                                                                                                                                                  LSA 2208.6 MSA 157.4 SSA
                                                                                                                                                  EL1 2153.8 EL2 29.4 ALF 168.75
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LAUNCH DATE AUG 1 1967
                                                                                        FLIGHT TIME 168,00
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   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.716 GAL -.96 A7L 92.98 MCA 251.76 SMA 122.12 ECC .24392 INC 2.9833 V1 29.341
RP 107.94 LAP 2.83 LOP 199.82 VP 37.046 GAP 12.47 AZP 89.07 TAL 182.99 TAP 74.76 RCA 92.34 APO 151.91 V2 35.110
RC 174.803 GL -20.04 GP 12.71 ZAL 93.18 ZAP 165.29 ETS 56.90 ZAE 129.71 ETE 169.31 ZAC 56.43 ETC 6.48 CLP-172.53
   PLANETOCENTRIC CONIC
    C3 15.254 VHL 3.906 DLA -31.81 RAL 204.64 RAD 6567.6 VEL 11.689 PTH 2.06 VHP 8.042 OPA 3.58 RAP 211.24 ECC 1.2510 LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.87 8 24 49 1209.59 23.57 349.39 69.91 112.00 8 44 59 609.6 26.35 341.52
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12 21 50 5737.73
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        110.00
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5089.6 SCR 433.4 SC3 133.4 ST 2143.2 SR 431.7 SS 504.0 RRT - .3614 RRF - .3645 RTF .8712 CRT - .9974 CRS .9418 CST - .9517 SCB 3108.0 R23 .0511 R13 - .8714 LSA 2238.2 MSA 152.0 SSA 28.5
    TOE-1.4578 TRA .0284 TC3-5.9123 BAU 1.2057
    ROE .2942 RRA .0168 RC3 -.0345 FAU .02606
FOE -.4689 FRA .4389 FC3-1.4791 BSP 15943
BOE 1.4872 BRA .0330 BC3 5.9124 FSP -425
                                                                                   SG1 5092.0 SG2 403.9 THA 178.23
                                                                                                                                                  EL1 2186.0 EL2 30.4 ALF 168.64
                                                                                                                                                               ARRIVAL DATE JAN 18 1968
                                                                                       FLIGHT TIME 170.00
 AUNCH DATE AUG 1 1967
                                                                                      DISTANCE 505.277
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.654 GAL -.40 AZL 92.82 HCA 254.98 SMA 121.77 ECC .24709 INC 2.8204 V1 29.341
RP 107.97 LAP 2.72 LOP 203.04 VP 36.992 GAP 12.77 AZP 89.27 TAL 181.23 TAP 76.21 RCA 91.68 APO 151.86 V2 35.097
RC 176.504 GL -18.75 GP 12.23 ZAL 89.48 ZAP 166.06 ETS 58.45 ZAE 129.84 ETE 169.66 ZAC 54.10 ETC 6.42 CLP-173.26
   PLANETOCENTRIC CONIC
    C3 15.415 VHL 3.926 DLA -32.02 RAL 209.26 RAD 6567.6 VEL 11.696 PTH 2.06 VHP 8.191 DPA 2.21 RAP 213.29 ECC 1.2537 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM 1NJ 2 LAT INJ 2 LONG
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                       12 43 27 5730.22
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                                                                                                 70.86
       110.00
                                        5360,04
                                                                                                                                                       4760.0
                                                                                                                                                                          33.12
                                                                                                                                                                                           236.12
                       14 43 3
                                                             31.53
                                                                              244.98
                                                                                                 77.66
        110.00
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  $6T 5131.5 $GR 442.5 $G3 131.1

RRT -.3698 RRF -.3658 RTF .8755

$G8 5150.6 R23 .0430 R13 -.8756

$G1 5134.1 $G2 410.9 TMA 178.16
                                                                                                                                                ST 2156.0 SR 441.5 SS 491.9

CRT -.9948 CRS .9260 CST -.9534

LSA 2249.8 MSA 150.2 SSA 29.0
    TDE-1.4713 TRA .2676 TC3-5.9064 BAU 1.21/2
    RDE .302: RRA .0117 RC3 -.0272 FAU .02466
FDE -.4435 FRA .4870 FC3-1.3848 BSP 16070
BDE 1.5020 BRA .2678 BC3 5.9065 FSP -419
                                                                                                                                                  EL1 2200.3 EL2 44.1 ALF 168.48
                                                                                                                                                               ARRIVAL DATE JAN 20 1968
                                                                                        FLIGHT TIME 172.00
                                                                                       DISTANCE 510.805
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.594 GAL .18 ATL 92.66 MCA 258.19 SMA 121.42 ECC .25056 INC 2.6624 VI 29.341
RP 108.01 LAP 2.61 LOP 206.26 VP 36.937 GAP 13.08 AZP 89.46 TAL 179.46 TAP 77.66 RCA 91.00 APO 151.85 V2 35.084
RC 178.389 GL -17.43 GP 11.80 ZAL 85.72 ZAP 166.78 ETS 60.26 ZAE 129.97 FTE 169.96 ZAC 51.76 ETC 6.41 CLP-173.99
   PLANETOCENTRIC CONIC
    C3 15.746 WHL 3.966 OLA -32.12 RAL 213.94 RAD 6567.6 VEL 11.710 PTH 2.06 WHP 8.351 OPA
                                                                                                                                                              .88 RAP 215.38 ECC 1.2591
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74,17 8 57 18 1231.31 23.60 351.05 79.81 112.44 9 17 49 631.3 26.44 343.21
                                                                                                                                                                           26.44
                                                                                                                   112.43 14 39 8
                                                                                                                                                       5130.3
                                                                                                                                                                                           262.66
                      13 3 36
                                        5730.33
                                                              23.61
                                                                              270.51
                                                                                                  79.81
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                         8 57 18
                                        1231.31
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                                                                              351.05
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         74.17
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120.46 12 11 8
104.42 16 29 8
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                      13 3 36 5730.33
                                                              23.61
                                                                              270.51
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                       12 0 30
                                          637.99
                                                              16.32
                                                                              303.75
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                                      5371.65
                                                                                                                                                                           32.99
                                                                                                 82.71
                      14 59 36
                                                              31.33
                                                                              245.83
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5175.6 SGR 449.9 SG3 128.6 ST 2152.0 SR 449.5 SS 474.0 RRT - .3778 RRF - .3657 RTF .8791 CRT - .9896 CRS .9058 CST - .9535 SG8 5195.1 R23 .0340 R13 - .8792 LSA 2243.5 MSA 153.2 SSA 28.8 SG1 5178.4 SG2 416.3 THA 178.11 EL1 2197.5 EL2 63.2 ALF 168.31
    TOE-1.4761 TRA .5137 TC3-5.8395 BAU 1.2293
    RDE .3113 RRA .0051 RC3 -.0195 FAU .02325
    FDE -.4133 FRA .5341 FC3-1.2784 89P 15248
80E 1.5086 88A .5137 8C3 5.8395 FSP -409
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ARRIVAL DATE JAN 22 1968
                                                                            FLIGHT TIME 174.00
LAUNCH DATE AUG 1 1967
                                                                           DISTANCE 516.302
   HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 25.534 GAL .78 AZL 92.51 MCA 261.40 SMA 121.09 ECC .25438 INC 2.5082 V1 29.341 RP 108.05 LAP 2.48 LOP 209.48 VP 36.884 GAP 13.41 AZP 89.63 TAL 177.70 TAP 79.10 RCA 90.28 APO 151.89 V2 35.071 RC 180.257 GL -16.09 GP 11.41 ZAL 81.93 ZAP 167.45 ETS 62.35 ZAE 130.09 ETE 170.24 ZAC 49.42 ETC 6.44 CLP-174.72
   PLANETOCENTRIC CONIC
    C3 16.260 VHL 4.032 DLA -32.10 RAL 218.64 RAD 6567.7 VEL 11.732 PTH 2.07 VMP 8.522 DPA
                                                                                                                                       -.38 RAP 217.50 ECC 1.2676
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.21 9 16 15 1237.92 23.40 351.46 85.00 112.63 9 36 53 637.9 26.26 343.65
                    9 16 15 1237.92
13 22 8 5738.32
                                                                                                                                                                  263.21
                                                                                                               14 57 47
                                                                                                                                   5136.3
                                                                                     85.00
                                                      23.41
                                                                    271.03
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                    9 16 15 1237.92
13 22 8 5738.32
12 18 52 646.43
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        74.21
                                                      23.40
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120.60 12 29 39
104.67 16 48 19
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       105.79
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                                                                    304.23
                                                                                     81.08
       110.00
                                                                                                                                   4777.8
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                                  5377.81
                                                                    246.28
                                                                                     87.97
       110.00
                    15 18 41
                                                      31.23
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5206.3 SGR 456.7 SG3 126.2
RRT - .3848 RRF - .3692 RTF .8824
                                                                                                                              ST 2121.3 SR 456.6 SS 456.9
CRT -.9814 CRS .8814 CST -.9529
    TOE-1.4641 TRA .7773 TC3-5.6928 BAU 1.2375
    RDE .3214 RRA -.0035 RC3 -.0115 FAU .02180
                                                                        SGB 5226.3 R23 .0297 R13 -.8825
SGI 5209.3 SG2 421.3 THA 178.05
                                                                                                                              LSA 2211.4 MSA 161.1 SSA 28.0
    FDE -.3841 FRA .5840 FC3-1.1607 BSP 16358
BDE 1.4990 BRA .7773 BC3 5.6928 FSP -404
                                                                                                                              EL1 2168.2 EL2 85.8 ALF 168.05
                                                                                                                                           ARRIVAL DATE JAN 24 1968
LAUNCH DATE AUG 1 1967
                                                                            FLIGHT TIME 176.00
                                                                            DISTANCE 521.762
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 25.475 GAL 1.41 ATL 92.36 MCA 264.61 SMA 120.76 ECC .25856 INC 2.3567 V1 29.341 RP 108.09 LAP 2.35 LOP 212.69 VP 36.831 GAP 13.75 AZP 89.78 TAL 175.94 TAP 80.55 RCA 89.53 APO 151.98 V2 35.058 RC 182.108 GL -14.73 GP 11.05 ZAL 78.17 ZAP 168.06 ETS 64.72 ZAE 130.19 ETE 170.49 ZAC 47.06 ETC 6.52 CLP-175.44
   PLANETOCENTRIC CONIC
    C3 16.974 WHL 4.120 DLA -31.96 RAL 223.29 RAD 6567.7 VEL 11.763 PTH 2.08 VHP 8.707 DPA -1.60 RAP 219.65 ECC 1.2794 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   112.78 9 57 36
112.77 15 14 30
                     9 36 55 1241.20
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                                                      23.05
                                                                    351.55
                                                                                  90.28
        74.52
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                                                                                                                                    5154.7
                    13 36 35
                                    5754.75
                                                       23.06
                                                                     272.12
                                                                                     90.29
       105.48
                                                                                                    112.78 9 57 36
112.77 15 14 30
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                     9 36 55
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                                                                    351.55
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        74.52
                                    1241.20
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                    13 38 35
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                                                                                     90.29
       105.48
                                    5754.75
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104.69 17 9 49
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                     12 34 30
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                                                                     305.32
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       110.00
                                     665.64
                                                                                                                                   4778.3
                                                                                                                                                     32.92
       110.00
                     15 40 10
                                   5378.30
                                                      31.22
                                                                     246.31
                                                                                     93.39
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ST 2072.8 SR 461.7 S5 436.7

CRT -.9697 CRS .8511 CST -.9513

LSA 2160.9 MSA 173.4 SSA 26.6
                                                                        SGT 5237.0 SGR 462.1 SG3 123.7
RRT -.3925 RRF -.3722 RTF .8866
     TDE-1.4402 TRA 1.0494 TC3-5.4888 BAU 1.2456
    RDE .3319 RRA -.0133 RC3 -.0033 FAU .02045
    FDE -.3522 FRA .6318 FC3-1.0432 BSP 16494
BDE 1.4780 BRA 1.0495 BC3 5.4888 FSP -398
                                                                        SG8 5257.3 R23 .0239 R13 -.8867
                                                                         SG1 5240.1 SG2 424.8 THA 178.00
                                                                                                                               EL1 2120.7 EL2 110.2 ALF 167.78
                                                                                                                                          ARRIVAL DATE JAN 26 1968
                                                                            FLIGHT TIME 174.00
LAUNCH DATE AUG 1 1967
                                                                            DISTANCE 527.181
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.418 GAL 2.07 AZL 92.21 HCA 267.82 SMA 120.43 ECC .26314 INC 2.2069 V1 29.341 RP 108.13 LAP 2.21 LOP 215.90 VP 36.778 GAP 14.11 AZP 89.92 TAL 174.18 TAP 82:00 RCA 88.74 APO 152.13 V2 35.045 RC 183.942 GL -13.36 GP 10.73 ZAL 74.46 ZAP 168,61 ETS 67.39 ZAE 130.29 ETE 170.72 ZAC 44.70 ETC 6.65 CLP-176.16
   PLANETOCENTRIC CONIC
    C3 17.908 VHL 4.232 DLA -31.70 RAL 227.85 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 8.905 DPA -2.77 RAP 221.82 ECC 1.2947
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    9 59 9 1240.95
13 52 44 5779.80
9 59 9 1240.95
13 52 44 5779.80
                                                                                 95.61
                                                                                                  112.90 10 19 50
112.89 15 29 4
112.90 10 19 50
                                                                                                                                                                  343.56
                                                                                                                                   640.9
                                                                                                                                                    25.45
                                                      22.54
                                                                   351.30
        74.12
                                                                                                                                                                  266.04
                                                                                                                                                    25.46
                                                       22.56
                                                                     273.79
                                                                                     95.61
                                                                                                                                   5179.8
       104.88
                                                                                                                                                                  343.56
                                                       22.54
                                                                     351.30
                                                                                     95.61
                                                                                                                                    640.9
                                                                                                                                                    25.45
        75.12
                                                                                                    112.89 15 29 4
121.37 12 59 4
104.51 17 33 9
                                                                                                                                                                  266.04
                                                                                                                                   5179.8
                                                                                                                                                    25.46
                                                       22.56
                                                                     273.79
                                                                                     95.61
       104.88
                                                                                                                                                                   300.18
                                                                                                                                     94.A
                                                                                                                                                    18.38
                     12 47 29
                                                       14.33
                                                                     306.96
                                                                                     91.18
                                     694.80
       110.00
                                                                                                                                   4774.0
                                                                                                                                                    32.97
                                                                                                                                                                  237.17
                                   5373.95
                                                      31.29
                                                                     246.00
                                                                                     98.92
       110.00
                     16 3 35
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5261.3 SGR 466.3 SG3 121.3
RRT -.3996 RRF -.3762 RTF .8909
SGB 5281.9 R23 .0194 R13 -.8910
SGI 5264.6 SGZ 427.2 THA 177.96
                                                                                                                              ST 2005.8 SR *464.8 SS 416.5
CRT -.9536 CRS .8139 CST -.9492
LSA 2091.9 MSA 189.9 SSA 25.0
     TOE-1.4012 TRA 1.3355 TC3-5.2262 BAU 1.2512
    ROE .3432 RRA -.0247 RC3 .0041 FAU .01910
FDE -.3194 FRA .6802 FC3 -.9236 BSP 16565
BDE 1.4426 BRA 1.3357 BC3 5.2262 FSP -391
                                                                                                                               EL1 2054.5 EL2 136.6 ALF 167.48
                                                                                                                                           ARRIVAL DATE JAN 28 1968
                                                                             FLIGHT TIME 180.00
LAUNCH DATE AUG 1 1967
                                                                             DISTANCE 532.554
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.361 GAL 2.75 AZL 92.06 MCA 271.02 SMA 120.12 ECC .26815 INC 2.0578 VI 29.341 RP 108.18 LAP 2.06 LOP 219.10 VP 36.727 GAP 14.49 AZP 90.04 TAL 172.43 TAP 83.45 RCA 87.91 APO 152.33 V2 35.032 RC 185.758 GL -12.02 GP 10.44 ZAL 70.83 ZAP 169.11 ETS 70.38 ZAE 130.37 ETE 170.92 ZAC 42.34 ETC 6.85 CLP-176.88
   PLANETOCENTRIC CONIC
    C3 19.086 VHL 4.369 DLA -31.33 RAL 232.28 RAD 6567.8 VEL 11.852 PTH 2.10 VHP 9.119 DPA -3.89 RAP 224.02 ECC 1.3141
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                   342.98
                                                                                                    112.98 10 43 33
112.97 15 41 8
                                                                     350.68
                                                                                    100.93
                                                                                                                                     636.6
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                     10 22 57
                                     1236.58
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        76.01
                     14 4 14
                                                                                                                                                     24.83
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                                                                     276.08
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                                     5814.04
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       103.99
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112.97 15 41 8
121.90 13 10 20
104.20 17 57 40
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                     10 22 57
                                     1236.58
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         76.01
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                                                       21.91
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       103.99
                     14 4 14
                                     5814.04
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                                                                                                                                     132.4
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                     12 58
                                      732.40
                                                       12.99
                                                                     309.04
                                                                                     96.09
       110.00
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                                                                                    104.51
                                                                                                                                                     33.05
                     16 28 14
                                                                                                                                   4766.2
       110.00
                                     5366.22
                                                                     245.43
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ST 1929.2 SR 466.1 SS 397.5
CRT -.9324 CRS .7700 CST -.9469
LSA 2013.1 MSA 209.7 SSA 23.3
F11 1017 0 F.2 2017.1
                                                                       SGT 5285.3 SGR 469.4 SG3 118.8

RRT -.4072 RRF -.3614 RTF .8956

SGB 5306.1 R23 .0156 R13 -.8956

SGI 5288.8 SG2 428.4 THA 177.91
     TOE-1.3512 TRA 1.6316 TC3-4.9251 BAU 1.2567
    RDE .3552 RRA -.0373 RC3 .0110 FAU .01784
FDE -.2870 FRA .7282 FC3 -.8090 89P 16694
                                                                                                                              EL1 1977.9 EL2 164.4 ALF 167.22
     BOE 1.3971 BRA 1.6321 BC3 4.9251 FSP -386
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FLIGHT TIME 182.00
                                                                                                                                        ARRIVAL CATE JAN 30 1968
   LAUNCH DATE AUG 1 1967
     HELTOCENTRIC CONTC
                                                                            DISTANCE 537.874
       RL 151.85 LL -.00 LOL 308.08 VL 25.305 GAL 3.47 AZL 91.91 HCA 274.22 SMA 119.81 ECC .27364 INC 1.9085 V1 29.341 RP 108.22 LAP 1.90 LOP 222.31 VP 36.675 GAP 14.90 AZP 90.14 TAL 170.69 TAP 84.91 RCA 87.03 APO 152.60 V2 35.019 RC 187.557 GL -10.70 GP 10.17 ZAL 67.31 ZAP 169.55 ETS 73.69 ZAE 130.44 ETE 171.11 ZAC 39.97 ETC 7.11 CLP-177.60
      PLANETOCENTRIC CONIC
       C3 20.536 VHL 4.532 DLA -30.85 RAL 236.53 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 9.349 DPA -4.96 RAP 226.24 ECC 1.3380
       LNCH AZMTH, LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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          77.20
                      10 48 23
                                     1227.21
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          102.80
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113.01 15 50 20
122.45 13 19 46
103.82 18 22 43
           77.20
                      10 48 23
                                     1227.21
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                      13 6 50
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         110.00
                                                                     311.47
                                                                                   100.88
                     16 53 26 5356.71
                                                                    244.74
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                                                                                                                                4756.7
                                                                                                                                                 33.16
                                                                                                                                                               235.86
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                      SCT 5304.8 SCR 471.2 SC3 116.4
RRT -.4146 RRF -.3871 RTF .9003
SGB 5325.7 R23 .0125 R13 -.9003
SGI 5308.5 SC2 428.5 THA 177.88
                                                                                                                            ST 1845.9 SR 465.4 SS 380.4
CRT -.9046 CRS .7182 CST -.9449
       TDE-1.2890 TRA 1.9415 TC3-4.5904 BAU 1.2603
       RDE .3676 RRA -.0514 RC3 .0166 FAU .01659
       FOE -.2546 FRA .7770 FC3 -.6993 BSP 16806
                                                                                                                            LSA 1927.2 MSA 232.3 SSA 21.6
       BDE 1.3404 BRA 1.9422 BC3 4.5904 FSP -380
                                                                                                                             EL1 1893.8 EL2 193.4 ALF 167.02
   LAUNCH DATE AUG 1 1967
                                                                            FLIGHT TIME 184.00
                                                                                                                                        ARRIVAL DATE FEB 1 1968
     HELIOCENTRIC CONIC
                                                                            DISTANCE 543.135
      RL 151.85 LAL -.00 LOL 308.08 VL 25.250 GAL 4.22 AZL 91.76 MCA 277.42 SMA 119.51 ECC .27965 INC 1.7582 V1 29.341 RP 108.26 LAP 1.74 LOP 225.51 VP 36.625 GAP 15.34 AZP 90.23 TAL 168.96 TAP 86.38 RCA 86.09 APO 152.94 V2 35.005 RC 189.337 GL -9.42 GP 9.93 ZAL 63.93 ZAP 169.93 ETS 77.32 ZAE 130.51 ETE 171.28 ZAC 37.61 ETC 7.44 CLP-178.32
     PLANETOCENTRIC CONIC
       C3 22.293 VHL 4.722 DLA -30.30 RAL 240.57 RAD 6567.9 VEL 11.986 PTH
                                                                                                       2.14 VHP 9.598 OPA -5.99 RAP 228.48 ECC 1.3669
       LNCH AZMTH LNCH TIME L-I TIME
78.75 11 15 52 1211.03
101.25 14 17 30 625.89
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                111.42
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                                                       20.24
                                                                    348.01
                                                                                                 113.03 11 36 3
                                                                                                                               611.0
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113.03 11 36 3
113.02 14 27 56
122.97 13 27 46
103.42 18 47 40
                                                       20.26
                                                                     304.93
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                                                       20.24
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                     13 14 0
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                                                                     314.14
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         110.00
                      17 18 -83 5346.86
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         110.00
                                                       31.74
                                                                    244.01
                                                                                   115.62
                                                                                                                                4746.9
                                                                                                                                                  33.26
     DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                        SCT 5316.2 SCR 471.3 SG3 114.0
RRT -.4209 RRF -.3921 RTF .9046
SCB 5337.0 R23 .0098 R13 -.9046
                                                                                                                           ST 1757.2 SR 462.3 SS 365.2
CRT -.8677 CRS .6555 CST -.9428
       TOE-1.2104 TRA 2.2698 TC3-4.2263 BAU 1.2596
       RDE .3802 RRA -.0669 RC3 .0204 FAU .01530
FDE -.2207 FRA .8281 FC3 -.5942 BSP 16805
                                                                                                                            LSA 1835.2 MSA 257.7 SSA 20.2
       BOE 1.2688 BRA 2.2708 BC3 4.2263 FSP -371
                                                                                                                           EL1 1803.1 EL2 224.0 ALF 166.94
                                                                        SG1 5319.9 SG2 427.2 THA 177.85
                                                                                                                                       ARRIVAL DATE FEB 3 1968
                                                                            FLIGHT TIME 186.00
   LAUNCH DATE AUG 1 1967
     HELIOCENTRIC CONIC
                                                                           DISTANCE 548.327
      RL 151.85 LAL -.00 LOL 308.08 VL 25.196 GAL 5.01 AZL 91.61 HCA 280.62 SMA 119.22 ECC .28624 INC 1.6057 V1 29.341
RP 108.30 LAP 1.58 LOP 228.70 VP 36.575 GAP 15.80 AZP 90.30 TAL 167.24 TAP 87.86 RCA 85.10 APO 153.35 V2 34.992
RC 191.100 GL -8.19 GP 9.70 ZAL 60.70 ZAP 170.25 ETS 81.26 ZAE 130.56 ETE 171.44 ZAC 35.26 ETC 7.86 CLP-179.04
     PLANETOCENTRIC CONTÉ
       C3 24.398 VHL 4.939 DLA -29.67 RAL 244.40 RAD 6568.0 VEL 12.074 PTH 2.16 VHP 9.867 DPA -6.96 RAP 230.74 ECC 1.4015
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.75 11 46 I8 1184.65 19.27 345.60 116.53 113.01 12 6 3 584.6 22.22 338.07 99.25 14 17 35 696.32 19.28 309.72 116.54 113.00 14 29 11 96.3 22.23 302.19 100.00 13 52 3h 776.08 16.67 314.42 115.31 115.17 14 5 34 176.1 19.93 307.14
                                                                                                113.01 12 6 3 584.6

113.00 14 29 11 96.3

115.17 14 5 34 176.1

110.86 16 31 44 5268.2

125.43 13 34 36 279.2

103.05 19 12 4 4737.8
                                                                                                                                 176.1
                                                                                                                                                 24.55
                                                                                                                                                              272 34
         100.00
                      14 53 56
                                   5868.16
                                                      21.91
                                                                    280.14
                                                                                  117.67
                     13 19 57
17 43 7
                                      879.19
                                                                                                                                 279.2
                                                                                                                                                 11.93
                                                                                                                                                               310.58
         110.00
                                                        7.59
                                                                    316.98
                                                                                  110.10
                                                                                                                                                 33.34
                                                                                                                                                              234 42
                                    5337.81
                                                      31.88
                                                                    243.34
                                                                                   121.07
         110.00
     DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                        SGT 5326.8 SGR 470.3 SG3 111.7

RRT -.4279 RRF -.3986 RTF .9096

SGB 5347.6 R23 .0076 R13 -.9096

SGI 5330.7 SG2 424.8 THA 177.82
                                                                                                                            ST 1676.7 SR 457.6 SS 353.9
CRT -.8226 CRS .5895 CST -.9430
       TOE-1.1261 TRA 2.6092 TC3-3.8593 BAU 1.2589
      RDE .3934 RRA -.0834 RC3 .0234 FAU .01413
FDE -.1893 FRA .8789 FC3 -.5013 BSP 16909
                                                                                                                           LSA 1750.9 MSA 282.9 SSA 18.8
                                                                                                                             EL1 1719.4 EL2 253.8 ALF 167.06
       BOE 1.1929 BRA 2.6105 BC3 3.8594 FSP . -365
LAUNCH DATE AUG 1 1967
                                                                                                                                        ARRIVAL DATE FEB 5 1968
                                                                            FLIGHT TIME 188.00
                                                                            DISTANCE 553.440
     HELIOCENTRIC CONIC
      RL 151.85 LAL -.00 LOL 308.08 VL 25.143 GAL 5.84 AZL 91.45 MCA 283.81 SMA 118.94 ECC .29347 INC 1.4502 V1 29.341 RP 108.34 LAP 1.41 LOP 231.90 VP 36.526 GAP 16.30 AZP 90.35 TAL 165.54 TAP 89.36 RCA 84.03 APO 153.84 V2 34.979 RC 192.846 GL -7.01 GP 9.50 ZAL 57.64 ZAP 170.50 ETS 85,50 ZAE 130.60 ETE 171.59 ZAC 32.91 ETC 8.39 CLP-179.78
     PLANETOCENTRIC CONIC
       C3 26.901 VHL 5.187 DLA -28.99 RAL 247.99 RAD 6568.1 VEL 12.177 PTH 2.19 VHP 10.160 DPA -7.89 RAP 233.02 ECC 1.4427
       ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  112.95 12 41 21
112.94 14 23 20
                                                       18.22
                                                                    341.76
                                                                                  121.53
                                                                                                                                  538.9
                                                                                                                                                21.17
                                                                                                                                                               334 2A
          83.51
                      12 22 22 1138.95
                                                      18.23
                                                                    316.20
                                                                                  121.54
                                                                                                                                  190.3
                                                                                                                                                 21.18
                                                                                                                                                               30A . 71
                      14 10 9
                                     790.26
                                                                                                  117.18 13 51 2
108.82 17 15 43
123.79 13 40 30
102.74 19 35 36
                                                                                                                                  300.0
                                                                                                                                                 16.49
                                                                                                                                                               314.73
                      13 36 2
                                      899.96
                                                       12.95
                                                                    321.73
                                                                                  118.98
         100,00
                     15 39 10
                                   5792.52
                                                                                  123.76
                                                                                                                                 5192.5
                                                                                                                                                 26.01
                                                                                                                                                              267.19
                                                      23.66
                                                                    275.20
         100.00
                                                        5.49
                                                                                  114.53
                                                                                                                                  334.9
                                                                                                                                                  9.89
                                                                                                                                                               313.60
         110.00
                      13 24 56
                                       934.89
                                                                    319.92
                     18 6 46
                                                                    242.79
                                                                                                                               4730.4
                                                                                                                                                33.41
                                                                                                                                                              233.85
         110.00
                                     5330.35
                                                      31.99
                                                                                 126.42
     DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                      SGT 5331.6 SGR 467.9 SG3 109.4
RRT - .4344 RRF - .4051 RTF .9147
SGB 5352.1 R23 .0059 R13 - .9147
                                                                                                                           ST 1604.3 SR 451.1 SS 346.1
CRT -.7675 CRS .5188 CST -.9450
       TOE-1.0320 TRA 2.9654 TC3-3.4892 BAU 1.2549
       ROE .4069 RRA -.1009 RC3 .0250 FAU .01297
FDE -.1586 FRA .9315 FC3 -.4173 BSP 16987
                                                                                                                           LSA 1674.0 MSA 307.6 SSA 17.6
                                                                        SG1 5335.5 SG2 421.1 THA 177.80
       BOE 1.1093 BRA 2.9671 BC3 3.4893 FSP -360
                                                                                                                           EL1 1642.4 EL2 282.4 ALF 167.44
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ARRIVAL DATE FEB 7 1968
                                                                          FLIGHT TIME 190.00
LAUNCH DATE AUG 1 1967
                                                                          DISTANCE 558.462
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 25.092 GAL 6.72 AZL 91.29 MCA 287.01 SMA 118.66 ECC .30140 INC 1.2904 V1 29.341
RP 108.38 LAP 1.23 LOP 235.09 VP 36.478 GAP 16.84 AZP 90.38 TAL 163.87 TAP 90.87 RCA 82.90 APO 154.43 V2 34.966
RC 194.574 GL -5.89 GP 9.31 ZAL 54.75 ZAP 170.67 ETS 90.00 ZAE 130.62 ETE 171.73 ZAC 30.58 ETC 9.03 CLP 179.48
   PLANETOCENTRIC CONIC
    C3 29.862 VHL 5.465 DLA -28.28 RAL 251.34 RAD 6568.2 VEL 12.298 PTH 2.22 VHP 10.478 DPA -8.77 RAP 235.30 ECC 1.4914
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.68 13 33 44
                                                                               125.91
                                                                                                                                433.1
                                                                                                                                                             325.67
       90.00
                                                                  333.00
                   13 16 31 1033.15
                                                    15.99
                                                                                                 112.04 13 58 32
                                                                                                                                348.2
                                                                                                                                                21.08
                                                                                                                                                              320.25
        90.00
                    13 42 44
                                   948.16
                                                    18.24
                                                                  327.78
                                                                                 126.90
                                                                                                118.33 13 45 11
107.61 17 49 9
124.04 13 45 40
102.51 19 58 2
                                                                                                                                394.0
                                                                                                                                                13.67
                                                                                                                                                              320.29
                                                                                 122.90
      100.00
                    13 28 37
                                   993.96
                                                     9.96
                                                                  327.12
                                                                                                                               5150.6
                                                                                                                                               26.73
                                5750.62
      100.00
                    16 13 19
                                                    24.55
                                                                  272.41
                                                                                 129.35
                                                                                                                                                              316.67
                                                                                                                                392.3
                                                                                                                                                 7.75
      110.00
                   13 29 8
                                    992.34
                                                     3.30
                                                                  322.94
                                                                                 118.84
                    18 29 17 5325.01
                                                                                                                             4725.0
                                                    32.07
                                                                  242.39
                                                                                 131.64
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RIT - 4406 RRF - 4117 RTF . 9198
SGB 5353.2 R23 .0044 R13 - .9198
SGI 5337.0 SG2 416.3 THA 177.79
                                                                                                                           ST 1544.4 SR 442.9 SS 341.7
CRT -.7032 CRS .4462 CST -.9489
    TOE -.9305 TRA 3.3398 TC3-3.1269 BAU 1.2484
    ROE .4205 RRA -.1194 RC3 .0254 FAU .01184
    FDE -.1288 FRA .9862 FC3 -.3433 BSP 17053
BDE 1.0211 BRA 3.3420 BC3 3.1270 FSP -354
                                                                                                                           LSA 1609.1 MSA 329.9 SSA 16.6
                                                                                                                           EL1 1576.8 EL2 308.4 ALF 168.14
                                                                                                                                      ARRIVAL DATE FEB 9 1968
LAUNCH DATE AUG 1 1967
                                                                          FLIGHT TIME 192,00
                                                                          DISTANCE 563.379
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 25.041 GAL 7.66 AZL 91.13 MCA 290.20 SMA 118.39 ECC .31013 INC 1.1252 V1 29.341 RP 108.42 LAP 1.06 LOP 238.28 VP 36.431 GAP 17.43 AZP 90.39 TAL 162.22 TAP 92.41 RCA 81.67 APO 155.11 V2 34.953 RC 196.285 GL -4.84 GP 9.14 ZAL 52.04 ZAP 170.77 ETS 94.69 ZAE 130.62 ETE 171.86 ZAC 28.27 ETC 9.82 CLP 178.73
   PLANETOCENTRIC CONIC
                                                                                                                                   -9.61 RAP 237.60 ECC 1.5489
                                                                                                    2.25 VHP 10.826 DPA
    C3 33.352 VHL 5.775 DLA -27.54 RAL 254.45 RAD 6568.3 VEL 12.439 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 12 43 55 1207.74 10.96 343.35 128.82 116.27 13 4 3 607.7 14.40 336.36
                                                                                                             14 53 58
                                                                                                                                 229.2
                                                                                                                                                23.55
                                                                                                                                                              312.41
        90.00
                    14 40 9 829.16
                                                     21.11
                                                                  320.23
                                                                                 133.25
                                                                                                  109.32
                   13 24 8 1077,79
16 42 37 5722,39
13 32 42 1050.87
18 50 32 5322.07
                                                                                                                                 477.8
                                                                                                  119.09 13 42 6
                                                                                                                                                11.05
                                                      7.22
                                                                  331.83
                                                                                 126.83
      100.00
                                                                                                 106.76 18 17 59
124.17 13 50 13
102.39 20 19 14
                                                                                                                                              27.18
                                                                                                                                5122.4
                                                                                                                                                              262.30
      100.00
                                                    25.12
                                                                  270.50
                                                                                 134.67
                                                                                 123.04
                                                                                                                                 450.9
                                                                                                                                                  5.54
                                                                                                                                                              319.77
      110.00
                                                     1.07
                                                                  326.00
                                                                                                                                4722.1
                                                                                                                                                33.49
                                                                                                                                                              233.21
      110.00
                                                                                 136.74
                                                     32.12
                                                                  242.18
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5328.9 SGR 458.7 SG3 105.0
RRT -.4460 RRF -.4178 RTF .9250
SGB 5348.6 R23 .0031 R13 -.9250
SGI 5332.8 SG2 410.2 THA 177.79
                                                                                                                           ST 1497.1 SR 433.1 SS 340..7

CRT -.6288 CRS .3712 CST -.9544

LSA 1556.5 MSA 349.2 SSA 15.7
    TDE -.8172 TRA 3.7384 TC3-2.7709 BAU 1.2355
    RDE .4340 RRA -.1389 RC3 .0245 FAU .01067
FDE -.0988 FRA 1.0446 FC3 -.2770 BSP 16996
                                                                                                                          ELI 1522.9 ELZ 331.0 ALF 169.17
    BOE .9253 BRA 3.7410 BC3 2.7710 FSP -345
                                                                                                                                      ARRIVAL DATE FEB 11 1968
                                                                          FLIGHT TIME 194,00
LAUNCH DATE AUG 1 1967
                                                                         DISTANCE 568.170
    RL 151.85 LAL -.00 LOL 308.08 VL 24.991 GAL 8.65 A7L 90.95 MCA 293.38 SMA 118.13 ECC .31975 INC .9532 V1 29.341
RP 108.46 LAP .87 LOP 241.46 VP 36.385 GAP 18.07 A7P 90.38 TAL 160.60 TAP 93.98 RCA 80.36 APO 155.90 V2 34.941
RC 197.979 GL -3.85 GP 8.99 ZAL 49.51 ZAP 170.79 ETS 99.54 ZAE 130.60 ETE 171.99 ZAC 25.98 ETC 10.79 CLP 177.96
   PLANETOCENTRIC CONIC
    C3 37.460 VHL 6.120 DLA -26.80 RAL 257.32 RAD 6568.5 VEL 12.603 PTH 2.29 VHP 11.206 DPA -10.39 RAP 239.90 ECC 1.6165
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               117.33 12 54 5
108.11 15 27 51
119.57 13 40 20
                                                                                                                                             11.30
                    12 32 11 1313.88
15 14 49 781.69
                                                                              132.41
                                                                                                                             713.9
                                                      7.70
                                                                  349.44
        90.00
                                                                                                                                                              309.20
                                                                                                                                                24.42
                    15 14 49
                                    781.69
                                                     22.15
                                                                  317.13
                                                                                 138.65
                                                                                                                                181.7
        90.00
                                                                                                                                                              329.55
                   13 21 4 1155.98
17 8 37 5702.87
                                                                                                                                                8.52
                                                                                 130.73
                                                                                                                                556.0
       100,00
                                                      4.61
                                                                  336.17
                                                                                                                                                              260.93
                                                                                                                                                27.47
                                                    25.50
                                                                  269.17
                                                                                 139.78
                                                                                                  106.15 18 43 40
                                                                                                                               5102.9
      100.00
                                                                                                 124.16 13 54 14
102.37 20 39 9
                    13 35 44 1109.95
19 10 27 5321.66
                                                                                                                                                              322.87
                                                     -1.19
                                                                  329.08
                                                                                 127.12
                                                                                                                                509.9
                                                                                                                                                 3.30
      110.00
                                                                                                                               4721.7
                                                                                                                                                              233.18
                                                                  242.15
                                                                                                                                                33.49
                                                                                 141.70
      110.00
                                                    32.12
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1465.8 SR 422.2 SS 342.6
CRT -.5512 CRS .3039 CST -.9615
LSA 1520.7 MSA 362.7 SSA 14.8
EL1 1485.3 EL2 347.7 ALF 170.45
                                                                      SGT 5321.4 SGR 452.0 SG3 102.9
    TOE -. 7027 TRA 4.1537 TC3-2.4381 BAU 1.2211
    ROE .4479 RRA -.1588 RC3 .0231 FAU .00960
FOE -.0715 FRA 1.1042 FC3 -.2218 BSP 17049
                                                                      RRT -.4514 RRF -.4245 RTF .9305
SGB 5340.5 R23 .0023 R13 -.9305
SGI 5325.3 SGZ 403.1 THA 177.79
    BOE .8333 BRA 4.1567 BC3 2.4383 FSP -339
                                                                          FLIGHT TIME 196.00
                                                                                                                                       ARRIVAL DATE FEB 13 1968
LAUNCH DATE AUG 1 1967
                                                                          DISTANCE 572.815
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.942 GAL 9.71 AZL 90.77 MCA 296.57 SMA 117.87 ECC .33036 INC .7728 V1 29.341 RP 108.50 LAP .69 LOP 244.65 VP 36.340 GAP 18.76 AZP 90.35 TAL 159.02 TAP 95.58 RCA 78.93 APO 156.81 V2 34.929 RC 199.655 GL -2.92 GP 8.84 ZAL 47.16 ZAP 170.72 ETS 104.46 ZAE 130.56 ETE 172.11 ZAC 23.72 ETC 11.98 CLP 177.17
   PLANETOCENTRIC CONIC
    C3 42.295 VHL 6.503 DLA -26.05 RAL 259.97 RAD 6568.6 VEL 12.793 PTH 2.33 VHP 11.623 DPA -11.13 RAP 242.27 ECC 1.6961
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 24 53 1404.43 4.84 354.56 136.08 117.93 12 48 18 804.4 8.54 347.83
                                                                                               117.93 12 48 18
107.33 15 55 47
                                                                                                                                                               307.20
                                                                                                                                 152.5
                                                                                                                                                24.91
        90.00
                    15 43 15
                                    752.46
                                                     22.75
                                                                   315.20
                                                                                  143.72
                                                                                                                                                               333.70
                  13 18 48 1230.32
                                                                                  134.57
                                                                                                  119.83
                                                                                                             13 39 19
                                                                                                                                 630.3
                                                                                                                                                  6.06
                                                      2.10
                                                                   340.26
       100.00
                                                                                  144.70
                                                                                                  105.74
                                                                                                             19 6 51
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                                                                                                                                                27.65
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       100.00
                    17 32 1
                                    5689.84
                                                     25.74
                                                                   268.28
                                                                                                  124.03 13 57 47
102.46 20 57 44
                                                                                                                                                               325.96
                   13 38 18
                                                                                  131.11
                                                                                                                                 569.1
                                                                                                                                                  1.04
                                    1169.15
                                                     -3.45
                                                                   332.17
                                                                                                                                                              233.35
                                                                                                                                                33.47
       110.00
                    19 29 1
                                   5323.77
                                                     32.09
                                                                  242.30
                                                                                  146.52
                                                                                                                                4723.8
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ST 1447.6 SR 410.2 SS 347.2
CRT -.4715 CRS .2413 CST -.9687
LSA 1499.0 MSA 370.5 SSA 14.0
    TOE -.5824 TRA 4.5925 TC3-2.1250 BAU 1.2017
                                                                       SGT 5309.1 SGR 443.9 SG3 100.9
                                                                      RRT -.4561 RRF -.4308 RTF .9361
SGB 5327.6 R23 .0017 R13 -.9361
    ROE .4618 RRA -.1791 RC3 .0210 FAU .00853
FOE -.0450 FRA 1.1672 FC3 -.1745 BSP 17085
BOE .7433 BRA 4.5960 BC3 2.1252 FSP -334
                                                                                                                         ELI 1461.3 EL2 358.4 ALF 171.90
                                                                       SG1 5312.9 SG2 394.8 THA 177.80
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LAUNCH DATE AUG 1 1967

ARRIVAL DATE FEB 15 1968

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HELIOCENTRIC CONIC
                                                                             DISTANCE 577.286
    RL 151.85 LAL -.00 LOL 308.08 VL 24.895 GAL 10.84 AZL 90.58 HCA 299.75 SMA 117.63 ECC .34210 INC .5823 V1 29.341 RP 108.53 LAP .51 LOP 247.83 VP 36.295 GAP 19.53 AZP 90.29 TAL 157.48 TAP 97.23 RCA 77.39 APO 157.87 VZ 34.917 RC 201.315 GL -2.06 GP 8.71 ZAL 44.99 ZAP 170.56 ETS 109.39 ZAE 130.49 ETE 172.23 ZAC 21.50 ETC 13.45 CLP 176.37
   PLANETOCENTRIC CONIC
    C3 47.991 VHL 6.928 DLA -25.32 RAL 262.40 RAD 6568.8 VEL 13.814 PTH 2.37 VHP 12.083 DPA -11.82 RAP 244.50 ECC 1.7898
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                  INJ AZMTH INJ TIME

118.24 12 44 27

106.81 16 20 3

119.89 13 38 42

105.50 19 27 53

123.76 14 0 55

102.65 21 15 2
                                                                     359.17 139.72
                                                                                                                                 886.8 5.95 352.50
        90.00 12 19 41 1486.78
                                                        2.19
                                                                                                                                      133.6
        90.00
                    16 7 50
                                     733.60
                                                      23.13
                                                                     313.95
                                                                                    148.55
                                                                                                                                                                     305.90
                   13 17 1 1301.65
                                                                     344.17
                                                                                  138.33
                                                                                                                                     701.7
                                                                                                                                                       3.67
                                                                                                                                                                     337.65
       100.00
                                                        - . 31
                    17 53 11
                                                     25.89
                                                                     267.74
                                                                                    149.43
                                                                                                                                     5082.0
                                                                                                                                                      27.76
                                                                                                                                                                     259.44
                                    5682.00
       100.00
                   13 40 27
                                                                     335.26
                                                                                  134.99
                                                                                                                                      628.1
                                                                                                                                                      -1.22
                                                                                                                                                                     329.04
                                   1228.11
                                                      -5.69
       110.00
                   19 46 14 5328.30
                                                                                                                                    4728.3
                                                      32.02
                                                                                    151.19
                                                                                                                                                      33.43
                                                                                                                                                                     233.69
       110.00
                                                                     242.64
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 5292.8 SGR 434.4 SG3 98.9

RRT -.4601 RRF -.4367 RTF .9418

SGB 5310.6 R23 .0012 R13 -.9418

SG1 5296.6 SG2 385.4 THA 177.83
                                                                                                                               ST 1440.9 SR 397.2 SS 354.1
CRT -.3926 CRS .1844 CST -.9756
LSA 1490.1 MSA 372.6 SSA 13.3
    TOE -.4566 TRA 5.0582 TC3-1.8333 BAU 1.1763
    ROE .4756 RRA -.1995 RC3 .0183 FAU .00746
FDE -.0193 FRA 1.2343 FC3 -.1345 BSP 17103
BDE .6593 BRA 5.0622 BC3 1.8334 FSP -328
                                                                                                                                EL1 1449.9 EL2 363.0 ALF 173.41
                                                                              FLIGHT TIME 200.00
                                                                                                                                            ARRIVAL DATE FEB 17 1968
LAUNCH DATE AUG 1 1967
                                                                             DISTANCE 581.548
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.848 GAL 12.07 AZE 90.38 MCA 302.93 SMA 117.39 ECC .35512 INC .3793 VI 29.341
RP 108.57 LAP .32 LOP 251.01 VP 36.252 GAP 20.37 AZP 90.21 TAL 156.00 TAP 98.93 RCA 75.70 APO 159.07 VZ 34.905
RC 202.957 GL -1.25 GP 8.59 ZAL 42.99 ZAP 170.32 ETS 114.25 ZAE 130.39 ETE 172.35 ZAC 19.33 ETC 15.28 CLP 175.53
  PLANETOCENTRIC CONIC
    C3 54.714 VHL 7.397 DLA -24.60 RAL 264.61 RAO 6369.0 VEL 13.269 PTH 2.42 VHP 12.392 DPA -12.45 RAP 246.78 ECC 1.9805 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    118.32 12 41 42
106.48 16 41 35
119.79 13 38 20
105.38 19 47 1
123.37 14 3 40
102.93 21 31 3
                                   1563.65
                                                                                   143.32
                    12 15 38
        90.00
                                                        - . 29
                                                                        3.46
                                                                                                                                       963.6
                                                                                                                                                       3.50
                  16 29 33
                                                                                                                                                                     305.09
                                     721.92
                                                      23.36
                                                                     313.17
                                                                                    153.17
                                                                                                                                       121.9
        90.00
                  13 15 30
18 12 22
                                                                                                                                                                     341.43
                                                                                                                                       770.4
                                                       -2.64
                                                                     347.95
                                                                                     142.01
                                                                                                                                                        1.34
       100.00
                                    1370.40
                                                                                                                                     5078.4
                                                                                                                                                      27.81
                                                                                                                                                                     259.19
                                   5678.44
                                                     25.95
                                                                     267.50
                                                                                   153.98
       100.00
                  13 42 14
20 2 8
                                                                                                                                      686.5
                                                                                                                                                      -3.45
                                                                                                                                                                     332.09
                                    1286.54
                                                       -7.89
                                                                     338.36
                                                                                    138,77
       110.00
                                                                                  155.70
                                                                                                                                 4735.1
                                                                                                                                                     33.37
                                    5335.06
                                                     31.92
                                                                     243.14
                                                                                                                                                                    234.21
       110.00
  DIFFERENTIAL CORRECTIONS
TDE -.3217 TRA 5.5574 TC3-1.5608 BAU 1.1418
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                        SGT 5273.4 SGR 423.4 SG3 97.1
RRT -.4630 RRF -.4417 RTF .9474
SGB 5290.3 R23 .0008 R13 -.9474
                                                                                                                                 ST 1443.7 SR 383.1 SS 363.5
CRT -.3152 CRS .1313 CST -.9815
    RDE .4892 RRA -.2200 RC3 .0152 FAU .00632
FDE .0067 FRA 1.3070 FC3 -.1000 BSP 17008
                                                                                                                               LSA 1492.1 MSA 369.7 SSA 12.6
                                                                          SC1 5277.0 SC2 375.0 THA 177.86
                                                                                                                                 EL1 1449.1 EL2 362.2 ALF 174.90
    BOE .5855 BRA 5.5618 BC3 1.5609 FSP -319
                                                                                                                                           ARRIVAL DATE FEB 19 1968
                                                                             FLIGHT TIME 202.00
LAUNCH DATE AUG 1 1967
                                                                            DISTANCE 585.558
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.803 GAL 13.39 A7L 90.16 HCA 306.10 SMA 117.16 ECC .36959 INC .1615 V1 29.341
RP 108.60 LAP .13 LOP 254.18 VP 36.211 GAP 21.30 AZP 90.10 TAL 154.59 TAP 100.70 RCA 73.86 APO 160.46 V2 34.894
RC 204.581 GL -.49 GP 8.48 ZAL 41.17 ZAP 169.99 ETS 118.99 ZAE 130.25 ETE 172.47 ZAC 17.21 ETC 17.59 CLP 174.65
   PLANETOCENTRIC CONIC
    C3 62.675 VML 7.917 DLA -23.90 RAL 266.62 RAD 6569.2 VEL 13.566 PTH 2.48 VMP 13.156 CPA -13.04 RAP 249.05 ECC 2.0315
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 118.20 12 39 34
106.30 17 0 51
119.53 13 38 4
105.38 20 4 26
122.85 14 6 3
103.29 21 45 48
                                                                                 146.84
157.58
                                                                                                                                 1036.3
        90.00 12 12 18 1636.30
90.00 16 48 55 715.64
                                                                                                                                                      1.16
                                                                                                                                                                        . 48
                                                      -2.63
                                                                       7.51
                                                                                                                                                                    304.66
                                                     23.48
                                                                     312.75
                                                                                                                                     115.6
                                                                                                                                                     25.49
                  13 14 7 1436.75
18 29 47 5678.46
                                                                                 145.60
158.35
                                                                                                                                                                    345.06
                                                                                                                                      836.8
                                                                                                                                                      - .91
                                                     -4.88
                                                                     351.60
       100.00
                                                     25.95
                                                                    267.50
                                                                                                                                     5078.5
                                                                                                                                                     27.81
                                                                                                                                                                    259.19
       100.00
                   13 45 39 1344.14
20 16 45 5343.84
                                                    -10.03
                                                                                   142.45
                                                                                                                                     744.1
                                                                                                                                                      -5.64
                                                                                                                                                                    335.11
                                                                     341.44
       110.00
                                                                     243.79
                                                                                                                                    4743.8
                                                                                                                                                     33.29
                                                                                                                                                                    234.88
                                                                                    160.05
                                                     31.79
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 1452.6 SR 368.5 SS 374.4

CRT -.2460 CRS ..0873 CST -.9865

LSA 1501.6 MSA 362.1 SSA 12.0

EL1 1455.6 EL2 356.5 ALF 176.20
                                                                        SGT 5248.9 SGR 411.0 SG3 95.2
RRT -.4652 RRF -.4461 RTF .9531
SGB 5264.9 R23 .0007 R13 -.9531
SGI 5252.4 SG2 363.6 THA 177.90
    TOE -.1873 TRA 6.0844 TC3-1.3148 BAU 1.1018
    RDE .5031 RRA -.2398 RC3 .0122 FAU .00522
FDE .0308 FRA 1.3838 FC3 -.0721 BSP 17022
    BOE .5368 BRA 6.0891 BC3 1.3149 FSP -314
                                                                             FLIGHT TIME 204,00
                                                                                                                                            ARRIVAL CATE FEB 21 1968
LAUNCH DATE AUG 1 1967
                                                                            DISTANCE 589.261
  HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.760 GAL 14.83 AZL 89.93 MCA 309.28 SMA 116.93 ECC .38573 INC .0730 VI 29.341
RP 108.64 LAP -.06 LOP 257.36 VP 36.171 GAP 22.34 AZP 89.95 TAL 153.27 TAP 102.55 RCA 71.83 APO 162.04 V2 34.883
RC 206.187 GL .21 GP 8.37 ZAL 39.52 ZAP 169.56 ETS 123.56 ZAE 130.06 ETE 172.59 ZAC 15.18 ETC 20.53 CLP 173.74
   PLANETOCENTRIC CONIC
    C3 72.138 VHL 8.493 DLA -23.23 RAL 268.43 RAD 6569.4 VEL 13.910 PTH 2.54 VHP 13.786 CPA -13.58 RAP 251.28 ECC 2.1872
    LNCH AZMTH LNCH TIME -L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   -1.07
        90.00 12 9 24 1705.39
90.00 17 6 16 713.59
100.00 13 12 47 1500.79
                                                                                                  117.93 12 37 49
106.24 17 18 9
                                                                                                                                  1105.4
                                                                      11.38 150.27
                                                                                                                                                                       4.73
                                                      -4.84
                                                                                                                                                                    304.51
                                                      23.52
                                                                     312.61
                                                                                    161.78
                                                                                                                                      113.6
                                                                                                                                                      25.52
                                                                                                    106.24 17 14 9
119.13 13 37 48
105.48 20 20-15
122.22 14 8 4
103.72 21 59 21
                                                                                                                                      900.8
                                                                                                                                                      -3.08
                                                                                                                                                                    348.58
                                                      -7.02
                                                                     355.16
                                                                                  149.09
       100.00
                   18 45 33
                                                                                    162.52
                                                                                                                                     5081.5
                                                                                                                                                      27.77
                                                                                                                                                                    259.41
                                                      25.90
                                                                     267.71
                                    5681.48
       100.00
                                                                                   146.03
                                                                                                                                                      -7.76
                                                                                                                                      800.7
                                                                                                                                                                     338.10
                   13 44 43 1400.66
                                                     -12.10
                                                                     344.51
       110.00
                     20 30 7
                                                                                                                                                     33.18
                                    5354.37 31.62
                                                                     244.56
                                                                                     164.22
                                                                                                                                    4754.4
                                                                                                                                                                    235.69
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 5220.3 SCR 397.3 SC3 93.4
RRT -.4660 RRF -.4493 RTF .9586
SCB 5235.4 R23 .0006 R13 -.9586
                                                                                                                              ST 1465.6 SR 353.3 SS 387.2
CRT -.1829 CRS .0485 CST -.9904
LSA 1516.3 MSA 351.2 SSA 11.4
    TOE -.0480 TRA 6.6485 TC3-1.0904 BAU 1.0516
    RDE .5169 RRA -.2587 RC3 .0091 FAU .00406
FDE .0545 FRA 1.4668 FC3 -.0487 BSP 17010
BDE .5191 BRA 6.6535 BC3 1.0904 FSP -309
                                                                                                                              EL1 1467.1 EL2 347.0 ALF 177.33
                                                                         SG1 5223.6 SG2 351.3 THA 177.96
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FLIGHT TIME 198.00

ARRIVAL DATE FEB 23 1968

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LAUNCH DATE AUG 1 1967
                                                                    DISTANCE 592.590
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 24.718 GAL 16.40 A7L 89.67 MCA 312.45 SNA 116.72 ECC .40378 INC .3325 V1 29.341 RP 108.67 LAP -.25 LOP 260.53 VP 36.132 GAP 23.50 A7P 89.78 TAL 152.04 TAP 104.49 RCA 69.59 APO 163.85 V2 34.872 RC 207.774 GL .86 GP 8.28 7AL 38.04 ZAP 169.03 ETS 127.93 ZAE 129.82 ETE 172.72 ZAC 13.25 ETC 24.31 CLP 172.78
   PLANETOCENTRIC CONIC
    C3 83.442 VML 9.135 DLA -22.58 RAL 270.05 RAD 6569.6 VEL 14.310 PTH 2.60 VMP 14.491 DPA -14.07 RAP 253.48 ECC 2.3732
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      117.52 12 36 16
106.28 17 33 42
                                                                       153.60
                                                                                                                    1171.2
                                                                                                                                  -3.19
                                                                                                                                                   8.41
       90.00 12 6 45 1771.25
                                               -6.93
                                                             15.09
                                                                                                                                    25.50
                                                                                                                                                 304 . 61
                                                                                                                     114.9
                                                                          165.77
                  17 21 47
                                 714.91
                                                23.49
                                                             312.70
                                                                                        118.61 13 37 28
105.65 20 34 34
121.47 14 9 42
104.21 22 11 42
                                                                          152.46
                                                                                                                      962.3
                                                                                                                                    -5.15
                                                                                                                                                351.99
                 13 11 25 1562.27
                                                -9.04
                                                             358.61
                                                                                                                                    27.69
                                                                                                                                                259.80
                                                                                                                     5086.9
      100.00
                  18 59 47
                               5686.95
                                               25.80
                                                             268.08
                                                                          166.49
                                                                                                                      855.8
                                                                                                                                    -9.82
                                                                                                                                                341.05
                 13 45 27 1455.83
20 42 16 5366.36
                                              -14.09
                                                             347.56
                                                                          149.48
      110,00
                                                                                                                    4766.4
                                                                                                                                  33.05
                                                                                                                                                236.60
                                                                          168.20
                                               31.42
                                                            245.44
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1480.5 9R 337.6 95 402.0

CRT - 1264 CRS .0143 CST -.9933

LSA 1534.0 MSA 337.9 SSA 10.8
                                                               SGT 5187.9 SGR 382.2 SG3 91.6
RRT -.4651 RRF -.4508 RTF .9640
    TDE .0961 TRA 7.2547 TC3 -.8867 BAU .9892
    RDE .5307 RRA - .2761 RC3 .0061 FAU .00282
                                                                SGB 5202.0 R23 .0006 R13 -.9640
SGI 5191.0 SGZ 338.2 THA 178.03
    FOE .0781 FRA 1.5572 FC3 -.0292 8SP 16981
                                                                                                                 ELI 1481.1 EL2 334.7 ALF 178.26
    BDE .5393 BRA 7.2600 BC3 .8868 FSP -303
                                                                                                                           ARRIVAL DATE FEB 25 1968
                                                                    FLIGHT TIME 208.00
LAUNCH DATE AUG 1 1967
                                                                    DISTANCE 595.454
  HELIOCENTRIC CONIC
   RL 151.85 LAL -.00 LOL 308.08 VL 24.678 GAL 18.12 AZL 89.38 MCA 315.62 SMA 116.52 ECC .42403 INC .6185 V1 29.341
RP 108.70 LAP -.43 LOP 263.70 VP 36.095 GAP 24.81 AZP 89.56 TAL 150.93 TAP 106.55 RCA 67.11 APO 165.92 V2 34.862
RC 209.341 GL 1.47 GP 8.19 ZAL 36.75 ZAP 168.40 ETS 132.09 ZAE 129.51 ETE 172.86 ZAC 11.46 ETC 29.25 CLP 171.75
  PLANETOCENTRIC CONIC
    C3 97.024 VHL 9.850 DLA -21.96 RAL 271.46 RAD 6569.9 VEL 14.777 PTH 2.67 VHP 15.284 DPA -14.52 RAP 255.63 ECC 2.5968
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  11.93
                                                                                        117.00 12 34 46
                                                                                                                    1234.0
                                                                                                                                  -5.20
                                                                         156.79
                               1833.96
                                                -8.89
                                                             18.66
       90.00
                  12 4 12
                                                                                                    17 47 37
                                                                                                                      118.9
                                                                                                                                    25.44
                                                                                                                                                  304.88
                                                23.42
                                                             312.97
                                                                           169.52
                                                                                         106.39
        90.00
                                718.91
                                                                                                     13 37 0
                                                                                                                      1021.7
                                                                                                                                    -7.13
                                                                                                                                                 355.27
                                                                                         117.99
                  13 9 58
                                                -10.96
                                                               1.97
                                                                           155.70
      100.00
                               1621.73
                                                                                                                                    27.59
                                                                                                                                                 260.33
                 19 12 33 5694.44
13 45 48 1509.37
20 53 13 5379.53
                                                                                         105.89 20 47 28
                                                                                                                     5094.4
                                               25.66
                                                             268.60
                                                                           170.24
      100.00
                                                                                         120.63 14 10 57
104.74 22 22 52
                                                                                                                                                 343.96
                                                                                                                      909.4
                                               -15.97
                                                             350.57
                                                                           152.81
      110.00
                                                                                                                     4779.5
                                                                                                                                   32.90
                                                                                                                                                 237.60
                                                             246.40
                                                31.20
                                                                           171.96
      110.00
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                RRT -.4620 RRF -.4501 RTF ..9691
SGB 5166.5 R23 .0007 R13 -.9691
SGI 5156.3 SGZ 324.2 THA 178.11
                                                                                                                 ST 1496.4 SR 321.4 SS 419.3
CRT -.0746 CRS -.0175 CST -.9954
    TOE .2490 TRA 7.9125 TC3 -.7013 BAU .9097
    ROE .5444 RRA -.2918 RC3 .0032 FAU .00140
                                                                                                                 LSA 1553.7 MSA 322.7 SSA 10.2
    FOE .1026 FRA 1.6573 FC3 -.0125 BSP 16834
                                                                                                                 ELI 1496.6 EL2 320.4 ALF 179.04
    BOE .5986 BRA 7.9179 BC3 .7013 FSP -296
                                                                                                                           ARRIVAL DATE FEB 27 1968
                                                                    FITCHT TIME 210.00
LAUNCH DATE AUG 1 1967
                                                                    DISTANCE 597.738
   HELIOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.640 GAL 20.03 ATL 89.06 MCA 318.79 SMA 116.33 ECC .44681 INC .9382 VI 29.341 RP 108.73 LAP -.62 LOP 266.87 VP 36.060 GAP 26.29 ATP 89.29 TAL 149.98 TAP 108.76 RCA 64.35 APO 168.30 V2 34.853
                                      8.10 ZAL 35.63 ZAP 167.65 ETS 136.03 TAE 129.13 ETE 173.00 ZAC 9.85 ETC 35.74 CLP 170.65
                        2.04 GP
    RC 210.889 GL
   PLANETOCENTRIC CONIC
    C3 113.451 VHL 10.651 DLA -21.38 RAL 272.68 RAD 6570.2 VEL 15.323 PTH 2.74 VHP 16.182 DPA -14.92 RAP 257.71 ECC 2.8671
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       116.37 12 33 12
106.57 17 59 58
117.27 13 36 18
                                                                                                                  1293.6
                                                                                                                                  -7.08
                                                                        159.83
        90.00
                  12 1 39 1893.56
                                               -10.71
                                                              22.09
                                                                                                                                    25.35
                                                                                                                                                 305.31
                                                                                                                      125.0
                  17 47 53
                                                23.30
                                                             313.30
                                                                           173.03
                                  725.02
        90.00
                                                                                                                                    -8.99
                                                                                                                                                 358.45
                                                                                                                     1078.4
                  13 8 20 1678.35
19 23 53 5703.50
                                                                           158.78
                                               -12.75
                                                               5.22
       100.00
                                                                                                                     5103.5
                                                                                                                                   27.46
                                                                                                                                                 260.97
                                                                                          106.17 20 58 57
                                               25.49
                                                             269.22
                                                                           173.73
       100.00
                                                                                          119.71 14 11 46
105.29 22 32 51
                                                                                                                                   -13.65
                                                                                                                      961.0
                  13 45 45 1561.03
21 2 57 5393.58
                                               -17.73
                                                             353.53
                                                                           155.97
       110.00
                                                                                                                                    32.74
                                                                                                                                                 238.66
                                                                                                                      4793.6
                                                             247.42
                                                30.95
                                                                           175.48
       110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 RRT -.4563 RRF -.4467 RTF .9739
SGB 5124.8 R23 .0008 R13 -.9739
SGI 5115.5 SG2 309.6 THA 178.21
                                                                                                                  ST 1509.4 SR 305.0 SS 438.3
    TOE .4006 TRA 8.6184 TC3 -.5371 BAU .8147
                                                                                                                 CRT -.0304 CRS -.0440 CST -.9970
LSA 1571.5 MSA 306.5 SSA 9.6
    RDE .5585 RRA -.3043 RC3 .0007 FAU-.00013
FDE .1259 FRA 1.7661 FC3 .0010 BSP 16802
BDE .6873 BRA 8.6238 BC3 .5371 FSP -291
                                                                                                                  ELI 1509.5 ELZ 304.9 ALF 179.63
                                                                                                                            ARRIVAL DATE FEB 29 1968
                                                                     FLIGHT TIME 212.00
LAUNCH DATE AUG 1 1967
                                                                     DISTANCE 599.294
   HELTOCENTRIC CONIC
    RL 151.85 LAL -.00 LOL 308.08 VL 24.605 GAL 22.16 AZL 88.70 MCA 321.95 SMA 116.15 ECC .47253 INC 1.3011 V1 29.341 RP 108.76 LAP -.80 LOP 270.04 VP 36.027 GAP 27.98 AZP 88.98 TAL 149.20 TAP 111.15 RCA 61.27 APO 171.03 V2 34.844 RC 212.418 GL 2.57 GP 8.01 ZAL 34.71 ZAP 166.78 ETS 139.76 ZAE 128.65 ETE 173.16 ZAC 8.48 ETC 44.20 CLP 169.45
   PLANETOCENTRIC CONIC
    C3 133.468 VHL 11.553 DLA -20.83 RAL 273.69 RAD 6570.4 VEL 15.962 PTH 2.82 VHP 17.203 DPA -15.27 RAP 259.71 ECC 3.1965
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         INJ AZMTH INJ TIME

115.66 12 31 29

106.78 18 10 49

116.48 13 35 19

106.49 21 9 3

118.73 14 12 7

105.87 22 41 36
                                                                                                                    1350.0
                                                                                                                                   -8.84
25.23
                                                                         162.68
        90.00 11 58 59 1949.96
                                                -12.39
                                                              25.38
                                                                                                                       132.7
                                                                                                                                                  305.H4
                  17 58 36
                                  732.74
                                                 23.15
                                                              313.89
                                                                           176.26
        90.00
                                                                                                                      1132.2
                                                                                                                                                    1.50
                                                               8.36
                                                                            161.67
                  13 6 27 1732.22
       100.00
                                                                                                                      5113.7
                                                                                                                                   27.31
                                                              269.91
                                                                            176.96
                   19 33 49
                                 5713.75
                                                 25.29
       100.00
                                                                                                                                  -15.40
32.55
                                                                                                                                                  349.57
                                                                                                                      1010.6
                               1610.57
                                              -19.38
                                                              356.42
                                                                           158.95
                   13 45 17
       110,00
                                                                                                                                                 239.76
                                                                                                                      4808.2
                  21 11 28
                                                30.68
                                                              248.48
                                                                           178.73
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TDE .5558 TRA 9.3848 TC3 -.3905 BAU .6967
                                                                                                                  ST 1519.4 SR 288.5 SS 459.8
                                                                SCT 5068.5 SCR 329.2 SC3 86.8
RRT -.4468 RRF -.4394 RTF .9783
SCB 5079.1 R23 .0009 R13 -.9784
                                                                                                                 CRT .0090 CRS -.0682 CST -.9980
    RDE .5731 RRA -.3129 RC3 -.0014 FAU-.00192
                                                                                                                 LSA 1587.2 MSA 289.7 SSA 9.0
Fit 1519.4 Fiz 288.5 ALF .10
    FDE .1493 FRA 1.8868 FC3 .0125 BSP 16749
BDE .7984 BRA 9.3900 BC3 .3905 FSP -286
                                                                                                                 EL1 1519.4 EL2 288.5 ALF
                                                                  SG1 5070.6 SG2 294.4 THA 178.33
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FLIGHT TIME 206.00

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LAUNCH DATE AUG 1 1967
                                                                                 FLIGHT TIME 214.00
                                                                                                                                                 ARRIVAL DATE MAR 2 1968
    HELIOCENTRIC CONIC
                                                                                DISTANCE 599.924
     RL 151.85 LAL -.00 LOL 308.08 VL 24.572 GAL 24.54 AZL 88.28 HCA 325.11 SMA 115.99 ECC .50163 INC 1.7189 V1 29.341 RP 108.78 LAP -.98 LOP 273.21 VP 35.997 GAP 29.92 AZP 88.59 TAL 148.64 TAP 113.76 RCA 57.80 APO 174.17 V2 34.836
                           3.06 GP 7.93 ZAL 34.00 ZAP 165.77 ETS 143.27 ZAE 128.06 ETE 173.34 ZAC 7.43 ETC 54.88 CLP 166.14
     RC 213.927 GL
    PLANETOCENTRIC CONIC
     C3 158.060 VML 12.572 DLA -20.32 RAL 274.48 RAD 6570.7 VEL 16.715 PTH 2.90 VMP 18.371 DPA -15.58 RAP 261.60 ECC 3.6013
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     165.31
                                                                                                       114.90 12 29 29
107.03 18 20 7
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19 42 18 5724.83
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106.83 21 17 43
117.69 14 11 56
106.44 22 49 6
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        110.00
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                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SCT 5019.6 SCR 309.1 SC3 85.3

RRT -.4323 RRF -.4269 RTF .9824

SCB 5029.1 R23 .0010 R13 -.9824

SCI 5021.4 SC2 278.7 THA 178.47
    TDE .7140 TRA10.2188 TC3 -.2602 BAU .5498
                                                                                                                                     ST 1525.1 SR 272.0 SS 484.2
    RDE .5883 RRA -.3162 RC3 -.0031 FAU-.00407
FDE .1731 FRA 2.0213 FC3 .0223 8SP 16674
BDE .9251 BRA10.2237 BC3 .2602 FSP -282
                                                                                                                                    CRT .0447 CRS -.0911 CST -.9988
                                                                                                                                     LSA 1600.0 MSA 272.5 SSA 8.5
                                                                                                                                     EL1 1525.1 EL2 271.8 ALF
LAUNCH DATE AUG 1 1967
                                                                                FLIGHT TIME 216.00
                                                                                                                                                  ARRIVAL DATE MAR 4 1968
   HELIOCENTRIC CONIC
                                                                                DISTANCE 599.373
    RL 151.85 LAL -.00 LOL 308.08 VL 24.544 GAL 27.24 AZL 87.79 MCA 328.27 SMA 115.84 ECC .53461 INC 2.2082 V1 29.341
RP 108.81 LAP -1.16 LOP 276.37 VP 35.969 GAP 32.15 AZP 88.12 TAL 148.36 TAP 116.63 RCA 53.91 APO 177.77 V2 34.828
RC 215.416 GL 3.51 GP 7.84 ZAL 33.51 ZAP 164.59 EYS 146.60 ZAE 127.33 ETE 173.54 ZAC 6.77 ETC 67.37 CLP 166.70
   PLANETOCENTRIC CONIC
    C3 188.541 VHL 13.731 DLA -19.85 RAL 275.02 RAD 6571.0 VEL 17.603 PTH 2.98 VHP 19.714 DPA -15.86 RAP 263.35 ECC 4.1029 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 52 54 2052.45 -15.33 31.47 167.68 114.10 12 27 6 1452.4 -11.95 24.43 90.00 18 15 19 751.39 22.77 315.13 181.77 107.30 18 27 50 151.4 24.93 307.13 100.00 13 1 37 1830.67 -17.30 14.24 166.74 114.76 13 32 8 1230.7 -13.82 7.17 100.00 19 49 17 5736.44 24.84 271.45 182.47 107.18 21 24 53 5136.4 26.96 263.29 110.00 13 42 46 1701.73 -22.27 1.92 164.21 116.65 14 11 8 1101.7 -18.51 354.80 110.00 21 24 37 5438.15 30.11 250.62 184.30 107.01 22 55 15 4838.1 32.14 242.00
    C3 188.541 VHL 13.731 DLA -19.85 RAL 275.02 RAD 6571.0 VEL 17.603 PTH
                                                                                                             2.98 VHP 19.714 DPA -15.86 RAP 263.35 ECC 4.1029
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    TDE .8731 TRA11.1282 TC3 -.1452 BAU .3662
RDE .6046 RRA -.3125 RC3 -.0044 FAU-.00669
                                                                           SCT 4966.3 SGR 288.1 SG3 83.9
RRT - 4108 RRF - 4072 RTF - 9859
SGB 4974.6 R23 .0011 R13 - 9860
SG1 4967.7 SG2 262.6 THA 178.63
                                                                                                                                     ST 1525.2 SR 255.7 SS 511.9
CRT .0777 CRS -.1133 CST -.9992
    FDE .1969 FRA 2.1720 FC3 .0307 BSP 16572
BDE 1.0620 BRAII.1326 BC3 .1453 FSP -277
                                                                                                                                     LSA 1608.9 MSA 255.4 SSA 7.9
                                                                                                                                     EL1 1525.4 EL2 254.9 ALF
                                                                                                                                                                                .77
LAUNCH DATE AUG 1 1967
                                                                                FLIGHT TIME 218.00
                                                                                                                                                ARRIVAL DATE MAR 6 1968
                                                                                DISTANCE 597.303
   HELLOCENTRIC CONTC.
    RL 151.85 LAL -.00 LOL 308.08 VL 24.519 GAL 30.30 AZL 87.21 MCA 331.43 SMA 115.72 ECC .57202 INC 2.7931 VI 29.341
RP 108.83 LAP -1.34 LOP 279.53 VP 35.945 GAP 34.75 AZP 87.55 TAL 148.41 TAP 119.84 RCA 49.53 APO 181.92 VZ 34.821
RC 216.886 GL 3.93 GP 7.75 ZAL 33.28 ZAP 163.23 ETS 149.75 ZAE 126.43 ETE 173.77 ZAC 6.51 ETC 80.27 CLP 165.08
    RC 216.886 GL
   PLANETOCENTRIC CONIC
    C3 226.669 VHL 15.056 DLA -19.42 RAL 275.30 RAD 6571.3 VEL 18.654 PTH 3.05 VHP 21.266 DPA -16.10 RAP 264.94 ECC 4.7304
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.88 13 29 43
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115.57 14 9 36
107.57 22 59 56
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   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SCT 4908.5 SCR 266.3 SC3 82.6
RRT -.3795 RRF -.3773 RTF .9891
SCB 4915.7 R23 .0012 R13 -.9891
SCI 4909.6 SCZ 246.4 THA 178.82
    TOE 1.0320 TRA12.1205 TC3 -.0443 BAU .1350
                                                                                                                                    ST 1519.0 SR 239.6 SS 543.4
    ROE .6224 RRA -.2995 RC3 -.0051 FAU-.01001
FOE .2211 FRA 2.3418 FC3 .0382 BSP 16382
BOE 1.2052 BRA12.1242 BC3 .0446 FSP -272
                                                                                                                                    CRT .1094 CRS -.1361 CST -.9995
                                                                                                                                    LSA 1613.4 MSA 238.5 SSA 7.3
EL1 1519.2 EL2 238.1 ALF 1.01
LAUNCH DATE AUG 1 1967
                                                                                FLIGHT TIME 220.00
                                                                                                                                                 ARRIVAL DATE MAR 8 1968
                                                                                DISTANCE 593.280
    RL 151.85 LAL -.00 LOL 308.08 VL 24.499 GAL 33.81 AZL 86.49 MCA 334.58 SMA 115.63 ECC .61436 INC 3.5093 V1 29.341
RP 108.85 LAP -1.51 LOP 282.70 VP 35.926 GAP 37.78 AZP 86.83 TAL 148.88 TAP 123.46 RCA 44.59 APO 186.66 V2 34.814
RC 218.336 GL 4.31 GP 7.65 ZAL 33.33 ZAP 161.64 ETS 152.74 ZAE 125.32 ETE 174.02 ZAC 6.60 ETC 91.72 CLP 163.26
   PLANETOCENTRIC CONIC
    C3 274.794 VHL 16.577 DLA -19.04 RAL 275.27 RAD 6571.6 VEL 19.902 PTH 3.13 VHP 23.070 DPA -16.32 RAP 266.31 ECC 5.5224
    LNCH AZMTH LNCH TIME L-I TIME
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                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 4842.6 SCR 244.2 SC3 81.3
RRT -.3341 RRF -.3332 RTF .9917
SCB 4848.8 R23 .0012 R13 -.9917
                                                                                                                                    ST 1503.4 SR 224.1 SS 578.6
CRT .1396 CRS -.1592 CST -.9997
    TOE 1.1794 TRA13.1915 TC3 .0423 BAU .1564
    RDE .6425 RRA -.2740 RC3 -.0052 FAU-.01418
FDE .2438 FRA 2.5320 FC3 .0447 8SP 16251
BDE 1.3451 BRA13.1944 BC3 .0426 FSP -269
                                                                                                                                    LSA 1611.1 MSA 222.0 SSA 6.8
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SG1 4843.3 SG2 230.2 THA 179.03

EL1 1503.7 EL2 221.8 ALF 1.22

ARRIVAL DATE OCT 11 1967

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DISTANCE 207.671
    HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 29.194 GAL -16.00 A7L 91.88 MCA 93.88 SMA 148.13 ECC .27666 INC 1.8776 V1 29.344
RP 108.18 LAP -1.87 LOP 42.92 VP 39.466 GAP -3.68 A7P 89.87 TAL 249.03 TAP 342.90 RCA 107.15 APO 189.11 V2 35.029
RC 70.443 GL -6.61 GP -20.82 7AL 168.52 7AP 63.95 ETS 11.05 ZAE 164.21 ETE 293.46 ZAC 108.31 ETC 9.03 CLP -61.97
    PLANETOCENTRIC CONIC
                                                         9.00 RAL 138.81 RAD 6569.2 VEL 13.604 PTH 2.49 VHP 5.227 OPA -8.71 RAP 155.87 ECC 2.0487
     C3 63.724 VHL 7.983 OLA
     C3 63.724 VML 7.983 OLA 9.00 RAL 138.81 RAD 6569.2 VEL 13.604 FM 2.45 VM 3.25 VM 3.25 VM 1.00 FM 2.00 
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                                                                                                    MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                ST 211.4 SR 347.7 SS 191.8
CRT -.5357 CRS .5233 CST -.9900
                                                                                                    SGT 513.6 SGR 499.3 SG3 192.8
RRT .3088 RRF .5895 RTF .4448
SGB 716.3 RZ3 .1505 R13 .6334
     TDE .2115 TRA -.6750 TC3 .0053 BAU .1329
RDE -.4710 RRA -.3721 RC3 -.1559 FAU .09136
                                                                                                                                                                                LSA 396.5 MSA 211.5 SSA 20.0
     FOE .4186 FRA-1.3491 FC3-1.2412 BSP 1061
BDE .5163 BRA .7707 BC3 .1560 FSP -550
                                                                                                                                                                                EL1 370.9 EL2 167.3 ALF 112.98
                                                                                                     SG1 579.7 SG2 420.7 THA 42.40
                                                                                                                                                                                                 ARRIVAL DATE OCT 13 1967
                                                                                                          FLIGHT TIME 72.00
LAUNCH DATE AUG 2 1967
                                                                                                          DISTANCE 214.243
    HELIOCENTRIC CONIC
     RL 151.83 LAL -.00 LOL 309.04 VL 29.178 GAL -15.82 AZL 91.73 HCA 97.08 SMA 147.97 ECC .27382 INC 1.7253 V1 29.344 RP 108.14 LAP -1.71 LOP 46.12 VP 39.466 GAP -3.00 AZP 89.79 TAL 248.92 TAP 346.00 RCA 107.45 APO 188.49 V2 35.042 RC 72.534 GL -6.15 GP -21.71 ZAL 168.75 ZAP 68.82 ETS 9.33 ZAE 163.93 ETE 281.05 ZAC 110.23 ETC 8.23 CLP -67.12
    PLANETOCENTRIC CONIC
                                                                                                                                                                                            -8.86 RAP 153.84 ECC 2.0229
                                                           9.43 RAL 138.98 RAD 6569.2 VEL 13.547 PTH
                                                                                                                                                 2.48 VHP 5.053 DPA
     C3 62.152 VHL 7.884 OLA 9.43 RAL 138.98 RAD 6569.2 VEL 13.547 PTH 2.48 VMP 5.053 DPA -8.86 RAP 153.58 ECC 2.02221 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 42 54 2792.90 -28.16 81.31 24.54 93.07 23 29 26 2192.9 -27.44 72.72 90.00 13 8 9 4843.03 19.19 209.45 17.17 68.77 14 28 52 4243.0 16.13 202.11 100.00 0 12 48 2515.63 -29.67 60.81 24.43 93.85 0 54 43 1915.6 -28.82 52.11
      C3 62.152 VHL 7.884 OLA
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10.66 16.58 67.83 15 41 28

1.68 24.02 96.04 2 9 23

15.20 14.83 65.19 16 36 10

MID-COURSE EXECUTION ACCURACY

SGT 563.3 SGR 516.3 SGR
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    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 563.3 SGR 516.3 SG3 206.1
RRT .3917 RRF .6252 RTF .5387
SGB 764.2 R23 .1483 R13 .6862
                                                                                                                                                                                 ST 226.4 SR 341.6 SS 203.8
CRT -.5023 CRS .5399 CST -.9902
      TOE .2186 TRA -. 7302 TC3 -. 0331 BAU .1491
      RDE -.4552 RRA -.3834 RC3 -.1764 FAU .09653
      FDE .4702 FRA-1.4101 FC3-1.3446 BSP 1262
                                                                                                                                                                                 LSA 399.9 MSA 221.8 SSA 20.1
EL1 367.1 EL2 182.2 ALF 114.96
                                                                                                      SG1 639.3 SG2 418.6 THA 38.72
      BDE .5049 BRA .8247 BC3 .1795 FSP
                                                                                                          FLIGHT TIME 74.00
                                                                                                                                                                                                ARRIVAL DATE OCT 15 1967
LAUNCH DATE AUG 2 1967
                                                                                                          DISTANCE 220.769
    HELIOCENTRIC CONIC
     RL 151.83 LAL -.00 LOL 309.04 VL 29.152 GAL -15.65 A7L 91.57 MCA 100.29 SMA 147.73 ECC .27111 INC 1.5707 V1 29.344
RP 108.10 LAP -1.55 LOP 49.33 VP 39.459 GAP -2.34 A7P 89.72 TAL 248.69 TAP 348.98 RCA 107.68 APO 187.78 V2 35.056
RC 74.652 GL -5.67 GP -22.56 ZAL 168.92 ZAP 73.71 ETS 7.56 ZAE 163.03 ETE 269.09 ZAC 112.16 ETC 7.37 CLP -72.32
    PLANETOCENTRIC CONIC
      C3 60.628 VHL 7.786 DLA 9.86 RAL 139.22 RAD 6569.1 VEL 13.490 PTH 2.47 VHP 4.916 DPA -8.98 RAP 151.79 ECC 1.9978
      C3 bU.BZN VML 7.780 ULA 9.80 RAL 139.22 RAU 0309.1 VEL 13.450 FIN 2.41 TINJ 1ME PO CST TIM INJ 2 LAT INJ 2 LONG POLOGO 22 40 24 2800.93 -28.19 81.89 24.53 92.78 23 27 5 2200.9 -27.51 73.29 90.00 13 12 35 4822.95 18.69 208.19 16.93 68.33 14 32 58 4223.0 15.58 200.89 100.00 0 10 33 2522.89 -29.70 61.35 24.44 93.57 0 52 36 1922.9 -28.89 52.64
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     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                ST 244.5 SR 334.3 SS 214.9
CRT -.4739 CRS .5521 CST -.9879
LSA 405.0 MSA 231.0 SSA 20.3
EL1 363.9 EL2 197.8 ALF 118.06
                                                                                                     SGT 625.2 SGR 533.4 SG3 218.1
RRT .4666 RRF .6585 RTF .6177
SGB 821.8 R23 .1468 R13 .7316
       TOE .2291 TRA -.7900 TC3 -.0769 BAU .1716
      RDE -.4381 RRA -.3930 RC3 -.1973 FAU .10102
FDE .5175 FRA-1.4566 FC3-1.4425 BSP 1502
BDE .4944 BRA .8823 BC3 .2118 FSP -638
                                                                                                     SG1 708.6 SG2 416.2 THA 35.56
                                                                                                                                                                                                  ARRIVAL DATE OCT 17 1967
                                                                                                            FLIGHT TIME 76.00
 LAUNCH DATE AUG 2 1967
                                                                                                           DISTANCE 227,249
      RL 151.83 LAL -.00 LOL 309.04 VL 29.119 GAL -15.48 AZL 91.41 HCA 103.50 SMA 147.41 ECC .26850 INC 1.4127 VI 29.344 RP 108.06 LAP -1.37 LOP 52.54 VP 39.446 GAP -1.73 AZP 89.67 TAL 248.34 TAP 351.84 RCA 107.83 APO 186.99 V2 35.069 RC 76.795 GL -5.16 GP -23.36 ZAL 169.03 ZAP 78.56 ETS 5.73 ZAE 161.55 ETE 258.41 ZAC 114.07 ETC 6.47 CLP -77.52
     PLANETOCENTRIC CONIC
       C3 59.137 VHL 7.690 DLA 10.30 RAL 139.54 RAD 6569.1 VEL 13.435 PTH 2.46 VHP 4.812 DPA -9.08 RAP 149.76 ECC 1.9732
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 38 8 2809.16 -28.22 82.49 24.60 92.48 23 24 58 2209.2 -27.58 73.89
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                                                                                                  42.56
                                                                                                                       24.15
                                                                                                                                               95.53 2 6 23
64.23 16 43 14
           110.00
                            1 28 23 2280.46
15 30 14 4379.30
                                                                           -33.79
                                                                                                                                                                                                              19.62
                                                                                                                        14.36
                                                                                                                                                                                        3779.3
                                                                                                172.96
           110.00
                                                                           23.28
                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                  ST 265.4 SR 325.7 SS 225.3
CRT -.4499 CRS .5637 CST -.9841
                                                                                                    SGT 698.9 SGR 549.5 SG3 228.2
RRT .5317 RRF .6882 RTF .6814
SGB 889.1 R23 .1468 R13 .7686
       TOE .2429 TRA -.8540 TC3 -.1259 BAU .1991
        RDE -.4196 RRA -.3999 RC3 -.2181 FAU .10455
                                                                                                                                                                                  LSA 412.5 MSA 238.2 55A 20.4
       FDE .5616 FRA-1.4834 FC3-1.5305 BSP 1775
BDE .4848 BRA .9430 BC3 .2518 FSP -677
                                                                                                                                                                                  EL1 362.0 EL2 213.2 ALF 122.68
                                                                                                      SG1 787.2 SG2 413.2 THA 32.73
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FLIGHT TIME 70.00

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LAUNCH DATE AUG 2 1967
                                                                                        FLIGHT TIME 78.00
                                                                                                                                                               ARRIVAL DATE OCT 19 1967
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 233.686
     RL 151.83 LAL -.00 LOL 309.04 VL 29.079 GAL -15.31 AZL 91.25 MCA 106.71 SMA 147.03 ECC .26597 INC 1.2504 V1 29.344 RP 108.02 LAP -1.20 LOP 55.75 VP 39.427 GAP -1.14 AZP 89.64 TAL 247.88 TAP 354.59 RCA 107.92 APO 186.13 V2 35.082 RC 78.958 GL -4.62 GP -24.12 ZAL 169.07 ZAP 83.32 ETS 3.84 ZAE 159.63 ETE 249.39 ZAC 115.91 ETC 5.53 CLP -82.68
    PLANETOCENTRIC CONIC
    C3 57.670 VHL 7.594 DLA 10.75 RAL 139.92 RAD 6569.0 VEL 13.380 PTH 2.45 VHP 4.740 DPA -9.16 RAP 147.81 ECC 1.9491
LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH 'INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 36 3 2817.70 -28.24 83.12 24.73 92.16 23 23 0 2217.7 -27.64 74.50
90.00 13 22 32 4781.78 17.63 205.63 16.69 67.48 14 42 14 4181.8 14.43 198.42
100.00 0 6 41 2538.05 -29.76 62.47 24.66 92.98 0 48 59 1938.1 -29.03 53.74
100.00 14 38 30 4536.66 19.03 186.98 16.07 66.50 15 54 7 3936.7 15.69 179.78
                                                                                                                     66.50 15 54 7
95.26 2 5 12
                                      2286.42
                         1 27 6
                                                            -33.83
                                                                                43.02
        110.00
                                                                                                 24.31
                                                                                                                                                       1686.4
                                                                                                                                                                        -32.73
                                                                                                                                                                                            33.95
        110.00
                       15 34 35
                                         4361.06
                                                             22.73
                                                                              171.62
                                                                                                  14.23
                                                                                                                     63.75
                                                                                                                                16 47 16
                                                                                                                                                       3761.1
                                                                                                                                                                         19.02
                                                                                                                                                                                          164.65
   DIFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     TOE .2599 TRA -.9212 TC3 -.1799 BAU .2300 ROE -.3991 RRA -.4031 RC3 -.2379 FAU .10681
                                                                                                                                                ST 289.1 SR 315.3 SS 235.7
CRT -.4305 CRS .5782 CST -.9788
LSA 423.5 MSA 2487.4 SSA 20.5
EL1 362.6 EL2 226.8 ALF 129.29
                                                                                   SGT 783.3 SGR 563.2 SG3 235.7
RRT .5867 RRF .7134 RTF .7312
    FOE .6054 FRA-1.4862 FC3-1.6035 BSP 2071
BOE .4762 BRA 1.0056 BC3 .2983 FSP -701
                                                                                   SGB 964.8 RZ3 .1476 R13 .7976
SG1 873.9 SG2 408.8 THA 30.10
LAUNCH DATE AUG 2 1967
                                                                                        FLIGHT TIME 80.00
                                                                                                                                                               ARRIVAL DATE OCT 21 1967
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 240.081
    RL 151.83 LAL -.00 LOL 309.04 VL 29.032 GAL -15.14 AZL 94.08 MCA 109.92 SMA 146.58 ECC .26352 INC 1.0824 V1 29.344
RP 107.98 LAP -1.02 LOP 58.96 VP 39.404 GAP -.37 AZP 89.63 TAL 247.33 TAP 357.25 RCA 107.96 APO 185.21 V2 35.094
RC 81.139 GL -4.05 GP -24.83 ZAL 169.03 ZAP 87.94 ETS 1.91 ZAE 157.41 ETE 242.00 ZAC 117.63 ETC 4.59 CLP -87.73
   PLANETOCENTRIC CONIC
    C3 56.222 VHL 7.498 DLA 11.21 RAL 140.38 RAD 6569.0 VEL 13.326 PTH 2.44 VHP 4.697 DPA -9.26 RAP 145.97 ECC 1.9253 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              24.93
                      22 34 4 2826.74
13 28 8 4760.26
         90.00
                                                             -28.26
                                                                               83.78
                                                                                                                    91.83 23 21 10
                                                                                                                                                     2226.7
                                                                                                                                                                       -27.71
                                                                                                                                                                                            75.15
                                                                                                                                14 47 28
         90.00
                                                            17,07
                                                                              204.30
                                                                                                                     67.06
                                                                                                                                                       4160.3
                                                                                                 16.68
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                      0 4 58 2546.22
14 43 50 4516.01
        100,00
                                                            -29.78
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                                                            18.46
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                                                                                                                     66.07
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                                                                                                                                                       3916.0
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                                      2292.73
4342.27
                         1 25 59
                                                            -33.86
                                                                                43.51
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                                                                                                                     94.97
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                       15 39 19
                                                            22.16
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                                                                                                                                                                         18.40
                                                                                                                                                                                          163.55
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  SGT 876.4 SGR 575.7 SG3 241.2
RRT .6313 RRF .7366 RTF .7689
SGB 1048.6 R23 .1508 R13 .8206
                                                                                                                                                 ST 315.8 SR 303.9 SS 244.8
CRT -.4170 CRS .5893 CST -.9741
    TOE .2810 TRA -.9898 TC3 -.2381 BAU .2636
     RDE -.3778 RRA -.4040 RC3 -.2574 FAU .10814
    FDE .6411 FRA-1.4722 FC3-1.6652 BSP 2393
                                                                                                                                                 LSA 438.4 MSA 243.8 SSA 20.6
     BOE .4708 BRA 1.0691 BC3 .3506 FSP
                                                                                   SG1 967.4 SG2 404.5 THA 27.79
                                                                                                                                                 EL1 369.1 EL2 236.4 ALF 137.62
LAUNCH DATE AUG 2 1967
                                                                                        FLIGHT TIME 82.00
                                                                                                                                                              ARRIVAL DATE OCT 23 1967
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 246.435
    RL 151.83 LAL -.00 LOL 309.04 VL 28.980 CAL -14.97 AZL 90.91 HCA 113.13 SMA 146.09 ECC .26114 INC .9073 V1 29.344

RP 107.94 LAP -.83 LOP 62.17 VP 39.377 CAP -.04 AZP 89.64 TAL 246.68 TAP 359.81 RCA 107.94 APO 184.25 VZ 35.107

RC 83.336 GL -3.43 CP -25.51 ZAL 168.92 ZAP 92.39 ETS 359.92 ZAE 155.00 ETE 236.02 ZAC 119.20 ETC 3.66 CLP -92.65
   PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 32 8 2836.47 -28.28 84.49 25.20 91.48 23 19 24 2236.5 -27.78 75.86 90.00 13 34 12 4737.81 16.47 202.93 16.74 66.63 14 53 10 4137.8 13.16 195.81 100.00 0 3 20 2555.02 -29.81 63.73 25.14 92.32 0 45 55 1955.0 -29.17 54.98 110.00 14 49 37 444.49 17.86 184.39 16.09 65.63 16 4 32 3894.5 14.43 177.29
     C3 54.789 VHL 7.402 OLA 11.69 RAL 140.89 RAD 6569.0 VEL 13.272 PTH 2.43 VHP 4.680 DPA -9.38 RAP 144.27 ECC 1.9017
                                                                                                                    65.63 16 4 32
94.66 2 3 18
                      1 24 58 2299.56
15 44 28 4322.72
        110.00
                                                            -33.90
                                                                                44.04
                                                                                                24.85
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                                                                                                                                                      1699.6
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                                                                                                                    62.81 16 56 31
        110,00
                                                            21.56
                                                                             169.47
                                                                                                 14.20
                                                                                                                                                      3722.7
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  SGT 976.6 SGR 588.7 SG3 245.2
RRT .6674 RRF .7596 RTF .7977
SGB 1140.4 R23 .1575 R13 .8394
                                                                                                                                                 ST 345.4 SR 292.7 SS 251.1
CRT -.40A2 CRS .5915 CST -.9719
LSA 456.5 MSA 243.3 SSA 20.7
    TOE .3059 TRA-1.0588 TC3 -.3000 BAU .2993
    ROE -.3571 RRA -.4033 RC3 -.2773 FAU .10882
FDE .6607 FRA-1.4501 FC3-1.7195 BSP 2761
BDE .4702 BRA 1.1331 BC3 .4085 FSP -765
                                                                                   SGI 1067.5 SGZ 401.1 THA 25.82
                                                                                                                                                 EL1 383.5 EL2 240.7 ALF 146.07
LAUNCH DATE AUG 2 1967
                                                                                        FLIGHT TIME 84.00
                                                                                                                                                              ARRIVAL DATE OCT 25 1967
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 252.749
    RL 151.83 LAL -.00 LOL 309.04 VL 28.922 GAL -14.80 A7L 90.72 MCA 116.35 SMA 145.56 ECC .25880 INC .7233 V1 29.344 RP 107.91 LAP -.65 LOP 65.39 VP 39.346 GAP .47 A7P 89.68 TAL 245.94 TAP 2.29 RCA 107.89 APO 183.23 V2 35.119 RC 85.546 GL -2.77 GP -26.16 ZAL 168.73 ZAP 96.62 ETS 357.89 ZAE 152.50 ETE 231.22 ZAC 120.59 ETC 2.75 CLP -97.38
   PLANETOCENTRIC CONIC
    C3 53.362 VHL 7.305 DLA 12.20 RAL 141.48 RAD 6568.9 VEL 13.218 PTH
                                                                                                                      2.41 VHP 4.686 OPA -9.55 RAP 142.75 ECC 1.8782
    LNCH A7MTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 30 11 2847.11 -28.30 85.27 25.54 91.09 23 17 38 2247.1 -27.85 76.63 90.00 13 40 50 4714.13 15.82 201.49 16.86 66.21 14 59 24 4114.1 12.47 194.41
                                                                                                                                  0 44 27
        100.00
                         0 1 42 2564.66
                                                            -29.83
                                                                               64.45
                                                                                                 25.49
                                                                                                                    91.95
                                                             17.22
                                                                             183.01
        100.00
                       14 55 57
                                        4471.81
                                                                                                 16.20
                                                                                                                    65.18
                                                                                                                               16 10 28
                                                                                                                                                      3871.8
                                                                                                                                                                         13.73
                        1 24 1 2307.06
15 50 7 4302.17
                                                                                                                                  2 2 28
                                                                                                                                                      1707.1
                                                            -33.94
                                                                               44.62
                                                                                                 25.23
                                                                                                                    94.32
                       15 50 7
                                                                                                                    62.32
                                                            20.91
                                                                             168.22
                                                                                                 14.28
                                                                                                                                17 1 49
                                                                                                                                                      3702.2
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  SGT 1082.1 SGR 593.3 SG3 244.7
RRT .6964 RRF .7751 RTF .8185
SGB 1234.1 R23 .1627 R13 .8515
                                                                                                                                               ST 378.3 SR 277.0 SS 261.8
CRT - 4044 CRS .6124 CST - .9655
LSA 481.5 MSA 236.9 SSA 20.8
    TOE .3357 TRA-1.1266 TC3 -.3650 BAU .3341
    RDE -.3312 RRA -.3954 RC3 -.2935 FAU .10740
    FDE .6990 FRA-1.3874 FC3-1.7424 BSP 3080
BDE .4716 BRA 1.1940 BC3 .4683 FSP -746
                                                                                   5G1 1169.5 5G2 394.0 THA 23.76
                                                                                                                                                 EL1 404.7 EL2 236.8 ALF 154.05
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ARRIVAL DATE OCT 27 1967

LAUNCH DATE AUG 2 1967

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DISTANCE 259.026
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 28.860 GAL -14.82 AZL 90.53 MCA 119.57 SMA 144.99 ECC .25652 INC .5288 V1 29.344
RP 107.87 LAP -.46 LOP 68.61 VP 39.311 GAP .96 AZP 89.74 TAL 245.13 TAP 4.70 RCA 107.80 APO 182.18 V2 35.131
    RC 87.767 GL -2.03 GP -26.82 7AL 168.45 7AP 100.61 ETS 355.81 7AE 149.99 ETE 227.35 7AC 121.77 ETC 1.87 CLP-101.91
   PLANETOCENTRIC CONIC
     C3 51.948 VHL 7.207 OLA 12.74 RAL 142.14 RAD 6568.9 VEL 13.165 PTH
                                                                                                             2.40 VHP 4.714 DPA -9.80 RAP 141.42 ECC 1.8549
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJARMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 28 9 2859.04 -28.31 86.14 25.95 90.65 23 15 48 2259.0 -27.92 77.49 90.00 13 48 7 4688.88 15.12 199.97 17.06 65.77 15 6 16 4088.9 11.72 192.94
                     0 0 0 2575.48
15 2 53 4447.67
                                                                                                                                                                             56.48
                                                                                          25.91
                                                                                                           91.52
                                                                                                                         0 42 56
                                                                                                                                           1975.5
                                                                         65.25
        100.00
                                                        -29.86
                                                                                                                     16 17 1
                                                                                                            64.73
                                                                                                                                          3847.7
                                                                                                                                                                            174.56
                                                         16.53
                                                                                          16.36
        100.00
                                                                        181.56
                                                                                                                    2 1 40
17 7 38
                                                                                                                                                          -33.07
16.29
                     1 23 5 2315.54
15 56 18 4280.38
                                                        -33.98
                                                                         45.28
                                                                                          25.66
                                                                                                           93.93
                                                                                                                                          1715.5
                                                                                                                                                                             36.16
        110.00
                                                                                                                                        3680.4
                                                         20.22
                                                                                         14.43
                                                                                                            61.83
       110.00
                                                                        166.91
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            SGT 1191.7 SGR 599.0 SG3 243.3
RRT .7198 RRF .7920 RTF .8343
SGB 1333.8 R23 .1717 R13 .8617
                                                                                                                                      ST 414.5 SR 261.6 SS 269.7
CRT -.4037 CRS .6224 CST -.9625
    TOE .3698 TRA-1.1924 TC3 -.4328 BAU .3699
    TOE .3698 IRA-1.1924 (C) -.1228 DAV .3058 ROE -.3063 RRA -.3667 RC3 -.3104 FAU .10564 FOE .7201 FRA-1.3237 FC3-1.7606 BSP 3444 BOE .4802 BRA 1.2536 BC3 .5326 FSP -749
                                                                                                                                      LSA 509.8 MSA 229.3 SSA 20.9
                                                                            SG1 1276.0 SG2 388.3 THA 22.04
                                                                                                                                      EL1 433.4 EL2 228.8 ALF 159.87
                                                                                                                                                  ARRIVAL DATE OCT 29 1967
LAUNCH DATE AUG 2 1967
                                                                                 FLIGHT TIME 88.00
   HELIOCENTRIC CONIC
                                                                                DISTANCE 265.268
    RL 151.83 LAL -.00 LOL 309.04 VL 28.794 GAL -14.44 AZL 90.32 MCA 122.79 SMA 144.39 ECC .25430 INC .3212 V1 29.344
RP 107.83 LAP -.27 LOP 71.83 VP 39.272 GAP 1.42 AZP 89.83 TAL 244.24 TAP 7.03 RCA 107.67 APO 181.10 V2 35.143
RC 89.996 GL -1.28 GP -27.49 ZAL 168.08 ZAP 104.35 ETS 353.67 ZAE 147.51 ETE 224.25 ZAC 122.74 ETC 1.03 CLP-106.22
   PLANETOCENTRIC CONIC
    C3 50.544 VHL 7.109 DLA 13.34 RAL 142.87 RAD 6568.9 VEL 13.111 PTH 2.39 VHP 4.762 DPA -10.13 RAP 140.27 ECC 1.8318 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 25 55 2872.64 -28.32 87.13 26.44 90.15 23 13 48 2272.6 -28.00 78.48 90.00 13 56 10 4661.66 14.35 198.34 17.33 65.33 15 13 52 4061.7 10.91 191.35 100.00 23 54 14 2587.84 -29.88 66.17 26.42 91.04 24 37 21 1987.8 -29.41 57.39 100.00 15 10 33 4421.70 15.77 180.01 16.64 64.27 16 24 14 3821.7 12.18 173.05 110.00 1 22 4 2325.28 -34.03 46.04 26.23 93.48 2 0 49 1725.3 -33.17 36.90
                    22 25 55 2872.64
13 56 10 4661.66
23 54 14 2567.64
15 10 33 4421.70
1 22 4 2325.28
16 3 7 4257.02
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       110.00
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                                                                         46.04
                                                                                         26.23
                                                                                                            61.33 17 14 4
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       110.00
                                                         19.46
                                                                        165.52
                                                                                          14.65
                                                                                                                                                                            158.56
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 1304.1 SGR 602.9 SG3 240.3
RRT .7389 RRF .8079 RTF .8459
SGB 1436.7 R23 .1830 R13 .8693
SGI 1384.9 SG2 382.6 THA 20.49
                                                                                                                                      ST 454.2 SR 244.8 SS 277.5
CRT -.4053 CRS .6312 CST -.9602
    TOE .4088 TRA-1.2551 TC3 -.5030 BAU .4053
    ROE -.2803 RRA -.3752 RC3 -.3268 FAU .10314
                                                                                                                                      LSA 542.7 MSA 219.5 SSA 21.0
EL1 468.0 EL2 217.2 ALF 164.19
    FOE .7371 FRA-1.2491 FC3-1.7666 89P 3815
BOE .4957 BRA 1,3099 BC3 .5998 FSP -745
                                                                                FLIGHT TIME 90.00
                                                                                                                                                  ARRIVAL DATE OCT 31 1967
LAUNCH DATE AUG 2 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 271.477
    RL 151.83 LAL -.00 LOL 309.04 VL 28.724 GAL -14.25 A7L 90.10 MCA 126.01 SMA 143.76 ECC .25212 INC .0969 V1 29.344
RP 107.80 LAP -.08 LOP 75.05 VP 39.231 GAP 1.87 AZP 89.94 TAL 243.29 TAP 9.30 RCA 107.51 APO 180.00 V2 35.154
RC 92.232 GL -.39 GP -28.20 7AL 167.61 ZAP 107.80 EES 351.47 ZAE 145.09 ETE 221478 ZAC 123.48 ETC .22 CLP-110.30
   PLANETOCENTRIC CONIC
    C3 49.156 VML 7.011 CLA 13.99 RAL 143.68 RAD 6568.8 WEL 13.058 PTH 2.38 VMP 4.828 OPA -10.57 RAP 139.32 ECC 1.8090
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    22 23 22 2888.44
14 5 9 4581.97
23 52 7 2602.21
15 19 5 4393.43
1 20 55 2336.68
16 10 42 4231.72
                                                                                     27.02
                                                                                                         89.57 23 11 31
64.87 15 22 21
90.48 24 35 30
                                                                                                                                       2288.4
                                                                                                                                                                             79.63
                                                        -28.31
                                                                                                                                                         -28.07
         90.00
                                                                        88.29
                                                                                                                                                                           189.64
                                                         13.50
                                                                        196.57
                                                                                         17.69
                                                                                                                                           4032.0
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                                                                         67.24
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       110.00
                                                        -34.07
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                                                                                                                                                           -33.29
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                                                                                                                                                           14.59
                                                                        164.03
                                                                                         14.96
                                                                                                            60.81
                                                                                                                                          3631.7
                                                                                                                                                                           157.24
       110.00
                                                        18.63
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 498.2 SR 225.9 S5 286.6
CRT -.4083 CRS .6408 CST -.9580
    TOE .4538 TRA-1.3129 TC3 -.5749 BAU .4397
                                                                            SGT 1417.8 SGR 604.0 SG3 235.2
RRT .7542 RRF .8223 RTF .8543
SGB 1541.1 R23 .1959 R13 .8746
    RDE -.2524 RRA -.3602 RC3 -.3421 FAU .09979
                                                                                                                                     LSA 581.3 MSA 207.4 SSA 21.1
EL1 508.3 EL2 202.1 ALF 167.50
    FOE .7549 FRA-1.1615 FC3-1.7575 BSP 4173
ROF .5193 BRA 1.3614 BC3 .6690 FSP -728
                                                                            SG1 1494.4 SG2 376.3 THA 19.07
LAUNCH DATE AUG 2 1967
                                                                                 FLIGHT TIME 92.00
                                                                                                                                                  ARRIVAL CATE NOV 2 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 277.654
    RL 151.83 LAL -.00 LOL 309.04 VL 28.651 GAL -14.06 A2L 89.86 MCA 129.24 SMA 143.11 ECC .25000 INC .1432 V1 29.344
RP 107.77 LAP .11 LOP 78.27 VP 39.188 GAP 2.29 AZP 90.09 TAL 242.27 TAP 11.50 RCA 107.33 APO 178.89 V2 35.165
RC 94.474 GL .58 GP -28.98 ZAL 167.02 ZAP 110.97 ETS 349.17 ZAE 142.73 ETE 219.82 ZAC 124.00 ETC 359.43 CLP-114.15
   PLANETOCENTRIC CONIC
    C3 47.787 VHL 6.913 DLA 14.73 RAL 144.56 RAD 6568.8 VEL 13.006 PTH 2.37 VHP 4.910 DPA -11.14 RAP 138.54 ECC 1.7865
    LNCH AZHTH LNCH TIME L-I TIME
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        88.89 23 8 49
64.41 15 31 54
89.81 24 33 17
63.31 16 41 22
                                                                                                                                           2307.1
                                                                                                                                                         -28.15
         90.00 22 20 22 2907.12
90.00 14 15 15 4599.17
                                                                                      27.71
                                                                                                                                                                             80.99
                                                        -28.30
                                                                         89.66
                                                                                                                                                                            187.75
                                                         12.55
                                                                        194.64
                                                                                          18.15
                                                                                                                                           3999.2
                                                                                                                                                             9.00
                      23 49 38
                                                                                          27.73
                                                                                                                                           2019.2
                                                                                                                                                           -29.60
                                                                                                                                                                              59.71
                                    2619.23
                                                        -29.89
                                                                          68.50
                                                                        176.50
                                                                                          17.43
                                                                                                                                           3762.3
                                                                                                                                                            10.28
                                                                                                                                                                            169.66
                     15 28 40
                                      4362.30
                                                         13.98
                       1 19 31
                                    2350.27
                                                                                          27.64
                                                                                                            92.33
                                                                                                                     1 20 -.
17 29 16
                                                                                                                        1 58 41
                                                                                                                                           1750.3
                                                                                                                                                           -33.41
                                                                                                                                                                              38.81
                                                        -34.11
                                                                          47.98
                                                                        162.42
        110.00
                      16 19 12
                                     4204.02
                                                         17.70
                                                                                          15,36
                                                                                                            60.27
                                                                                                                                           3604.0
                                                                                                                                                           13.61
                                                                                                                                                                            155.69
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 546.7 SR 206.0 SS 295.6
CRT - 4098 CRS .6448 CST - .9571
                                                                            SGT 1533.1 SGR 605.1 SG3 229.3
RRT .7668 RRF .8370 RTF .8606
SGB 1648.2 R23 .2115 R13 .8786
     TOE .5045 TRA-1.3658 TC3 -.6492 BAU .4736
     RDE -.2238 RRA -.3436 RC3 -.3580 FAU .09612
                                                                                                                                      LSA 624.9 MSA 194.1 55A 21.3
    FOE .7671 FRA-1.0715 FC3-1.7414 BSP 4551
BOE .5519 BRA 1.4084 BC3 .7414 FSP -715
                                                                                                                                   EL1 554.0 EL2 185.4 ALF 170.10
                                                                            SG1 1606.0 SG2 370.8 THA 17.82
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FLIGHT TIME 86.00

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ARRIVAL DATE NOV 4 1967
                                                                               FLIGHT TIME 94.00
LAUNCH DATE AUG 2 1967
                                                                               DISTANCE 283.801
   HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 28.575 GAL -13.86 A7L 89.59 MCA 132.46 SMA 142.45 ECC .24793 INC .4099 V1 29.344 RP 107.73 LAP .30 LOP 81.50 VP 39.142 GAP 2.70 A7P 90.28 TAL 241.19 TAP 13.65 RCA 107.13 APO 177.76 V2 35.175 RC 96.719 GL 1.67 GP -29.86 TAL 166.51 ZAP 113.84 ETS 346.76 ZAE 140.44 ETE 218.31 ZAC 124.31 ETC 358.67 CLP-117.78
   PLANETOCENTRIC CONIC
    C3 46.448 VHL 6.815 DLA 15.55 RAL 145.55 RAD 6568.7 VEL 12.954 PTH
                                                                                                           2.36 VHP 5.010 DPA -11.87 RAP 137.93 ECC 1.7644
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-1 TIME
                                                                       91.30
                                                                                       28.53
                                                                                                        88.07
                                                                                                                  23 5 30
                                                                                                                                       2329.6
                                                                                                                                                       -28.23
                                                                                                                                                                         82.63
                   22 16 41 2929.60
14 26 45 4562.45
                                                       -28.26
        90.00
                                                                                                         63.93 15 42 48
                                                                                        18.74
                                                                                                                                        3962.4
                                                                                                                                                          7.86
                                                                                                                                                                         185.66
                                                                      192.49
        90.00
                                                       11.46
                                                                                                         89.01
                                                                                                                    24 30 34
                                                                                                                                        2039.7
                                                                                                                                                         -29.70
                                                                                                                                                                          61.22
                                                                       70.02
                                                                                        28.58
                     23 46 34 2639.72
15 39 33 4327.56
                                                      -29.88
                                                                                                                  24 30 34
16 51 41
       100.00
                                                                                                                                        3727.6
                                                                                                                                                          9.16
                                                                                       18.00
                                                                                                         62.80
       100.00
                    15 39 33
                                                       12.91
                                                                      174.48
                                                                                                         91.58
                    1 17 45 2366.71
16 28 47 4173.33
                                                                                                                     1 57 12
                                                                                                                                        1766.7
                                                                                                                                                        +33.56
                                                                                                                                                                          40.07
                                                     -34.15
                                                                       49.27
                                                                                       28.55
       110.00
                                                                                       15.67
                                                                                                         59.71
                                                                                                                   17 38 21
                                                                                                                                        3573.3
                                                                                                                                                         12.51
                                                       16.65
                                                                      160.65
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RET . 7770 RRF . .8515 RTF . .8651
SGB 1756.7 R23 .2291 R13 .8815
SGI 1718.2 SG2 365.8 THA 16.70
                                                                                                                                   ST 600.8 SR 184.5 SS 305.5
CRT -.4077 CRS .6438 CST -.9570
    TDE .5622 TRA-1.4125 TC3 -.7251 BAU
                                                           . 5066
    RDE -.1939 RRA -.3245 RC3 -.3739 FAU .09202
                                                                                                                                   LSA 675.0 MSA 179.7 SSA 21.4
    FOE .7779 FRA -.9773 FC3-1.7152 8SP 4934
RDF .5947 RRA 1.4493 BC3 .8158 FSP -698
                                                                                                                                   EL1 605.9 EL2 167.0 ALF 172.28
    BDE .5947 BRA 1.4493 BC3 .8158 FSP
                                                                                                                                               ARRIVAL DATE NOV 6 1967
                                                                               FLIGHT TIME 96.00
                                                                               DISTANCE 289.920
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 28.497 GAL -13.65 AZL 89.29 MCA 135.69 SMA 141.77 ECC .24592 INC .7053 V1 29.344
RP 107.70 LAP .49 LOP 84.73 VP 39.094 GAP 3.09 AZP 90.50 TAL 240.06 TAP 15.75 RCA 106.90 APO 176.63 V2 35.185
RC 98.967 GL 2.91 GP -30.87 ZAL 165.45 ZAP 116.40 ETS 344.23 ZAE 138.21 ETE 217.17 ZAC 124.42 ETC 357.90 CLP-121.20
   PLANETOCENTRIC CONIC
                                                                                                            2.35 VHP 5.126 DPA -12.78 RAP 137.46 ECC 1.7430
   C3 45,149 VHL 6,719 DLA 16.50 RAL 146.63 RAD 6568.7 VEL 12.904 PTH 2.35 VMP 5.126 DPA -12.78 RAP 137.46 ECC 1.7430 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 12 3 2957.10 -28.18 93.31 29.49 87.06 25 1 20 2557.1 -28.29 84.64 90.00 14 40 4 4520.70 10.20 190.07 19.48 63.44 15 55 24 3920.7 6.55 183.29 100.00 23 42 42 2664.78 -29.83 71.89 29.57 88.03 24 27 7 2064.8 -29.79 63.08 100.00 15 52 6 4288.25 11.67 172.21 18.71 62.28 17 3 34 3688.3 7.87 165.49 110.00 1 15 27 2386.88 -34.18 50.84 29.63 90.64 1 55 14 1786.9 -35.71 41.63 110.00 16 39 46 4138.92 15.46 158.70 16.52 59.15 17 48 45 3538.9 11.26 152.12
    C3 45.149 WHL 6.719 DLA 16.50 RAL 146.63 RAD 6568.7 VEL 12.904 PTH
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RRI .7848 RRF .6653 RIF .8661
SGB 1865.3 R23 .2485 R13 .8832
SGI 1830.1 SGZ 361.0 THA 15.66
                                                                                                                                   ST 662.3 SR 160.4 SS 318.0
CRT -.3973 CRS .6354 CST -.9569
    TOE .6291 TRA-1.4511 TC3 -.8020 BAU .5381
    ROE -.1616 RRA -.3020 RC3 -.3893 FAU .08744
                                                                                                                                   LSA 733.5 MSA 164.4 SSA 21.5
    FOE .7923 FRA -.8763 FC3-1.6767 BSP 5296
                                                                                                                                   EL1 665.5 EL2 146.5 ALF 174.22
          .6495 BRA 1.4822 BC3 .8915 FSP
                                                          -671
                                                                                                                                               ARRIVAL DATE NOV 8 1967
                                                                               FLIGHT TIME 98.00
LAUNCH DATE AUG 2 1967
                                                                              DISTANCE 296.013
   HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 28.418 GAL -13.44 AZL 88.96 HCA 138.92 SHA 141.08 ECC .24398 INC 1.0367 V1 29.344 RP 107.67 LAP .68 LOP 87.96 VP 39.044 GAP 3.46 AZP 90.78 TAL 238.89 TAP 17.80 RCA 106.66 APO 175.51 V2 35.195 RC 101.218 GL 4.33 GP -32.04 ZAL 164.41 ZAP 118.64 ETS 341.52 ZAE 136.02 ETE 216.37 ZAC 124.33 ETC 357.12 CLP-124.43
   PLANETOCENTRIC CONIC
    C3 43.909 VML 6.626 DLA 17.59 RAL 147.84 RAD 6568.7 VEL 12.856 PTH 2.34 VHP 5.261 DPA -13.90 RAP 137.09 ECC 1.7226
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                       85.82 22 55 56
62.95 16 10 13
86.82 24 22 37
                   22 6 5 2991.38
14 55 41 4472.41
23 37 41 2695.98
16 6 46 4243.04
                                                                                                                                                     -28.32
                                                                                                                                                                        87.15
                                                                                    30.64
                                                                                                                                     2391.4
                                                                      95.80
                                                      -28.03
        90.00
                                                                                        20.42
                                                                                                                                        3872.4
                                                                                                                                                          5.02
                                                                                                                                                                        180.57
                                                                      187.30
                                                         8.71
                                                                                                                                        2096.0
                                                                                        30.76
                                                                                                                                                                         65.40
                                                       -29.74
                                                                       74.20
       100.00
                                                                                                                                        3643.0
                                                                                                         61.76 17 17 29
                                                                                                                                                          6.38
                                                                                                                                                                        162.96
                                                       10.23
                                                                      169.63
                                                                                       19.62
                                  2411.99
4099.80
                                                                                                                     1 52 35
                                                                                                                                        1812.0
                                                                                                                                                        -33.87
                                                                                                                                                                          43.57
                                                                                                         89.4A
                      1 12 23
                                                       -34.18
                                                                        52.80
                                                                                        30.93
                                                                                                                                        3499.8
                                                                                                                                                          9.82
                                                                                                                                                                         150.01
                                                                                                         58.53
                                                                                                                    18 0 49
                                                      14.08
                                                                      156.51
                                                                                       17.36
       110.00
                    16 52 29
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          RGT 1881.3 SGR 603.8 SG3 205.4
RRT .7904 RRF .8793 RTF .8704
SGB 1975.8 R23 .2699 R13 .8845
SGI 1943.1 SG2 358.1 THA 14.75
                                                                                                                                   ST 732.1 SR 135.1 SS 331.5

CRT -.3701 CRS .6091 CST -.9580

LSA 800.9 MSA 149.0 SSA 21.6
    TOE .7056 TRA-1.4814 TC3 -.8804 BAU .5690
    ROE - .1282 RRA - .2776 RC3 - .4056 FAU .08273
    FOE .8038 FRA -.7767 FC3-1.6311 BSP 5676
BOE .7172 BRA 1.5072 BC3 .9693 FSP -648
                                                                                                                                   EL1 733.9 EL2 125.2 ALF 175.98
                                                                                                                                               ARRIVAL DATE NOV 10 1967
                                                                               FLIGHT TIME 100,00
LAUNCH DATE AUG 2 1967
                                                                               DISTANCE 302.080
   HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 28.336 GAL -13.22 A7L 88.59 MCA 142.14 SMA 140.39 ECC .24209 INC 1.4143 VI 29.344
RP 107.65 LAP .87 LOP 91.19 VP 38.993 GAP 3.82 A7P 91.12 TAL 237.66 TAP 19.80 RCA 106.41 APO 174.38 V2 35.204
RC 103.470 GL 5.98 GP -33.42 ZAL 163.16 ZAP 120.52 ETS 338.62 ZAE 133.83 ETE 215.86 ZAC 124.06 ETC 356.31 CLP-127.48
   PLANETOCENTRIC CONIC
    C3 42.753 VHL 6.539 DLA 18.88 RAL 149.20 RAD 6568.6 VEL 12.811 PTH 2.33 VHP 5.418 DPA -15.26 RAP 136.81 ECC 1.7036
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                         84.25 22 48 44
62.48 16 28 2
                                                                                                                                        2435.0
                                  3035.01
4415.34
                                                                       98.97
        90.00 21 58 9
                                                       -27.77
                                                                                        32.00
                                                                                                                                         3815.3
                                                                                                                                                           3.19
                                                                                                                                                                         177.37
                     15 14 27
                                                        6.93
                                                                       184.05
                                                                                        21.64
                                                                                                                   24 16 37
                                                                                                                                        2135.5
                                                                                                                                                        -29.89
                    23 31 2 2735.53
16 24 16 4190.06
                                                                                                          85.29
                                                       -29.55
                                                                       77.13
                                                                                        32.18
                                                                                                                   17 34 6
                                                                                                                                        3590.1
                                                                                                                                                                         160.03
                                                        8.51
                                                                       166.64
                                                                                        20.79
                                                                                                          61.24
       100.00
                                                                                                                      1 48 57
                                                                                                                                         1843.7
                                                                                                                                                        -34.03
                                                                                                                                                                          46.04
                    1 8 14 2443.73
17 7 29 4054.62
                                                                        55.28
                                                                                        32.50
                                                                                                          88.02
                                                      -34.13
                                                                                                                   18 15 4
                                                                                                         57.91
                                                                                                                                        3454.6
                                                                                                                                                           8.14
                                                                                        18.43
       110.00
                                                        12.46
                                                                       154.01
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 1997.9 SGR 603.9 SG3 196.0
RRT 17936 RRF .8929 RTF .8720
SGB 2087.2 R23 .2924 R13 .8854
SG1 2056.5 SG2 357.0 THA 13.92
                                                                                                                                   ST 812.8 SR 108.2 SS 347.5
CRT -.3068 CRS .5486 CST -.9597
    TOE .7949 TRA-1.5016 TC3 -.9590 BAU
                                                            .5988
    RDE -.0927 RRA--.2501 RC3 -.4219 FAU .07777
                                                                                                                                  LSA 880.1 MSA 134.1 SSA 21.5
EL1 813.5 EL2 102.9 ALF 177.62
    FDE .8167 FRA -.6761 FC3-1.5748 BSP 6062
BDE .8002 BRA 1.5222 BC3 1.0477 FSP -623
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LAUNCH DATE AUG 2 1967
                                                                                    FLIGHT TIME 102.00
                                                                                                                                                       ARRIVAL CATE NOV 12 1967
                                                                                   DISTANCE 308.123
   HELIOCENTRIC CONIC
     RL 151.83 LAL -.00 LOL 309.04 VL 28.253 GAL -13.00 AZL 88.15 MCA 145.37 SMA 139.70 ECC .24028 INC 1.8511 V1 29.344 RP 107.62 LAP 1.05 LOP 94.42 VP 38.940 GAP 4.17 AZP 91.52 TAL 236.39 TAP 21.77 RCA 106.13 APO 173.27 V2 35.212 RC 105.723 GL 7.91 GP -35.05 ZAL 161.65 ZAP 122.03 ETS 335.48 ZAE 131.61 ETE 215.61 ZAC 123.63 ETC 355.43 CLP-130.39
    PLANETOCENTRIC CONIC
     C3 41.720 VHL 6.459 DLA 20.41 RAL 150.74 RAD 6568.6 VEL 12.771 PTH 2.32 VMP 5.601 DPA -16.90 RAP 136.55 ECC 1.6866
    LNCH A7MTH LNCH TIME L-1 TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 21 47 16 3092.04 -27.32 103.08 33.62 82.24 22 38 48 2492.0 -28.11 94.50
90.00 15 37 38 4345.98 4.73 180.14 23.25 62.05 16 50 4 3746.0 .96 173.49
100.00 23 21 56 2786.83 -29.21 80.90 33.89 83.33 24 8 22 2186.8 -29.82 72.15
100.00 16 45 40 4126.42 6.41 163.09 22.34 60.74 17 54 27 3526.4 2.46 156.52
                                                                                                              49.21
        110.00
                        1 2 29
                                      2484.51
                                                          -33.99
                                                                                                                                               1884.5
                                                                                                                                                                -34.15
                                                                            58.46
                                                                                             34.41
                      17 25 32
        110.00
                                        4001.50
                                                                          151.12
                                                                                             19.84
                                                                                                                                               3401.5
                                                                                                                                                                  6.14
                                                           10.53
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SGT 2113.7 SGR 602.9 SG3 185.5
RRT .7936 RRF .9054 RTF .8730
SG8 2198.0 R23 .3156 R13 .8857
SG1 2168.7 SG2 357.5 THA 13.12
                                                                                                                                          ST 908.3 SR 80.1 SS 367.8
CRT -.1535 CRS .4018 CST -.9618
     TOE .9019 TRA-1.5082 TC3-1.0357 BAU .6270
    RDE -.0540 RRA -.2180 RC3 -.4369 FAU .07242
FDE .8345 FRA -.5713 FC3-1.5027 88P 6417
                                                                                                                                          LSA 975.6 MSA 120.5 SSA 21.0
     BOE .9035 BRA 1.5239 BC3 1.1241 FSP -569
                                                                                                                                          EL1 908.4 EL2 79.1 ALF 179.22
LAUNCH DATE AUG 2 1967
                                                                                    FLIGHT TIME 104.00
                                                                                                                                                       ARRIVAL DATE NOV 14 1967
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 314.143
    RL 151.83 LAL -.00 LOL 309.04 VL 28.169 GAL -12.76 AZL 87.63 MCA 148.60 SMA 139.01 ECC .23853 INC 2.3659 V1 29.344
RP 107.60 LAP 1.23 LOP 97.66 VP 38.887 GAP 4.50 AZP 92.02 TAL 235.09 TAP 23.69 RCA 105.85 APO 172.17 V2 35.220
RC 107.975 GL 10.22 GP -37.00 ZAL 159.80 ZAP 123.12 ETS 332.07 ZAE 129.30 ETE 215.60 ZAC 123.04 ETC 354.45 CLP-133.18
   PLANETOCENTRIC CONIC
    C3 40.871 VHL 6.393 DLA 22.24 RAL 152.52 RAD 6568.6 VEL 12.737 PTH 2.32 VMP 5.819 DPA -18.86 RAP 136.26 ECC 1.6726 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 31 35 3169.54 -26.48 108.60 35.53 79.59 22 24 24 2569.5 -27.65 100.13 90.00 16 7 31 4258.10 1.91 175.22 25.46 61.74 17 18 29 3658.1 -1.88 168.59 100.00 23 8 59 2855.49 -28.56 85.90 35.93 80.77 23 56 34 2255.5 -29.54 77.23 100.00 17 12 48 4047.39 3.76 158.71 24.44 60.32 18 20 16 3447.4 -.22 152.19 110.00 0 54 22 2538.05 -33.67 62.60 36.74 83.71 1 36 40 1938.0 -34.17 53.40
        110.00
                        0 54 22
                                      2538.05
                                                          -33.67
                                                                                            36.74
                                                                                                                          1 36 40
                                                                            62.60
                                                                                                               A3.71
                                                                                                                                               1938.0
                                                                                                                                                                -34.17
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                                                                                                                         18 53 27
                      17 47 50
        110.00
                                                                                                                                               3337.6
                                       3937.60
                                                             8.15
                                                                          147.69
                                                                                            21.73
                                                                                                               56.69
                                                                                                                                                                   3.72
                                                                                                                                                                                 141.41
   DIFFERENTIAL CORRECTIONS
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SGT 2231.1 SGR 603.5 SG3 174.4
RRT .7902 RRF .9169 RTF .8742
SGB 2311.3 R23 .3384 R13 .8865
SGI 2282.8 SG2 361.5 THA 12.38
     TOE T.0296 TRA-1.5009 TC3-1.1099 BAU .6547
                                                                                                                                          ST 1021.6 SR 56.9 SS 390.7 CRT .2180 CRS .0234 CST -.9649
    RDE -.0134 RRA -.1820 RC3 -.4513 FAU .06695
    FOE .8515 FRA -.4694 FC3-1.4181 BSP 6805
BOE 1.0299 BRA 1.5119 BC3 1.1981 FSP -558
                                                                                                                                          LSA 1089.6 MSA 109.4 SSA 20.0
                                                                6805
                                                                                                                                          EL1 1021.7 EL2 55.6 ALF
                                                                                   FLIGHT TIME 106.00
                                                                                                                                                      ARRIVAL DATE NOV 16 1967
LAUNCH DATE AUG 2 1967
                                                                                   DISTANCE 320.142
   HELIOCENTRIC CONTC
    RL 151.83 LAL -.00 LOL 309.04 VL 28.085 GAL -12.52 AZL 87.01 MCA 151.83 SMA 138.32 ECC .23685 INC 2.9857 VI 29.344
RP 107.58 LAP 1.41 LOP 100.90 VP 38.832 GAP 4.81 AZP 92.63 TAL 233.74 TAP 25.57 RCA 105.56 APO 171.08 VZ 35.227
RC 110.226 GL 13.00 GP -39.34 ZAL 157.51 ZAP 123.73 ETS 328.35 ZAE 126.83 ETE 215.78 ZAC 122.32 ETC 353.33 CLP-135.89
   PLANETOCENTRIC CONIC
    C3 40.305 VHL 6.349 DLA 24.48 RAL 154.61 RAD 6568.6 VEL 12.715 PTH 2.31 VHP 6.085 DPA -21.21 RAP 135.87 ECC 1.6633
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     21 6 51 3282.51
16 48 56 4138.10
22 49 19 2952.15
                                                                                         37.67
                                                                                                             75.97 22 1 34
61.75 17 57 54
77.34 23 38 31
                                                                                                                                                              -26.54
                                                         -24.85
                                                                          116.47
                                                                                                                                            2682.5
                                                                                                                                                                               108.21
         90.00
                                                                                                                                                                                 161.87
         90.00
                                                           -1.96
                                                                          168.53
                                                                                            28.65
                                                                                                                                              3538.1
                                                                                                                                                                 -5.72
                                                                                                                                                               -28.7A
        100.00
                                                          -27.31
                                                                            92.81
                                                                                            38.32
                                                                                                                                              2352.2
                                                                                                                                                                                  84.32
        100.00
                     17 49 9 3943.68
0 42 30 2610.35
18 16 24 3858.26
                                                                                                                         18 54 53
                                                             .25
                                                                          153.02
                                                                                            27.42
                                                                                                               60.11
                                                                                                                                              3343.7
                                                                                                                                                                -3.73
                                                                                                                                                                                146.49
        110.00
                                                          -32.99
                                                                            68.14
                                                                                            39.60
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       110.00
                                                           5.17
                                                                          143.49
                                                                                            24.36
                                                                                                                                               3258.3
                                                                                                                                                                   . 69
                                                                                                                                                                                137.27
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGT 2348.8 SGR 603.6 SG3 162.4
RRT .7816 RRF .9261 RTF .8757
SGB 2425.1 R23 .3595 R13 .8875
SGI 2396.9 SG2 369.0 THA 11.64
                                                                                                                                         ST 1159.4 SR 52.7 SS 418.1
    TDE 1.1882 TRA-1.4742 TC3-1.1761 BAU .6809
                                                                                                                                         CRT .7878 CRS -.6384 CST -.9686
    FDE .8710 FRA -.3670 FC3-1.3136 BSP 7196
    RDE .0301 RRA -.1398 RC3 -.4622 FAU .06116
                                                                                                                                          LSA 1229.2 MSA 102.0 SSA 18.1
EL1 1160.2 EL2 32.4 ALF 2.05
 AUNCH DATE AUG 2 1967
                                                                                   FLIGHT TIME 108.00
                                                                                                                                                       ARRIVAL DATE NOV 18 1967
                                                                                   DISTANCE 326.118
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 28.000 GAL -12.27 AZL 86.25 MCA 155.05 SMA 137.63 ECC .23525 INC 3.7516 V1 29.344
RP 107.56 LAP 1.58 LOP 104.13 VP 38.776 GAP 5.12 AZP 93.40 TAL 232.36 TAP 27.41 RCA 105.26 APO 170.01 V2 35.233
RC 112.475 GL 16.40 GP -42.17 ZAL 154.63 ZAP 123.77 ÉTS 324.27 ZAE 124.11 ETE 216.11 ZAC 121.47 ETC 352.01 CLP-138.59
   PLANETOCENTRIC CONIC
    C3 40.192 VHL 6.340 DLA 27.23 RAL 157.14 RAD 6568.5 VEL 12.711 PTH 2.31 VMP 6.419 DPA -24.01 RAP 135.27 ECC 1.6615
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              70.38 21 14 52
62.87 19 4 44
72.46 23 6 39
60.48 19 46 54
                      20 16 47 3485.03
17 59 10 3934.14
                                                                                         39.44
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         90.00
                                       3465.03
                                                          -20.84
                                                                          129.95
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         90 00
                                                          -A.44
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                                                                                             33.92
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        100.00
                       22 14 54
                                      3104.25
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        110.00
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   DIFFFRENTIAL CORRECTIONS
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                                         ST 1331.2 SR 76.7 SS 451.7
CRT .9799 CRS -.9492 CST -.9727
                                                                             SCT 2465.8 SGR 600.6 SG3 148.9

RRT .7651 RRF .9311 RTF .8775

SGB 2537.9 R23 .3779 R13 .8888
    TDE 1.3919 TRA-1.4204 TC3-1.2253 BAU .7042
    RDE .0771 RRA -.0880 RC3 -.4651 FAU .05486
FDE .8954 FRA -.2614 FC3-1.1818 BSP 7542
BDE 1.3940 BRA 1.4231 BC3 1.3106 FSP -481
                                                                                                                                         LSA 1404.3 MSA 99.5 SSA 15.2
EL1 1333.3 EL2 15.3 ALF 3.23
                                                                              SG1 2509.3 SG2 380.0 THA 10.81
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ARRIVAL DATE NOV 20 1967

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FLIGHT TIME 110.00
LAUNCH DATE AUG 2 1967
                                                                                          DISTANCE 332.073
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 27.914 GAL -12.02 AZL 85.27 MCA 158.27 SMA 136.95 ECC .23371 INC 4.7287 VI 29.344 RP 107.54 LAP 1.75 LOP 107.38 VP 38.719 GAP 5.41 AZP 94.39 TAL 230.95 TAP 29.22 RCA 104.95 APO 168.96 VZ 35.239 RC 114.720 GL 20.62 GP -45.60 ZAL 150.96 ZAP 123.13 ETS 319.79 ZAE 121.02 ETE 216.49 ZAC 120.53 ETC 350.38 CLP-141.37
   PLANETOCENTRIC CONIC
     C3 40.842 VHL 6.391 DLA 30.64 RAL 160.30 RAD 6568.6 VEL 12.736 PTH 2.32 VHP 6.858 DPA -27.35 RAP 134.30 ECC 1.6721 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                41.09
                                                                                                                        63.60
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         77.78 17 42 48 4028.34
102.22 20 58 23 3398.94
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                       23 47 2 2871.93
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                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     RRT .7364 RRF .9291 RTF .8811
SGB 2653.0 R23 .3911 R13 .6916
SGI 2623.2 SG2 396.2 THA 9.83
                                                                                                                                                     ST 1545.7 SR 112.3 SS 489.6
CRT .9721 CRS -.9940 CST -.9773
     TOE 1.6594 TRA-1.3325 TC3-1.2479 BAU
                                                                    .7255
     ROE .1234 RRA -. 0253 RC3 -. 4563 FAU .04826
                                                                                                                                                      LSA 1622.1 MSA 101.3 SSA 12.0
    FOE .9189 FRA -.1587 FC3-1.0231 BSP 7932
BDE 1.6640 BRA 1.3328 BC3 1.3287 FSP -440
                                                                                                                                                      EL1 1549.5 EL2 26.3 ALF
                                                                                                                                                                    ARRIVAL DATE" NOV 22 1967
                                                                                          FLIGHT TIME 112.00
   HELIOCENTRIC CONIC
                                                                                          DISTANCE 338.003
    RL 151.83 LAL -.00 LOL 309.04 VL 27.828 GAL -11.75 AZL 83.97 HCA 161.49 3MA 136.28 ECC .23225 INC 6.0271 V1 29.344 RP 107.52 LAP 1.91 LOP 110.62 VP 38.662 GAP 5.70 AZP 95.72 TAL 229.51 TAP 30.99 RCA 104.63 APO 167.93 V2 35.244 RC 116.981 GL 25.91 GP -49.80 ZAL 146.23 ZAP 121.67 ETS 314.81 ZAE 117.39 ETE 216.74 ZAC 119.51 ETC 348.26 CLP-144.44
   PLANETOCENTRIC CONIC
                                                                                                                          2.33 WHP 7.465 OPA -31.31 RAP 132.71 ECC 1.7055
     C3 42.869 VHL 6.547 DLA 34.87 RAL 164.44 RAD 6568.6 VEL 12.815 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.75 17 0 13 4223.96 -17.74 183.82 47.12 59.48 18 10 37 3624.0 -21.66 176.82 111.25 22 13 58 3227.76 -17.73 109.32 47.11 59.47 23 7 45 2627.8 -21.64 102.33
                      17 0 13 4223.96
22 13 56 3227.76
17 0 13 4223.96
22 13 56 3227.76
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                                                                                109.32
                                                                                                    47.11
       111.25
                                                              -17.73
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 2706.1 SGR 576.6 SG3 118.0
RRT .6827 RRF .9110 RTF .8868
SGB 2766.9 R23 .3979 R13 .8961
SG1 2735.3 SG2 416.8 THA 8.48
                                                                                                                                                      ST 1818.0 SR 144.5 SS 533.7
CRT .9405 CRS -.9865 CST -.9819
     TOE 2.0307 TRA-1.1902 TC3-1.2204 BAU .7405
     ROE .1627 RRA .0558 RC3 -.4243 FAU .04107
                                                                                                                                                      LSA 1897.2 MSA 107.4 SSA
                                                                                                                                                                                                       8.7
     FDE .9447 FRA -.0546 FC3 -.8294 83P 8275
BDE 2.0372 BRA 1.1915 8C3 1.2920 FSP -389
                                                                                                                                                      EL1 1823.1 EL2 48.9 ALF
                                                                                                                                                                   ARRIVAL DATE NOV 24 1967
                                                                                          FLIGHT TIME 114.00
LAUNCH DATE AUG 2 1967
                                                                                          DISTANCE 343.906
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOU 309.04 VL 27.742 GAL -11.47 AZL 82.15 MCA 164.69 SMA 135.62 ECC .23084 INC 7.8481 V1 29.344 RP 107.51 LAP 2.07 LOP 113.86 VP 38.604 GAP 5.96 AZP 97.57 TAL 228.03 TAP 32.72 RCA 104.31 APO 166.92 V2 35.248 RC 119.197 GL 32.54 GP -54.93 7AL 140.10 ZAP 119.22 ETS 309.10 ZAE 112.98 ETE 216.50 ZAC 118.48 ETC 345.31 CLP-148.18
   PLANETOCENTRIC CONIC
     C3 47.623 VML 6.901 DLA 40.02 RAL 170.16 RAD 6568.8 VEL 12.999 PTH 2.37 VMP 8.361 DPA -35.96 RAP 130.06 ECC 1.7838
    C3 47.623 VHL 6.901 OLA 40.02 RAL 170.16 RAD 6568.8 VEL 12.999 PTH 2.37 VHP 8.361 OPA -35.96 RAP 130.06 ECC 1.7838 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO 651 TIM INJ 2 LAT INJ 2 LONG 60.44 16 40 10 4375.99 -19.00 197.06 55.97 54.09 17 53 6 3776.0 -23.55 190.41 19.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47 119.56 23 19 39 3128.58 -18.98 102.12 55.96 54.08 24 11 47 2528.6 -23.54 95.47
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 2830.2 SGR 541.4 SG3 100.5
RRT .5686 RRF .8474 RTF .8971
SGB 2881.5 R23 .3945 R13 .9041
SGI 2847.3 SG2 442.7 THA 6.36
                                                                                                                                                      ST 2155.3 SR 147.1 SS 580.5
     TOE 2.5677 TRA -.9632 TC3-1.1165 BAU .7465
                                                                                                                                                      CRT .8700 CRS -.9388 CST -.9864
     RDE .1647 RRA .1605 RC3 -.3580 FAU .03347 FDE .9672 FRA .0468 FC3 -.6085 BSP 8671
                                                                                                                                                      LSA 2233.9 MSA 116.2 SSA
                                                                                                                                                                                                     6.0
                                                                                                                                                      EL1 2159.1 EL2 72.4 ALF
                                                                                                                                                                                                   3.40
     BDF 2.5730 BRA .9765 BC3 1.1724 FSP
                                                                    -338
                                                                                                                                                                    ARRIVAL DATE NOV 26 1967
                                                                                          FLIGHT TIME 116.00
LAUNCH DATE AUG 2 1967
                                                                                          DISTANCE 349.772
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 27.656 GAL -11.18 AZL 79.40 HCA 167.87 SMA 134.96 ECC .22946 INC10.6007 V1 29.344
RP 107.50 LAP 2.22 LOP 117.11 VP 38.546 GAP 6.22 AZP 100.37 TAL 226.52 TAP 34.39 RCA 103.99 APO 165.93 V2 35.252
RC 121.426 GL 40.74 GP -61.18 ZAL 132.23 ZAP 115.60 ETS 301.95 ZAE 107.43 ETE 214.81 ZAC 117.54 ETC 340.61 CLP-153.68
   PLANETOCENTRIC CONIC
     C3 38.499 VHL 7.648 DLA 45.95 RAL 178.58 RAD 6569.1 VEL 13.411 PTH 2.45 VHP 9.795 DPA -41.25 RAP 125.55 ECC 1.9627
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 52.16 16 39 51 4518.48 -19.01 209.70 69.14 47.34 17.55 9 3918.5 -24.31 203.67 127.84 0 31 4 3087.98 -18.99 98.52 69.12 47.33 1 22.32 2488.0 -24.29 92.50
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                                          3087.98
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         127.84
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 2951.5 SGR 490.4 SG3 82.3

RRT .2574 RRF .6054 RTF .9146

SGB 2992.0 R23 .3764 R13 .9173

SG1 2954.3 SG2 473.4 THA 2.51
                                                                                                                                                     5T 2544.1 SR 98.0 SS 628.3
CRT .1482 CRS -.2836 CST -.9903
     TOE 3.3866 TRA -.5745 TC3 -.8992 BAU
                                                                     .7288
     ROE .0285 RRA .2937 RC3 -.2445 FAU .02544
FDE .9886 FRA .1510 FC3 -.3765 BSP 9028
BDE 3.3868 BRA .6452 BC3 .9319 FSP -283
                                                                                                                                                     LSA 2619.2 MSA 128.5 SSA 3.9
                                                                                                                                                     EL1 2544.2 EL2 96.9 ALF
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ARRIVAL DATE NOV 28 1967

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FLIGHT TIME 118.00
LAUNCH DATE AUG 2 1967
                                                                         DISTANCE 355.579
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 27.571 GAL -10.88 AZL 74.75 MCA 171.00 SMA 134.32 ECC .22806 INC15.2541 V1 29.344 RP 107.49 LAP 2.36 LOP 120.35 VP 38.487 GAP 6.45 AZP 105.08 TAL 224.97 TAP 35.97 RCA 103.68 APO 164.95 V2 35.255 RC 123.648 GL 50.22 GP -68.50 ZAL 122.49 ZAP 110.68 ETS 290.80 ZAE 100.17 ETE 208.78 ZAC 117.03 ETC 331.32 CLP-164.46
   PLANETOCENTRIC CONIC
                                                                                                   2.62 VHP 12.373 OPA -46.76 RAP 117.51 ECC 2.4141
    C3 85.927 VML 9.270 DLA 51.62 RAL 191.50 RAD 6569.7 VEL 14.397 PTH
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  LNCH
17 6 50
47 9
                                                  -16.15
                                                                 221.44
                                                                                 88.26
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        44.85
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                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 3035.5 SGR 592.7 SG3 65.3
RRT -.5016 RRF -.1992 RTF .9441
                                                                                                                         ST 2850.7 SR 420.3 SS 677.8

CRT - 4532 CRS .9133 CST -.9937
    TDE 4.6110 TRA .1690 TC3 -.5562 BAU .6478
    RDE -.6518 RRA .4006 RC3 -.0934 FAU .01699
                                                                     SGB 3092.8 R23 -.3330 R13 -.9386
                                                                                                                         LSA 2956.4 MSA 148.0 SSA 2.4
    FDE 1.0170 FRA .2747 FC3 -.1712 BSP 9298
                                                                                                                         EL1 2878.7 EL2 125.9 ALF 171.99
                                                                     SG1 3050.4 SG2 510.3 THA 174.24
    BOE 4.6568 BRA .4347 BC3 .5640 FSP -225
                                                                                                                                     ARRIVAL DATE NOV 30 1967
                                                                         FLIGHT TIME 120.00
LAUNCH DATE AUG 2 1967
                                                                         DISTANCE 361.252
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 27.48E GAL -10.54 AZL 65.32 MCA 174.02 SMA 133.68 ECC .22644 INC24.6768 V1 29.344 RP 107.48 LAP 2.49 LOP 123.60 VP 38.428 GAP 6.64 AZP 114.56 TAL 223.35 TAP 37.37 RCA 103.41 APO 163.95 V2 35.257 RC 125.861 GL 58.98 GP -74.95 ZAL 111.41 ZAP 104.52 ETS 264.23 ZAE 89.82 ETE 186.68 ZAC 117.95 ETC 305.41 CLP 164.92
   PLÂNETOCENTRIC CONIC
C3 173.298 VML 13.164 DLA 53.89 RAL 209.60 RAD 6570.9 VEL 17.165 PTH 2.94 VMP 17.860 DPA -50.69 RAP 1UZ.38 ELC 3.03.29 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
18 10 36 4825.88 -9.15 229.40 112.86 36.65 19 31 2 4225.9 -15.53 224.87
   PLANETOCENTRIC CONIC
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36.65 4 1 46
36.65 19 31 2
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       137.97
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                                  3234.39
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                                4625....
3238.39
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        42.03
                    18 10 36
                                                   -9.15
                                                                  229.40
                                                                    MID-COURSE EXECUTION ACCURACY
SGT 2738.6 SGP 153
                                                                                                                              2638.4
                                                                                                                                            -15.52
                                                                                                                                                              97.41
      137.97
                     3 7 47
                                                   -9.14
                                                                  102.33
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2738.6 SGR 1571.8 SG3 52.4
RRT -.9232 RRF -.8538 RTF .9873
                                                                                                                          ST 2425.0 SR 1561.7 SS 756.1
    TOE 5.5031 TRA 1.7098 TC3 -.1561 BAU .3617
                                                                                                                          CRT -.9927 CRS .9826 CST -.9978
    RDE-3.5858 RRA -.2525 RC3 .0005 FAU .00716
                                                                     SGB 3157.6 R23 -.2421 R13 -.9689
                                                                                                                          LSA 2976.6 MSA 175.2 SSA 1.4
    FDE 1.0980 FRA .4882 FC3 -.0358 BSP 9566
BDE 6.5683 BRA 1.7284 BC3 .1561 FSP -178
                                                                                                                          EL1 2879.9 EL2 158.9 ALF 147.30
                                                                     SG1 3112.6 SG2 531.4 THA 151.16
                                                                                                                                    ARRIVAL DATE DEC 2 1967
                                                                         FLIGHT TIME 122.00
LAUNCH DATE AUG 2 1967
                                                                         DISTANCE 366.458
    RL 151.83 LAL -.00 LOL 309.04 VL 27.401 GAL -10.10 AZL 39.84 HCA 176.59 SMA 133.06 ECC .22373 INC50.1578 VI 29.344 RP 107.48 LAP 2.62 LOP 126.85 VP 38.369 GAP 6.70 AZP 140.11 TAL 221.53 TAP 38.11 RCA 103.29 APO 162.83 V2 35.258 RC 128.066 GL 58.08 GP -67.06 ZAL 100.82 ZAP 97.89 ETS 207.69 ZAE 71.55 ETE 134.30 ZAC 124.07 ETC 245.40 CLP 110.62
   PLANETOCENTRIC CONIC
    C3 595.480 VHL 24.402 DLA 45.47 RAL 224.26 RAD 6572.5 VEL 26.773 PTH 3.39 VHP 32.727 DPA -45.59 RAP 77.11 ECC10.8001
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 52.80 19 44 27 4884.31 -1.16 225.91 133.14 44.54 21 5 51 4284.3 -6.84 220.68 127.20 3 30 57 3465.92 -1.14 115.86 133.13 44.54 4 28 43 2865.9 -6.83 110.63
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                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                               -6.83
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                                                                  115.86
       127.20
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 191.0 SR 2309.9 SS 1027.7
CRT -.3013 CRS .9964 CST -.3809
LSA 2527.7 MSA 197.9 SSA 1.3
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RRT -.5885 RRF -.9877 RTF .7050
SGB 3053.8 R23 -.1310 R13 -.9909
    TOE .0544 TRA 1.8973 TC3 -.0172 BAU 1.2136
    ROE-9.5568 RRA-5.4526 RC3 -.1515 FAU-.01651
    FOE 1.4673 FRA 1.1523 FC3 .0240 BSP 8697
BOF 9.5570 BRA 5.7733 BC3 .1524 FSP -141
                                                                      SG1 3010.2 SG2 514.0 THA 97.42
                                                                                                                          EL1 2310.6 EL2 182.1 ALF 91.44
    BOE 9.5570 BRA 5.7733 BC3 .1524 FSP
                                                                                                                                     ARRIVAL DATE DEC 4 1967
LAUNCH DATE AUG 2 1967
                                                                          FLIGHT TIME 124.00
                                                                          DISTANCE 375.466
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 27.317 GAL -10.44 AZL 158.80 MCA 182.94 SMA 132.45 ECC .23139 INC68.8025 V1 29.344 RP 107.48 LAP 2.74 LOP 130.10 VP 38.310 GAP 7.85 AZP 21.22 TAL 221.10 TAP 44.04 RCA 101.80 APO 163.09 V2 35.259 RC 130.261 GL -51.13 GP 59.00 ZAL 98.45 ZAP 97.40 ETS 173.41 ZAE 62.74 ETE 243.45 ZAC 102.61 ETC 126.44 CLP 104.47
   PLANETOCENTRIC CONIC
    C31035.018 VHL 32.172 DLA -55.26 RAL 173.77 RAD 6573.0 VEL 34.004 PTH 3.51 VHP 40.685 DPA 69.55 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ 2 LAT INJ 2 LONG
                                                                                              145.26 4 24 10
145.26 13 0 27
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                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 493.6 SR 2390.9 SS 1700.8
                                                                      SGT 938.5 SGR 2791.6 SG3 47.0
    TOE 2.5210 TRA 2.1814 TC3 -.0720 BAU 2.7228
                                                                     RRT -.8420 RRF .9975 RTF -.8052
SGB 2945.2 R23 -.1128 R13 .9931
                                                                                                                         CRT -.9498 CRS -.9998 CST .9437
LSA 2971.2 MSA 157.6 SSA 1.6
    RO-13.3432 RRA-2.7846 RC3 .1831 FAU-.03818
FOE-2.7054 FRA -.4667 FC3 .0319 BSP .8558
BOE13.5793 BRA 3.5373 BC3 .1968 FSP .143
                                                                      SG1 2904.7 SG2 486.7 THA 106.27
                                                                                                                          EL1 2436.6 EL2 151.5 ALF 101.14
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LAUNCH DATE AUG 2 1967
                                                                   FLIGHT TIME 126.00
                                                                   DISTANCE 380.313
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 27.233 GAL -9.91 A7L 123.47 HCA 185.17 SMA 131.85 ECC .22789 INC33.4716 V1 29.344 RP 107.48 LAP 2.85 LOP 133.35 VP 38.250 GAP 7.80 AZP 56.64 TAL 219.16 TAP 44.32 RCA 101.80 APO 161.89 V2 35.259
    RC 132.447 GL -60.78 GP 73.25 7AL 105.27 ZAP 104.50 ETS 132.13 ZAE 85.61 ETE 205.40 ZAC 91.71 ETC 83.62 CLP 150.32
   PLANETOCENTRIC CONIC
    C3 287.377 VHL 16.952 DLA -55.32 RAL 148.48 RAD 6571.7 VEL 20.216 PTH 3.15 VHP 20.686 DPA 81.98 RAP 264.66 ECC 5.7295
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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       40.27.
                               2266.13
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                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                             SGT 1604.2 SGR 3010.1 SG3 55.9
RRT .9375 RRF .9696 RTF .9931
SGB 3410.9 R23 -.1678 R13 .9851
    TOE-3.8351 TRA-1.5887 TC3 -.0161 BAU .2323
                                                                                                               ST 1326.7 SR 1852.0 SS 880.4
   ROE-5.0184 RRA-4.1737 RC3 .0583 FAU .00247
FOE-1.4044 FRA -.7394 FC3 -.0074 BSP 10185
                                                                                                               CRT .9804 CRS -.9899 CST -.9984
                                                                                                               LSA 2432.3 MSA 222.2 SSA 1.3
   BDE 6.3161 BRA 4.4659 BC3 .0605 FSP -174
                                                              SG1 3374.3 SG2 498.2 THA 62.81
                                                                                                               EL1 2268.2 EL2 213.4 ALF 54.56
LAUNCH DATE AUG 2 1967
                                                                   FLIGHT TIME 128.00
                                                                                                                         ARRIVAL DATE DEC 8 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 385.871
   RL 151.83 LAL -.00 LOL 309.04 VL 27.150 GAL -9.53 AZL 111.36 HCA 188.11 SMA 131.26 ECC .22650 INC21.3587 VI 29.344
RP 107.48 LAP 2.95 LOP 136.60 VP 38.190 GAP 7.95 AZP 68.84 TAL 217.45 TAP 45.56 RCA 101.53 APO 160.99 VZ 35.258
RC 134.624 GL -57.81 GP 67.32 ZAL 111.76 ZAP 112.62 ETS 89.60 ZAE 97.63 ETE 165.43 ZAC 89.11 ETC 41.20 CLP-175.64
  PLANETOCENIRIC CONTC
   C3 132.773 VHL 11.523 DLA -49.26 RAL 144.40 RAD 6570.4 VEL 15.941 PTH
                                                                                          2.82 VHP 13.669 DPA 72.80 RAP 213.67 ECC 3.1851
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      138.33
       47.84
                   2 10 20 2093.18
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                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SGT 3358.4 SGR 1226.1 SG3 70.9
RRT .9127 RRF .8050 RTF .9756
SGB 3575.2 R23 -.2533 R13 .9650
    TOE-3.6567 TRA-3.6200 TC5 -.2621 BAU .4683
                                                                                                               ST 1997.8 SR 421.3 SS 678.5
CRT .8229 CRS .7421 CST -.9915
   ROE -.4351 RRA-1.5813 RC3 -.0298 FAU .01611
   FOE-1.1047 FRA -.7350 FC3 -.1051 BSP 10907
BDE 3.6825 BRA 3.9503 BC3 .2658 FSP -226
                                                                                                               LSA 2136.3 MSA 254.8 SSA
                                                                                                                                                  1.8
                                                               SG1 3543.5 SG2 474.8 THA 18.78
                                                                                                               EL1 2028.0 EL2 235.8 ALF
                                                                                                                                                  9.98
                                                                  FLIGHT TIME 130.00
                                                                                                                        ARRIVAL DATE DEC 10 1967
LAUNCH CATE AUG 2 1967
                                                                  CISTANCE 391.586
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 27.068 GAL -9.17 AZL 105.79 MCA 191.23 SMA 130.68 ECC .22569 INC15.7907 V1 29.344
RP 107.88 LAP 3.04 LOP 139.85 VP 38.131 GAP 8.14 AZP 74.50 TAL 215.78 TAP 47.00 RCA 101.19 APO 160.18 V2 35.256
RC 136.791 GL -53.05 GP 58.75 ZAL 116.73 ZAP 120.17 ETS 74.88 ZAE 105.66 ETE 154.12 ZAC 88.37 ETC 26.80 CLP-165.66
   PLANETOCENTRIC CONIC
   C3 82.804 VHL 9.100 DLA -43.96 RAL 145.48 RAD 6569.6 VEL 14.288 PTH 2.60 VMP 10.671 DPA 63.57 RAP 200.47 ECC 2.3627
   LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               1330.3
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                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                              RRT .6230 RRF .3475 RTF .9454
SGB 3682.6 R23 -3197 R13 .9417
SGI 3656.6 SG2 437.0 THA 5.57
                                                                                                              ST 1900.3 SR 249.6 SS 626.2

CRT -.3750 CRS .5702 CST -.9754

LSA 1999.0 MSA 264.1 SSA 2.7

EL1 1902.7 EL2 231.1 ALF 177.14
    TOE-2.6474 TRA-3.4752 TC3 -.6090 BAU .6741
         .3069 RRA - .6024 RC3 .0034 FAU .02478
   FOE-1.0370 FRA -.7107 FC3 -.2591 BSP 11245
BOE 2.6651 BRA 3.5270 BC3 -6090 FSP -281
                                                                                                                         ARRIVAL DATE DEC 12 1967
LAUNCH DATE AUG 2 1967
                                                                  FLIGHT TIME 132,00
                                                                  DISTANCE 397.350
   RL 151.83 LAL -.00 LOL 309.04 VL 26.987 GAL -8.82 A7L 102.63 MCA 194.40 SMA 130.12 ECC .22516 INC12.6345 V1 29.344
RP 107.49 LAP 3.12 LOP 143.10 VP 38.071 GAP 8.35 A7P 77.75 TAL 214.11 TAP 48.51 RCA 100.82 APO 159.42 VZ 35.254
RC 138.949 GL -48.64 GP 51.12 ZAL 120.26 ZAP 126.76 ETS 68.47 ZAE 111.48 ETE 151.72 ZAC 87.89 ETC 20.83 CLP-162.45
  PLANETOCENTRIC CONIC
   C3 60.389 VHL 7.771 DLA -39.80 RAL 147.69 RAD 6569.1 VEL 13.481 PTH 2.46 VHP 9.156 DPA 55.60 RAP 194.73 ECC 1.9939
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               1786.61
                                                                                      126.73
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                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                              ST 1805.8 SR 304.8 SS 603.9
CRT -.6817 CRS .8584 CST -.9604
LSA 1909.5 MSA 268.7 SSA 3.6
                                                              SCT 3759.6 SGR 412.1 SG3 103.7
RRT .2124 RRF -.1542 RTF .9225
    TOE-2.1029 TRA-3.2117 TC3 -.9614 BAU .7768
   RDE .3970 RRA -.2956 RC3 .0393 FAU .03121
                                                              SGB 3782.1 R23 -.3606 R13 .9216
SG1 3760.7 SG2 402.6 THA 1.35
   FDE-1.0015 FRA -.6696 FC3 -.4474 BSP 11612
BDE 2.1400 BRA 3.2252 BC3 .9622 FSP -333
                                                                                                              ELI 1817.9 EL2 221.5 ALF 173.34
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ARRIVAL DATE DEC 14 1967
                                                                      FLIGHT TIME 134.00
LAUNCH CATE AUG 2 1967
                                                                     DISTANCE 403.131
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.907 GAL -8.47 A7L 100.60 HCA 197.60 SMA 129.57 ECC .22482 INC10.6029 V1 29.344
RP 107.50 LAP 3.19 LOP 146.35 VP 38.011 GAP 8.56 AZP 79.88 TAL 212.45 TAP 50.04 RCA 100.44 APO 158.70 V2 35.251
   RC 141.095 GL -44.92 GP 44.74 7AL 122.62 7AP 132.33 ETS 64.64 7AE 115.77 ETE 152.09 7AC 87.26 ETC 17.52 CLP-161.45
  PLANETOCENTRIC CONIC
   C3 48.095 VHL 6.935 CLA -36.61 RAL 150.14 RAC 6568.8 VEL 13.018 PTH 2.37 VHP 8.312 CPA 48.82 RAP 191.93 ECC 1.7915
                                              RAL 150.14 RAD 6568.8 VEL 13.018 PTH 2.37 VHP 8.312 CPA 48.82 RAP 191.93 ELC 1.7912
INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
17.46 20.97 35.06 122.70 4 16 3 1058.8 21.65 14.15
17.48 276.43 35.07 122.69 11 13 6 5250.7 21.66 269.61
17.48 276.43 35.07 122.69 11 13 6 5250.7 21.66 269.61
17.46 20.97 35.06 122.70 4 16 3 1058.8 21.65 14.15
17.48 276.43 35.07 122.69 11 13 6 5250.7 21.66 269.61
17.48 276.43 35.07 122.69 11 13 6 5250.7 21.66 269.61
17.48 276.43 35.07 122.69 11 13 6 5250.7 21.66 269.61
   LNCH AZMTH LNCH TIME L-I TIME
       65.77
                  3 48 24 165R.A3
                    9 35 36
                                 5850.67
      114.23
                   3 48 24
                                1658.83
      114.23
                    9 35 36
                                 5850.67
                   3 4A 24
                                1658.83
                    9 35 36
                                 5850.67
      114.23
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
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RRT -.0379 RRF -.4160 RTF .9054
SCB 3874.7 R23 .3816 R13 -.9055
SCI 3856.8 SC2 372.1 THA 179.79
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CRT -.7445 CRS .9193 CST -.9471
    TOE-1.7790 TRA-2.9863 TC3-1.3034 BAU .8389
    ROE .3815 RRA -.1757 RC3 .0586 FAU .03569
                                                                                                                    LSA 1839.9 MSA 271.4 SSA
   FOE -.9605 FRA -.6108 FC3 -.6424 BSP 11903
                                                                                                                    EL1 1752.4 EL2 211.5 ALF 172.07
   BOE 1.8194 BRA 2.9914 BC3 1.3047 FSP -372
                                                                                                                               ARRIVAL CATE CEC 16 1967
                                                                      FLIGHT TIME 136.00
                                                                      DISTANCE 408.916
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.827 GAL -8.11 A7L 99.18 MCA 200.81 SMA 129.03 ECC .22465 INC 9.1812 V1 29.344
RP 107.51 LAP 3.25 LOP 149.60 VP 37.951 GAP 8.78 AZP 81.41 TAL 210.77 TAP 51.58 RCA 100.05 APO 158.02 V2 35.247
   RC 143.232 GL -41.82 GP 39.46 ZAL 124.06 ZAP 137.01 ETS 61.89 ZAE 118.94 ETE 153.46 ZAC 86.37 ETC 15.31 CLP-161.36
  PLANETOCENTRIC CONIC
   C3 40.390 VHL 6.355 DLA -34.19 RAL 152.63 RAD 6568.6 VEL 12.718 PTH
                                                                                               2.31 VMP 7.816 DPA 43.06 RAP 190.65 ECC 1.6647
   LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         943.1
                    4 22 16
                                1543.09
                                                 17.92
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       69.99
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                                5878.58
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                   9 21 37
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                                 1543.09
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                   9 21 37 5878.58
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                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                 SCT 3950.9 SCR 352.1 SC3 126.3

RRT -.1627 RRF -.5276 RTF .8926

SCB 3966.6 R23 .3864 R13 -.8931

SCI 3951.4 SC2 347.3 THA 179.16
                                                                                                                    ST 1686.0 SR 319.7 SS 570.1
CRT -.7680 CRS .9447 CST -.9354
    TDE-1.5699 TRA-2.7960 TC3-1.6355 BAU .8838
    RDE .3520 RRA -.1182 RC3 .0643 FAU .03864
                                                                                                                    LSA 1787.5 MSA 273.0 SSA
    FOE -.9149 FRA -.5423 FC3 -.8283 BSP 12203
                                                                                                                    EL1 1704.1 EL2 202.6 ALF 171.60
    BDE 1.6088 BRA 2.7985 BC3 1.6368 FSP
                                                     -404
                                                                                                                               ARRIVAL DATE DEC 18 1967
                                                                      FLIGHT TIME 138.00
LAUNCH DATE AUG 2 1967
                                                                     DISTANCE 414.700
   RL 151.83 LAL -.00 LOL 309.04 VL 26.749 GAL -7.74 AZL 98.13 MCA 204.03 SMA 128.51 ECC .22464 INC 8.1261 V1 29.344
RP 107.53 LAP 3.30 LOP 152.85 VP 37.891 GAP 9.00 AZP 82.57 TAL 209.09 TAP 53.12 RCA 99.64 APO 157.38 V2 35.243
RC 145.356 GL -39.23 GP 35.12 ZAL 124.77 ZAP 140.95 ETS 59.72 ZAE 121.31 ETE 155.16 ZAC 85.23 ETC 13.69 CLP-161.69
   PLANETOCENTRIC CONIC
    C3 35.087 VHL 5.923 OLA -32.37 RAL 155.13 RAD 6568.4 VEL 12.508 PTH 2.26 VHP 7.518 DPA 38.14 RAP 190.28 ECC 1.5774
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         117.26 5 19 1
117.25 9 19 12
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                    4 55 3 1437.27
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                    9 8 47
                                                              303.85
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                                 625.23
                                                  18.19
      106.38
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122.86 8 21 7
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                    9 8 47
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112.09 12 28 32
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                    8 7 33
                                                              313.52
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      110,00
                                 814.62
                                5583.92
                                                              260.65
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                                                                                                                                      29.53
                                                                                                                                                     252.54
                                                                              38.20
      110.00
                  10 55 28
                                                  26.77
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 4044.8 SGR 337.5 SG3 133.4

RRT -.2250 RRF -.5684 RTF .8830

SGB 4058.8 R23 .3781 R13 -.8836

SG1 4045.5 SG2 328.8 THA 178.92
                                                                                                                    ST 1652.2 SR 316.4 SS 555.5
CRT -.7824 CRS .9598 CST -.9254
    TOE-1.4287 TRA-2.6279 TC3-1.9603 BAU .9200
   ROE .3257 RRA -.0854 RG3 .0604 FAU .04037
FOE -.8676 FRA -.4688 FC3 -.9962 BSP 12513
                                                                                                                    LSA 1750.3 MSA 273.6 SSA 6.9
EL1 1670.9 EL2 194.8 ALF 171.36
    BOE 1.4654 BRA 2.6293 BC3 1.9613 FSP -427
                                                                      FLIGHT TIME 140,00
                                                                                                                               ARRIVAL DATE DEC 20 1967
LAUNCH DATE AUG 2 1967
                                                                      DISTANCE 420.478
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.671 GAL -7.36 AZL 97.31 MCA 207.26 SMA 127.99 ECC .22478 INC 7.3078 VI 29.344 RP 107.54 LAP 3.34 LOP 156.10 VP 37.832 GAP 9.22 AZP 83.50 TAL 207.40 TAP 54.65 RCA 99.22 APO 156.77 VZ 35.237 RC 147.469 GL -37.05 GP 31.52 ZAL 124.90 ZAP 144.27 ETS 57.96 ZAE 123.09 ETE 156.89 ZAC 83.88 ETC 12.41 CLP-162.24
  PLANETOCENTRIC CONIC
   C3 31.180 VHL 5.584 DLA -31.03 RAL 157.65 RAD 6568.2 VEL 12.351 PTH 2.23 VHP 7.339 DPA 33.90 RAP 190.50 ECC 1.5131
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     21.63
                                                                                          115.47
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                    5 26 37 1340.07
                                                 18.35
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                    8 57 18
                                  662.92
                                                  18.37
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      103.25
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                                1340.07
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        76.75
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       103.25
                    8 57 18
                                  662.92
                                                  18.37
                                                               306.80
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                                                                                            115.46
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                    7 51 11
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                                                   7.93
                                                               316.48
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                                                                                            123.36
      110.00
                                  869.89
       110.00
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                                5469.14
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                                                                                            108.16 13 3 4
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                                                                                                                                                      244.29
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4135.5 SGR 327.6 SG3 13H.3
RRT -.2567 RRF -.5738 RTF .8755
SGB 4148.5 R23 .3599 R13 -.8761
                                                                                                                    ST 1630.5 SR 314.4 SS 542.6
CRT -.7961 CRS .9709 CST -.9172
    TOE-1.3309 TRA-2.4709 TC3-2.2800 BAU .9507
    ROE .3056 RRA -.0635 RC3 .0508 FAU .04117
    FOE -.8216 FRA -.3934 FC3-1.1432 BSP 12805
BOE 1.3655 BRA 2.4717 BC3 2.2806 FSP -442
                                                                                                                     LSA 1725.4 MSA 273.1 SSA H.2
                                                                                                                     EL1 1649.8 EL2 188.0 ALF 171.16
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SG1 4136.4 SG2 316.5 THA 178.83

ARRIVAL DATE DEC 22 1967

LAUNCH DATE AUG 2 1967

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DISTANCE 426.249
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.595 GAL -6.98 ATL 96.65 HCA 210.48 SMA 127.49 ECC .22507 INC 6.6511 V1 29.344
RP 107.56 LAP 3.37 LOP 159.35 VP 37.772 GAP 9.43 AZP 84.26 TAL 205.70 TAP 56.18 RCA 98.80 APO 156.19 V2 35.231
RC 149.570 GL -35.19 GP 28.52 TAL 124.54 ZAP 147.12 ETS 56.51 ZAE 124.45 ETE 158.53 ZAC 82.35 ETC 11.38 CLP-162.90
   PLANETOCENTRIC CONIC
    C3 28.153 VHL 5.306 DLA -30.07 RAL 160.21 RAD 6568.1 VEL 12.228 PTH 2.20 VHP 7.239 DPA 30.20 RAP 191.12 ECC 1.4633
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     21.64
                                                                            34.79
                                                                                           114.10
                                                                                                        6 17 26
                    5 56 34 1251.87
                                                 18.54
                                                               350.26
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                   8 47 45
                                                  18.55
                                                               309.66
                                                                               34.79
                                                                                             114.09
                                                                                                          8 59 25
                                                                                                                           100.0
                                                                                                                                         21.65
                                                                                                                                                       302.22
                                  699.97
                                                                                                        6 17 26
8 59 25
8 0 53
                   5 56 34
                                 1251.87
                                                 18.54
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                   8 47 45
                                 699.97
895.24
                                                 18.55
                                                               309.66
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                                                                                             123.55 8 0 53
105.26 13 27 25
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                                                               317.83
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                                                                                                                                                       311.45
                                                    6.98
                                                                                                                        4792.6
                                                                               39.67
                                                                                                                                         32.75
                                                                                                                                                      238.59
                  11 57 32
                                 5392.63
                                                  30.97
                                                               247.36
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 4237.6 SGR 323.2 SG3 142.4

RRT -.2798 RRF -.5647 RTF .8710

SGB 4250.0 R23 .3330 R13 -.8715

SGI 4238.6 SG2 310.2 THA 178.77
                                                                                                                      ST 1627.1 SR 315.8 SS 535.4
CRT -.8132 CRS .9798 CST -.9120
    TDE-1.2705 TRA-2.3261 TC3-2.6067 BAU .9812
    RDE .2920 RRA -.0458 RC3 .0396 FAU .04152
   FOE -.7839 FRA -.3239 FC3-1.2768 BSP 13237
BDE 1.3037 BRA 2.3265 BC3 2.6070 FSP -462
                                                                                                                      LSA 1720.5 MSA 271.4 SSA 9.4
                                                                                                                      EL1 1647.5 EL2 181.5 ALF 170.92
                                                                                                                                 ARRIVAL DATE DEC 24 1967
                                                                       FLIGHT TIME 144.00
                                                                       DISTANCE 432.017
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.519 GAL -6.59 A7L 96.11 MCA 213.71 SMA 127.00 ECC .22550 INC 6.1095 V1 29.344
RP 107.58 LAP 3.39 LOP 162.60 VP 37.713 GAP 9.65 AZP 84.91 TAL 203.98 TAP 57.70 RCA 98.36 APO 155.64 V2 35.225
RC 151.657 GL -33.56 GP 26.00 ZAL 123.76 ZAP 149.58 ETS 55.34 ZAE 125.49 ETE 160.04 ZAC 80.67 ETC 10.51 CLP-163.63
  PLANETOCENTRIC CONIC
   C3 25.718 WHL 5.071 DLA -29.41 RAL 162.83 RAD 6568.0 VEL 12.128 PTH
                                                                                                 2.17 VHP 7.190 DPA 26.94 RAP 192.04 ECC 1.4232
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                 1174.28
                                                  18.76
                                                               344.61
                                                                              35.75
                                                                                           113.07
                                                                                                          6 43 51
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                                                                                                                                         21.73
                                                                                                                                                       337.11
       81.69
                    6 24 17
                                                                                                         8 53 12
                                 732.63
                                                  18.76
                                                               312.19
                                                                               35.76
                                                                                             113.06
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                                                                                                                                                       304.68
                   8 41 0
                    8 9 5
                                   834.85
                                                  14.94
                                                               317.92
                                                                               33.92
                                                                                             116.20
                                                                                                          8 23 0
                                                                                                                            234.8
                                                                                                                                          18.34
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123.61 8 2 7
                   9 36 52 5835.33
                                                 22.69
                                                               278.01
                                                                               37.41
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                                                                                                                                          25.21
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                    7 47 2
                                  904.29
                                                   6,64
                                                                318.31
                                                                               29.07
                                                                                             123.61
                                                                                                                           304.3
                                                                                                                                          11.01
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                  12 17 24 5338.66
                                                                                            103.08 13 46 23
                                                                              40.47
                                                                                                                         4738.7
                                                                                                                                         33.34
                                                                                                                                                       234.49
      110.00
                                                               243.41
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 4249.5 SGR 316.9 SG3 139.5
RRT -.2527 RRF -.5175 RTF .8580
SGB 4261.3 R23 .3096 R13 -.8584
SGI 4250.3 SG2 306.6 THA 178.91
                                                                                                                      ST 1589.3 SR 313.0 SS 508.4
CRT -.8242 CRS .9871 CST -.9023
   TOE-1.1948 TRA-2.1438 TC3-2.8753 BAU .9886
    ROE .2767 RRA -.0373 RC3 .0178 FAU .03994
    FOE -.7194 FRA -.2249 FC3-1.3446 BSP 12722
                                                                                                                      LSA 1676.5 MSA 267.4 SSA 10.7
    BOE 1.2265 BRA 2.1441 BC3 2.8753 FSP
                                                                                                                      ELI 1610.3 EL2 174.9 ALF 170.67
                                                                                                                                ARRIVAL DATE DEC 26 1967
                                                                       FLIGHT TIME 146.00
LAUNCH DATE AUG 2 1967
                                                                      DISTANCE 437.769
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.445 GAL -6.18 AZL 95.65 MCA 216.94 SMA 126.53 ECC .22611 INC 5.6525 V1 29.344 RP 107.60 LAP 3.39 LOP 165.85 VP 37.654 GAP 9.88 AZP 85.48 TAL 202.27 TAP 59.21 RCA 97.92 APO 155.14 VZ 35.217 RC 153.730 GL -32.13 GP 23.86 ZAL 122.62 ZAP 151.74 ETS 54.40 ZAE 126.31 ETE 161.41 ZAC 78.88 ETC 9.78 CLP-164.40
  PLANETOCENTRIC CONIC
    C3 23.712 VHL 4.870 DLA -29.01 RAL 165.54 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 7.178 DPA 24.01 RAP 193.17 ECC 1.3902
    ENCH AZHTH ENCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       21.90
                                                                                                                          510.1
                                                                                                                                                     332.44
                                                               340.00
                                                                             37.03
                                                                                           112.31
                                                                                                         7 7 21
                    6 48 51
                                 1110.13
                                                  19.04
       83.42
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116.70 8 18 18
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                                 756.84
                   8 38 4
                                                  19.05
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       96.58
                  8 3 51
10 5 45
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107.98 11 41 48
123.60 8 7 25
101.47 14 2 3
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                   12 33 43
                                                               240.54
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1618.5 SR 320.9 SS 512.4

CRT -.8486 CRS .9925 CST -.9036

LSA 1707.5 MSA 263.0 SSA 12.0

EL1 1641.5 EL2 167.4 ALF 170.35
                                                                  SCT 4371.3 SCR 322.3 SC3 143.0

RRT -.2773 RRF -.5028 RTF .8588

SCB 4383.2 R23 .2742 R13 -.8592

SCI 4372.3 SC2 309.6 THA 178.82
    TOE-1.1874 TRA-2.0106 TC3-3.2208 BAU 1.0210
   RDE .2726 RRA -.0227 RC3 .0082 FAU .03988
FDE -.6989 FRA -.1692 FC3-1.4561 BSP 13410
    BOE 1.2183 BRA 2.0108 BC3 3.2208 FSP -445
                                                                       FLIGHT TIME 148.00
                                                                                                                                 ARRIVAL DATE DEC 28 1967
LAUNCH DATE AUG 2 1967
                                                                      DISTANCE 443.512
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.37] GAL -5.77 AZL 95.26 MCA 220.17 SMA 126.06 ECC .22687 INC 5.2595 VI 29.344 RP 107.63 LAP 3.39 LOP 169.09 VP 37.595 GAP 10.10 AZP 85.98 TAL 200.54 TAP 60.71 RCA 97.46 APO 154.66 V2 35.210 RC 155.789 GL -30.83 GP 22.04 ZAL 121.16 ZAP 153.65 ETS 53.70 ZAE 126.96 ETE 162.62 ZAC 76.99 ETC 9.16 CLP-165.19
  PLANETOCENTRIC CONIC
   C3 22.027 VHL 4.693 DLA -28.81 RAL 168.37 RAD 6567.9 VEL 11.975 PTH 2.13 VHP 7.193 DPA 21.37 RAP 194.48 ECC 1.3625
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.75
                                                                                                        7 26 5
8 53 54
                                                                            38.61
                                                                                                                           465.8
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                    7 8 19
                                 1065.78
                                                 19.38
                                                               336.88
                   8 41 9
                                  765.33
                                                  19.39
                                                               314.87
                                                                               38.61
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       95.57
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                    8 8 45
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7.75 31.99 123.54 8 15 59
8.53 42.88 100.32 14 15 27
MID-COURSE EXECUTION ACCURACY
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                  10 23 24
                                 5724.75
                                                  25.08
                                                               270.66
      100.00
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                                  893.78
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      110.00
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                                                                                                                        4673.4
                                                               238.53
                  12 47 34
                                 5273.37
                                                  32.77
                                                                                                                                         33.85
                                                                                                                                                       229.46
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 4459.7 SCR 328.5 SC3 143.8
RRT -.2852 RRF -.4774 RTF .8569
SCB 4471.8 R23 .2418 R13 -.8573
                                                                                                                      ST 1641.4 SR 328.1 SS 510.6
CRT -.8712 CRS .9962 CST -.9046
    TOE-1.1812 TRA-1.8606 TC3-3.5476 BAU 1.0447
    ROE .2688 RRA -.0119 RC3 -.0040 FAU .03906
FOE -.6711 FRA -.1050 FC3-1.5353 BSP 13756
BDE 1.2114 BRA 1.8606 BC3 3.5476 FSP -451
                                                                                                                     LSA 1731.1 MSA 256.5 SSA 13.4
                                                                                                                     EL1 1666.4 EL2 158.7 ALF 170.03
                                                                   561 4460.7 SG2 314.8 THA 178.79
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FLIGHT TIME 142.00

ARRIVAL DATE DEC 30 1967

LAUNCH DATE AUG 2 1967

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DISTANCE 449.245
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.299 GAL -5.35 AZL 94.92 MCA 223.40 SMA 125.61 ECC .22780 INC 4.9159 V1 29.344 RP 107.65 LAP 3.38 LOP 172.34 VP 37.556 GAP 10.32 AZP 86.42 TAL 198.81 TAP 62.21 RCA 96.99 APO 154.22 V2 35.201 RC 157.834 GL -29.63 GP 20.47 ZAL 119.40 ZAP 155.36 ETS 53.21 ZAE 127.48 ETE 163.70 ZAC 75.02 ETC 8.62 CLP-165.98
   PLANETOCENTRIC CONIC
    C3 20.597 VHL 4.538 DLA -28.79 RAL 171.33 RAD 6567.8 VEL 11.915 PTH 2.12 VHP 7.230 DPA 18.96 RAP 195.92 ECC 1.3390
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           111.37 7 36 38

111.36 9 4 27

116.53 8 34 7

106.26 12 11 2

123.43 8 27 14

99.58 14 27 17
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                    7 21 12 1046.19
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       84.56
                                 752.62
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                                                                                                                                                         306.45
                                                   19.78
                                                                314.10
                                                                                40.48
       95.44
                   8 51 54
                                                                                                                                                         312.06
                                                                               37.94
                                                                                                                            255.8
                                                                                                                                           17.75
                                                                319.16
                                                   14.31
      100.00
                   A 19 52
                                   855.79
                                                                                42.57
                                                                                                                           5106.3
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                                                   25.43
                                 5706.28
                                                                269.41
      100.00
                  10 35 56
                                                                                                                            278.6
                                                                                                                                           11.95
                                                                                                                                                         310.55
                                                                               34.01
                                                    7.61
                                                                316.95
      110.00
                   8 12 36
                                  878.65
                                                                                                                           4656.2
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                                                                                                                                                         228.13
                                                                237.23
                                                                                44.55
                                                   32.97
      110.00
                  12 59 41
                                 5256.20
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 4537.1 SGR 336.5 SG3 143.6
RRT -.2899 RRF -.4516 RTF .8551
                                                                                                                      ST 1669.2 SR 336.2 SS 508.6
CRT -.8937 CRS .9982 CST -.9069
    TDE-1.1838 TRA-1.7026 TC3-3.8695 BAU 1.0655
    RDE .2663 RRA -.0028 RC3 -.0156 FAU .03796
                                                                    SGB 4549.6 R23 .2115 R13 -.8554
SG1 4538.2 SG2 322.0 THA 178.76
                                                                                                                       LSA 1759.6 MSA 248.2 SSA 14.8
   FDE -.6439 FRA -.0412 FC3-1.5954 BSP 14012
BDE 1.2134 BRA 1.7026 BC3 3.8695 FSP -451
                                                                                                                       EL1 1696.2 EL2 148.5 ALF 169.72
                                                                                                                                   ARRIVAL DATE JAN 1 1968
                                                                        FLIGHT TIME 152.00
LAUNCH DATE AUG 2 1967
                                                                        DISTANCE 454.965
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 26.228 GAL -4.91 ATL 94.61 HCA 226.65 SMA 125.16 ECC .22891 INC 4.6112 V1 29.344
RP 107.68 LAP 3.35 LOP 175.58 VP 37.478 GAP 10.55 AZRE 86.83 TAL 197.07 TAP 63.70 RCA 96.51 APO 153.81 V2 35.192
RC 159.865 GL -28.50 GP 19.11 ZAL 117.37 ZAP 156.89 ETS 52.92 ZAE 127.91 ETE 164.65 ZAC 72.98 ETC 8.15 CLP-166.77
  PLANETOCENTRIC CONIC
    C3 19.379 VHL 4.402 DLA -28.91 RAL 174.45 RAD 6567.8 VEL 11.864 PTH
                                                                                                 2.10 VHP 7.282 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             42.65
                                                                                                           7 45 52
                                                                                                                             448.6
                                                                                                                                          22.90
                                                                                                                                                         328.27
                                                   20.20
                                                                335.96
                                                                                              111.13
                    7 28 23 1048.58
       41.92
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                                                                                              111.12
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                                  721.20
                                                   20.21
       96.04
                   9 9 34
                                                                                               116.10
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                   10 44 37 5703.97
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      100.00
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99.18 14 38 1
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      110.00
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                                   858.85
                                                                 315.89
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                                                                                                                                            33.99
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                   13 10 34
                                                   33.07
                                                                236.53
      110.00
                                  5246.96
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 4612.4 SCR 346.3 SC3 143.0
RRT -.2955 RRF -.4291 RTF .8541
SCB 4625.4 R23 .1837 R13 -.8544
SCI 4613.6 SC2 330.8 THA 178.72
                                                                                                                       ST 1706.5 SR 345.5 SS 508.5
CRT -.9156 CRS .9983 CST -.9109
    TDE-1.1973 TRA-1.5394 TC3-4.1898 BAU 1.0855
    ROE .2655 RRA .0050 RC3 -.0256 FAU .03674
FOE 4.6201 FRA .0197 FC3-1.6412 BSP 14270
BOE 1.2264 BRA 1.5394 BC3 4.1899 FSP -449
                                                                                                                       LSA 1798.1 MSA 238.3 SSA 16.2
                                                                                                                        ELI 1735.7 EL2 136.6 ALF 169.43
                                                                                                                                  ARRIVAL DATE JAN 3 1968
                                                                        FLIGHT TIME 154.00
LAUNCH DATE AUG 2 1967
                                                                        DISTANCE 460.672
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 26.157 GAL -4.47 A7L 94.34 MCA 229.86 SMA 124.73 ECC .23019 INC 4.3374 VI 29.344 RP 107.71 LAP 3.31 LOP 178.82 VP 37.420 GAP 10.79 A7P 87.20 TAL 195.32 TAP 65.18 RCA 96.02 APO 153.44 V2 35.183 RC 161.876 GL -27.42 GP 17.93 7AL 115.07 7AP 158.29 ETS 52.84 7AE 128.27 ETE 165.50 7AC 70.89 ETC 7.75 CLP-167.55
   PLANETOCENTRIC CONIC
    C3 18.343 VHL 4.283 DLA -29.14 RAL 177,74 RAD 6567.7 VEL 11.821 PTH 2.09 VHP 7.349 DPA 14.67 RAP 199.13 ECC 1.3019
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             111.01 7 50 22
111.00 9 42 54
115.43 9 10 23
106.60 12 24 57
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        82.81
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        97.19
                    9 31 34
                                   679.67
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       100.00
                    8 57 13
                                   789.96
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       100.00
                   10 49 40 5717.23
                                                                                               123.06 8 56 42
99.07 14 48 0
                   8 42 46 835.42
13 20 35 5244.54
                                                                                39.09
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       110.00
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                                                                 236.34
                                                                                48.86
       110.00
                                                   33.10
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4676.7 SGR 356.8 SG3 141.8

RRT -.2998 RRF -.4084 RTF .8529

SGB 4690.3 R23 .1587 R13 -.8531

SGI 4678.0 SG2 340.3 THA 178.68
                                                                                                                       ST 1747.7 SR 355.3 SS 507.6
CRT -.9358 CRS .9966 CST -.9155
LSA 1840.2 MSA . 227.0 SSA 17.8
    TOE-1.2161 TRA-1.3667-TC3-4.4978 BAU 1.1030
    RDE .2655 RRA .0111 RC3 -.0343 FAU .03534
FDE -.5961 FRA .0802 FC3-1.6681 BSP 14452
    BDE 1.2447 BRA 1.3668 BC3 4.4979 FSP -443
                                                                                                                        EL1 1779.2 EL2 123.0 ALF 169.18
                                                                         FLIGHT TIME 156.00
                                                                                                                                   ARRIVAL DATE JAN 5 1968
LAUNCH DATE AUG 2 1967
   HELIOCENTRIC CONIC
                                                                        DISTANCE 466.364
    RL 151.83 LAL -.00 LOL 309.04 VL 26.088 GAL -4.01 AZL 94.09 MCA 233.09 SMA 124.31 ECC .23168 INC 4.0887 V1 29.344
RP 107.74 LAP 3.27 LOP 182.06 VP 37.362 GAP 11.02 AZP 87.54 TAL 193.57 TAP 66.65 RCA 95.51 APO 153.10 V2 35.172
RC 163.875 GL -26.35 GP 16.89 ZAL 112.53 ZAP 159.57 ETS 52.95 ZAE 128.58 ETE 166.24 ZAC 68.74 ETC 7.40 CLP-168.34
   PLANETOCENTRIC CONIC
    C3 17.472 VHL 4.180 DLA -29.46 RAL 181.21 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 7.427 DPA 12.73 RAP 200.86 ECC 1.2875
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         23.83
                                                                              47.91
                                                                                             110.98 7 54 19
110.97 10 6 15
                     7 36 13 1085.83
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        81.52
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107.58 12 25 49
122.81 9 14 28
99.22 14 57 33
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                                  5749.56
                                                                 272.34
                   10 49 59
       100.00
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                                                                 236.60
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                                  5247.97
                                                    33.06
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1800.5 SR 366.1 SS 509.0
CRT -.9538 CRS .9932 CST -.9214
LSA 1894.3 MSA 214.5 SSA 19.4
                                                                     SGT 4746.6 SGR 368.5 SG3 140.7
    TDE-1.2448 TRA-1.1900 TC3-4.8010 BAU 1.1215
                                                                    RRT -.3073 RRF -.3934 RTF .8533
SGB 4760.8 R23 .1364 R13 -.8536
    ROE .2670 RRA .0163 RC3 -.0403 FAU .03399
FDE -.5759 FRA .1364 FC3-1.6844 BSP 14699
BOE 1.2731 BRA 1.1901 BC3 4.8012 FSP -441
                                                                                                                        ELI 1834.1 ELZ 107.9 ALF 168.99
                                                                     SG1 4747.9 SG2 350.5 THA 178.63
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FLIGHT TIME 150.00

ARRIVAL CATE JAN 7 1968

LAUNCH DATE AUG 2 1967

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DISTANCE 472.041
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 26.020 GAL -3.54 AZL 93.86 MCA 236.32 SMA 123.89 ECC .23336 INC 3.8602 VI 29.344 RP 107.78 LAP 3.21 LOP 185.29 VP 37.304 GAP 11.27 AZP 87.86 TAL 191.81 TAP 68.12 RCA 94.98 APO 152.81 V2 35.162 RC 165.860 GL -25.29 GP 15.97 ZAL 109.76 ZAP 160.75 ETS 53.26 ZAE 128.84 ETE 166.91 ZAC 66.55 ETC 7.10 CLP-169.11
   PLANETOCENTRIC CONIC
    C3 16.753 VHL 4.093 DLA -29.84 RAL 184.87 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 7.517 DPA 10.91 RAP 202.65 ECC 1.2757
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                111.03 7 58 59
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        99.82
                    10 20 38 5880.65
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122.51 9 34 2
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                   10 36 59
                                 5828.42
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       110.00
                                                     12.97
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1859.0 SR 377.5 SS 510.5
CRT -.9689 CRS ..9882 CST -.9276
LSA 1954.0 MSA 201.4 SSA 21.1
EL1 1894.7 EL2 91.6 ALF 168.84
                                                                      SCT 4814.7 SCR 380.4 SC3 139.5
RRT -.3161 RRF -.3822 RTF .8549
SCB 4829.7 R23 .1165 R13 -.8551
SCI 4816.2 SC2 360.8 THA 178.56
    TOE-1.2785 TRA-1.0062 TC3-5.0871 BAU 1.1394
ROE .2696 RRA .0201 RC3 -.0437 FAU .03264
FOE -.5569 FRA .1900 FC3-1.6867 BSP 14958
BOE 1.3066 BRA 1.0064 BC3 5.0873 FSP -439
                                                                                                                                        ARRIVAL DATE JAN 9 1968
                                                                           FLIGHT TIME 160.00
LAUNCH DATE AUG 2 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 477.701
    RL 151.83 LAL -.00 LOL 309.04 VL 25.953 GAL -3.06 AZL 93.65 MCA 239.54 SMA 123.49 ECC .23526 INC 3.6485 V1 29.344
RP 107.81 LAP 3.14 LOP 188.32 VP 37.247 GAP 11.52 AZP 88.15 TAL 190.04 TAP 69.58 RCA 94.44 APO 152.54 V2 35.151
RC 167.829 GL -24.20 GP 15.16 ZAL 106.77 ZAP 161.83 ETS 53.77 ZAE 129.08 ETE 167.50 ZAC 64.33 ETC 6.85 CLP-169.87
   PLANETOCENTRIC CONIC
    C3 16.179 VHL 4.022 DLA -30.25 RAL 188.74 RAD 6567.6 VEL 11.729 PTH 2.07 VHP 7.616 DPA 9.19 RAP 204.51 ECC 1.2663 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                     7 46 10 1132.36
10 45 48 5841.61
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      110.00
                                                     32.62
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      RRT - .3246 RRF - .3735 RTF .8567
SGB 4893.0 R23 .0992 R13 - .8569
SGI 4879.0 SGZ 370.9 THA 178.50
    TOE-1.3139 TRA -.8131 TC3-5.3448 BAU 1.1561
                                                                                                                            ST 1918.6 SR 389.0 SS 510.6
CRT -. 9808 CRS .. 9817 CST -. 9334
    ROE .2730 RRA .0223 RC3 -.0451 FAU .03123
FOE -.5375 FRA .2427 FC3-1.6713 B9P 15179
BOE 1.3420 BRA .8134 BC3 5.3449 FSP -435
                                                                                                                            LSA 2014.2 MSA 188.4 SSA 22.8
                                                                                                                            ELI 1956.3 ELZ 74.4 ALF 168.74
                                                                                                                                       ARRIVAL DATE JAN 11 1968
                                                                          FLIGHT TIME 162.00
LAUNCH DATE AUG 2 1967
                                                                          DISTANCE 483.343
   HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.887 GAL -2.56 AZL 93.45 HCA 242.76 SMA 123.10 ECC .23738 INC 3.4504 V1 29.344 RP 107.84 LAP 3.07 LOP 191.76 VP 37.190 GAP 11.77 AZP 88.42 TAL 188.28 TAP 71.04 RCA 93.88 APO 152.32 VZ 35.139
    RC 169.783 GL -23.09 GP 14.44 7AL 103.58 ZAP 162.84 ETS 54.49 ZAE 129.28 ETE 168.02 ZAC 62.08 ETC
   PLANETOCENTRIC CONIC
    C3 15.749 VHL 3.969 DLA -30.67 RAL 192.80 RAD 6567.6 VEL 11.710 PTH 2.06 VHP 7.725 DPA 7.56 RAP 206.41 ECC 1.2592
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   7 53 35 1154.17
11 10 49 5807.56
7 53 35 1154.17
11 10 49 5807.56
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                                                                  308.62
                   13 58 6 5284.96
                                                                                                                               4685.0
                                                     32.62
                                                                  239.40
                                                                                   61.49
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4926.7 SGR 403.5 SG3 136.1
RRT - .3315 RRF - .3656 RTF .8580
SGB 4943.2 R23 .0842 R13 - .8581
SG1 4928.6 SG2 380.5 THA 178.44
                                                                                                                           ST 1971.8 SR 400.2 SS 507.2
CRT -.9894 CRS .9731 CST -.9381
LSA 2067.3 MSA 176.1 SSA 24.7
    TDE-1.3460 TRA -.6082 TC3-5.5570 BAU 1.1701
    RDE .2771 RRA .0228 RC3 -.0450 FAU .02972 FDE -.5154 FRA .2957 FC3-1.6339 BSP 15310
                                                                                                                            EL1 2011.2 EL2 56.9 ALF 168.63
    BDE 1.3742 BRA .6087 BC3 5.5572 FSP -427
                                                                                                                                       ARRIVAL DATE JAN'13 1968
                                                                           FLIGHT TIME 164.00
LAUNCH DATE AUG 2 1967
                                                                          DISTANCE 488.964
   RL 151.83 LAL -.00 LOL 309.04 VL 25.821 GAL -2.04 AZL 93.26 MCA 245.98 SMA 122.72 ECC .23975 INC 3.2636 VI 29.344
RP 107.88 LAP 2.98 LOP 194.98 VP 37.134 GAP 12.04 AZP 88.67 TAL 186.51 TAP 72.49 RCA 93.29 APO 152.14 V2 35.128
RC 171.722 GL -21.94 GP 13.80 ZAL 100.21 ZAP 163.77 ETS 55.41 ZAE 129.47 ETE 168.48 ZAC 59.80 ETC 6.48 CLP-171.38
   PLANETOCENTRIC CONIC...
    C3 15.463 VHL 3.932 DLA -31.07 RAL 197.05 RAD 6567.6 VEL 11.698 PTH 2.06 VHP 7.844 DPA
                                                                                                                                   6.00 RAP 208.36 ECC 1.2545
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               62.31
                     8 2 58 1173.94
11 35 20 5779.51
8 2 58 1173.94
11 35 20 5779.51
                                                                  346.43
                                                                                                111.52 8 22 32
                                                                                                                                 573.9
                                                    22.98
        76.64
                                                                                   62.32
                                                                                                  111.50
                                                                                                             13 11 39
                                                                                                                                5179.5
                                                                                                                                                25.70
                                                                                                                                                              266.11
                                                     22.99
                                                                  273.96
      103.36
                   11 35 20
                                                                                                 111.52
                                                                                                              8 22 32
                                                                                                                                  573.9
                                                                                                                                                25.69
                                                                  346.43
                                                                                   62.31
                    8 2 58
                                                     22.98
        76.64
                                                                                                  111.50 13 11 39
121.43 10 40 48
101.59 15 36 42
                                                                                                                                5179.5
                                                                                                                                                25.70
                                                                                                                                                              266.11
                                                                  273.96
                                                                                   62.32
       103.36
                    11 35 20
                                                    22.99
                                                                                                                                                18.25
       110.00
                    10 29 9
                                    698.56
                                                     14.20
                                                                   307.17
                                                                                   57.71
                                                                                                                                4702.9
                                                                                                                                                 33.64
                    14 8 19 5302.89
                                                    32.39
                                                                   240.75
                                                                                   65.47
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4983.5 SCR 414.7 SC3 134.4

RRT -.3408 RRF -.3623 RTF .8611

SCB 5000.7 R23 .0714 R13 -.8612
                                                                                                                            ST 2025.8 SR 411.8 SS 503.9
    TOE-1.3802 TRA -.3979 TC3-5.7334 BAU 1.1853
                                                                                                                           CRT -.9949 CRS .9632 CST -.9427
LSA 2121.2 MSA 165.3 SSA 26.5
EL1 2066.8 EL2 40.6 ALF 168.56
    RDE .2825 RRA .0220 RC3 -.0420 FAU .02831
    FDE -.4951 FRA .3453 FC3-1.5852 BSP 15528
BDE 1.4088 BRA .3985 BC3 5.7336 FSP -423
                                                                       SG1 4985.5 SG2 389.7 THA 178.37
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FLIGHT TIME 158.00

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ARRIVAL DATE JAN 15 1968
                                                                    FLIGHT TIME 166.00
LAUNCH DATE AUG 2 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 494.563
   RL 151.83 LAL -.00 LOL 309.04 VL 25.757 GAL -1.51 AZL 93.09 MCA 249.20 SMA 122.34 ECC .24237 INC 3.0861 VI 29.344
RP 107.92 LAP 2.88 LOP 198.21 VP 37.078 GAP 12.31 AZP 88.90 TAL 184.74 TAP 73.94 RCA 92.69 APO 151.99 VZ 35.116
RC 173.647 GL -20.74 GP 13.22 ZAL 96.69 ZAP 164.64 ETS 56.56 ZAE 129.63 ETE 168.90 ZAC 57.50 ETC 6.36 CLP-172.12
  PLANETOCENTRIC CONIC
    C3 15.324 VHL 3.915 CLA -31.43 RAL 201.47 RAD 6567.6 VEL 11.692 PTH 2.06 VHP 7.973 CPA
                                                                                                                        4.51 RAP 210.36 ECC 1.2522
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      111.73 8 34 18
111.72 13 35 4
111.73 8 34 18
111.73 8 34 18
111.73 13 35 4
121.08 11 4 22
102.37 15 48 18
                                                                        66.70
                                                            347.87
                                                                                                                     591.3
                   A 14 26 1191.26
                                                23.28
       75.77
                                                                            66.70
                                                                                                                     5158.1
                                                                                                                                    26.03
                                                                                                                                                 264.62
                                5758.13
                                                 23.29
                                                             272.48
      104.23
                 11 59 6
                                                                                                                                    26,02
                                                                                                                                                 340.01
                                                             347,87
                                                                            66.70
                                                                                                                     591.3
       75.77
                   8 14 26
                               1191.26
                                                23.28
                                                             272.48
                                                                            66.70
                                                                                                                     5158.1
                                                                                                                                    26.03
                                                                                                                                                 264.62
                                                 23.29
      104.23
                 11 59 6 5758.13
                                                                                                                      75.9
                                                                                                                                    19.01
                                                                                                                                                 299.08
                                                             305.90
                                                                            62.35
                 10 53 6
                                675.93
                                                15.00
      110.00
                 14 19 36 5321.46
                                                                                                                     4721.5
                                                                                                                                    33.49
                                                                                                                                                 233.17
                                                             242.13
                                                                            69.76
      110.00
                                                32.12
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5037.0 SGR 425.3 SG3 132.6
RRT - .3504 RRF - .3610 RTF .8649
SGB 5054.9 R23 .0599 R13 - .8650
SGI 5039.2 SG2 398.1 THA 178.29
                                                                                                                 ST 2069.H SR 423.0 SS 497.7
CRT -.9974 CRS .9515 CST -.9464
    TDE-1.4096 TRA -.1780 TC3-5.8561 BAU 1.1998
   RDE .2890 RRA .0198 RC3 -.0369 FAU .02694
FDE -.4732 FRA .3936 FC3-1.5218 BSP 15740
BDE 1.4389 BRA .1791 BC3 5.8562 FSP -420
                                                                                                                 LSA 2164.5 MSA 156.7 55A 28.0
                                                                                                                 EL1 2112.3 EL2 29.6 ALF 168.47
                                                                                                                            ARRIVAL CATE JAN 17 1968
                                                                    FLIGHT TIME 164.00
LAUNCH DATE AUG 2 1967
                                                                   DISTANCE 500.138
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.694 GAL -.96 A7L 92.92 MCA 252.42 SMA 121.98 ECC .24527 INC 2.9161 V1 29.344
RP 107.96 LAP 2.78 LOP 201.43 VP 37.023 GAP 12.60 A7P 89.12 TAL 182.96 TAP 75.38 RCA 92.06 APO 151.89 V2 35.103
RC 175.555 GL -19.49 GP 12.70 7AL 93.04 7AP 165.45 ETS 57.94 7AE 129.79 ETE 169.27 7AC 55.19 ETC 6.27 CLP-172.85
  PLANETOCENTRIC CONIC
    C3 15.339 VHL 3.917 OLA -31.71 RAL 206.03 RAD 6567.6 VEL 11.693 PTH
                                                                                             2.06 VHP 8.111 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 8 28 1 1205.90
12 21 52 5743.92
                                                                                        111.96
                                                                                                      8 48 7
                                                                                                                      605.9
                                                                                                                                  26.24
                                                                                                                                                 341.21
                                                23.47
                                                             349.06
                                                                            71.36
       75.10
                                                                                          111.94 13 57 36
                                                                                                                      5143.9
                                                                                                                                                  263.63
                                                                            71.36
                                                                                                                                     26.25
                                                 23.48
                                                             271.48
      104.90
                                                                                        111.96 8 48 7
111.94 13 57 36
120.81 11 27 37
103.09 16 1 24
                                                                                                                       605.9
                                                                                                                                     26.24
                                                                                                                                                  341.21
       75.10
                                1205.90
                                                 23.47
                                                             349.06
                                                                            71.36
                   8 28 1
                                                                                                                      5143.9
                                                                                                                                     26.25
                                                                                                                                                 263.63
                 12 21 52 5743.92
                                                             271.48
                                                                            71.36
      104.90
                                                 23.48
                                                                                                                                                 298,07
                                                             304.94
                                                                            67.22
                                                                                                                       58.8
                                                                                                                                     19.57
      110.00
                 11 16 39
                                658.80
                                                15.60
                                                                                                                  4739.0
                               5339.01
                                                                                                                                   33.33
                                                                                                                                                 234.51
                 14 32 25
                                                                            74.35
      110.00
                                                             243.43
                                                31.86
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 5084.4 SGR 434.8 SG3 130.5

RRT -.3591 RRF -.3604 RTF .8687

SGB 5103.0 R23 .0498 R13 -.8688

SGI 5086.8 SG2 405.6 THA 178.23
                                                                                                                 ST 2098.1 SR 433.4 SS 487.4
CRT -.9972 CRS .9372 CST -.9489
    TOE-1.4309 TRA .0520 TC3-5.9142 BAU 1.2128
    ROE .2962 RRA .0158 RC3 -.0305 FAU .02553
FOE -.4486 FRA .4415 FC3-1.4411 BSP 15923
                                                                                                               LSA 2191.7 MSA 151.5 SSA 29.2
    BOE 1.4613 BRA .0544 BC3 5.9143 FSP -415
                                                                                                                  EL1 2142.2 EL2 31.8 ALF 168.36
                                                                                                                           ARRIVAL DATE JAN 19 1968
                                                                    FLIGHT TIME 170.00
LAUNCH DATE AUG 2 1967
                                                                   DISTANCE 505.686
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.ON LOL 309.04 VL 25.632 GAL -.39 AZL 92.75 MCA 255.63 SMA 121.62 ECC .24846 INC 2.7522 VI 29.344 RP 107.99 LAP 2.67 LOP 204.65 VP 36.968 GAP 12.90 AZP 89.32 TAL 181.19 TAP 76.82 RCA 91.40 APO 151.84 VZ 35.091
    RC 177.448 GL -18.21 GP 12.23 TAL 89.30 TAP 166.21 ETS 59.57 TAE 129.93 ETE 169.61 TAC 52.85 ETC
                                                                                                                                      6.23 CLP-173.58
  PLANETOCENTRIC CONIC
    C3 15.516 VHL 3.939 CLA -31.90 RAL 210.68 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 8.260 CPA 1.73 RAP 214.46 ECC 1.2553
    ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJERT ASC INJEZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       112.18 9 3 55
112.16 14 19 1
112.18 9 3 55
112.16 14 19 1
120.65 11 49 49
103.70 16 16 26
                                                                                                                      617.8
                                                                                                                                 26.33
       74.66
                   8 43 37 1217.75
                                                                           76.25
                                                23.54
                                                             349.99
                                                                            76.25
                                                                                                                     5137.2
                                                                                                                                                 263.15
      105.34
                 12 43 24
                                5737.23
                                                 23.55
                                                             271.00
                                                                                                                                                 342.14
                                                             349.99
                                                                                                                      617.8
                                                                                                                                    26.33
       74.66
                                                                            76.25
                   8 43 37 1217.75
                                                23.54
                               5737.23
                                                                            76.25
                                                                                                                     5137.2
                                                                                                                                    26.35
                                                                                                                                                 263.15
                                                             271.00
      105.34
                  12 43 24
                                                23.55
                                                                                                                       49.2
                                                                                                                                    19.88
                                                                                                                                                 297.50
                                                                            72.24
      110.00
                                                             304.39
                 11 39 0
                                649.23
                                                15.93
                                                                                                                  4753.7
                 14 47 12 5353.75
                                                                                                                                                 235.64
                                                                            79.20
                                                                                                                                    33.19
      110.00
                                                31.63
                                                             244.52
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                RET - .3675 RRF - .3623 RFF .8725
SGB 5144.0 R23 .0426 R13 - .8726
SGI 5127.5 SG2 412.5 THA 178.17
                                                                                                                 ST 2108.9 SR 443.0 SS 475.6
    TDE-1.4429 TRA .2936 TC3-5.9003 BAU 1.2239
                                                                                                                 CRT -.9942 CRS .9202 CST -.9506
    RCE .3046 RRA .0103 RC3 -.0233 FAU .02411
FDE -.4237 FRA .4894 FC3-1.3452 BSP 16094
                                                                                                                 LSA 2201.4 MSA 150.4 SSA 29.7
                                                                                                                 EL1 2154.4 EL2 46.5 ALF 168.20
    BCE 1.4747 BRA .2938 BC3 5.9003 FSP -413
                                                                                                                            ARRIVAL CATE JAN 21 1968
                                                                    FLIGHT TIME 172,00
LAUNCH DATE AUG 2 1967
                                                                    DISTANCE 511.204
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.571 GAL .20 A7L 92.59 HCA 258.84 SMA 121.27 ECC .25197 INC 2.5930 VI 29.344 RP 108.03 LAP 2.54 LOP 207.87 VP 36.913 GAP 13.21 A7P 89.50 TAL 179.41 TAP 78.26 RCA 90.72 APO 151.83 VZ 35.078 RC 179.325 GL -16.88 GP 11.81 7AL 85.51 7AP 166.90 ETS 61.45 7AE 130.06 ETE 169.90 7AC 50.51 ETC 6.24 CLP-174.30
  PLANETOCENTRIC CONIC
    C3 15.866 VHL 3.983 DLA -31.98 RAL 215.39 RAC 6567.6 VEL 11.715 PTH 2.06 VHP 8.421 DPA
                                                                                                                          .42 RAP 216.56 ECC 1.2611
    ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJERT ASC INJEZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         81.33
                                                                                        112.38 9 21 38
                                                                                                                               26.29
                                                                                                                                              342.HG
                                                             350.63
                                                                                                                       626.6
                                                23.46
       74 48
                   9 1 12
                                1226.58
                                                                                          112.36 14 39 3
                                                                                                                      5138.5
                                                                                                                                     26.30
                                                                                                                                                  263.23
                                                             271.07
                                                                            81.33
                                                 23.47
      105.52
                 13 3 24
                                5738.49
                                                                                         342.RIT
                                                                                                                       626.6
                                                                                                                                     26.29
                                                             350.63
       74.48
                   9 1 12
                               1226.58
                                                 23.46
                                                                            81.33
                                                                                                                      5138.5
                                                                                                                                                 263.23
                  13 3 24
                                                                                                                                     26.30
                                573A.49
                                                             271.07
                                                                            81.33
                                                23.47
      105.52
                                                                                                                                     19.89
                                                                                                                                                  297.4B
                                                                                                                       49.0
                                                                            77.35
      110.00
                  11 59 26
                                 648.99
                                                 15.94
                                                             304.38
                                                                                                                                     33.OR
                                                                                                                      4764.1
                                                                                                                                                 236.42
                                5364.08
                                                             245.28
                                                                            84.30
      110.00
                 15 4 21
                                               31.46
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2095.3 SR 450.7 SS 458.3
CRT - 9884 CRS .8968 CST - .9495
                                                                SGT 5160.9 SGR 450.8 SG3 126.4
RRT -.3756 RRF -.3627 RTF .8751
SGB 5180.6 R23 .0344 R13 -.8752
    TOE-1.4403 TRA .5495 TC3-5.8170 BAU 1.2338
    ROE .3133 RRA .0025 RC3 -.0151 FAU .02273
FOE -.3933 FRA .5416 FC3-1.2403 BSP 16177
BOE 1.4740 BRA .5495 BC3 5.8170 FSP -402
                                                                                                                LSA 2185.9 MSA 155.5 SSA 29.3
                                                                                                            ELI 2142.1 ELZ 66.9 ALF 167.99
                                                                 SG1 5163.7 SG2 417.6 THA 178.11
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ARRIVAL DATE JAN 23 1968

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FLIGHT TIME 174.00
LAUNCH DATE AUG 2 1967
                                                                              DISTANCE 516.689
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.511 CAL .81 AZL 92.44 MCA 262.05 SMA 120.93 ECC .25582 INC 2.4375 V1 29.344 RP 108.07 LAP 2.41 LOP 211.08 VP 36.859 CAP 13.53 AZP 89.66 TAL 177.64 TAP 79.70 RCA 90.00 APO 151.87 V2 35.065 RC 181.185 CL -15.54 CP 11.43 ZAL 81.71 ZAP 167.55 ETS 63.60 ZAE 130.17 ETE 170.18 ZAC 48.15 ETC 6.29 CLP-175.02
   PLANETOCENTRIC CONIC
    C3 16.403 VHL 4.050 DLA -31.94 RAL 220.10 RAD 6567.7 VEL 11.738 PTH
                                                                                                          2.07 VHP 8.593 DPA
                                                                                                                                         -.83 RAP 218.70 ECC 1.2699
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   112.55 9 41 7
112.55 9 41 7
112.55 9 41 7
112.55 9 41 7
112.54 14 57 25
120.62 12 26 24
104.32 16 53 27
                                                                                    86.55
                                                                     350.97
                                                                                                                                      632.4 26.09
                       9 20 35 1232.35
                                                       23.24
        74.57
                                    5747.88
                                                       23.25
                                                                      271.68
                                                                                       86.55
                                                                                                                                      5147.9
                                                                                                                                                                      263.87
       105.43
                    13 21 37
                                                                      350.97
                                                                                       86.55
                                                                                                                                       632.4
                                                                                                                                                       26.09
        74.57
                      9 20 35
                                    1232.35
                                                       23.24
                                                                                       86.55
                                                                                                                                      5147.9
                                                                                                                                                       26.10
                                                                                                                                                                      263.87
                                    5747.88
                                                       23.25
                                                                      271.68
                    13 21 37
12 17 24
       105.43
                                                                                       82.47
                                                                      304.96
                                      659.20
                                                       15.58
       110.00
                                    5369.03
                                                                      245.64
                                                                                       89.60
                                                                                                                                      4769.0
                                                                                                                                                       33.02
                                                                                                                                                                      236.80
       110.00
                                                     31.36
                    15 23 58
                                                                          MID-COURSE EXECUTION ACCURACY
SGT 5195.6 SGR 457.5 SG3 123.6
RRT -.3829 RRF -.3661 RTF .8802
SGB 5215.7 R23 .0290 R13 -.8803
SGI 5198.6 SG2 422.4 THA 178.06
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE-1.4286 TRA .8090 TC3-5.6697 BAU 1.2433

RDE .3233 RRA -.0057 RC3 -.0072 FAU .02132

FDE -.3644 FRA .5849 FC3-1.1255 BSP 16326

BDE 1.4647 BRA .8090 BC3 5.6697 FSP -395
                                                                                                                                 ST 2065.7 SR 457.4 SS 440.6
CRT -.9795 CRS .8719 CST -.9497
                                                                                                                                LSA 2154.8 MSA 163.1 SSA 28.3
                                                                                                                                  EL1 2113.8 EL2 90.0 ALF 167.74
                                                                              FLIGHT TIME 176.00
                                                                                                                                              ARRIVAL DATE JAN 25 1968
LAUNCH DATE AUG 2 1967
                                                                              DISTANCE 522.136
  HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.452 GAL 1.45 A7L 92.28 MCA 265.26 SMA 120.60 ECC .26005 INC 2.2844 V1 29.344 RP 108.11 LAP 2.28 LOP 214.29 VP 36.806 GAP 13.88 A7P 89.81 TAL 175.87 TAP 81.13 RCA 89.24 APO 151.97 V2 35.052 RC 183.028 GL -14.18 GP 11.08 ZAL 77.92 ZAP 168.14 ETS 66.04 ZAE 130.28 ETE 170.42 ZAC 45.79 ETC 6.39 CLP-175.73
   PLANETOCENTRIC CONIC
    C3 17.144 VHL 4.141 DLA -31.78 RAL 224.77 RAD 6567.7 VEL 11.770 PTH
                                                                                                          2.08 VHP 8.779 DPA
                                                                                                                                         -2.04 RAP 220.86 ECC 1.2822
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      9 41 43 1234.60
13 37 42 5765.95
                                                                      350.97
                                                                                                                  10 2 17
        74.94
                                                       22.86
                                                                                      91.85
                                                                                                     112.69
                                                                                                                                        634.6
                    13 37 42
                                                                                                       112.68 15 13 48
                                                       22.87
                                                                      272.88
                                                                                       91.86
                                                                                                                                       5165.9
                                                                                                                                                        25.74
       105.06
                                                                                                     112.69 10 2 17
112.68 15 13 48
121.15 12 44 3
104.30 17 15 20
                                                                                                                                        634.6
                                                                                                                                                        25.73
                      9 41 43
                                    1234.60
                                                       22.86
                                                                      350.97
                                                                                       91.85
                                                                                                                                                                      343.19
        74.94
                    13 37 42 5765.95
                                                       22.87
                                                                                                                                      5165.9
                                                                                                                                                        25.74
                                                                                                                                                                      265.10
       105.06
                                                                      272.88
                                                                                       91.86
                                                                                                                                        79.9
                                                                                                                                                        18.87
                                                                                                                                                                      299.31
                    12 32 43
                                      679.94
                                                       14.86
                                                                      306.13
                                                                                       87.57
       110.00
                                  5368.60
                    15 45 52
                                                                                                                                 4768.6
                                                       31.36
                                                                      245.61
                                                                                       95.06
                                                                                                                                                        33.03
                                                                                                                                                                     236.77
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 5227.0 SCR 462.8 SC3 121.3
RRT -.3911 RRF -.3698 RTF .8848
SCB 5247.4 R23 .0233 R13 -.8849
SCI 5230.1 SC2 425.7 THA 178.00
                                                                                                                                 ST 2016.0 SR 462.1 SS 421.3
CRT -.9669 CRS .8394 CST -.9480
    TDE-1.4024 TRA 1.0833 TC3-5.4603 BAU 1.2515
    RDE .3339 RRA -.0159 RC3 .0010 FAU .02002
FOE -.3333 FRA .6320 FC3-1.0109 BSP 16472
BDE 1.4416 BRA 1.0834 BC3 5.4603 FSP -391
                                                                                                                                 LSA 2103.2 MSA 176.4 SSA 26.8
                                                                                                                                  EL1 2065.0 EL2 115.2 ALF 167.46
                                                                                                                                             ARRIVAL DATE JAN 27 1968
                                                                              FLIGHT TIME 178.00
LAUNCH DATE AUG 2 1967
                                                                             DISTANCE 527.543
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.394 GAL 2.11 AZL 92.13 MCA 268.47 SMA 120.28 ECC .26468 INC 2.1329 VI 29.344 RP 108.16 LAP 2.13 LOP 217.50 VP 36.753 GAP 14.24 AZP 89.94 TAL 174.11 TAP 82.58 RCA 88.44 APO 152.12 V2 35.039 RC 184.853 GL -12.82 GP 10.76 ZAL 74.20 ZAP 168.67 ETS 68.78 ZAE 130.38 ETE 170.64 ZAC 43.42 ETC 6.55 CLP-176.45
   PLANETOCENTRIC CONIC
    C3 18.111 VHL 4.256 DLA -31.49 RAL 229.33 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 8.978 DPA -3.19 RAP 223.05 ECC 1.2981
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.61 10 4 31 1232.90 22.33 350.60 97.20 112.80 10 25 4 632.9 25.23 342.86
                                                                                                   112.80 10 25 4
112.79 15 27 51
112.80 10 25 4
112.79 15 27 51
121.60 12 57 18
104.10 17 38 56
                  13 51 18
        104.39
                                    5793.12
                                                       22.34
                                                                      274.70
                                                                                       97.20
                                                                                                                                      5193.1
                                                                                                                                                       25.24
                                                                                                                                                                      266.96
                   10 4 31
13 51 18
                                                                     350.60
                                                                                       97.20
                                                                                                                                       632.9
                                                                                                                                                       25.23
                                                                                                                                                                      342.86
         75.61
                                    1232.90
                                                       22.33
       104.39
                                    5793.12
                                                       22.34
                                                                    274.70
                                                                                       97.20
                                                                                                                                      5193.1
                                                                                                                                                       25.24
                                                                                                                                                                      266.96
       110.00
                    12 45 28
                                      710.31
                                                       13.78
                                                                     307.82
                                                                                       92.58
                                                                                                                                      110.3
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                                                                                                                                                                      301.08
                     16 9 32
                                  5363.70
                                                                     245.25
                                                                                   100.61
                                                                                                                                     4763.7
                                                                                                                                                      33.OA
                                                                                                                                                                     236.40
       110.00
                                                       31.47
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1946.7 SR 464.7 SS 401.5

CRT -.9492 CRS .7985 CST -.9454

LSA 2031.9 MSA 194.3 SSA 25.0

EL1 1996.4 EL2 142.6 ALF 167.17
     TOE-1.3594 TRA 1.3724 TC3-5.1898 BAU 1.2566
                                                                          SGT 5249.5 SGR 466.6 SG3 118.9
    RDE .3450 RRA -.0277 RC3 .0080 FAU .01867
FDE -.3003 FRA .6804 FC3 -.8925 BSP 16533
                                                                        RRT -.3980 RRF -.3735 RTF .8890
SGB 5270.2 R23 .0189 R13 -.8890
SGI 5252.8 SG2 427.8 THA 177.96
    BOE 1.4025 BRA 1.3727 BC3 5.1898 FSP -383
LAUNCH DATE AUG 2 1967
                                                                               FLIGHT TIME 180.00
                                                                                                                                              ARRIVAL DATE JAN 29 1968
                                                                              DISTANCE 532.901
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.337 GAL 2.80 AZL 91.98 MCA 271.67 SMA 119.97 ECC .26975 INC 1.9820 V1 29.344
RP 108.20 LAP 1.98 LOP 220.71 VP 36.701 GAP 14.63 AZP 90.06 TAL 172.35 TAP 84.02 RCA 87.60 APO 152.33 VZ 35.025
RC 186.660 GL -11.48 GP 10.48-ZAL 70.56 ZAP 169.15 ETS 71.83 ZAE 130.47 ETE 170.84 ZAC 41.05 ETC 6.77 CLP-177.16
   PLANETOCENTRIC CONIC
    C3 19.328 VHL 4.396 DLA -31.10 RAL 233.75 RAD 6567.8 VEL 11.862 PTH 2.10 VHP 9.194 DPA -4.29 RAP 225.26 ECC 1.3181
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   24.57
                                                                                   102.53
                                                                                                                                       626.8
                                                                                                    112.87 10 49 24
112.85 15 39 18
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                  10 28 57
                                     1226.80
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       103.42
                     14 2 9
                                     5829.77
                                                       21.68
                                                                      277.17
                                                                                     102.54
                                                                                                      112.85 15 39 18
112.87 10 49 24
112.85 15 39 18
122.11 13 8 26
103.76 18 3 35
                   10 28 57
                                                                      349.83
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                                                                                                                                        626.8
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        76.58
                                    1226.80
                                                       21.67
                                    5829.77
                                                                      277.17
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                                                                                                                                      5229.8
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       103.42
                     14 2 9
                                                       21.68
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       110.00
                     12 55 57
                                                       12.40
                                                                      309.95
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                                      748.81
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                                    5355.76
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       110.00
                     16 34 19
                                                       31.60
                                                                      244.67
                                                                                      106.21
                                                                                                                                                       33.17
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1870.3 SR 465.6 SS 383.6

CRT -.9260 CRS .7516 CST -.9433

L94 1953.3 MSA 245.2 SSA 23.2

ELI 1919.8 EL2 171.2 ALF 166.91
                                                                          SCT 5273.1 SCR 469.5 SC3 116.6

RRT -.4058 RRF -.3791 RTF .8941

SCB 5294.0 R23 .0152 R13 -.8942

SCI 5276.6 SCZ 428.8 THA 177.92
     TOE-1.3066 TRA 1.6707 TC3-4.8839 BAU 1.2620
    ROE .3570 RRA -.0406 RC3 .0146 FAU .01744
FOE -.2687 FRA .7276 FC3 -.7812 BSP 16668
BDE 1.3545 BRA 1.6712 BC3 4.8839 FSP -379
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ARRIVAL DATE JAN 31 1968
LAUNCH DATE AUG 2 1967
                                                                      FLIGHT TIME 182.00
                                                                      DISTANCE 538.206
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.281 GAL 3.53 A7L 91.83 MCA 274.87 SMA 119.66 ECC .27531 INC 1.8307 V1 29.344 RP 108.24 LAP 1.82 LOP 223.91 VP 36.649 GAP 15.04 AZP 90.16 TAL 170.61 TAP 85.47 RCA 86.72 APO 152.60 V2 35.012 RC 188.449 GL -10.17 GP 10.21 ZAL 67.04 ZAP 169.57 ETS 75.19 ZAE 130.54 ETE 171.03 ZAC 38.68 ETC 7.05 CLP-177.87
  PLANETOCENTRIC CONIC
    C3 20.824 VHL 4.563 OLA -30.60 RAL 237.99 RAD 6567.8 VEL 11.925 PTH 2.12 VMP 9.426 DPA -5.35 RAP 227.49 ECC 1.3427
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
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112.89 15 47 37
112.90 11 15 31
112.89 15 47 37
122.64 13 17 48
103.40 18 28 38
                                                  20.87
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                 17 55 16
                                 1214.84
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                                                                                                                          5277.2
                                                                             107.63
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                                                               280.37
                                 5877.25
                                                  20.89
      102.11
                   14 9 39
                                                                                                                                         23.79
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                                                               348.58
                                                                              107.82
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                  10 55 16
                                 1214.84
                                                  20.87
       77.89
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                                                               280.37
                                                                             107.83
                                 5877,25
      102.11
                  14 9 39
                                                  20.89
                                                                                                                                                       305.85
                                                                                                                          193.8
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                                                  10.76
                                                               312.40
                                                                             102.30
      110,00
                  13 4 35
                                  793.76
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                                                                                                                        4746.3
                                                                                                                                         33.26
                                                               243.97
                                                                             111.79
                                                  31.75
      110.00
                  16 59 31
                                 5346.33
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1786.6 SR 464.2 SS 367.7

CRT -. 4953 CRS .6953 CST -. 9411

LSA 1866.8 MSA 239.1 SSA 21.6
                                                                   SGT 5291.4 SGR 470.9 SG3 114.3
RRT -.4129 RRF -.3847 RTF .8989
    TDE-1.2397 TRA 1.9840 TC3-4.5442 BAU 1.2651
    RDE .3692 RRA -.0550 RC3 .0198 FAU .01621
FDE -.2363 FRA .7765 FC3 -.6739 BSP 16767
                                                                   SGB 5312.3 R23 .0121 R13 -.8989
SG1 5295.0 SG2 428.6 THA 177.88
    BOE 1.2935 BRA 1.9847 BC3 4.5442 FSP -373
                                                                                                                      ELI 1834.9 EL2 201.3 ALF 166.74
                                                                                                                                 ARRIVAL DATE FEB 2 1968
                                                                       FLIGHT TIME 184.00
LAUNCH DATE AUG 2 1967
                                                                       DISTANCE 543.451
  HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.226 CAL 4.29 A7L 91.68 MCA 278.07 SMA 119.36 ECC .28140 INC 1.6781 V1 29.344
RP 108.28 LAP 1.66 LOP 227.11 VP 36.599 CAP 15.47 A7P 90.24 TAL 168.87 TAP 86.94 RCA 85.77 APO 152.95 V2 34.999
RC 190.221 GL -8.91 GP 9.98 7AL 63.66 ZAP 169.93 ETS 78.86 ZAE 130.61 ETE 171.20 ZAC 36.32 ETC 7.42 CLP-178.59
  PLANETOCENTRIC CONIC
                                                                                                 2.14 VHP 9.677 OPA -6.35 RAP 229.75 ECC 1.3725
    C3 22.635 VHL 4.758 DLA -30.02 RAE 242.03 RAD 6567.9 VEL 12.001 PTH
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            112.89 11 43 52
                                                                                                                            594.9
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                                                               346.69
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                 11 23 57
                                                  19.97
       79.58
                                 1194.93
                                                                                             112.88 14 23 58
112.89 11 43 52
112.88 14 23 58
123.14 13 25 46
103.00 18 53 30
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                                                                306.56
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      100 42
                  14 13 9
                                  649.39
                                                   19.99
                                                                                                                            594.9
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                                                                             113.04
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                                                                346.69
        79.58
                  11 23 57
                                 1194.93
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                                                                                                                                          22.91
                                                                                                                                                       298.97
                  14 13 9 649,39
13 11 43 843,59
                                                   19.99
                                                                306.56
                                                                             113.04
      100.42
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                                                                                                                           243.6
                                                                                                                                                        308.62
                                                                315.08
                                                                             106.98
                                                   8.92
      110.00
                                                                243.27
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                                                                                                                         4736.8
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                                 5336.77
      110.00
                  17 24 34
                                                   31.90
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                    SGT 5301.6 SGR 470.7 SG3 112.0
RRT -.4192 RRF -.3896 RTF .9034
                                                                                                                      ST 1700.4 SR 460.6 SS 353.9

CRT -.8548 CRS .6281 CST .9392

LSA 1777.0 MSA 265.5 SSA 20.1
    TOE-1.1577 TRA 2.3153 TC3-4.1764 BAU 1.2639
    RDE .3817 RRA -.0709 RC3 .0231 FAU .01494
FDE -.2027 FRA .8277 FC3 -.5715 BSP 16761
BDE 1.2190 BRA 2.3164 BC3 4.1765 FSP -364
                                                                   SGB 5322.5 R23 .0093 R13 -.9034
SG1 5305.3 SG2 427.0 THA 177.85
                                                                                                                      EL1 1746.2 EL2 232.8 ALF 166.72
                                                                                                                                ARRIVAL DATE FEB 4 1968
                                                                       FLIGHT TIME 186.00
LAUNCH CATE AUG 2 1967
                                                                      DISTANCE 548.625
   HELIOCENTRIC CONIC
   RL 151.83 LAL -.00 LOL 309.04 VL 25.171 GAL 5.09 AZL 91.52 MCA 281.26 SMA 119.07 ECC .28808 INC 1.5231 V1 29.344 RP 108.32 LAP 1.49 LOP 230.30 VP 36.549 GAP 15.94 AZP 90.30 TAL 167.15 TAP 88.41 RCA 84.77 APO 153.37 V2 34.986 RC 191.975 GL -7.69 GP 9.76 ZAL 60.43 ZAP 170.22 ETS 82.83 ZAE 130.66 ETE 171.35 ZAC 33.96 ETC 7.89 CLP-179.31
   PLANETOCENTRIC CONIC
    C3 24.805 VHL 4.980 CLA -29.38 RAL 245.83 RAD 6568.0 VEL 12.091 PTH 2.16 VHP 9.950 OPA -7.31 RAP 232.02 ECC 1.4082
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           112.86 12 15 47
112.84 14 23 9
116.13 13 52 27
119.62 16 48 34
123.56 13 32 36
102.64 19 17 47
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                                 1162.01
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                                 727,08
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                                                   18.99
                                                               311.88
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                                  831.03
                                                   15.05
                                                               317.70
       100,00
                   13 3A 36
                                                                                                                                          25.48
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                                                                                                                          5221.3
                                                                             119.83
                                 5821.33
                   15 11 33
                                                   23.02
                                                               277.10
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                                                                                                                          297.0
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       110.00
                   13 17 39
                                  896.98
                                                   6.92
                                                                317.92
                                                                             111.53
                                                                                                                          4728.1
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                                                                                                                                                       233 68
                   17 48 58 5328.14
                                                   32.03
                                                                242.63
                                                                             122.77
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   RRT -,4259 RRF -,3962 RTF ,9086
SGB 5331.5 R23 ,0074 R13 -,9087
SGI 5314.6 SGZ 424.4 THA 177.83
                                                                                                                      ST 1623.4 SR 455.5 SS 344.2
CRT -.8054 CRS .5586 CST -.9402
    TOE-1.0697 TRA 2.6577 TC3-3.8068 BAU 1.2624
    ROE .3948 RRA -.0876 RC3 .0256 FAU .01379
FOE -.1719 FRA .8785 FC3 -.4813 BSP 16870
                                                                                                                      LSA 1695.9 MSA 291.4 SSA 18.7
                                                                                                                      EL1 1665.4 EL2 263.2 ALF 166.93
    BOE 1.1402 BRA 2.6592 BC3 3.8069 FSP -359
                                                                                                                                 ARRIVAL DATE FEB 6 1968
                                                                        FLIGHT TIME 188,00
                                                                       DISTANCE 553.718
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.118 GAL 5.94 AZL 91.36 HCA 284.45 SHA 118.78 ECC .29541 INC 1.3648 V1 29.344
RP 108.36 LAP 1.32 LOP 233.49 VP 36.500 GAP 16.45 AZP 90.34 TAL 165.44 TAP 89.90 RCA 83.69 APO 153.87 V2 34.973
RC 193.712 GL -6.53 GP 9.56 ZAL 57.38 ZAP 170.44 ETS 87.07 ZAE 130.70 ETE 171.50 ZAC 31.61 ETC 8.46 CLP 179.96
   PLANETOCENTRIC CONIC
    C3 27.384 VHL 5.233 DLA -28.69 RAL 249.40 RAD 6568.1 VEL 12.197 PTH 2.19 VHP 10.246 CPA
                                                                                                                            -8.22 RAP 234.30 ECC 1.4507
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            123.16
                                                                                             112.78 12 56 10
                                                                                                                            498.9
                                                                                                                                          20.85
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                                                  17.92
                                                                338.68
        85.20 12 37 51 1098.89
                                                                                              112.77
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                                                                                                                            239.2
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                                                                              123.16
        94.80
                   13 58 4
                                  839.15
                                                   17.93
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       100.00
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108.05 17 26 34
123.88 13 38 32
102.36 19 41 8
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                                 5765.65
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                                                                273.41
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       100.00
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       110.00
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                                                                320.87
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                                   952.88
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       110.00
                                 5321.19
                                                                              128.11
                   18 12 26
                                                   32.13
                                                                242.11
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1561.2 SR 448.6 SS 337.9
CRT - .7478 CRS .4844 CST - .9418
                                                                    SGT 5316.6 SGR 466.7 SG3 107.6
     TOE -.9791 TRA 3.0173 TC3-3.4364 BAU 1.2581
                                                                    RRT -14335 RRF -14025 RTF 9138
SGB 5337.0 R23 .0044 R13 .9138
    RDE .4081 RRA -.1054 RC3 .0268 FAU .01265
FDE -.1414 FRA .9312 FC3 -.4000 BSP 16887
                                                                                                                      LSA 1628.7 MSA 315.7 SSA 17.5
                                                                                                                      ELI 1598.1 EL2 290.9 ALF 167.45
                                                                    SG1 5320.5 SG2 420.2 THA 177.81
    BOE 1.0607 BRA 3.0191 BC3 3.4366 FSP -353
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LAUNCH CATE AUG 2 1967
                                                                                FLIGHT TIME 190.00
                                                                                                                                                 ARRIVAL CATE FEB 8 1968
                                                                                DISTANCE 558.718
   HELIOCENTRIC CONIC
     RL 151.83 LAL -.00 LOL 309.04 VL 25.066 GAL 6.83 AZL 91.20 HCA 287.64 SMA 118.50 ECC .30347 INC 1.2020 V1 29.344 RP 108.40 LAP 1.15 LOP 236.68 VP 36.452 GAP 17.00 AZP 90.36 TAL 163.76 TAP 91.41 RCA 82.54 APO 154.47 V2 34.960 RC 195.431 GL -5.43 GP 9.37 ZAL 54.50 ZAP 170.59 ETS 91.54 ZAE 130.72 ETE 171.64 ZAC 29.28 ETC 9.17 CLP 179.22
    PLANETOCENTRIC CONIC
     C3 30.433 VHL 5.517 DLA -27.96 RAL 252.72 RAD 6568.2 VEL 12.321 PTH
                                                                                                            2.22 VHP 10.568 CPA -9.09 RAP 236.60 ECC 1.5009
    ENCH AZMIH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 51 54 1123.19 13.46 338.40 126.50 115.15 13 10 37 523.2 16.74 331.26 90.00 14 10 33 867.64 20.22 322.70 129.45 110.25 14 25 1 267.6 22.80 314.98
                   13 22 35 1023.96
16 22 33 5730.14
13 26 53 1010.45
18 34 45 5316.41
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106.99 17 58 3
124.10 13 43 43
102.16 20 3 21
        100.00
                                                                        328.81
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       110.00
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                                                                       241.76
                                                                                       133.32
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       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5316.2 SGR 462.5 SG3 105.4
RRT -.4582 RRF .4090 RTF .9192
SGB 5336.3 R23 .0042 R13 -.9192
                                                                                                                                     ST 1501.9 SR 440.0 SS 335.0
CRT -.6759 CRS .4095 CST -.9480
    TDE -. 8667 TRA 3.3958 TC3-3.0746 BAU 1.2510
    RDE .4215 RRA -.1242 RE3 .0268 FAU .01154
FDE -.1119 FRA .9862 FC3 -.3283 BSP 16999
                                                                                                                                    LSA 1564.2 MSA 338.4 SSA 16.5
                                                                            SG1 5320.1 SG2 415.4 THA 177.80
                                                                                                                                     ELI 1532.4 EL2 317.8 ALF 168.29
    BOE .9638 BRA 3.3981 BC3 3.0747 FSP -348
                                                                                FLIGHT TIME 192.00
                                                                                                                                                 ARRIVAL DATE FEB 10 1968
LAUNCH DATE AUG 2 1967
                                                                                DISTANCE 563.610
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 25.015 GAL 7.77 AZL 91.03 MCA 290.83 SMA 118.23 ECC .31233 INC 1.0333 V1 29.344
RP 108.44 LAP .97 LOP 239.87 VP 36.405 GAP 17.59 AZP 90.37 TAL 162.11 TAP 92.94 RCA 81.31 APO 155.16 V2 34.947
RC 197.134 GL -4.40 GP 9.21 ZAL 51.80 ZAP 170.67 ETS 96.20 ZAE 130.72 ETE 171.77 ZAC 26.97 ETC 10.04 CLP 178.47
   PLANETOCENTRIC CONIC
    C3 34.030 VHL 5.834 DLA -27.22 RAL 255.81 RAD 6568.3 VEL 12.466 PTH 2.25 VHP 10.920 DPA -9.90 RAP 238.91 ECC 1.5600 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 34 21 1249.30 9.70 345.75 129.98 116.74 12 55 11 649.3 13.21 338.83
                                                                                                        108.53 15 6 0
119.28 13 37 28
106.23 18 25 47
124.18 13 48 17
102.06 20 24 20
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         90.00
                     14 52 42
                                       797.76
                                                         21.80
                                                                        318.19
                                                                                       135.21
                                                                                                                                           197.8
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                    13 19 4 1104.87
16 50 41 5705.46
13 30 28 1069.03
18 55 46 5314.06
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       100.00
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124.49
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       100.00
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       110,00
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   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                           RRT -.4433 RRF -.4149 RTF ..9245
SGB 5330.4 R23 ..0030 R13 -.9245
SGB 5334.7 SG2 409.1 THA 177.80
                                                                                                                                     ST 1461.2 SR 429.8 SS 335.5
CRT -.5967 CRS .3332 CST -.9544
    TOE -.7502 TRA 3.7975 TC3-2.7199 BAU 1.2375
    ROE .4349 RRA -.1438 RC3 .0255 FAU .01039
FOE -.0821 FRA 1.0448 FC3 -.2644 BSP 16947
BOE .8671 BRA 3.8002 BC3 2.7200 FSP -339
                                                                                                                                    LSA 1518.2 MSA 356.7 SSA 15.6
ELI 1484.8 EL2 339.4 ALF 169.49
                                                                                                                                                ARRIVAL CATE FEB 12 1968
LAUNCH DATE AUG 2 1967
                                                                               FLIGHT TIME 194.00
                                                                               DISTANCE 564.372
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 38.265 VHL 6.186 CLA -26.47 RAL 258.66 RAC 6568.5 VEL 12.635 PTH 2.29 VHP 11.306 CPA -10.67 RAP 241.21 ECC 1.6297
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    117.59 12 47 40
107.51 15 37 14
109.68 13 36 17
105.70 18 50 41
124.14 13 52 20
102.06 20 44 1
        90.00 12 25 13 1347.21
90.00 15 24 35 759.10
100.00 13 16 36 1181.25
                                                                                    133.68
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       100.00
                                                         3.76
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25.77
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                   17 15 53 5688.34
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                   13 33 32 1128.11
19 15 27 5314.24
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                                                                       330.02 128.58
241.59 143.35
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       110,00
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       110.00
                                                        32.23
                                                                                                                                                                         232.61
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY ....
   DIFFERENTIAL CORRECTIONS
                                                                           RRT - .4482 RRF - .4214 RTF . 9303
SGB 5321.2 R23 .0022 R13 - .9303
SGI 5306.0 SG2 401.7 THA 177.81
                                                                                                                                  ST 1436.5 SR 418.7 SS 338.8

CRT -.5152 CRS .2658 CST -.9622

LSA 1489.1 MSA 368.7 SSA 14.7

EL1 1453.7 EL2 354.6 ALF 170.92
    TDE -.6320 TRA 4.2165 TC3-2.3891 BAU 1.2223
    RCE .4487 RRA - 1637 RC3 .0237 FAU .00933
FCE -.0550 FRA 1.1049 FC3 -.2112 BSP 17005
BCE .7751 BRA 4.2197 BC3 2.3893 FSP -334
                                                                                                                                                ARRIVAL DATE FEB 14 1968
LAUNCH DATE AUG 2 1967
                                                                                FLIGHT TIME 196.00
                                                                                DISTANCE 572.984
    RL 151.83 LAL -.00 LOL 309.04 VL 24.916 GAL 9.86 AZL 90.67 HCA 297.20 SMA 117.72 ECC .33290 INC .6730 V1 29.344
RP 108.51 LAP .60 LOP 246.24 VP 36.313 GAP 18.94 AZP 90.31 TAL 158.91 TAP 96.11 RCA 78.53 APO 156.90 V2 34.923
RC 200.487 GL -2.51 GP 8.91 ZAL 46.95 ZAP 170.57 ETS 105.81 ZAE 130.66 ETE 172.02 ZAC 22.43 ETC 12.43 CLP 176.92
   PLANETOCENTRIC CONIC
    C3 43.251 VHL 6.577 DLA -25.72 RAL 261.28 RAD 6568.6 VEL 12.830 PTH 2.34 VHP 11.730 CPA -11.38 RAP 243.52 ECC 1.7118
    ENCH AZMTH ENCH TIME L-I TIME INDIGAT INDIGONG INDIRT ASC INDIAZMTH INDITIME POICST TIM INDIZICAT INDIZICNG
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118.07 12 43 3 835.9

106.83 16 3 48 134.3

119.87 13 35 39 654.3

105.34 19 13 16 5077.1

123.96 13 55 55 587.3

102.18 21 2 23 4716.9
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        90.00 12 19 9 1433.87
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                                                                       356.21
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        90.00
                    15 51 34
                                     734.28
                                                       23.12
                                                                       314.00
                                                                                      145.51
                   13 14 45 1254.32
17 38 39 5677.10
13 36 7 1187.26
19 33 46 5316.93
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       100.00
       100.00
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                                                        -4.14
                                                                       333.12
       110.00
                                                                       241.79
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       110.00
                                                        32.19
                                                                                       148.16
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    5T 1424.9 SR 406.4 SS 344.6
CRT -.4324 CRS .2034 CST -.9699
                                                                           SGT 5289.4 SGR 441.3 SG3 99.5
RRT -.4525 RRF -.4274 RTF .9360
SGB 5307.7 R23 .0016 R13 -.9361
    TOE - .5076 TRA 4.6603 TC3-2.0782 BAU 1.2017
    ROE .4624 RRA -.1839 RC3 .0213 FAU .00828
FOE -.0285 FRA 1.1686 FC3 -.1657 BSP 17024
BDE .6867 BRA 4.6640 BC3 2.0783 FSP -329
                                                                                                                                    ESA 1474.3 MSA 374.7 SSA 13.9
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SG1 5293.2 SG2 393.2 THA 177.H3

FL1 1436.4 EL2 363.5 ALF 172.49

ARRIVAL CATE FEB 16 1968

LAUNCH DATE AUG 2 1967 DISTANCE 577.415 HELIOCENTRIC CONIC RL 151.83 LAL -.NN LOL 3N9.N4 VL 24.869 CAL 11.01 A7L 90.48 HCA 300.38 SMA 117.47 ECC .34485 INC .4778 V1 29.344 RP 108.55 LAP .41 LOP 249.42 VP 36.269 CAP 19.72 A7P 90.24 TAL 157.37 TAP 97.75 RCA 76.96 APO 157.98 V2 34.911 RC 202.138 CL -1.66 CP 8.78 7AL 44.79 ZAP 17N.40 ETS 110.64 7AE 130.59 ETE 172.14 7AC 20.22 ETC 14.08 CLP 176.11 PLANETOCENTRIC CONTC C3 49.128 VHL 7.009 DLA -24.98 RAL 263.68 RAD 6568.8 VEL 13.057 PTH 2.38 VHP 12.197 DPA -12.05 RAP 245.83 ECC 1.8085 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.29 12 39 54 106.38 16 27 10 119.87 13 35 20 105.13 19 33 48 123.66 13 59 4 102.39 21 19 26 141.08 . 68 913.8 5.09 354.03 90.00 12 14 40 1513.84 1.32 304.84 312.92 118.3 150.30 90.00 16 15 12 718.25 23.43 -1.09 724.7 2.89 338.91 139.73 345,44 100.00 13 13 16 1324.67 5070.7 27.91 258.64 266.97 100.00 17 59 17 5670.69 26.09 151.12 136.46 329.98 646.1 -1.91 110.00 13 38 18 1246.12 19 50 44 5322.00 -6.37 336.21 4722.0 152.81 110.00 32.12 242.17 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RIT - 4560 RRF - .4329 RTF .9418
SGB 5289.7 R23 .0012 R13 - .9418
SGI 5275.8 SG2 383.6 THA 177.85 ST 1424.0 SR 393.1 SS 352.6 CRT -.3520 CRS .1474 CST -.9769 TOE -.3781 TRA 5.1306 TC3-1.7893 BAU 1.1753 ROE .4762 RRA -.2042 RC3 .0184 FAU .00722 FOE -.0028 FRA 1.2363 FC3 -.1272 BSP 17Q45 BOE .6080 BRA 5.1347 BC3 1.7894 FSP -323 LSA 1471.7 MSA 374.9 SSA 13.2 EL1 1431.2 ELZ 366.1 ALF 174.06 ARRIVAL DATE FEB 18 1968 LAUNCH DATE AUG 2 1967 FLIGHT TIME 200,00 DISTANCE 581.631 HELIOCENTRIC CONIC RL 151.83 LAL -.00 LOL 309.04 VL 24.822 CAL 12.26 A7L 90.27 MCA 303.56 SMA 117.23 ECC .35811 INC .2692 V1 29.344
RP 108.59 LAP .22 LOP 252.60 VP 36.226 GAP 20.57 AZP 90.15 TAL 155.90 TAP 99.46 RCA 75.25 APO 159.21 V2 34.899
RC 203.771 GL -.87 GP 8.66 ZAL 42.81 ZAP 170.14 ETS 115.38 ZAE 130.48 ETE 172.26 ZAC 18.06 ETC 16.14 CLP 175.27 PLANETOCENTRIC CONIC C3 56.072 VHL 7.488 DLA -24.26 RAL 265.87 RAD 6569.0 VEL 13.320 PTH 2.43 VHP 12.715 DPA -12.66 RAP 248.11 ECC 1.9228 C3 56.072 WIL (.488 ULA -24.26 MAL 203.87 MAU 0309.0 VEL 13.320 FIN 2.47 MILLIAN SIN 1.487 MILLIAN SIN 12 11 8 1589.03 106.10 16 48 1 119.72 13 35 11 105.06 19 52 30 123.22 14 1 50 102.69 21 35 13 108.6 304.17 90.00 16 36 12 708.61 23.61 312.26 154.87 25.59 792.6 .59 342.64 100.00 13 11 59 1392.60 -3.39 349.17 143,43 27.94 18 18 2 5668.32 13 40 6 1304.39 20 6 24 5329.28 5068.3 258.47 100.00 26.13 266.80 155.65 110.00 704.4 333.02 -4.13 -8.56 339.31 140.25 233.77 4729.3 110.00 32.01 242.71 157.31 33.42 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5252.0 SGR 420.0 SG3 95.8 RRT -.4584 RRF -.4374 RTF .9476 SGB 5268.8 R23 .0009 R13 -.9476 SGI 5255.6 SG2 373.0 THA 177.89 ST 1432.3 SR 378.9 SS 362.9 CRT -.2742 CRS .0956 CST -.9828 TDE -.2392 TRA 5.6353 TC3-1.5198 BAU 1.1393 RDE .4897 RRA -.2245 RC3 .0151 FAU .00609 LSA 1479.7 MSA 370.1 SSA 12.5 EL1 1436.3 EL2 363.4 ALF 175.57 FDE .0233 FRA 1.3100 FC3 -.0940 BSP 16942 .5450 BRA 5.6398 BC3 1.5199 FSP -315 ARRIVAL DATE FEB 20 1968 FLIGHT TIME 202.00 LAUNCH DATE AUG 2 1967 DISTANCE 585.585 RL 151.83 LAL -.00 LOL 309.04 VL 24.777 GAL 13.60 AZL 90.05 MCA 306.74 SMA 117.00 ECC .37287 INC .0431 V1 29.344
RP 108.62 LAP .04 LOP 255.77 VP 36.185 GAP 21.52 AZP 90.03 TAL 154.49 TAP 101.23 RCA 73.37 APO 160.63 VZ 34.888
RC 205.386 GL -.14 GP 8.55 7AL 41.03 ZAP 169.78 ETS 120.01 ZAE 130.34 ETE 172.38 ZAC 15.97 ETC 18.77 CLP 174.39 PLANETOCENTRIC CONIC C3 64.300 VHL 8.019 DLA -23.57 RAL 267.85 RAD 6569.2 VEL 13.626 PTH 2.49 VHP 13.290 CPA -13.23 RAP 250.38 ECC 2.0582 UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.13 12 35 49 105.97 17 6 43 119.41 13 35 5 105.09 20 9 32 122.67 14 4 14 103.08 21 49 45 148.23 159.25 1060.4 9n.nn 12 8 9 1660.39 9n.nn 16 54 59 703.90 . 3A 2.22 -3.40 8.86 303.84 103.9 25.66 23.70 311.96 346.24 147,03 858.2 -1.64 100.00 13 10 47 1458.23 -5.60 352.79 IA 35 3 159.99 258.54 26.11 266.87 5069.3 27.93 100.00 5669.34 143.94 336,04 13 41 32 1361.79 -10.68 342.40 761.8 -6.30 110.00 243.40 4738.5 33.34 234.48 161.64 110.00 20 20 47 5338.54 31.87 MID-COURSE EXECUTION ACCURACY ORBIT CETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1445.6 SR 364.2 SS 374.7
CRT -.2053 CRS .0528 CST -.9876
LSA 1494.1 MSA 361.0 SSA 11.9
EL1 1447.6 EL2 356.0 ALF 176.85 SCT 5226.6 SGR 407.3 SG3 94.0 RRT -,4598 RRF -.4412 RTF .9534 SGB 5242.4 R23 .0008 R13 -.9534 SGI 5229.9 SG2 361.5 THA 177.94 TDE - .1003 TRA 6.1681 TC3-1.2767 BAU 1.0976 RDE .5035 RRA -.2438 RC3 .0119 FAU .00500 FDE .0476 FRA 1.3877 FC3 -.0673 BSP 16953 BDE .5134 BRA 6.1729 BC3 1.2768 FSP -317 FLIGHT TIME 204.00 ARRIVAL DATE FEE 22 1968 LAUNCH DATE AUG 2 1967 DISTANCE 589.221 HELIOCENTRIC CONIC RL 151.83 LAL -.00 LOL 309.04 VL 24.734 GAL 15.07 AZL 89.80 MCA 309.91 SMA 116.78 ECC .38933 INC .1972 VI 29.344
RP 108.65 LAP -.15 LOP 258.95 VP 36.145 GAP 22.58 AZP 89.87 TAL 153.18 TAP 103.08 RCA 71.31 APO 162.24 V2 34.878
RC 206.983 GL .55 GP 8.45 ZAL 39.38 ZAP 169.34 ETS 124.47 ZAE 130.15 ETE 172.50 ZAC 13.96 ETC 22.17 CLP 173.47 PLANETOCENTRIC CONIC C3 74.092 VHL 8.608 DLA -22.89 RAL 269.63 RAD 6569.4 VEL 13.980 PTH 2.55 VHP 13.932 DPA -13.75 RAP 252.62 ECC 2.2194 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 5 31 1728.39 -5.58 12.67 151.68 117.81 12 34 20 1128.4 -1.81 6.02 117.81 12 34 20 105.94 17 23 33 118.97 13 34 57 105.21 20 25 0 121.99 14 6 15 103.53 22 3 4 151.68 303.79 17 11 50 703.11 23.71 311.91 163.42 103.1 25.68 90.00 13 9 36 1521.58 921.6 -3.78 349.73 -7.70 356.32 150.52 100.00 5073.2 27.88 258.82 18 50 27 5673.20 26.04 267.14 164.13 100,00 818.0 -A.41 339.03 -12.73 345.46 147.51 110.00 13 42 37 1418,04 110.00 20 33 55 5349.50 31.70 244.21 165.78 4749.5 33.23 235.31 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE .0432 TRA 6.73A7 TC3-1.0555 BAU 1.0456 KDE .5172 RRA -.2621 RC3 .008A FAU .00384 FDE .0716 FRA 1.4720 FC3 -.0449 BSP 16949 BDE .5190 BRA 6.7438 BC3 1.0556 FSP -305 SGT 5197.3 SGR 393.2 SG3 92.2 RRT -.4598 RRF -.4436 RTF .9590 SGB 5212.1 R23 .0007 R13 -.9590 ST 1462.0 SR 348.9 SS 388.4 CRT -.1433 CRS .0154 CST -.9913 LSA 1512.7 MSA 348.9 SSA 11.3 EL1 1462.9 EL2 345.1 ALF 177.93 SG1 5200.4 SG2 349.0 THA 178.00

FLIGHT TIME 198.00

ARRIVAL DATE FEB 24 1968

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FLIGHT TIME 206.00
LAUNCH DATE AUG 2 1967
                                                                                      DISTANCE 592.468
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 24.692 GAL 16.67 A7L 89.54 MCA 313.08 SMA 116.57 ECC .40776 INC .4647 VI 29.344
RP 108.69 LAP -.34 LOP 262.12 VP 36.106 GAP 23.77 A7P 89.68 TAL 151.96 TAP 105.04 RCA 69.04 APO 164.10 V2 34.867
RC 208.560 GL 1.19 GP 8.36 ZAL 37.93 ZAP 168.79 ETS 128.74 ZAE 129.90 ETE 172.63 ZAC 12.08 ETC 26.61 CLP 172.50
   PLANETOCENTRIC CONIC
     C3 85.802 VHL 9.263 DLA -22.25 RAL 271.22 RAD 6569.7 VEL 14.393 PTH 2.62 VHP 14.652 DPA -14.22 RAP 254.82 ECC 2.4121
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           155.00
                                                                                                               117.35 12 32 58
106.01 17 38 41
                                                                              16.34
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                   12 3 5 1793.26
17 26 55 705.46
                                                            -7.62
         90.00
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                                                                                              167.36
         90.00
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105.41 20 38 59
121.22 14 7 54
104.03 22 15 11
                    13 8 21 1582.58
19 4 20 5679.41
13 43 21 1472.87
20 45 49 5361.89
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                                                                                             153.89
                                                            -9.70
       100.00
                                                                             267.57
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                                                           25.93
                                                                                             168.07
       100.00
                                                                                             150.97
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       110.00
                                                          -14.69
                                                                             348.51
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                                                                                              169.73
                                                           31.50
                                                                             245.12
       110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RIT - 4580 RRF - .4443 RTF . .9645
SGB 5178.1 R23 .0008 R13 - .9645
SGI 5167.2 SG2 335.7 THA 178.07
                                                                                                                                               ST 1479.8 SR 333.2 SS 474.0
CRT -.0879 CRS -.0178 CST -.9940
     TDE .1925 TRA T.352 C3 -.8548 BAU
                                                                 .9806
    RCE .5310 RRA -.2789 RC3 .0037 FAU .00259
FCE .0956 FRA 1.5641 FC3 -.0261 BSP 16912
BCE .5648 BRA 7.3581 BC3 .8548 FSP -300
                                                                                                                                               LSA 1533.6 MSA 334.6 SSA 10.7
                                                                                                                                               EL1 1480.1 EL2 331.8 ALF 178.81
                                                                                                                                                            ARRIVAL DATE FEB 26 1968
                                                                                      FLIGHT TIME 208.00
LAUNCH DATE AUG 2 1967
                                                                                     01STANCE 595.231
  HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 24.652 GAL 18.43 A7L 89.24 HCA 316.25 SHA 116.37 ECC .42844 INC .7601 V1 29.344
RP 108.72 LAP -.53 LOP 265.29 VP 36.070 GAP 25.11 A7P 89.45 TAL 150.87 TAP 107.12 RCA 66.51 APO 166.22 VZ 34.858
RC 210.118 GL 1.78 GP 8.26 ZAL 36.65 ZAP 168.14 ETS 132.80 ZAE 129.58 ETE 172.78 ZAC 10.35 ETC 32.51 CLP 171.47
   PLANETOCENTRIC CONIC
    C3 99.891 VHL 9.995 DLA -21.64 RAL 272.60 RAD 6569.9 VEL 14.874 PTH 2.68 VHP 15.464 DPA -14.64 RAP 256.96 ECC 2.6440 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                116.79 12 31 37
                                                                                                                                                   1255.0
                                                                                            158.20
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        90.00
                      12 0 42 1855.05
                                                            -9.54
                                                                             19.87
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117.75 13 34 20
105.67 20 51 33
120.35 14 9 8
104.57 22 26 7
                     17 40 22 710.33
13 6 59 1641.13
19 16 46 5687.53
13 43 42 1526.01
20 56 32 5375.41
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         90.00
                                                            23.58
                                                                             312.39
                                                                                              171.08
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                                                            -11.57
                                                                                             157.13
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       100.00
                                                                               3.08
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                                                                             268.12
                                                                                          171.77
154.28
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       100.00
                                                            25.78
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       110.00
                                                          -16.54
                                                                             351.51
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       110.00
                                                       31.27
                                                                             246.10
                                                                                              173.46
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .3500 TRA 8.0187 TC3 -.6726 BAU .8982 RDE .5448 RRA -.2935 RC3 .0074 FAD .00547
                                                                                 RRI -.4537 RRF -.4424 RTF ..9696
SGB 5141.6 R23 ..0008 R13 -.9696
SGI 5131.6 SG2 321.6 THA 178.16
                                                                                                                                               ST 1497.7 SR 317.0 SS 422.0 CRT -.0377 CRS -.0484 CST -.9960
    RDE .5448 RRA -.2935 RC3 .0028 FAU .00116
FOE .1206 FRA 1.6659 FC3 -.0101 BSP 16771
                                                                                                                                               LSA 1555.6 MSA 318.8 SSA 10.1
EL1 1497.8 EL2 316.8 ALF 179.52
     BOE .6475 BRA 8.0240 BC3 .6726 FSP -292
                                                                                                                                                           ARRIVAL DATE FEB 28 1968
                                                                                      FLIGHT TIME 210.00
LAUNCH CATE AUG 2 1967
                                                                                      DISTANCE 597.389
   HELLOCENTRIC CONTC.
    RL 151.83 LAL -. OT LOL 309.04 VL 24.615 GAL 20.38 AZL 88.91 MCA 319.41 SMA 116.18 ECC .45174 INC 1.0918 V1 29.344
RP 108.74 LAP -. 71 LOP 268.45 VP 36.035 GAP 26.62 AZP 89.17 TAL 149.94 TAP 109.35 RCA 63.69 APO 168.66 V2 34.848
RC 211.656 GL 2.33 GP 8.18 ZAL 35.57 ZAP 167.38 ETS 136.65 ZAE 129.18 ETE 172.93 ZAC 8.84 ETC 40.35 CLP 170.35
   PLANETOCENTRIC CONIC
     C3 116.956 VHL IN.815 CLA -21.07 RAL 273.79 RAC 6570,2 VEL 15.437 PTH 2.76 VHP 16.383 CPA -15.02 RAP 259.04 ECC 2.9248
    C3 116.956 VHL 10.815 CLA -21.07 RAL 273.79 RAC 6570.2 VEL 15.437 PTH 2.76 VHP 16.383 CPA -15.02 RAP 259.04 ECC 2.9248 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJRT ASC INJATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 58 17 1913.73 -11.32 23.26 161.23 116.13 12.30 10 1313.7 -7.71 16.44 100.00 17 52 14 717.18 23.45 312.85 174.55 106.35 18 4 11 117.2 25.47 304.76 100.00 13 5 25 1697.05 -13.33 6.31 160.20 117.01 13 33 42 1097.1 -9.60 359.50 100.00 19 27 46 5697.14 25.61 268.78 175.23 105.97 21 2 44 5097.1 27.55 260.52 110.00 13 43 40 1577.19 -18.28 354.47 157.44 119.40 14 9 57 977.2 -14.22 347.70 110.00 21 6 1 5389.76 31.02 247.15 176.94 105.14 22 35 51 4789.8 32.78 238.37
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RIT -,4465 RRF -,4375 RTF ,9745

SGB 5099.1 R23 ,0010 R13 -,9745

SGI 5089.9 SGZ 306.8 THA 178.27
                                                                                                                                               ST 1512.0 SR 300.7 SS 441.9
     TOE .5072 TRA 8.7340 TC3 -.5112 BAU .7994
                                                                                                                                               CRT .0052 CRS -.0743 CST -.9974
    ROE .5591 RRA -.3047 RC3 .0004 FAU-.00040
FCE .1445 FRA 1.7768 FC3 .0030 BSP 16737
BCE .7549 BRA 8.7393 BC3 .5112 FSP -288
                                                                                                                                                                                          9.5
                                                                                                                                              LSA 1575.0 MSA 302.1 SSA
                                                                                                                                              EL1 1512.0 EL2 300.7 ALF
                                                                                                                                                            ARRIVAL CATE MAR 1 1968
LAUNCH DATE AUG 2 1967
                                                                                      FLIGHT TIME 212.00
                                                                                     DISTANCE 598.785
   HELIOCENTRIC CONIC
    RL 151.83 LAL -.00 LOL 309.04 VL 24.579 GAL 22.56 A7L 88.53 HCA 322.58 SMA 116.00 ECC .47805 INC 1.4692 V1 29.344
RP 108.77 LAP -.89 LOP 271.62 VP 36.003 GAP 28.35 AZP 88.83 TAL 149.19 TAP 111.76 RCA 60.55 APO 171.46 V2 34.840
RC 213.175 GL 2.84 GP 8.09 ZAL 34.67 ZAP 166.49 ETS 140.31 ZAE 128.69 ETE 173.09 ZAC 7.62 ETC 50.60 CLP 169.14
   PLANETOCENTRIC CONIC
     C3 137.783 VHL 11.738 OLA -20.53 RAL 274.76 RAD 6570.5 VEL 16.097 PTH 2.83 VHP 17.429 DPA -15.35 RAP 261.02 ECC 3.2676
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 55 43 1969.19 -12.96 26.51 164.06 115.40 12 28 33 1369.2 -9.43 19.61
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106.58 18 14 39
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118.39 14 10 16
105.73 22 44 21
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        100.00
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                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 1522.8 SR 284.3 SS 464.3
CRT .0438 CRS -.0983 CST -.9983
     TOE .6687 TRA 9.5113 TC3 -.3672 BAU .6764
                                                                                 SGT 5042.4 SGR 323.8 SG3 85.9
RRT -.4351 RRF -.4283 RTF .9789
SGB 5052.8 R23 .0011 R13 -.9789
     ROE .5739 RRA -.3117 RC3 -.0017 FAU-.00224
FDE .1689 FRA 1.9000 FC3 .0141 BSP 16676
BDE .8812 BRA 9.5164 BC3 .3672 FSP -283
                                                                                                                                              LSA 1591.9 MSA 285.0 SSA 8.9
                                                                                                                                             EL1 1522.9 EL2 284.7 ALF .49
                                                                                 SG1 5044.3 SG2 291.5 THA 178.39
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ARRIVAL DATE HAR 3 1968 FLIGHT TIME 214.00 LAUNCH DATE AUG 2 1967 HELIOCENTRIC CONIC **CISTANCE 599.213** RL 151.83 LAL -.00 LOL 309.04 VL 24.547 GAL 25.00 AZL 88.09 MCA 325.74 SMA 115.84 ECC .50785 INC 1.9051 VI 29.344 RP 108.80 LAP -1.07 LOP 274.79 VP 35.973 GAP 30.34 AZP 88.43 TAL 148.67 TAP 114.41 RCA 57.01 APO 174.67 V2 34.832 RC 214.674 GL 33.00 AL 33.00 AL 34.00 AZP 88.43 TAL 148.67 TAP 114.41 RCA 57.01 APO 174.67 V2 34.832 8.01 TAL 33.99 TAP 165.45 ETS 143.77 TAE 128.07 ETE 173.28 TAC 6.78 ETC 63.27 CLP 167.81 RC 214.674 GL 3.32 GP PLANETOCENTRIC CONIC C3 163.416 VHL 12.783 OLA -20.03 RAL 275.51 RAD 6570.8 VEL 16.874 PTH 2.91 VHP 18.628 CPA -15.65 RAP 262.89 ECC 3.6894 LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ A7MTH INJ TIME PO CST TIM

114.62 12 26 37 1421.2

106.85 18 23 34 135.0

115.33 13 31 26 1200.1

106.66 21 20 49 5119.4

117.34 14 10 3 1072.5

106.32 22 51 34 4819.8 29.60 90.00 11 52 56 2021.23 -14.46 166.67 -11.02 22.61 735.03 23.10 314.05 180.60 25.19 306.00 90.00 16 11 19 13 1 26 1800.14 12.40 165.72 100.00 -16.42 19 45 30 5719.39 13 42 11 1672.45 270.30 27.22 262.09 181.29 100.00 25.18 353.10 -21.36 163.13 110.00 .13 183.05 32.39 240.63 249.32 110.00 21 21 15 5419.A4 30.46 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4992.7 SGR 303.6 SG3 84.5 RRT -.4182 RRF -.4134 RTF .9829 SGB 5001.9 R23 .0012 R13 -.9829 ST 1528.7 SR 268.0 SS 489.6 CRT .0788 CRS -.1210 CST -.9989 TDE .8331 TRAID.3571 TC3 -.2396 BAU .5235 RDE .5895 RRA -.3130 RC3 -.0033 FAU-.00445 FOE .1936 FRA 2.0373 FC3 .0236 BSP 16599 BDE 1.0205 BRAID.3619 BC3 .2396 FSP -279 LSA 1605.2 MSA 267.8 SSA SG1 4994.3 SGZ 275.7 THA 178.54 EL1 1528.8 EL2 267.1 ALF ARRIVAL CATE MAR 5 1968 LAUNCH BATE AUG 2 1967 FLIGHT TIME 216,00 HELIOCENTRIC CONIC **DISTANCE 598.402** RL 151.83 LAL -.00 LOL 309.04 VL 24.519 GAL 27.77 A7L 87.58 MCA 328.89 SMA 115.70 ECC .54163 INC 2.4176 V1 29.344
RP 108.82 LAP -1.25 LOP 277.95 VP 35.946 GAP 32.64 A7P 87.93 TAL 148.44 TAP 117.33 RCA 53.03 APO 178.37 V2 34.824
RC 216.153 GL 3.76 GP 7.92 ZAL 33.55 ZAP 164.25 ETS 147.05 ZAE 127.32 ETE 173.49 ZAC 6.39 ETC 77.27 CLP 166.34 PLANETOCENTRIC CONIC C3 195.245 VHL 13.973 DLA -19.57 RAL 276.01 RAD 6571.1 VEL 17.792 PTH 2.99 VHP 20.007 DPA -15.91 RAP 264.62 ECC 4.2132 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.80 12 24 17 107.13 18 30 54 1469.6 -12.46 168.99 90.00 11 49 47 2069.62 -15.81 32.51 745.29 145.3 25.03 183.12 90.00 18 18 29 22.90 314.73 114.45 13 29 37 107.03 21 27 38 12 58 50 1846.78 19 52 7 5731.40 -17.76 15.21 168.08 1246.8 -14.31 8.12 100.00 27.04 5131.4 100.00 24.94 271.11 183.81 13 40 36 1715.90 116.27 14 9 12 106.90 22 57 25 -18.98 32.18 355.63 110.00 -22.70 2.80 165.59 1115.9 21 26 50 185.60 4835.0 241.77 110.00 5435.05 30.17 250.40 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4940.2 SGR 282.4 SG3 83.2 RRT - .3934 RRF - .3903 RTF .9864 SGB 4948.3 R23 .0013 R13 - .9865 ST 1529.5 SR 251.8 SS 518.7 CRT .1123 CRS -.1443 CST -.9993 TOE 1.0029 TRA11.2836 TC3 -.1262 BAU .3297 RDE .6062 RRA -.3067 RC3 -.0044 FAU-.00721 FDE .2194 FRA 2.1923 FC3 .0320 BSP 16384 BDE 1.1719 BRA11.2877 BC3 .1263 FSP -273 LSA 1615.2 MSA 250.6 SSA 7.8 SG1 4941.5 SG2 259.6 THA 178.71 EL1 1529.8 EL2 250.1 ALF 1.09 ARRIVAL DATE MAR 7 1968 LAUNCH DATE AUG 2 1967 FLIGHT TIME 218.00 **DISTANCE 595.999** HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 235.13N VHL 15.334 DLA -19.16 RAL 276.24 RAD 6571.4 VEL 18.880 PTH 3.07 VHP 21.605 CPA -16.13 RAP 266.17 ECC 4.8696 ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJERT ASC INJEZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.98 12 21 24 107.42 18 36 31 113.56 13 27 11 107.40 21 32 48 170.98 1514.1 90.00 11 46 10 2114.0A -13.75 28.06 -17.01 35.22 156.1 24.85 18 23 55 756.06 22.68 315.44 185.24 90.00 -15.67 10.66 1289.8 12 55 41 1889.75 -18.95 17.85 170.10 100.00 263.80 5143.7 26.84 19 57 5 5743.65 24.70 271.94 185.93 100.00 13 38 20 1756.11 21 30 55 5450.06 -20.29 115.21 14 7 36 107.46 23 1 45 358.02 -23.89 5.32 167.70 1156.1 110.00 242.88 29.86 251.47 147 75 4850.1 31.96 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1521.2 SR 236.0 SS 550.8 CRT .1429 CRS -.1667 CST -.9996 SGT 4879.4 SGR 260.6 SG3 81.9 RRT -.3578 RRF -.3562 RTF .9895 SGB 4886.4 R23 .0013 R13 -.9895 SGI 4880.3 SG2 243.3 THA 178.90 TOE 1.1637 TRA12.2844 TC3 -.0287 BAU .0916 RDE .6249 RRA -.2902 RC3 -.0050 FAU-.01062 FDE .2439 FRA 2.3649 FC3 .0391 BSP 16300 BDE 1.3209 BRA12.2879 BC3 .0291 FSP -270 LSA 1618.2 MSA 233.8 SSA 7.2 EL1 1521.6 EL2 233.5 ALF 1.30 ARRIVAL DATE MAR 9 1968 LAUNCH DATE AUG 2 1967 FLIGHT TIME 220,00 DISTANCE 591.547 HELIOCENTRIC CONIC RL 151.83 LAL -.00 LOL 309.04 VL 24.477 GAL 34.53 A7L 86.21 MCA 335.20 SMA 115.49 ECC .62326 INC 3.7903 V1 29.344
RP 108.86 LAP -1.59 LOP 284.28 VP 35.904 GAP 38.44 A7P 86.56 TAL 149.10 TAP 124.30 RCA 43.51 APO 187.47 V2 34.811
RC 219.054 GL 4.52 GP 7.73 ZAL 33.47 ZAP 161.22 ETS 153.12 ZAE 125.23 ETE 173.99 ZAC 6.72 ETC 101.31 CLP 162.83 PLANETOCENTRIC CONIC C3 285.561 VHL 16.899 DLA -18.79 RAL 276.15 RAD 6571.7 VEL 20.171 PTH 3.15 VHP 23.462 DPA -16.34 RAP 267.50 ECC 5.6996 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 41 55 2154.31 -18.06 37.70 172.57 112.19 12 17 49 1554.3 -14.90 30.46 90.00 18 27 28 767.10 22.45 316.17 186.91 107.72 18 40 15 167.1 24.67 308.20 100.00 12 51 49 1928.74 -19.99 20.28 171.72 112.70 13 23 58 1328.7 -16.75 12.99 107.76 21 36 11 114.18 14 5 6 108.00 23 4 25 20 0 15 5755.94 13 35 13 1792.75 264.65 5155.9 26.64 100.00 24.44 272.76 187.60 1192.8 -21.45 110.00 -24.93 7.65 169.41 21 33 20 5464.69 108.00 4864.7 31.73 110.00 29.56 252.50 189.45 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4812.1 SCR 238.7 SC3 80.7 RRT -.3066 RRF -.3061 RTF .9920 SCB 4818.0 R23 .0013 R13 -.9920 ST 1504.1 SR 220.8 SS 587.1 CRT .1734 CRS -.1906 CST -.9998 TOE 1.3169 TRA13.3676 TC3 .0555 BAU .2128 RDE .6460 RRA -.2605 RC3 -.0050 FAU-.01499 LSA 1615.1 MSA 217.5 SSA 6.7 EL1 1504.6 EL2 217.4 ALF 1.49 FOE .2678 FRA 2.5592 FC3 .0454 BSP 16168 BOE 1.4668 BRA13.3702 BC3 .0557 FSP -267 SG1 4812.7 SG2 227.1 THA 179.13

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EL1 363.6 EL2 218.8 ALF 126.03

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ARRIVAL DATE OCT 12 1967
                                                                                         FLIGHT TIME 70.00
LAUNCH DATE AUG 3 1967
                                                                                        DISTANCE 208.936
    PL 151.81 LAL -.00 LOL 309.99 VL 29.320 GAL -16.30 A7L 91.80 MCA 94.52 SMA 149.32 ECC .28105 INC 1.7990 V1 29.348 RP 108.16 LAP -1.79 LOP 44.52 VP 39.562 GAP -3.28 A7P 89.86 TAL 250.44 TAP 344.96 RCA 107.35 APO 191.28 V2 35.036 RC 71.485 GL -6.23 GP -21.23 7AL 169.33 7AP 67.11 ETS 9.89 7AE 164.38 ETE 284.51 7AC 109.99 ETC 8.45 CLP -65.33
   HELIOCENTRIC CONIC
    C3 66.206 VHL 8.137 OLA 9.30 RAL 139.14 RAO 6569.3 VEL 13.695 PTH 2.50 VHP 5.214 DPA -8.48 RAP 154.18 ECC 2.0896 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 22 40 42 2803.72 -28.20 82.10 25.81 92.68 23 27 25 2203.7 -27.53 73.49 90.00 13 3 48 4862.62 19.67 210.69 18.38 69.21 14 24 51 4262.6 16.66 203.30 100.00 0 10 31 2526.69 -29.71 61.63 25.71 93.42 0 52 38 1926.7 -28.92 52.91 100.00 14 20 36 4614.89 21.08 191.89 17.80 68.30 15 37 31 4014.9 17.95 184.49 110.00 1 29 8 2280.69 -33.79 42.58 25.34 95.52 2 7 9 1680.7 -32.66 35.52 110.00 15 18 28 4433.65 24.84 176.40 16.07 65.73 16 49.20
    PLANETOCENTRIC CONIC
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 219.5 SR 344.0 SS 193.9
CRT -.5226 CRS .5520 CST -.9901
LSA 397.9 MSA 213.2 SSA 19.8
EL1 368.9 EL2 174.6 ALF 114.18
                                                                                    SGT 539.9 SGR 500.2 SG3 191.1
RRT .3537 RRF .5936 RTF .5061
SGB 736.0 R23 .1428 R13 .6574
SG1 607.1 SG2 416.1 THA 38.91
    TOE .2211 TRA -.7232 TC3 -.0193 BAU .1402
    ROE - .4747 RRA - .3769 RC3 - .1572 FAU .09253
    FOE .4481 FRA-1.3395 FC3-1.2100 BSP 1147
BDE .5236 BRA .8164 BC3 .1584 FSP -549
     BOE .5236 BRA .8164 BC3 .1584 FSP
                                                                                                                                                                  ARRIVAL DATE OCT 14 1967
                                                                                         FLIGHT TIME 72.00
LAUNCH DATE AUG 3 1967
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 215.481
    RL 151.81 LAL -.00 LOL 309.99 VL 29.294 GAL -16.11 A7L 91.64 MCA 97.73 SMA 149.06 ECC .27813 INC 1.6443 V1 29.348 RP 108.12 LAP -1.63 LOP 47.72 VP 39.555 GAP -2.61 AZP 89.78 TAL 250.24 TAP 347.97 RCA 107.61 APO 190.52 V2 35.049 RC 73.590 GL -5.77 GP -22.06 ZAL 169.53 ZAP 71.98 ETS 8.15 ZAE 163.67 ETE 272.24 ZAC 111.91 ETC 7.63 CLP -70.50
    C3 64.543 VHL 8.034 DLA 9.72 RAL 139.36 RAD 6569.2 VEL 13.634 PTH 2.49 VHP 5.059 DPA -8.59 RAP 152.16 ECC 2.0622 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 36 13 2611.26 -28.22 82.65 25.77 92.40 23 25 4 2211.3 -27.59 74.04 90.00 13 8 2 4642.86 19.18 209.44 18.11 68.76 14 28 45 4949 Q 16.12
   PLANETOCENTRIC CONIC
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   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 596.2 SGR 515.7 SG3 202.9
RRT .4291 RRF .6266 RTF .5881
SGB 788.3 R23 .1409 R13 .7055
SG1 670.9 SG2 414.0 THA 35.63
                                                                                                                                                    ST 236.0 SR 337.6 SS 205.5
CRT -.4934 CRS .5684 CST -.9877
     TOE .2301 TRA - .7814 TC3 - .0588 BAU
                                                                   .1604
     ROE -.4582 RRA -.3883 RC3 -.1763 FAU .09713
     FDE .4982 FRA-1.3877 FC3-1.3028 BSP 1367
BDE .5128 BRA .8725 BC3 .1858 FSP -587
                                                                                                                                                   LSA 402.3 MSA 222.8 SSA 19.9
                                                                                                                                                     EL1 365.7 EL2 189.5 ALF 116.73
                                                                                                                                                                 ARRIVAL DATE OCT 16 1967
                                                                                         FLIGHT TIME 74.00
LAUNCH DATE AUG 3 1967
                                                                                         DISTANCE 221.980
    RL 151.81 LAL -.00 LOL 309.99 VL 29.260 GAL -15.94 AZL 91.49 MCA 100.93 SMA 148.73 ECC .27532 INC 1.4871 V1 29.348 RP 108.08 LAP -1.46 LOP 50.93 VP 39.542 GAP -1.97 AZP 89.72 TAL 249.92 TAP 350.86 RCA 107.79 APO 189.68 V2 35.062 RC 75.721 GL -5.28 GP -22.85 ZAL 169.67 ZAP 76.83 ETS 6.36 ZAE 162.37 ETE 261.06 ZAC 113.81 ETC 6.75 CLP -75.69
    PLANETOCENTRIC CONIC
     C3 62.926 VHL 7.933 DLA 10.14 RAL 139.65 RAD 6569.2 VEL 13.575 PTH 2.48 VHP 4.939 DPA -8.67 RAP 150.15 ECC 2.0356
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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    DIFFERENTIAL CORRECTIONS
                                                                                    SCT 663.7 SGR 531.1 SG3 213.4

RRT .4955 RRF .6576 RTF .6554

SGB 850.1 R23 .1406 R13 .7461

SG1 743.7 SGZ 411.7 THA 32.80
                                                                                                                                                   ST 255.5 SR 330.2 SS 215.8
CRT -.4697 CRS .5798 CST -.9841
LSA 408.7 MSA 231.1 SSA 20.0
     TOE .2429 TRA -.8435 TC3 -.1030 BAU .1860
     ROE - .4408 RRA - .3959 RC3 - .1957 FAU .10100
                                                                 1621
-627
     FOE .5423 FRA-1.4215 FC3-1.3895 BSP
                                                                                                                                                    EL1 363.9 EL2 204.7 ALF 120.54
     BOE .5032 BRA .9318 BC3 .2211 FSP
                                                                                                                                                                 ARRIVAL DATE OCT 18 1967
                                                                                         FLIGHT TIME 76.00
LAUNCH DATE AUG 3 1967
                                                                                         DISTANCE 228.433
    RL 151.81 LAL -.00 LOL 309.99 VL 29.219 GAL -15.76 AZL 91.33 HCA 104.14 SMA 148.33 ECC .27260 INC 1.3264 V1 29.348 RP 108.04 LAP -1.29 LOP 54.14 VP 39.323 GAP -1.36 AZP 89.68 TAL 249.49 TAP 353.64 RCA 107.90 APO 188.77 V2 35.075 RC 77.874 GL -4.77 GP -23.59 ZAL 169.74 ZAP 81.61 ETS 4.51 ZAE 160.57 ETE 251.49 ZAC 115.66 ETC 5.85 CLP -80.84
    PLANETOCENTRIC CONIC
     C3 61.343 VHL 7.832 OLA 10.57 RAL 140.01 RAD 6569.1 VEL 13.517 PTH 2.47 VHP 4.851 CPA -8.74 RAP 148.19 ECC 2.0096
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 33 56 2826.81 -28.26 83.78 25.89 91.83 23 21 3 2226.8 -27.71 75.16 90.00 13 17 29 4802.77 18.18 206.93 17.80 67.91 14 37 32 4202.8 15.02 199.68
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15 29 52 4381.01
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        110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
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    DIFFERENTIAL CORRECTIONS
                                                                                  SGT 742.0 SGR 544.3 SG3 221.5

RRT .5524 RRF .6840 RTF .7089

SGB 920.2 R23 .1411 R13 .7782

SGI 824.7 SG2 408.2 THA 30.16
                                                                                                                                                  ST 277.6 SR 321.0 SS 226.1

CRT -,4502 CRS .5945 CST -,9788

LSA 417.9 MSA 237.0 SSA 20.1
     TDE .2587 TRA -.9094 TC3 -.1521 BAU .2155
     RDE -.4213 RRA -.4000 RC3 -.2143 FAU .10369
     FDE .5863 FRA-1.4321 FC3-1.4634 BSP 1900
BDE .4944 BRA .9934 BC3 .2628 FSP -654
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BOE .4944 BRA .9934 BC3 .2628 FSP

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LAUNCH DATE AUG 3 1967
                                                                                                            FLIGHT TIME 78.00
                                                                                                                                                                                                   ARRIVAL DATE OCT 20 1967
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 234.842
     RL 151.81 LAL -.00 LOL 309.99 VL 29.171 GAL -15.59 AZL 91.16 MCA 107.35 SMA 147.87 ECC .26995 INC 1.1609 V1 29.348
RP 108.00 LAP -1.11 LOP 57.35 VP 39.499 GAP -.78 AZP 89.65 TAL 248.96 TAP 356.32 RCA 107.95 APO 187.79 V2 35.088
RC 80.046 GL -4.22 GP -24.29 ZAL 169.73 ZAP 86.28 ETS 2.62 ZAE 158.44 ETE 243.60 ZAC 117.41 ETC 4.94 CLP -85.91
    PLANETOCENTRIC CONIC
      C3 59.786 VHL 7.732 DLA 11.00 RAL 140.44 RAD 6569.1 VEL 13.459 PTH 2.45 VHP 4.794 DPA -8.81 RAP 146.34 ECC 1.9839
     CS 59.786 VML 7.732 OLA 11.00 RAL 140.44 RAD 6589.1 VEL 13.459 PTM 2.46 VMP 4.794 DPA -8.N1 RAP 146.34 ECC 1.9839 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 32 2 2835.06 -28.28 84.39 26.06 91.53 23 19 18 2235.1 -27.77 75.76 90.00 13 22 46 4782.02 17.64 205.64 17.76 67.48 14 42 28 4182.0 14.44 198.43 100.00 0 2 50 2554.92 -29.81 63.72 26.00 92.32 0 45 25 1954.9 -29.17 54.98 100.00 14 38 36 4537.39 19.05 187.03 17.13 66.52 15 54 13 3937.4 15.71 179.82 110.00 1 23 35 2302.25 -33.92 44.25 25.71 94.54 2 1 57 1702.3 -32.92 35.15 110.00 15 34 20 4362.83 22.78 171.93 15.28 63.80 16 47 3 3762.8 19.08 164.76
                                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                     SCT 829.1 SCR 556.4 SC3 227.8
RRT .5994 RRF .7083 RTF .7500
SCB 998.5 R23 .1439 R13 .6040
SCI 912.9 SC2 404.5 THA 27.83
                                                                                                                                                                                  ST 302.7 SR 310.9 SS 235.1
CRT -.4364 CRS .6058 CST -.9740
      TOE .2784 TRA -.9770 TC3 -.2053 BAU .2480
      RDE -.4010 RRA -.4016 RC3 -.2326 FAU .10547
FDE .6225 FRA-1.4267 FC3-1.5272 BSP 2204
BDE .4881 BRA 1.0564 BC3 .3103 FSP -680
     FOE .6225 FRA-1.4267 FC3-1.5272 BSP
BOE .4881 BRA 1.0564 BC3 .3103 FSP
                                                                                                                                                                                 LSA 430.5 MSA 240.4 SSA 20.2
                                                                                                                                                                                  EL1 367.8 EL2 230.2 ALF 133.23
LAUNCH DATE AUG 3 1967
                                                                                                            FLIGHT TIME 80.00
                                                                                                                                                                                                    ARRIVAL DATE OCT 22 1967
    HELIOCENTRIC CONIC
                                                                                                            DISTANCE 241.208
     RL 151.81 LAL -.00 LOL 309.99 VL 29.118 GAL -15.41 A7L 90.99 MCA 110.57 SMA 147.36 ECC .26737 INC .9895 V1 29.348
RP 107.96 LAP -.93 LOP 60.57 VP 39.470 GAP -.23 AZP 89.65 TAL 248.34 TAP 358.90 RCA 107.96 APO 186.76 V2 35.101
RC 82.236 GL -3.64 GP -24.95 ZAL 169.66 ZAP 90.78 ETS .69 ZAE 156.09 ETE 237.21 ZAC 119.02 ETC 4.03 CLP -90.86
    RC 82.236 GL -3.84 UP -60.95 UR 1.46 RAL 140.93 RAD 6569.1 VEL 13.402 PTH 2.45 VHP 4.764 DPA -8.9G RAP 144.62 ECC 1.9586 CS 58.248 VHL 7.632 DLA 11.46 RAL 140.93 RAD 6569.1 VEL 13.402 PTH 2.45 VHP 4.764 DPA -8.9G RAP 144.62 ECC 1.9586 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 30 14 2843.84 -28.29 85.03 26.28 91.21 23 17 38 2243.8 -27.83 76.39 90.00 13 28 30 4760.52 17.07 204.32 17.78 67.06 14 47 50 4160.5 13.82 197.15 100.00 0 1 18 2562.84 -29.83 64.31 26.23 92.02 0 44 1 1962.8 -29.23 55.56 100.00 14 44 3 4516.76 18.49 185.75 17.13 66.08 15 59 20 3916.8 15.10 178.60 110.00 1 22 38 2308.31 -33.95 44.72 25.97 94.26 2 1 6 1708.3 -32.99 35.61 110.00 14 30 12 4344.04 22.21 170.77 15.25 63.33 16 51 36 3744.0 18.45 163.66 ORBIT DETERMINATION ACCURACY
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 923.8 SGR 566.7 SG3 231.9
RRT .6379 RRF .7302 RTF .7814
SGB 1083.7 R25 .1485 R13 .8241
SGI 1007.1 SG2 400.3 THA 25.73
     TOE .3019 TRA-1.0458 TC3 -.2623 BAU .2823
                                                                                                                                                                                  ST 330.6 SR 299.6 SS 243.4
CRT -.4275 CRS .6162 CST -.9696
     RDE -.3796 RRA -.4003 RC3 -.2503 FAU .10620
FDE .6529 FRA-1.4040 FC3-1.5764 83P .2531
BDE .4850 BRA 1.1197 BC3 .3625 FSP -701
                                                                                                                                                                                  LSA 447.0 MSA 240.9 SSA 20.3
                                                                                                                                                                                  EL1 378.1 EL2 236.8 ALF 141.48
                                                                                                                                                                                                   ARRIVAL DATE OCT 24 1967
LAUNCH DATE AUG 3 1967
                                                                                                            FLIGHT TIME 82.00
                                                                                                           DISTANCE 247.533
     RL 151.81 LAL -.00 LOL 309.99 VL 29.058 GAL -15.24 AZL 90.81 MCA 113.78 SMA 146.80 ECC .26485 INC .8103 V1 29.348 RP 107.92 LAP -.74 LOP 63.78 VP 39.438 GAP .29 AZP 89.67 TAL 247.62 TAP 1.41 RCA 107.92 APO 185.68 VZ 35.113 RC 84.440 GL -3.02 GP -25.57 ZAL 169.51 ZAP 95.09 ETS 358.71 ZAE 153.63 ETE 232.07 ZAC 120.45 ETC 3.14 CLP -95.64
    PLANETOCENTRIC CONIC
     C3 56.724 VHL 7.532 OLA 11.94 RAL 141.48 RAD 6569.0 VEL 13.345 PTH 2.44 VHP 4.758 OPA -9.03 RAP 143.06 ECC 1.9335
     UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 28 28 2853.35 -28.31 85.72 26.57 90.86 23 16 1 2253.4 -27.89 77.08 90.00 13 34 42 4738.01 16.47 202.94 17.86 66.64 14 53 40 4138.0 13.17 195.82 100.00 23 55 53 2571.42 -29.85 64.95 26.54 91.68 24 38 44 1971.4 -29.30 56.19 100.00 14 49 58 4495.17 17.88 184.43 17.21 65.64 16 4 54 3895.2 14.45 177.33
                           22 28 28 2853.35
13 34 42 4738.01
23 55 53 2571.42
14 49 58 4495.17
1 21 47 2314.92
15 44 30 4324.44
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    DIFFERENTIAL CORRECTIONS
                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                     SCT 1024.2 SCR 573.5 SG3 233.3
RRT .6691 RRF .7487 RTF .8048
SCB 1173.8 R23 .1544 R13 .8390
                                                                                                                                                                                  ST 361.4 SR 286.4 SS 252.0

CRT -.4235 CRS .6302 CST -.9648

LSA 468.2 MSA 237.8 SSA 20.4
     TDE .3297 TRA-1.1139 TC3 -.3224 BAU .3172
     RDE -.3562 RRA -.3950 RC3 -.2666 FAU .10570
FDE .6830 FRA-1.3597 FC3-1.6132 BSP 2859
     BOE .4853 BRA 1.1819 BC3 .4183 FSP -706
                                                                                                     SG1 1105.4 SG2 _ 394.9 THA 23.76
                                                                                                                                                                                  EL1 395.6 EL2 237.1 ALF 149.50
LAUNCH DATE AUG 3 1967
                                                                                                            FLIGHT TIME 84.00
                                                                                                                                                                                                   ARRIVAL DATE OCT 26 1967
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 253.820
    RL 151.81 LAL -.00 LOL 309.99 VL 28.994 GAL -15.06 A7L 90.62 MCA 117.00 SMA 146.20 ECC .26239 INC .6221 V1 29.34A
RP 107.89 LAP -.55 LOP 67.00 VP 39.401 GAP .80 A7P 89.72 TAL 246.82 TAP 3.83 RCA 107.84 APO 184.56 V2 35.125
RC 86.655 GL -2.35 GP -26.19 ZAL 169.27 ZAP 99.17 ETS 356.69 ZAE 151.13 ETE 227.93 ZAC 121.69 ETC 2.28 CLP-100.23
    PLANETOCENTRIC CONIC
     C3 55.214 VHL 7.431 DLA 12.44 RAL 142.11 RAD 6569.0 VEL 13.288 PTH 2.43 VHP 4.775 DPA -9.22 RAP 141.68 ECC 1.9087
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 26 39 2863.89 -28.31 86.49 26.93 90.47 23 14 23 2263.9 -27.95 77.85 90.00 13 41 29 4714.20 15.82 201.49 18.02 66.21 15 0 4 4114.2 12.47 194.42 100.00 23 54 23 2580.94 -29.87 65.65 26.91 91.31 24 37 24 1980.9 -29.37 56.89
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    DIFFERENTIAL CORRECTIONS
                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                     SCT 1129.2 SCR 579.4 SC3 233.2
RRT .6945 RRF .7667 RTF .8225
SCB 1269.2 R23 .1629 R13 .8508
SCI 1207.9 SC2 389.7 THA 22.03
     TOE .3615 TRA-1.1808 TC3 -.3853 BAU- .3528
                                                                                                                                                                                  ST 395.3 SR 272.5 SS 259.5
     ROE - 3324 RRA - 3875 RC3 - 2826 FAU .10449
FOE .7038 FRA-1.3058 FC3-1.6383 BSP 3212
BOE .4911 BRA 1.2428 BC3 .4779 FSP -713
                                                                                                                                                                                CRT -.4228 CRS .6404 CST -.9616
                                                                                                                                                                                 LSA 493.4 MSA 232.4 55A
                                                                                                                                                                                                                                         20.6
                                                                                                                                                                                  EL1 420.2 EL2 232.3 ALF 155.99
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ARRIVAL DATE OCT 28 1967

LAUNCH DATE AUG 3 1967

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DISTANCE 260.070
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 28.926 GAL -14.87 AZL 90.42 MCA 120.22 SMA 145.57 ECC .25998 INC .4224 VI 29.348 RP 107.85 LAP -.37 LOP 70.22 VP 39.362 GAP 1.27 AZP 89.79 TAL 245.95 TAP 6.18 RCA 107.72 APO 183.41 V2 35.137 RC 88.880 GL -1.61 GP -26.81 ZAL 168.94 ZAP 103.00 ETS 354.61 ZAE 148.66 ETE 224.61 ZAC 122.73 ETC 1.46 CLP-104.60
  PLANETOCENTRIC CONIC
   C3 53.716 VHL 7.329 DLA 12.99 RAL 142.80 RAD 6568.9 VEL 13.232 PTH 2.42 VHP 4.812 DPA -9.49 RAP 140.50 ECC 1.8840
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            90.04 23 12 39
65.77 15 7 5
90.89 24 36 0
64.74 16 17 41
93.23 1 59 0
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                   22 24 43 2875.78
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                  15 3 32
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                  1 20 9 2330.69
15 56 37 4281.82
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                                                 -34.05
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      110.00
                                                 20.26
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 432.5 SR 257.2 S5 266.8

CRT -.4253 CRS .6505 CST -.9592

LSA 523.1 MSA 224.4 SSA 20.7
                                                                   SGT 1237.4 SGR 583.2 SG3 231.2
RRT .7152 RRF .7833 RTF .8357
SGB 1368.0 R23 .1733 R13 .8596
   TOE .3981 TRA-1.2452 TC3 -.4507 BAU .3880
   ROE -.3074 RRA -.3772 RC3 -.2980 FAU .10243
   FOE .7209 FRA-1.2396 FC3-1.6509 BSP 3571
BOE .5029 BRA 1.3010 BC3 .5403 FSP -713
                                                                                                                       EL1 451.0 EL2 223.3 ALF 160.97
                                                                   SGI 1312.9 SG2 384.2 THA 20.46
                                                                                                                                  ARRIVAL DATE OCT 30 1967
                                                                        FLIGHT TIME 88.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 266.285
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 28.855 GAL -14.68 AZL 90.21 MCA 123.44 SMA 144.91 ECC .25762 INC .2091 V1 29.348 RP 107.82 LAP -.17 LOP 73.44 VP 39.319 GAP 1.73 AZP 89.88 TAL 245.01 TAP 8.46 RCA 107.58 APO 182.24 V2 35.149 RC 91.113 GL -.81 GP -27.47 ZAL 168.52 ZAP 106.56 ETS 352.48 ZAE 146.23 ETE 221.94 ZAC 123.54 ETC .67 CLP-108.74
  PLANETOCENTRIC CONIC
   C3 52.234 VHL 7.227 DLA 13.59 RAL 143.56 RAD 6568.9 VEL 13.176 PTH 2.41 VHP 4.867 DPA -9.86 RAP 139.50 ECC 1.8596 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 2.41 VHP 4.867 OPA
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      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 473.6 SR 239.9 SS 275.3
CRT -.4303 CRS .6622 CST -.9567
                                                                    SGT 1347.5 SGR 584.2 SG3 227.4
RRT .7319 RRF .7983 RTF .8452
    TOE .4402 TRA-1.3054 TC3 -.5179 BAU
                                                      .4224
    RDE -.2805 RRA -.3636 RC3 -.3124 FAU .09955
                                                                                                                       LSA 558.1 MSA 213.9 SSA 20.8
                                                                    SG8 1468.7 R23 .1854 R13 .8657
   FOE .7388 FRA-1.1602 FC3-1.6499 BSP 3919
BDE .5220 BRA 1.3551 BC3 .6049 FSP -700
                                                                    SG1 1419.2 SG2 378.0 THA 19.01
                                                                                                                       EL1 487.4 EL2 210.4 ALF 164.81
                                                                                                                                 ARRIVAL DATE NOV 1 1967
                                                                       FLIGHT TIME 90.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 272.468
   RL 151.81 LAL -.00 LOL 309.99 VL 28.779 GAL -14.49 A7L 89.98 MCA 126.67 SMA 144.22 ECC .25531 INC .0000 V1 29.348
RP 107.78 LAP .02 LOP 76.66 VP 39.274 GAP 2.17 A7P 90.01 TAL 244.01 TAP 10.68 RCA 107.40 APO 181.05 V2 35.160
RC 93.352 GL .08 GP -28.17 ZAL 167.99 ZAP 109.85 E7S 350.28 ZAE 143.88 ETE 219.82 ZAC 124.13 ETC 359.92 CLP-112.66
   PLANETOCENTRIC CONIC
    C3 50.771 VHL 7.125 DLA 14.25 RAL 144.40 RAD 6568.9 VEL 13.120 PTH 2.40 VHP 4.939 DPA -10.34 RAP 138.69 ECC 1.8356
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
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       PO .00 22 20 3 2905.45

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100.00 23 48 59 2618.65

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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 518.7 SR 221.6 SS 283.4

CRT -.4354 CRS .6699 CST -.9555

LSA 597.7 MSA 202.1 SSA 20.9
                                                                    SGT 1459.3 SGR 585.0 SG3 222.6
RRT .7458 RRF .8136 RTF .8523
SGB 1572.2 R23 .2002 R13 .8705
    TOE .4875 TRA-1.3613 TC3 -.5873 BAU
                                                      .4563
    RDE - .2530 RRA - .3481 RC3 - .3272 FAU .09627
    FDE .7505 FRA-1.0775 FC3-1.6417 BSP 4285
                                                                                                                       EL1 529.1 EL2 195.6 ALF 167.77
                                                                    5G1 1527.5 5G2 372.3 THA 17.73
    BOE .5492 BRA 1.4051 BC3 .6723 FSP
                                                    -649
                                                                                                                                  ARRIVAL DATE NOV 3 1967
                                                                        FLIGHT TIME 92.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 278.619
   HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 28.702 GAL -14.29 A7L 89.73 MCA 129.89 SMA 143.53 ECC .25306 INC .2696 VI 29.348 RP 107.75 LAP .21 LOP 79.89 VP 39.227 GAP 2.58 AZP 90.17 TAL 242.95 TAP 12.84 RCA 107.21 APO 179.85 V2 35.170 RC 95.596 GL 1.07 GP -28.96 ZAL 167.34 ZAP 112.85 ETS 347.98 ZAE 141.60 ETE 218.16 ZAC 124.52 ETC 359.19 CLP-116.35
   PLANETOCENTRIC CONIC
    C3 49.333 VHL 7.024 DLA 14.99 RAL 145.32 RAD 6568.8 VEL 13.065 PTH 2.38 VHP 5.027 DPA -10.97 RAP 138.05 ECC 1.8119
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 17 2 2924.52 -28.27 90.93 29.21 88.25 23 5 47 2324.5 -28.21 82.26
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                                                  -29.88
                   23 46 30 2636.00
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60.28 17 30 11
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                   16 20 6 4204.43
                                                  17.71
                                                                162.44
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 1572.4 SGR 584.9 SG3 216.7
RRT .7573 RRF .8288 RTF .8576
SGB 1677.6 R23 .2170 R15 .8740
                                                                                                                      ST 564.7 SR 201.7 SS 292.2
CRT -.4392 CRS .6745 CST -.9551
LSA 642.9 MSA 188.8 SSA 21.1
    TDE .5408 TRA-1.4120 TC3 -.6586 BAU
                                                       . ARGA
    ROE - .2243 RRA - .3304 RC3 - .3419 FAU .09258
    FOE .7607 FRA -.9905 FC3-1.6246 BSP 4662
RDF .5855 BRA 1.4501 BC3 .7421 FSP -677
                                                                    SGI 1637.0 SGZ 366.9 THA 16.59
                                                                                                                       EL1 576.3 EL2 178.9 ALF 170.19
     BOE .5855 BRA 1.4501 BC3 .7421 FSP
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FLIGHT TIME 86.00

ARRIVAL DATE NOV 5 1967 FLIGHT TIME 94.00 LAUNCH CATE AUG 3 1967 DISTANCE 284.741 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 28.621 GAL -14.08 AZL 89.45 HCA 133.12 SHA 142.82 ECC .25087 INC .5446 V1 29.348 RP 107.72 LAP .40 LOP 83.11 VP 39.177 GAP 2.98 AZP 90.37 TAL 241.83 TAP 14.94 RCA 106.99 APO 178.64 V2 35.180 RC 97.843 GL 2.19 GP -29.85 ZAL 166.56 ZAP 115.56 ETS 345.56 ZAE 139.39 ETE 216.90 ZAC 124.69 ETC 358.47 CLP-119.83 PLANETOCENTRIC CONIC C3 47.929 VHL 6.923 OLA 15.83 RAL 146.34 RAD 6568.8 VEL 13.011 PTH 2.37 VHP 5.131 DPA -11.75 RAP 137.57 ECC 1.7888 ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 87.41 23 2 26 63.90 15 44 37 88.33 24 27 41 62.78 16 53 17 90.84 1 54 45 59.71 17 39 31 2347.6 -28.27 30.06 90.00 22 13 18 2947.60 -28.21 92.61 3960.2 7.79 14 28 36 4560.18 192.36 20.05 90.00 11.39 62.51 2057.0 -29.76 23 43 24 2657.02 -29.85 71.31 30.13 167.60 100.00 15 41 11 4325.99 12.86 174.39 19.29 3726.0 9.11 41.30 30.16 1782.6 -33.68 1 15 3 2382.59 -34.17 50.51 12.50 153.99 17.14 3573.2 110.00 16 29 58 4173.18 160.65 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 625.0 SR 179.5 SS 303.3 CRT -.4401 CRS .6763 CST -.9547 LSA 695.7 MSA 174.3 SSA 21.2 SCT 1685.0 SCR 582.9 SC3 209.6 RRT .7662 RRF .8432 RTF .8610 SCB 1783.0 R23 .2357 R13 .8760 SCI 1746.0 SC2 361.5 THA 15.53 TOE .6025 TRA-1.4550 TC3 -.7309 BAU .5210 RDE -.1934 RRA -.3095 RC3 -.3562 FAU .08836 FOE .7737 FRA -.8960 FC3-1.5960 BSP 5010 EL1 630.3 EL2 159.8 ALF 172.30 BDE .6328 BRA 1.4876 BC3 .8130 FSP -653 ARRIVAL CATE NOV 7 1967 LAUNCH DATE AUG 3 1967 FLIGHT TIME 96.00 DISTANCE 290.835 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 28.539 GAL -13.87 AZL 89.15 MCA 136.34 SMA 142.10 ECC .24875 INC .8506 V1 29.348 RP 107.69 LAP .59 LOP 86.34 VP 39.126 GAP 3.36 AZP 90.62 TAL 240.66 TAP 17.00 RCA 106.75 APO 177.44 V2 35.190 RC 100.092 GL 3.46 GP -30.89 ZAL 165.63 ZAP 117.96 ETS 343.00 ZAE 137.23 ETE 215.97 ZAC 124.67 ETC 357.75 CLP-123.11 PLANETOCENTRIC CONIC 2.36 VHP 5.253 OPA -12.73 RAP 137.21 ECC 1.7665 C3 46.575 WHL 6.825 DLA 16.80 RAL 147.46 RAD 6568.7 VEL 12.959 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 86.37 22 58 9
63.40 15 57 37
87.32 24 24 9
62.25 17 5 33
89.68 1 52 46
59.11 17 50 15 2376.0 86.03 -28.10 94.69 31.06 -28.31 22 8 33 2976.02 14 42 20 4517.39 189.88 20.83 3917.4 6.45 183.10 90.00 10.10 73.23 31.16 2082.9 -29.84 64.43 100.00 23 39 26 2682.89 -29.78 11.59 7.79 165.35 15 54 7 4285.75 20.05 3665.6 172.07 1 12 42 2403.36 16 41 17 4136.03 -34.18 52.13 1803.4 -33.62 42.90 110.00 31.29 152.07 3538.0 11.22 110.00 158.65 17.63 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1799.1 SGR 582.0 SG3 202.1 RRT 17733 RRF .8583 RTF .8636 SGB 1890.9 R23 .2567 R13 .8776 SGI 1856.8 SG2 357.6 TMA 14.60 ST 688.0 SR 156.0 SS 314.9 CRT -.4326 CRS .6682 CST -.9555 TOE .6721 TRA-1.4915 TC3 -.8052 BAU .5521 RDE -.1616 RRA -.2870 RC3 -.3714 FAU .08403 FOE .7836 FRA -.8031 FC3-1.5619 BSP 5386 BDE .6912 BRA 1.5188 BC3 .8867 FSP -634 LSA 755.7 MSA 159.5 SSA 21.3 EL1 691.5 EL2 140.0 ALF 174.16 ARRIVAL DATE NOV 9 1967 FLIGHT TIME 98.00 LAUNCH DATE AUG 3 1967 DISTANCE 296.904 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 28.455 GAL -13.65 AZL 88.80 MCA 139.57 SMA 141.37 ECC .24669 INC 1.1949 VI 29.348
RP 107.66 LAP .78 LOP 89.57 VP 39.073 GAP 3.73 AZP 90.91 TAL 239.44 TAP 19.01 RCA 106.50 APO 176.25 V2 35.199
RC 102.344 GL 4.92 GP -32.10 ZAL 164.51 ZAP 120.03 ETS 340.26 ZAE 135.10 ETE 215.35 ZAC 124.46 ETC 357.00 CLP-126.21 PLANETOCENTRIC CONIC C3 45.288 VHL 6.730 OLA 17.92 RAL 148.71 RAD 6568.7 VEL 12.909 PTH 2.35 VHP 5.392 DPA -13.92 RAP 136.94 ECC 1.7453 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.09 22 52 32 62.91 16 12 59 86.07 24 19 30 61.72 17 19 57 88.68 1 50 2 -28.31 2411.7 88.63 22 2 20 14 58 31 -27.92 97.28 32.24 90.00 3011.66 180.30 187.03 21.83 3867.7 4.87 4467.69 8.57 90.00 23 34 15 66.83 2115.3 -29.89 2715.28 -29.66 75.63 32.39 100.00 162.76 16 9 18 10.11 169.42 21.01 3639.3 6.25 100.00 4239.30 44.92 1 9 33 2429.40 54.16 32.64 1829.4 -33.97 -34.16 88.68 1 50 c 58.50 18 2 43 110.00 18.71 3498.0 9.75 149.91 16 54 25 156.40 4097.95 14.02 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .7780 RRF .8730 RTF .8655 SGB 1999.6 R23 .2793 R13 .8787 SGI 1967.8 SG2 355.0 THA 13.75 ST 760.2 SR 130.7 SS 328.6 CRT -.4097 CRS .6453 CST -.9569 LSA 825.6 MSA 144.5 SSA 21.3 TOE .7524 TRA-1.5186 TC3 -.8803 BAU .5821 ROE -.1281 RRA -.2616 RC3 -.3867 FAU .07943 FOE .7944 FRA -.7084 FC3-1.5184 BSP 5761 BOE .7633 BRA 1.5410 BC3 .9615 FSP -612 EL1 762.1 EL2 118.9 ALF 175.87 FLIGHT TIME 100.00 ARRIVAL DATE NOV 11 1967 LAUNCH DATE AUG 3 1967 **DISTANCE 302.948** HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 28.370 GAL -13.43 AZL 88.41 MCA 142.80 SNA 140.65 ECC .24469 INC 1.5883 VI 29.348
RP 107.63 LAP .96 LOP 92.80 VP 39.019 GAP 4.08 AZP 91.27 TAL 238.18 TAP 20.98 RCA 106.23 APO 175.06 VZ 35.208
RC 104.596 GL 6.61 GP -33.53 ZAL 163.17 ZAP 121.75 ETS 357.31 ZAE 132.97 ETE 214.99 ZAC 124.09 ETC 356.21 CLP-129.15 PLANETOCENTRIC CONIC C3 44.099 VHL 6.641 DLA 19.24 RAL 150.12 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 5.555 DPA -15.35 RAP 136.73 ECC 1.7258 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 54 1 3057.31 -27.61 100.58 53.65 83.46 22 44 58 2457.3 -28.23 91.97 83.46 22 44 58 62.43 16 31 32 84.48 24 13 13 61.19 17 37 13 90.00 21 54 1 3057.31 90.00 15 18 3 4408.66 100.00 23 27 16 2756.58 2.48 6.72 183.67 23.13 3AGA . 7 176.99 2156.6 -29.88 69.90 -29.42 78.68 33.87 100.00 8.33 3584.6 4.42 159.73 16 27 29 4184.62 166.34 22.26 100.00 47.49 -34,08 56.74 87.15 1 46 15 1862.4 -34.10 1 5 13 2462.44 34.27 110.00 57,87 18 17 29 17 9 57 4051.53 12.35 153.84 19.85 3451.5 8.02 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2028.1 SGR 580.6 SG3 185.0 RRT .7802 RRF .8873 RTF .8669 SGB 2109.5 R23 .3030 R13 .8794 ST 843.7 SR 103.6 SS 344.9 CRT -.3527 CRS .5904 CST -.9589 TOE .8463 TRA-1.5354 TC3 -.9557 BAU .6113 RDE -. 0926 RRA -. 2332 RC3 -. 4022 FAU . 07462 LSA 907.8 MSA 130.1 SSA 21.2 FOE .8070 FRA -.6131 FC3-1.4649 BSP 6144 BDE .8513 BRA 1.5530 BC3 1.0369 FSP -588 EL1 844.5 EL2 96.8 ALF 177.49 SG1 2079.6 SG2 354.2 THA 12.97

ARRIVAL DATE NOV 13 1967

LAUNCH DATE AUG 3 1967

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HELIOCENTRIC CONIC
                                                                       DISTANCE 308.969
    RL 151.81 LAL -.00 LOL 309.99 VL 28.283 GAL -13.19 A7L 87.95 MCA 146.03 SMA 139.92 ECC .24277 INC 2.0450 V1 29.348
RP 107.61 LAP 1.14 LOP 96.04 VP 38.963 GAP 4.42 A7P 91.70 TAL 236.88 TAP 22.91 RCA 105.95 APO 173.89 V2 35.216
RC 106.849 GL 8.61 GP -35.23 ZAL 161.56 ZAP 123.10 ETS 334.11 ZAE 130.78 ETE 214.88 ZAC 123.56 ETC 355.35 CLP-131.95
   PLANETOCENTRIC CONIC
    C3 43.051 VHL 6.561 OLA 20.61 RAL 151.72 RAD 6568.6 VEL 12.823 PTH 2.33 VHP 5.744 OPA -17.08 RAP 136.54 ECC 1.7085
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                 -27.07
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        90.00
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                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   $67 2141.6 $GR 579.0 $G3 175.0
RRT .7788 RRF .9002 RTF .8677
$GB 2218.5 R23 .3271 R13 .8797
                                                                                                                      ST 942.8 SR 75.0 SS 365.5
CRT -.2072 CRS .4518 CST -.9613
    TOE .9592 TRA-1.5378 TC3-1.0284 BAU .6385
    RDE -.0539 RRA -.1999 RC3 -.4161 FAU .06941
   FOE .8246 FRA -.5139 FC3-1.3959 BSP 6490
BOE .9607 BRA 1.5507 BC3 1.1094 FSP -556
                                                                                                                      LSA 1006.9 MSA 117.4 SSA 20.6
                                                                                                                      EL1 943.0 EL2 73.4 ALF 179.05
                                                                    5G1 2189.9 SG2 355.2 THA 12.22
LAUNCH DATE AUG 3 1967
                                                                        FLIGHT TIME 104.00
                                                                                                                                  ARRIVAL DATE NOV 15 1967
                                                                       DISTANCE 314.967
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 28.196 GAL -12.95 ATL 87.41 MCA 149.26 SMA 139.20 ECC .24092 INC 2.5854 V1 29.348
RP 107.59 LAP 1.32 LOP 99.28 VP 38.906 GAP 4.74 AZP 92.22 TAL 235.54 TAP 24.80 RCA 105.66 APO 172.73 V2 35.223
RC 109.101 GL 11.00 GP -37.26 ZAL 159.59 ZAP 124.01 ETS 330.64 ZAE 128.49 ETE 214.98 ZAC 122.89 ETC 354.38 CLP-134.65
  PLANETOCENTRIC CONIC
   C3 42.214 VHL 6.497 DLA 22.71 RAL 153.56 RAD 6568.6 VEL 12.790 PTH 2.33 VHP 5.971 DPA -19.14 RAP 136.29 ECC 1.6947 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                3200.12
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                                                                               37.27
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       90.00
                   21 25 31
                                                  -26.09
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        90.00
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                                  4243.83
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                                                                174.43
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      100.00
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                                2883.34
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      110.00
                               3930.46
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2257.0 SGR 579.0 SG3 164.5
RRT .7733 RRF .9118 RTF .8689
SGB 2330.1 R23 .3505 R13 .8805
                                                                                                                      ST 1060.5 SR 50.9 SS 388.8
CRT .1760 CRS .0646 CST -.9646
    TOE 1.0945 TRA-1.5255 TC3-1.0981 BAU .6654
    RDE -.0136 RRA -.1625 RC3 -.4291 FAU .06409
    FDE .8416 FRA -.4173 FC3-1.3144 BSP 6871
                                                                                                                      LSA 1125.4 MSA 107.2 SSA 19.4
                                                                    SG1 2302.1 SG2 359.9 THA 11.51
                                                                                                                       ELI 1060.6 EL2 50.1 ALF
    BOE 1.0946 BRA 1.5341 BC3 1.1789 FSP
                                                      -527
                                                                                                                                 ARRIVAL DATE NOV 17 1967
                                                                       FLIGHT TIME 106.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 320.944
   RL 151.81 LAL -.00 LOL 309.99 VL 28.108 GAL -12.71 AZL 86.76 MCA 152.48 SMA 138.48 ECC .23915 INC 3.2392 V1 29.348 RP 107.57 LAP 1.50 LOP 102.51 VP 38.849 GAP 5.05 AZP 92.87 TAL 234.17 TAP 26.65 RCA 105.36 APO 171.59 V2 35.230 RC 111.351 GL 13.88 GP -39.70 ZAL 157.15 ZAP 124.43 ETS 326.84 ZAE 126.03 ETE 215.26 ZAC 122.10 ETC 353.26 CLP-137.30
   PLANETOCENTRIC CONIC
    C3 41.701 VHL 6.456 DLA 25.02 RAL 155.74 RAD 6568.6 YEL 12.770 PTH 2.32 VHP 6.250 DPA -21.60 RAP 135.91 ECC 1.6863
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 58 2 3323.49 -24.15 119.26 39.41 74.74 21 53 26 2723.5 -26.01 111.09 90.00 16 58 54 4114.30 -2.73 167.20 30.70 61.80 18 7 28 3514.3 -6.48 160.53
                                                                                             74.74 21 53 26 61.80 18 7 28 76.15 23 32 3 60.11 19 2 47 79.29 1 21 48 56.11 19 26 21
                   22 42 16 2987.45
17 57 21 3925.57
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      100.00
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      110.00
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                                                               142.93
      110.00
                                 3847.59
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2373.0 SGR 578.3 SG3 153.0
RRT .7618 RRF .9206 RTF .8706
SGB 2442.4 R23 .3718 R13 .8818
SG1 2414.5 SG2 368.2 THA 10.77
                                                                                                                      ST 1204.1 SR 46.6 SS 416.5
    TOE 1.2629 TRA-1.4926 TC3-1.1587 BAU .6906
   RDE .0292 RRA -.1184 RC3 -.4383 FAU .05844
FDE .8612 FRA -.3202 FC3-1.2132 BSP 7252
                                                                                                                      CRT .8031 CRS -.6643 CST -.9686
                                                                                                                      LSA 1270.8 MSA 100.7 SSA 17.4
EL1 1204.7 EL2 27.7 ALF 1.78
    BOE 1.2632 BRA 1.4973 BC3 1.2388 FSP -495
LAUNCH DATE AUG 3 1967
                                                                       FLIGHT TIME 108.00
                                                                                                                                 ARRIVAL DATE NOV 19 1967
                                                                       DISTANCE 326.900
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 28.020 GAL -12.45 AZL 85.95 MCA 155.71 SMA 137.76 ECC .23745 INC 4.0519 VI 29.348
RP 107.55 LAP 1.67 LOP 103.75 VP 38.790 GAP 5.35 AZP 93.69 TAL 232.76 TAP 28.47 RCA 105.05 APO 170.48 V2 35.236
RC 113.598 GL 17.42 GP -42.65 ZAL 154.10 ZAP 124.27 ETS 322.67 ZAE 123.28 ETE 215.66 ZAC 121.21 ETC 351.91 CLP-139.95
  PLANETOCENTRIC CONIC
   C3 41.709 VHL 6.458 DLA 27.87 RAL 158.39 RAD 6568.6 VEL 12.770 PTH 2.32 VHP 6.604 DPA -24.53 RAP 135.29 ECC 1.6864
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 19 53 10 3575.47 -18.67 135.69 40.63 68.31 20 52 46 2975.5 -21.45 128.12
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      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE 1.4805 TRA-1.4307 TC3-1.2007 BAU
                                                                   SGT 2488.4 SGR 574.3 SG3 140.2
                                                                                                                      ST 1383.1 SR 71.1 SS 450.€
                                                      .7129
    ROE .0746 RRA -.0643 RC3 -.4389 FAU .05229
FDE .8858 FRA -.2202 FC3-1.0853 BSP 7594
                                                                                                                      CRT .9779 CRS -.9630 CST -.9729
                                                                   RRT .7408 RRF .9241 RTF .8729
                                                                                                                      LSA 1452.9 MSA 99.3 SSA 14.4
EL1 1384.8 EL2 14.8 ALF 2.88
                                                                   5GB 2553.8 R23 .3899 R13 .8835
                                                    7594
-454
    BDE 1.4824 BRA 1.4322 BC3 1.2784 FSP
                                                                   SG1 2525.4 SG2 380.2 THA 9.93
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FLIGHT TIME 102.00

ARRIVAL CATE NOV 21 1967

LAUNCH DATE AUG 3 1967

DISTANCE 332.833 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 27.931 GAL -12.18 A7L 84.90 HCA 158.93 SMA 137.06 ECC .23583 INC 5.0966 V1 29.348
RP 107.55 LAP 1.83 LOP 109.00 VP 38.731 GAP 5.64 A7P 94.76 TAL 231.32 TAP 30.25 RCA 104.74 APO 169.38 V2 35.241
RC 115.842 GL 21.81 GP -46.24 7AL 150.20 7AP 123.40 ETS 318.09 7AE 120.13 ETE 216.08 7AC 120.22 ETC 350.22 CLP-142.73 PLANETOCENTRIC CONIC

C3 42.605 VHL 6.527 DLA 31.40 RAL 161.73 RAD 6568.6 VEL 12.805 PTH 2.33 VHP 7.074 DPA -28.01 RAP 134.24 ELC 1.0012
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.82 17 30 34 4083.15 -16.18 172.07 43.38 62.71 18 38 37 3483.1 -19.70 164.94 PLANETOCENTRIC CONIC 18 38 37 22 10 13 62.71 -19.70 17 30 34 4083.15 21 14 7 3365.46 75.82 -16.18 -19.59 111.89 43.37 2765.5 104.18 -16.16 119.02 62.70 68.36 24 24 22 56.25 21 7 46 -29.82 2325.7 110.00 23 35 36 2925.67 -27.13 90.75 48.73 110.00 2970.9 -10.18 20 8 15 3570.93 -5.79 128.46 37.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2606.7 SCR 566.3 SC3 126.1 RRT .7042 RRF .9180 RTF .8772 SCB 2667.5 R23 .4021 R13 .8869 ST 1606.4 SR 104.4 SS 488.9 CRT .9572 CRS -.9920 CST -.9777 TOE 1.7684 TRA-1.3318 TC3-1.2135 BAU .7327 ROE .1174 RRA .0018 RC3 -.4266 FAU .04581 FOE .9094 FRA -.1228 FC3 -.9308 BSP 7977 BOE 1.7723 BRA 1.3318 BC3 1.2863 FSP -414 LSA 1679.3 MSA 102.0 SSA 11.2 EL1 1609.5 EL2 30.2 ALF 3.56 SG1 2637.8 SG2 397.4 THA 8.90 FLIGHT TIME 112.00 ARRIVAL DATE NOV 23 1967 LAUNCH DATE AUG 3 1967 **DISTANCE 338.743** HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 27.842 GAL -11.91 AZL 83.50 MCA 162.14 SMA 136.36 ECC .23427 INC 6.4983 VI 29.348 RP 107.52 LAP 1.99 LOP 112.24 VP 38.672 GAP 5.91 AZP 96.19 TAL 229.85 TAP 31.99 RCA 104.42 APO 168.31 V2 35.246 RC 118.080 GL 27.32 GP -50.63 ZAL 145.19 ZAP 121.67 ETS 312.97 ZAE 116.39 ETE 216.31 ZAC 119.19 ETC 347.99 CLP-145.86 PLANETOCENTRIC CONIC C3 45.124 VHL 6.717 OLA 35.78 RAL 166.13 RAD 6568.7 VEL 12.903 PTH 2.35 VHP 7.732 DPA -32.13 RAP 132.49 ECC 1.7426 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.39 18 5 6 3663.9 -21.75 160.04 16 54 2 4263.93 22 25 47 3213.60 67.16 -17.70 186.96 49.87 58.38 23 19 21 58.39 18 5 6 58.38 23 19 21 58.39 18 5 6 58.38 23 19 21 101.26 -21.73 112.84 -17.68 108.17 49.86 2613.6 16 54 2 4263.93 22 25 47 3213.60 3663.9 -21.75 180.04 67.16 -17.70 186.96 49.87 2613.6 -21.73 101.26 112.84 -17.66 10A.17 49.86 -21.75 180.04 67.16 16 54 2 4263.93 -17.70 186.96 49.87 3663.9 22 25 47 3213.60 -21.73 101.26 112.84 -17.68 108.17 49.86 2613.6 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS NIG-COURSE EXECUTION ACCURACY SGT 2726.0 SGR 546.5 SG3 110.4 RRT .6344 RRF .8892 RTF .8842 SGB 2780.2 R23 .4070 R13 .8925 SGI 2748.4 SG2 419.0 TMA 7.42 ST 1889.2 SR 130.0 SS 533.4 CRT .9121 CRS -.9715 CST -.9824 TOE 2.1714 TRA-1.1725 TC3-1.1725 BAU .7454 RDE .1478 RRA .0875 RC3 -.3899 FAU .03873 FOE .9354 FRA -.0238 FC3 -.7431 8\$P 8317 LSA 1964.3 MSA 108.7 SSA 8.1 BOE 2.1764 BRA 1.1758 BC3 1.2356 FSP -365 EL1 1892.9 EL2 53.2 ALF 3.59 ARRIVAL DATE NOV 25 1967 LAUNCH DATE AUG 3 1967 FLIGHT TIME 114.00 DISTANCE 344.624 RL 151.81 LAL -.00 LOL 309.99 VL 27.754 GAL -11.63 AZL 81.51 MCA 165.34 SMA 135.68 ECC .23278 INC 8.4899 V1 29.348
RP 107.50 LAP 2.14 LOP 115.48 VP 38.612 GAP 6.17 AZP 98.22 TAL 228.35 TAP 33.69 RCA 104.09 APO 167.26 V2- 35.250
RC 120.312 GL 34.22 GP -55.99 ZAL 138.72 ZAP 118.92 ETS 307.03 ZAE 111.79 ETE 215.88 ZAC 118.18 ETG 344.79 CLP-149.83 PLANETOCENTRIC CONIC C3 50.923 VHL 7.136 OLA 41.06 RAL 172.29 RAD 6568.9 VEL 13.126 PTH 2.40 VMP 8.719 OPA -36.93 RAP 129.55 ECC 1.8381 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 52.77 17 51 27 52.76 24 23 8 52.77 17 51 27 52.76 24 23 8 193.39 16 37 55 4411.79 23 31 2 3126.23 -18.73 -23.44 59.40 3811.8 58.92 199.91 95.19 -18.72 101.71 59.39 2526.2 -23.43 121.08 193.39 59.40 3611.8 -23.44 58.92 16 37 55 4411.79 -18.73 199.91 121.08 23 31 2 3126.23 -18.72 101.71 59.39 2526.2 -23.43 95.19 16 37 55 4411.79 23 31 2 3126.23 58.92 -18.73 199.91 59.40 52.77 17 51 27 3611.8 -23.44 193.39 52.76 24 23 8 59.39 2526.2 -23.43 95.19 -18.72 101.71 121.08 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2235.3 SR 119.7 SS 580.3 CRT .7672 CRS -.8601 CST -.9869 SGT 2847.6 SGR 510.2 SG3 93.6 TOE 2.7594 TRA -.9167 TC3-1.0503 BAU .7470 ROE .1254 RRA .1979 RC3 -.3178 FAU .03126 FDE .9586 FRA .0732 FC3 -.5314 BSP 8702 BOE 2.7623 BRA .9378 BC3 1.0973 FSP -316 RRT .4800 RRF .7924 RTF .8966 SGB 2892.9 R23 .4003 R13 .9022 SG1 2858.3 SG2 445.9 THA 5.04 LSA 2309.5 MSA 118.0 SSA 5.5 EL1 2237.2 EL2 76.7 ALF 2.35 ARRIVAL DATE NOV 27 1967 LAUNCH DATE AUG 3 1967 FLIGHT TIME 116.00 **DISTANCE 350.465** HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 27.666 GAL -11.33 AZL 78.44 MCA 168.51 SNA 135.00 ECC .23131 INC11.5578 VI 29.348
RP 107.49 LAP 2.29 LOP 118.73 VP 38.551 GAP 6.42 AZP 101.33 TAL 226.82 TAP 35.33 RCA 103.78 APO 166.23 V2 35.253
RC 122.538 GL 42.67 GP -62.48 ZAL 130.47 ZAP 114.96 ETS 299.35 ZAE 105.96 ETE 213.64 ZAC 117.33 ETC 339.49 CLP-155.98 PLANETOCENTRIC CONIC C3 64.306 VHL 8.019 OLA 46.99 RAL 181.44 RAD 6569.2 VEL 13.626 PTH 2.49 VHP 10.334 DPA -42.32 RAP 124.46 ECC 2.0583 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -23.72 206.48 50.79 16 42 23 4554.01 129.21 0 43 31 3096.37 45.91 17 58 17 3954.0 -18.27 212.33 73.53 1 35 9 2498.4 -23.71 92.92 129.21 -18.25 98.77 73.51 45.91 206.48 16 42 23 4554.01 212.33 73.55 45.91 17 58 17 3954.0 -23.72 50.79 -18.27 0 43 31 3098.37 -16.25 98.77 73.51 45.91 1 35 9 2498.4 -23.71 92.92 129.21 17 58 17 206.48 3954.0 -23.72 16 42 23 4554.01 -18.27 212.33 73.53 45.91 50.79 98.77 -23.71 92.92 2498.4 129.21 0 43 31 3098.37 -18.25 73.51 45.91 1 35 9 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2618.1 SR 122.2 SS 628.9 CRT -.5553 CRS .4383 CST -.9909 LSA 2692.1 MSA 131.2 SSA 3.6 TDE 3.6580 TRA -.4719 TC3 -.8129 BAU SGT 2962.3 SGR 478.6 SG3 76.4 ROE -.0870 RRA .3333 RC3 -.2004 FAU .02335 FDE .9826 FRA .1754 FC3 -.3144 BSP 9054 BOE 3.6590 BRA .5778 BC3 .8372 FSP -263 RRT .0592 RRF .4317 RTF .9174 SGB 3000.7 R23 .3766 R13 .9180 EL1 2619.0 EL2 101.6 ALF 178.51 .56 SG1 2962.4 SG2 477.8 THA

FLIGHT TIME 110.00

ARRIVAL CATE NOV 29 1967

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LAUNCH CATE AUG 3 1967
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 356.237
     RL 151.81 LAL -.00 LOL 309.99 VL 27.578 GAL -11.02 AZL 73.10 HCA 171.63 SMA 134.34 ECC .22979 INC16.8968 VI 29.348 RP 107.49 LAP 2.43 LOP 121.98 VP 38.491 GAP 6.64 AZP 106.73 TAL 225.24 TAP 36.87 RCA 103.47 APO 165.21 V2 35.256
                              52.19 GP -69.92 TAL 120.40 TAP 109.70 ETS 286.46 TAE 98.22 ETE 205.78 TAC 117.07 ETC 328.31 CLP-169.02
     RC 124.755 GL
    PLANETOCENTRIC CONIC
     C3 99.165 VHL 9.958 DLA 52.24 RAL 195.41 RAD 6569.9 VEL 14.849 PTH 2.68 VHP 13.321 DPA -47.69 RAP 115.31 ECC 2.6320 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 44.07 17 16 10 4705.45 -14.64 223.46 93.76 39.26 18 34 35 4105.5 -20.76 218.47
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17 16 10 4705.45
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4705.45
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          44.07
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                   99.33
                                                                                                                                                                              -20.75
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                                          3144.85
                                                              -14.62
        135.93
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 3013.5 SGR 714.7 SG3 60.8
RRT -.6830 RRF -.4337 RTF .9516
                                                                                                                                                      ST 2849.9 SR 612.1 SS 683.7
CRT -.9755 CRS .9468 CST -.9944
     TDE 4.9491 TRA .4026 TC3 -.4574 BAU .6111
     ROE-1.0463 RRA .3917 RC3 -.0572 FAU .01495
                                                                   9269
                                                                                      SG8 3097.1 R23 -.3228 R13 -.9429
SG1 3054.0 SG2 515.1 THA 170.53
     FOE 1.0213 FRA .3062 FC3 -.1305 BSP
BOE 5.0584 BRA .5617 BC3 .4610 FSP
                                                                                                                                                      LSA 2990.1 MSA 152.5 SSA 2.1
                                                                     -209
                                                                                                                                                       EL1 2911.9 EL2 131.7 ALF 168.14
                                                                                            FLIGHT TIME 120.00
                                                                                                                                                                     ARRIVAL DATE DEC 1 1967
LAUNCH DATE AUG 3 1967
                                                                                           DISTANCE 361.841
   HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 27.491 GAL -10.66 A7L 61.76 MCA 174.59 SMA 133.69 ECC .22795 INC28.2383 VI 29.348
RP 107.48 LAP 2.56 LOP 125.22 VP 38.430 GAP 6.81 AZP 118.13 TAL 223.58 TAP 38.17 RCA 103.21 APO 164.16 V2 35.258
                             60.03 GP -75.07 ZAL 109.21 ZAP 103.27 ETS 253.37 ZAE 86.86 ETE 177.00 ZAC 118.74 ETC 295.44 CLP 153.01
     RC 126.964 GL
   PLANETOCENTRIC CONIC
     C3 217.721 VHL 14.795 DLA 53.03 RAL 213.86 RAD 6571.2 VEL 18.413 PTH 3.04 VHP 19.964 DPA -50.62 RAP 98.39 ECC 4.5831 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                116.48
                                                                                                                       37.31 19 47 42
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                       18 26 47
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                       18 26 47
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        136.91
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                                           4654.92
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          43.09
                                                                                     MID-COURSE EXECUTION ACCURACY
                         3 17 43 3281.14
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        136.91
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   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 2444.7 SGR 1981.6 SG3 49.8

RRT -.9422 RRF -.9089 RTF ..9952

SGB 3146.9 R23 -.2182 R13 -.9748

SGI 3103.2 SG2 522.9 THA 141.33
                                                                                                                                                       ST 2060.6 SR 1915.6 SS 788.1
CRT -.9933 CRS .9874 CST -.9991
     TOE 5.2025 TRA 2.0983 TC3 -.0830 BAU .2449
     ROE-4.9161 RRA -.8210 RC3 -.0138 FAU .00422
                                                                                                                                                      LSA 2916.3 MSA 177.8 SSA 1.3
EL1 2808.8 EL2 162.0 ALF 137.10
     FOE 1.1425 FRA .5647 FC3 -.0168 BSP 9405
BOE 7.1578 BRA 2.2532 BC3 .0841 FSP -166
                                                                                                                                                                    ARRIVAL DATE DEC 3 1967
                                                                                           FLIGHT TIME 122.00
LAUNCH DATE AUG 3 1967
                                                                                          DISTANCE 366.793
     PLANETOCENTRIC CONIC
     C3 829.352 VHL 28.798 CLA 40.83 RAL 225.57 RAD 6572.8 VEL 30.832 PTH 3.46 VHP 38.406 CPA -41.33 RAP 71.75 ECC14.6490
     C3 829.352 VHL 28.798 OLA 40.83 RAL 225.57 RAO 6572.8 VEL 30.832 PTH 3.46 VHP 38.406 CPA -41.33 RAP 71.75 ECC14.6490 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 59.26 20 11 56 4834.33 -.15 220.51 135.42 49.17 21 32 30 4234.3 -5.37 214.86 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.13 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 3 6 1 3556.99 -.15 123.02 135.40 49.17 4 5 18 2957.0 -5.35 117.36 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.74 120.
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 349.4 SR 2074.6 SS 1123.0
CRT .8419 CRS .9975 CST .8016
LSA 2376.0 MSA 204.1 SSA 1.3
                                                                                     SGT 524.8 SGR 2884.8 SG3 44.9
RRT .1584 RRF -.9929 RTF -.0425
SGB 2932.1 R23 -.1215 R13 -.9922
     TOE-1.6760 TRA 1.3183 TC3 -.0364 BAU 1.9411
     RO-10.0551 RRA-6.9577 RC3 -.1712 FAU-.02779
     FOE 1.6042 FRA 1.4249 FC3 .0290 BSP 8462
BOE10.1938 BRA 7.0815 BC3 .1751 FSP -139
                                                                                                                                                       EL1 2095.5 EL2 186.6 ALF 81.87
                                                                                      5G1 2886.0 SG2 517.9 THA 88.29
                                                                                                                                                                     ARRIVAL DATE DEC 5 1967
                                                                                            FLIGHT TIME 124.00
LAUNCH DATE AUG 3 1967
                                                                                           DISTANCE 375.801
    HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 27.318 GAL -10.50 AZL 148.25 MCA 183.28 SMA 132.42 ECC .23223 INC58.2456 V1 29.348 RP 107.48 LAP 2.79 LOP 131.72 VP 38.308 GAP 7.95 AZP 31.80 TAL 221.20 TAP 44.48 RCA 101.67 APO 163.18 V2 35.259 RC 131.355 GL -55.10 GP 64.36 ZAL 99.82 ZAP 98.70 ETS 168.77 ZAE 68.95 ETE 239.48 ZAC 99.45 ETC 120.10 CLP 110.45
    PLANETOCENTRIC CONIC
     C3 775.581 VHL 27.849 DLA -57.15 RAL 166.78 RAD 6572.8 VEL 29.948 PTH 3.45 VHP 35.002 DPA 75.29 RAP 356.46 ECC13.7641
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                76.52
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         141.97
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 745.0 SGR 2992.7 SG3 47.8
RRT - 7541 RRF .9957 RTF - 6935
SGB 3084.0 R23 - .1175 R13 .9926
                                                                                                                                                        ST 272.7 SR 2488.8 SS 1469.8
      TOE .9206 TRA 1.7218 TC3 -.0547 BAU 1.9167
                                                                                                                                                      CRT -.8066 CRS -.9996 CST .7888
LSA 2898.4 MSA 166.7 SSA 1.5
     RO-11.9216 RRA-3.7031 RC3 .1766 FAU-.02468
FDE-2.3366 FRA -.5983 FC3 .0275 BSP 8761
BDE11.9571 BRA 4.0838 BC3 .1848 FSP -142
                                                                                                                                                       EL1 2498.6 EL2 160.5 ALF 95.07
                                                                                    SG1 3046.3 SG2 480.7 THA 100.91
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FLIGHT TIME 118,00

ARRIVAL DATE DEC 7 1967

JPL TM 33-99

LAUNCH DATE AUG 3 1967

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HELIOCENTRIC CONIC
                                                             DISTANCE 380.882
   RL 151.81 LAL -.00 LOL 309.99 VL 27.232 GAL -10.02 ATL 120.24 MCA 185.76 SMA 131.81 ECC .22935 INC30.2422 V1 29.348 RP 107.48 LAP 2.90 LOP 134.97 VP 38.246 GAP 7.96 ATP 59.88 TAL 219.33 TAP 45.09 RCA 101.58 APO 162.04 V2 35.259 RC 133.537 GL -60.47 GP 72.65 TAL 106.88 TAP 106.27 ETS 120.88 TAE 88.51 ETE 194.28 TAC 90.96 ETC 71.38 CLP 159.99
  PLANETOCENTRIC CONIC
   C3 240.943 VHL 15.522 OLA -54.25 RAL 147.31 RAO 6571.4 VEL 19.033 PTH 3.08 VHP 18.842 OPA 80.57 RAP 244.40 ECC 4.9653
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              143.99
                                                                                                                                    58.26
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                                                                    52.67
                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                          SGT 2176.1 SGR 2662.6 SG3 57.8
RRT .9560 RRF .9525 RTF .9991
SGB 3438.7 R23 ~.1870 R13 .9815
                                                                                                      ST 1618.0 SR 1475.5 SS 805.2
   TDE-4.2057 TRA-2.4054 TC3 -.0405 BAU .1505
                                                                                                      CRT .9788 CRS -.9792 CST-1.0000
   RDE-3.5237 RRA-3.6754 RC3 .0234 FAU .00603
   FDE-1.2849 FRA -.7398 FC3 -.0217 BSP 10356
BDE 5.4867 BRA 4.3926 BC3 .0467 FSP -182
                                                                                                      LSA 2321.2 MSA 234.7 SSA 1.3
                                                                                                      EL1 2178.2 EL2 224.3 ALF 42.31
                                                          SG1 3402.2 SG2 499.6 THA 51.00
                                                                                                                ARRIVAL DATE DEC 9 1967
LAUNCH DATE AUG 3 1967
                                                              FLIGHT TIME 128.00
                                                             DISTANCE 386.475
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 27.148 GAL -9.64 A7L 110.06 MCA 188.75 SMA 131.21 ECC .22803 INC20.0621 V1 29.348 RP 107.48 LAP 2.99 LOP 138.22 VP 38.185 GAP 8.12 A7P 70.15 TAL 217.62 TAP 46.38 RCA 101.29 APO 161.13 V2 35.257
   RC 135.709 GL -56.72 GP 65.47 7AL 113.14 7AP 114.34 ETS 85.85 7AE 99.44 ETE 161.98 7AC 88.82 ETC 36.52 CLP-173.14
  PLANETOCENTRIC CONIC
   C3 120.624 VHL 10.983 DLA -48.17 RAL 144.96 RAD 6570.3 VEL 15.555 PTH
                                                                                    2.77 VHP 13.009 OPA 70.66 RAP 209.75 ECC 2.9852
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                          SGT 3431.2 SGR 1033.7 SG3 72.9
RRT .8843 RRF .7455 RTF .9684
SGB 3583.5 R23 -.2717 R13 .9594
   TDE-3.3762 TRA-3.6531 TC3 -.3239 BAU .5241
                                                                                                       ST 1958.9 SR 320.9 SS 653.3
   RDE -.1697 RRA-1.3144 RC3 -.0272 FAU .01799
                                                                                                       CRT .6687 CRS -.5456 CST -.9879
   FDE-1.0651 FRA -. 7262 FC3 -. 1291 BSP 10921
                                                                                                      LSA 2073.7 MSA 259.1 SSA 2.0
                                                                                                      EL1 1970.8 EL2 237.2 ALF
   BDE 3.3804 BRA 3.8823 BC3 .3250 FSP -233
                                                          SG1 3553.1 SG2 466.2 THA 15.18
                                                                                                               ARRIVAL DATE DEC 11 1967
                                                              FLIGHT TIME 130.00
LAUNCH DATE AUG 3 1967
                                                             DISTANCE 392.191
  HELIOCENTRIC CONIC
   RC 137.871 GL -51.93 GP 57.06 7AL 117.85 ZAP 121.72 ETS 73.74 7AE 106.94 ETE 153.42 ZAC 88.06 ETC 24.78 CLP-165.21
  PLANETOCENTRIC CONIC
   C3 78.327 VHL 8.850 DLA -43.06 RAL 146.41 RAD 6569.5 VEL 14.131 PTH 2.58 VHP 10.402 CPA 61.63 RAP 199.21 ECC 2.2891
   LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                          SCT 3650.4 SCR 525.2 SC3 89.1
RRT .5730 RRF .2716 RTF .9388
SCB 3688.0 R23 -33542 R13 .9355
                                                                                                      ST 1851.9 SR 259.1 SS 609.1
CRT - 4488 CRS .6496 CST - .9710
   TOE-2.4849 TRA-3.4480 TC3 -.6692 BAU .7008
   RDE .3331 RRA -.5402 RC3 .0080 FAU .02598 FDE-1.0069 FRA -.6952 FC3 -.2871 BSP 11253
                                                                                                      LSA 1948.4 MSA 267.2 SSA 2.9
                                                          SG1 3662.9 SG2 428.9 THA 4.78
                                                                                                      ELI 1855.6 ELZ 231.1 ALF 176.35
   BOE 2.5072 BRA 3.4900 BC3 .6692 FSP -284
                                                              FLIGHT TIME 132.00
                                                                                                                ARRIVAL DATE DEC 13 1967
LAUNCH DATE AUG 3 1967
                                                             DISTANCE 397.948
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 26.982 GAL -8.92 ATL 102.23 MCA 195.06 SMA 130.06 ECC .22665 INC12.2285 V1 29.348
RP 107.50 LAP 3.16 LOP 144.73 VP 38.063 GAP 8.52 AZP 78.18 TAL 214.27 TAP 49.33 RCA 100.58 APO 159.53 VZ 35.253
RC 140.023 GL -47.63 GP 49.72 ZAL 121.17 ZAP 128.09 ETS 68.06 ZAE 112.40 ETE 151.78 ZAC 87.47 ETC 19.58 CLP-162.58
  PLANETOCENTRIC CONIC
   C3 58.389 VHL 7.641 DLA -39.08 RAL 148.70 RAD 6569.1 VEL 13.407 PTH 2.45 VHP 9.049 DPA 53.91 RAP 194.42 ECC 1.9609
   LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 19 2 1764.14
                                                                  37.14
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                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                          SCH 3766.5 SCR 403.8 SC3 103.8
RRT .2027 RRF -.1758 RTF .9165
SCB 3788.1 R23 -.3714 R13 .9156
SCI 3767.4 SC2 395.3 THA 1.26
                                                                                                      ST 1763.6 SR 303.3 SS 587.5
CRT -.6781 CRS .8648 CST -.9554
LSA 1863.8 MSA 271.5 SSA 3.8
    TDE-2.0009 TRA-3.1946 TC3-1.0164 BAU .7940
   RDE .3895 RRA -.2818 RC3 .0394 FAU .03188
FDE -.9698 FRA -.6488 FC3 -.4728 8SP 11639
BDE 2.0385 BRA 3.2070 BC3 1.0172 FSP -333
                                                                                                       EL1 1775.7 EL2 221.4 ALF 173.24
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FLIGHT TIME 126,00

ARRIVAL CATE DEC 15 1967

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FLIGHT TIME 134,00
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 403.720
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.900 GAL -8.56 AZL 100.33 MCA 198.26 SMA 129.50 ECC .22629 INCID.3288 VL 29.348 RP 107.51 LAP 3.22 LOP 147.98 VP 38.001 GAP 8.73 AZP 80.18 TAL 212.59 TAP 50.85 RCA 190.19 APO 158.80 V2 35.249 RC 142.165 GL -44.02 GP 43.60 ZAL 123.37 ZAP 133.47 ETS 64.50 ZAE 116.43 ETE 152.40 ZAC 86.70 ETC 16.57 CLP-161.78
   PLANETOCENTRIC CONIC
   C5 47.100 VHL 6.863 DLA -36.04 RAL 151.16 RAD 6568.8 VEL 12.979 PTH 2.37 VHP 8.283 DPA 47.35 RAP 192.08 ECC 1.7751
LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
66.71 3 53 40 1638.46 17.41 19.30 35.61 122.06 4 20 59 1038.5 21.52 12.43
113.29 9 30 39 5860.57 17.43 277.19 35.62 122.06 11 8 20 5260.6 21.53 270.32
66.71 3 53 40 1638.46 17.41 19.30 35.61 122.06 4 20 59 1036.5 21.52 12.43
113.29 9 30 39 5860.57 17.43 277.19 35.62 122.06 11 8 20 5260.6 21.53 270.32
66.71 3 53 40 1638.46 17.41 19.30 35.61 122.06 4 20 59 1036.5 21.52 12.43
113.29 9 30 39 5860.57 17.43 277.19 35.62 122.06 11 8 20 5260.6 21.53 270.32
    C3 47.100 VHL 6.863 DLA -36.04 RAL 151.16 RAD 6568.8 VEL 12.979 PTH 2.37 VMP 8.283 CPA 47.35 RAP 192.08 ECC 1.7751
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RET - 0181 REF - .4057 REF .895
SGB 3878-4 R23 .3894 R13 - .8996
SG1 3881.0 SG2 3860.0 THA 179.90
                                                                                                                                     ST 1696.2 SR 314.1 SS 568.8
CRT -.7327 CRS .9192 CST -.9414
    TOE-1.7041 TRA-2.9765 TC3-1.3512 BAU .8515
    ROE .3706 RRA -.1749 RC3 .0551 FAU .03591
FOE -.9263 FRA -.5862 FC3 -.6601 BSP 11899
BOE 1.7439 BRA 2.9817 BC3 1.3523 FSP -368
                                                                                                                                      LSA 1795.6 MSA 274.2 SSA 4.9
                                                                                                                                      ELI 1712.0 ELZ 211.8 ALF 172.15
                                                                                 FLIGHT TIME 136.00
                                                                                                                                                    ARRIVAL DATE DEC 17 1967
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 409.494
   HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 26.819 GAL -8.20 AZL 98.98 HCA 201.47 SMA 128.95 ECC .22609 INC 8.9810 VI 29.348
RP 107.52 LAP 3.28 LOP 151.23 VP 37.940 GAP 8.94 AZP 81.63 TAL 210.90 TAP 52.38 RCA 99.80 APO 158.10 V2 35.245
RC 144.295 GL -41.02 GP 38.54 7AL 124.69 ZAP 137.98 ETS 61.89 ZAE 119.42 ETE 153.84 ZAC 85.70 ETC 14.54 CLP-161.77
   PLANETOCENTRIC CONIC
    C3 39.866 VHL 6.314 DLA -33.73 RAL 153.66 RAD 6568.5 VEL 12.698 PTH 2.31 VHP 7.829 DPA 41.78 RAP 191.07 ECC 1.6561 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RET -.1332 RRF -.5069 RTF .8870
SGB 3970.8 R23 .3913 R13 -.8874
SGI 3956.0 SGZ 342.7 THA 179.33
                                                                                                                                      ST 1649.0 SR 313.7 SS 552.6
CRT -.7554 CRS .9440 CST -.9291
    TOE-1.5111 TRA-2.7916 TC3-1.6777 BAU .8947
    RDE .3429 RRA -.1206 RC3 .0365 FAU .03654
FDE -.8601 FRA -.5166 FC3 -.8369 85P 12205
BOE 1.5495 BRA 2.7942 BC3 1.6767 FSP -396
                                                                                                                                      LSA 1745.6 MSA 275.7 SSA 6.0
                                                                                                                                      EL1 1666.2 EL2 203.4 ALF 171.70
                                                                                                                                                   ARRIVAL DATE CEC 19 1967
                                                                                 FLIGHT TIME 138.00
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 415.267
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.739 GAL -7.82 A7L 97.97 HCA 204.70 SMA 128.42 ECC .22605 INC 7.9704 V1 29.348
RP 107.55 LAP 3.32 LOP 154.48 VP 37.879 GAP 9.16 A7P 82.75 TAL 209.21 TAP 53.90 RCA 99.39 APO 157.45 V2 35.240
RC 146.414 GL -38.51 GP 34.38 7AL 125.30 ZAP 141.77 ETS 59.83 ZAE 121.66 ETE 155.53 ZAC 84.46 ETC 13.02 CLP-162.13
   PLANETOCENTRIC CONIC
    C3 34.807 VML 5.900 DLA -32.00 RAL 156.16 RAD 6568.4 VEL 12.497 PTH 2.26 VMP 7.554 DPA 37.02 RAP 190.87 ECC 1.5728
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT -.1937 RRF -.5445 RTF .8775
SGB 4062.3 R23 .3807 R13 -.8779
SGI 4049.2 SG2 325.7 THA 179.08
                                                                                                                                      ST 1616.6 SR 311.4 SS 537.9

CRT -.7707 CRS .9595 CST -.9186

LSA 1709.8 MSA 276.3 SSA 7.2
     TOE-1.3794 TRA-2.6257 TC3-1.9975 BAU .9298
    ROE .3191 RRA -.0862 RC3 .0535 FAU .04003
FOE -.8334 FRA -.4431 FC3 -.9956 BSP 12513
                                                                                                                                      EL1 1634.6 EL2 196.3 ALF 171.43
     BDE 1.4158 BRA 2.6272 BC3 1.9982 FSP -417
                                                                                 FLIGHT TIME 140.00
                                                                                                                                                   ARRIVAL DATE DEC 21 1967
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 421.035
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.661 GAL -7.44 A7L 97.18 MCA 207.92 SMA 127.90 ECC .22616 INC 7.1806 V1 29.348 RP 107.55 LAP 3.36 LOP 157.73 VP 37.819 GAP 9.37 A7P 83.65 TAL 207.50 TAP 55.42 RCA 98.97 APO 156.82 V2 35.234 RC 148.521 GL -36.38 GP 30.92 TAL 125.35 ZAP 144.98 ETS 58.14 ZAE 123.35 ETE 157.22 ZAC 83.03 ETC 11.82 CLP-162.69
   PLANETOCENTRIC CONIC
                                                                                                              2.23 WHP 7.389 DPA 32.90 RAP 191.20 ECC 1.5107
     C3 31.033 VHL 5.571 DLA -30.73 RAL 158.68 RAD 6568.2 VEL 12.345 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.53 5 32 21 1321.34 18.22 355.30 35.03 115.18 5 54 23 721.3 21.46 347.94
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                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 1596.0 SR 310.5 SS 525.1
CRT -.7857 CRS .9710 CST -.9100
LSA 1686.2 MSA 275.6 SSA 8.4
                                                                            SGT 4138.8 SGR 323.1 SG3 135.2
RRT -.2263 RRF -.5491 RTF .8700
SGB 4151.4 R23 .3604 R13 -.8705
     TOE-1.2881 TRA-2.4699 TC3-2.3129 BAU .9597
     ROE .3010 RRA -.0658 RC3 .0435 FAU .04065
FDE -.7885 FRA -.3688 FC3-1.1339 BSP 12799
                                                                                                                                     ELI 1614.8 ELZ 189.9 ALF 171.19
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-430

BOE 1.3228 BRA 2.4707 BC3 2.3133 FSP

SG1 4139.4 SG2 314.7 THA 178.98

LAUNCH DATE AUG 3 1967 FLIGHT TIME 142.00 ARRIVAL DATE DEC 23 1967 HELIOCENTRIC CONIC **DISTANCE 426.796** RL 151.81 LAL -.00 LOL 309.99 VL 26.583 GAL -7.05 AZL 96.54 MCA 211.15 SMA 127.39 ECC .22643 INC 6.5428 VI 29.348 RP 107.57 LAP 3.38 LOP 160.98 VP 37.758 GAP 9.59 AZP 84.39 TAL 205.79 TAP 56.94 RCA 98.55 APO 156.23 V2 35.228 RC 150.615 GL -34.56 GP 28.04 ZAL 124.92 ZAP 147.74 ETS 56.77 ZAE 124.64 ETE 158.82 ZAC 81.44 ETC 10.84 CLP-163.35 PLANETOCENTRIC CONIC C3 28.082 VHL 5.299 DLA -29.82 RAL 161.24 RAD 6568.1 VEL 12.225 PTH 2.20 VHP 7.296 DPA 29.29 RAP 191.91 ECC 1.4622 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.88 6 23 13 18.42 6 2 40 1232.44 348.76 35.72 632.4 B 54 3 8 42 4 718.16 18.43 310.96 35.72 113.87 118.2 21.50 303.51 8 39 30 8 26 43 767.20 35.01 167.2 306.58 16.93 313.89 115.01 20.16 100.00 9 0 43 658.63 112.75 9 11 41 7 57 43 19.93 307.22 36.41 58.6 22.84 299.63 110.00 7 42 36 906.54 29.07 306.5 10.93 6.56 318.43 123.62 312.07 13 30 59 110.00 12 1 19 5380.09 31.19 246.44 40.64 104.76 4780.1 32.90 237.64 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 1590.4 SR 312.7 SS 517.0
CRT -.8038 CRS .9802 CST -.9044
LSA 1679.1 MSA 273.8 SSA 9.7
EL1 1610.4 EL2 183.7 ALF 170.90 SCT 4234.9 SCR 319.6 SC3 13A.6 RRT - .2498 RRF - .5393 RTF .8651 TOE-1.2299 TRA-2.3226 TC3-2.6330 BAU .9886 RDE .2888 RRA -.0477 RC3 .0322 FAU .04081 FOE -.7505 FRA -.2992 FC3-1.2580 BSP 13173 SG8 4246.9 R23 .3326 R13 -.8656 SG1 4235.6 SG2 309.5 THA 178.91 LAUNCH DATE AUG 3 1967 ARRIVAL DATE DEC 25 1967 FLIGHT TIME 144,00 HELIOCENTRIC CONIC **DISTANCE 432.551** RL 151.81 LAL -.00 LOL 309.99 VL 26.506 GAL -6.65 A7L 96.01 MCA 214.38 SMA 126.90 ECC .22684 INC 6.0142 V1 29.348 RP 107.59 LAP 3.39 LOP 164.22 VP 37.698 GAP 9.80 A7P 85.03 TAL 204.07 TAP 58.44 RCA 98.11 APO 155.68 V2 35.221 RC 152.696 GL -32.97 GP 25.61 ZAL 124.09 ZAP 150.13 ETS 55.66 ZAE 125.64 ETE 160.29 ZAC 79.71 ETC 10.03 CLP-164.08 PLANETOCENTRIC CONIC C3 25.693 VHL 5.069 DLA -29.21 RAL 163.88 RAD 6568.0 VEL 12.127 PTH 2.17 VHP 7.252 DPA 26.10 RAP 192.89 ECC 1.4228 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 50 7 8 47 25 1153.61 21.59 82.50 6 30 54 18.65 343.03 36.73 112.90 553.6 335.52 8 34 53 97.50 752.83 18.67 313.63 36.74 112.89 152.8 21.61 306.12 8 0 47 100.00 862.20 14.11 319.53 34.55 116.63 A 15 10 262.2 312.45 17.57 9 47 40 100.00 5807.51 11 24 28 23.33 38.66 5207.5 276.19 109.24 25.74 268.22 7 59 46 110.00 7 44 53 913.34 6.30 318.79 29.95 123.67 313.3 10.68 312.44 13 49 13 110.00 12 20 24 5329.14 242.70 32.01 41.46 102.69 4729.1 233.76 33.42 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4278.1 SGR 316.9 SG3 137.7 RRT -.2414 RRF -.5037 RTF ..8557 SGB 4289.8 R23 .3051 R13 -.8560 SGI 4278.8 SGZ 307.5 THA 178.97 TOE-1.1718 TRA-2.1538 TC3-2.9207 BAU 1.0032 ST 1569.3 SR 313.4 SS 498.5 CRT -.8193 CRS .9876 CST -.8969 LSA 1654.2 MSA 270.0 SSA 11.0 ROE .2770 RRA -.0363 RC3 .0146 FAU .03969 FOE -.6990 FRA -.2137 FC3-1.3375 BSP 12999 BOE 1.2041 BRA 2.1541 BC3 2.9207 FSP -421 EL1 1590.4 EL2 177.3 ALF 170.59 LAUNCH DATE AUG 3 1967 FLIGHT TIME 146.00 ARRIVAL DATE DEC 27 1967 DISTANCE 438.295 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 26.431 GAL -6.25 ÅZL 95.57 MCA 217.61 SMA 126.41 ECC .22743 INC 5.5662 V1 29.348 RP 107.62 LAP 3.39 LOP 167.47 VP 37.638 GAP 10.02 AZP 85.59 TAL 202.34 TAP 59.94 RCA 97.66 APO 155.16 V2 35.214 RC 154.762 GL -31.56 GP 23.55 ZAL 122.90 ZAP 152.23 ETS 54.78 ZAE 126.43 ETE 161.61 ZAC 77.87 ETC 9.34 CLP-164.84 PLANETOCENTRIC CONIC C3 23.714 VHL 4.870 DLA -28.85 RAL 166.61 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 7.243 DPA 23.24 RAP 194.08 ECC 1.3903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT- ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 338.34 112.17 7 14 5 112.16 8 44 34 488.3 84.26 6 55 57 1088.25 16.94 38.05 21.78 330.78 8 31 35 95.74 778.76 16.95 315.67 38.06 17A.A 21.79 308.11 8 13 30 7 58 45 100.00 884.44 13:43 320.63 35.43 116.96 284.4 16.94 313.80 11 47 14 5145.8 100.00 10 11 28 5745.84 24.65 272.09 40.27 107.46 26.41 263.95 123.65 8 5 41 101.15 14 4 25 110.00 7 50 31 910.36 6.41 318.63 31.27 310.4 10.79 312.27 5292.69 110.00 12 36 12 32.52 239.98 42.55 4692.7 33.72 230.95 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4372.6 SGR 321.5 SG3 139.4 RRT -.2569 RRF -.4828 RTF .8536 SGB 4384.4 R23 .2715 R13 -.8539 ST 1584.9 SR 320.1 SS 496.1 CRT -.8427 CRS .9931 CST -.8963 LSA 1670.4 MSA 265.1 SSA 12.4 TDE-1.1555 TRA-2.0078 TC3-3.2465 BAU 1.0292 RDE .2720 RRA -.0230 RC3 .0030 FAU .03917 FDE -.6709 FRA -.1506 FC3-1.4302 BSP 13404 BOE 1.1871 BRA 2.0079 BC3 3.2465 FSP -433 SG1 4373.4 SG2 310.6 THA 178.91 EL1 1608.0 EL2 169.9 ALF 170.23 LAUNCH DATE AUG 3 1967 FLIGHT TIME 148.00 ARRIVAL DATE DEC 29 1967 HELIOCENTRIC CONIC DISTANCE 444.028 RL 151.81 LAL -.00 LOL 309.99 VL 26.357 GAL -5.83 AZL 95.18 MCA 220.84 SMA 125.94 ECC .22818 INC 5.1797 V1 29.348 RP 107.64 LAP 3.38 LOP 170.71 VP 37.578 GAP 10.24 AZP 86.08 TAL 200.60 TAP 61.44 RCA 97.20 APO 154.68 V2 35.205 RC 156.813 GL -30.28 GP 21.78 ZAL 121.40 ZAP 154.09 ETS 54.14 ZAE 127.06 ETE 162.78 ZAC 75.94 ETC 8.75 CLP-165.61 PLANETOCENTRIC CONIC C3 22.045 VHL 4.695 DLA -28.68 RAL 169.45 RAD 6567.9 VEL 11.976 PTH 2.13 VHP 7.260 DPA 20.65 RAP 195.42 ECC 1.3628 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 7 32 55 85.26 7 15 31 1043.99 19.28 335.24 39.67 111.65 444.0 22.05 327.63 8 47 51 187.5 787.51 94.74 8 34 44 19.30 316.46 39.67 111.63 22.07 30A . A 5 8 5 0 100.00 883.32 13.46 320.76 36.93 116.94 8 19 44 283.3 16.97 313.73 10 27 55 106.42 12 3 7 100.00 5711.46 25.33 269.76 41.92 5111.5 27.34 261.53 110.00 7 59 41 900.04 6.80 318.08 32.99 300.0 11.17 311.71 5267.50 110.00 12 49 43 32.84 238.08 43.94 4667.5 33.88 229.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 160A.3 SR 32A.0 SS 494.6 CRT -.8667 CRS .9966 CST -.8978 LSA 1694.7 MSA 258.4 SSA 13.7 TDE-1.1519 TRA-1.8569 TC3-3.5728 BAU 1.0530 SGT 4461.2 SGR 328.5 SG3 140.2 RDE .2688 RRA -.0117 RC3 -.0082 FAU .03835 RRT -.2682 RRF -.4598 RTF .8520 SG8 4473.3 R23 .2389 R13 -.8524 FOE -.6447 FRA -.0887 FC3-1.5060 83P 13756 BDE 1.1829 BRA 1.8569 BC3 3.5728 FSP -439

SG1 4462.1 SG2 316.4 THA 178.86

ELI 1633.4 EL2 161.1 ALF 169.87

ARRIVAL DATE DEC 31 1967

LAUNCH DATE AUG 3 1967

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DISTANCE 449.750
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.283 GAL -5.40 A7L 94.84 MCA 224.07 SMA 125.48 ECC .22910 INC 4.8406 V1 29.348 RP 107.67 LAP 3.36 LOP 173.96 VP 37.518 GAP 10.47 A7P 86.52 TAL 198.86 TAP 62.92 RCA 96.73 APO 154.23 V2 35.197 RC 158.850 GL -29.09 GP 20.26 ZAL 119.59 ZAP 155.75 ETS 53.71 ZAE 127.57 ETE 163.82 ZAC 73.94 ETC 8.24 CLP-166.39
   PLANETOCENTRIC CONIC
     C3 20.625 VHL 4.541 DLA -28.68 RAL 172.44 RAD 6567.8 VEL 11.917 PTH 2.12 VHP 7.298 DPA 18.28 RAP 196.90 ECC 1.3394
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4539.7 SG2 324.0 THA 178.82
                                                                                                                                ST 1636.5 SR 336.7 S5 493.4
CRT -.8904 CRS .9983 CST -.9007
    TOE-1.1569 TRA-1.6975 TC3-3.8943 BAU 1.0738
    ROE .2669 RRA -.0024 RC3 -.0189 FAU .03724
                                                                                                                                LSA 1724.0 MSA 249.7 SSA 15.2
    FOE -.6192 FRA -.0269 FC3-1.5634 BSP 14022
                                                                                                                                 EL1 1864.0 EL2 150.7 ALF 169.53
    BOE 1.1873 BRA 1.6975 BC3 3.8943 FSP
                                                         -439
                                                                                                                                             ARRIVAL DATE JAN 2 1968
                                                                              FLIGHT TIME 152.00
LAUNCH DATE AUG 3 1967
                                                                              DISTANCE 455.460
  HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.211 GAL -4.96 AZL 94.54 MCA 227.29 SMA 125.03 ECC .23019 INC 4.5391 V1 29.348 RP 107.70 LAP 3.33 LOP 177.20 VP 37.459 GAP 10.69 AZP 86.92 TAL 197.10 TAP 64.40 RCA 96.25 APO 153.82 V2 35.187 RC 180.871 GL -27.97 GP 18.95 ZAL 117.52 ZAP 157.25 ETS 53.48 ZAE 127.99 ETE 164.75 ZAC 71.87 ETC 7.80 CLP-167.17
   PLANETOCENTRIC CONIC
    C3 19.412 VHL 4.406 DLA -28.81 RAL 175.58 RAD 6567.8 VEL 11.866 PTH 2.10 VHP 7.351 DPA 16.08 RAP 198.49 ECC 1.3195 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 4612.2 SCR 347.3 SC3 139.5
RRT -_2838 RRF -_4158 RTF .8495
SCB 4625.3 R23 .1809 R13 -_8498
SCI 4613.3 SC2 333.0 TMA 178.77
                                                                                                                                ST 1672.6 SR 346.4 SS 493.1
CRT -.9133 CRS .9981 CST -.9051
     TOE-1.1712 TRA-1.5320 TC3-4.2130 BAU 1.0934
    RDE .2663 RRA .0055 RC3 -.0279 FAU .03602
FDE -.5960 FRA .0326 FC3-1.6066 BSP 14267
BDE 1.2011 BRA 1.5321 BC3 4.2131 FSP -437
                                                                                                                                LSA 1761.5 MSA 239.4 SSA 16.6
                                                                                                                                EL1 1702.4 EL2 138.6 ALF 169.22
                                                                                                                                            ARRIVAL DATE JAN 4 1968
                                                                              FLIGHT TIME 154.00
LAUNCH DATE AUG 3 1967
                                                                             DISTANCE 461.158
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 26.140 GAL -4.51 A7L 94.27 MCA 230.52 SMA 124.60 ECC .23148 INC 4.2675 V1 29.348 RP 107.73 LAP 3.29 LOP 180.44 VP 37.400 GAP 10.92 A7P 87.28 TAL 195.35 TAP 65.87 RCA 95.76 APO 153.44 V2 35.178 RC 162.878 GL -26.89 GP 17.79 7AL 115.19 7AP 158.61 ETS 53.45 7AE 128.35 ETE 165.57 7AC 69.75 ETC 7.42 CLP-167.94
   PLANETOCENTRIC CONIC
     C3 18.381 VML 4.287 DLA -29.06 RAL 178.89 RAD 6567,7 VEL 11.822 PTH 2.09 VHP 7.418 DPA 14.05 RAP 200.16 ECC 1.3025
    LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ AXE INJ AXE INJ AXE INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.20 7 36 23 1054.82 20.60 336.58 46.29 110.95 7 55 58 454.8 23.27 328.87 96.80 9 29 10 690.06 20.62 309.84 46.29 110.94 9 40 40 90.1 23.28 302.12 100.00 8 54 49 800.45 15.46 314.88 44.19 115.61 9 8 9 900.4 10.29 300.65
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                                                                          HID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                         SCT 4676.2 SGR 358.2 SG3 138.4
RRT -.2904 RRF -.3974 RTF .8485
SGB 4689.9 R23 .1563 R13 -.8487
SGI 4677.4 SG2 342.7 THA 178.72
                                                                                                                                ST 1713.7 SR 356.5 S5 492.6

CRT -.9344 CRS .9959 CST -.9103

LSA 1803.9 MSA 227.6 SSA 18.2
     TOE-1.1915 TRA-1.3575 TC3-4.5205 BAU 1.1109
     RDE .2668 RRA .0117 RC3 -.0356 FAU .03466
FDE -.5734 FRA .0914 FC3-1.6323 BSP 14448
                                                                                                                                EL1 1745.9 EL2 124.7 ALF 168.94
     BOE 1.2210 BRA 1.3576 BC3 4.5206 FSP -432
                                                                                                                                             ARRIVAL DATE JAN 6 1968
                                                                              FLIGHT TIME 156.00
 LAUNCH DATE AUG 3 1967
                                                                              DISTANCE 466.840
    RL 151.81 LAL -.00 LOL 309.99 VL 26.070 GAL -4.05 AZL 04.02 MCA 233.75 SMA 124.17 ECC .23296 INC 4.0202 VI 29.348 RP 107.76 LAP 3.24 LOP 183.67 VP 37.342 GAP 11.16 AZP 87.62 TAL 193.58 TAP 67.33 RCA 95.25 APO 153.10 V2 35.167 RC 164.869 GL -25.83 GP 16.78 ZAL 112.60 ZAP 159.86 ETS 53.62 ZAE 128.65 ETE 166.29 ZAC 67.58 ETC 7.09 CLP-168.71
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 17.513 VHL 4.185 DLA -29.38 RAL 182.40 RAD 6567.7 VEL 11.785 PTH 2.08 VHP 7.496 DPA 12.14 RAP 201.91 ECC 1.2882
     LNCH AZHTH LHCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.81 7 39 19 1079.06 21.10 338.57 49.12 110.94 7 57 18 479.1 23.76 330.83
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                                                                                                                                                       34.00
                                                                                                                                                                      227.25
                                                                      236.37
                                                                                       52.72
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 4744.9 SGR 370.0 SG3 137.4
RRT -.2997 RRF -.3836 RTF .8492
SG8 4759.3 R23 .1341 R13 -.8494
SG1 4746.2 SG2 352.9 THA 178.65
                                                                                                                               ST 1765.4 SR 367.6 SS 493.6

CRT -.9531 CRS ..9921 CST -.9167

LSA 1857.2 MSA 214.7 SSA 19.9

EL1 1799.9 EL2 109.2 ALF 168.73
     TOE-1.2207 TRA-1.1787 TC3-4.8224 BAU 1.1291
     ROE .2684 RMA .0168 RC3 -.0405 FAU .03333
FOE -.5538 FRA .1461 FC3-1.6474 BSP 14694
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FLIGHT TIME 150.00

-430

BOE 1.2499 BRA 1.1788 BC3 4.8225 FSP

ARRIVAL DATE JAN 8 1968

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FLIGHT TIME 158.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 472.507
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 26.001 GAL -3.57 AZL 93.79 MCA 236.97 SMA 123.76 ECC .23464 INC 3.7926 V1 29.348 RP 107.79 LAP 3.18 LOP 186.91 VP 37.283 GAP 11.40 AZP 87.93 TAL 191.82 TAP '68.79 RCA 94.72 APO 152.79 V2 35.156 RC 166.846 GL -24.76 GP 15.89 ZAL 109.79 ZAP 161.01 ETS 53.99 ZAE 128.92 ETE 166.93 ZAC 65.38 ETC 6.81 CLP-169.47
  PLANETOCENTRIC CONIC
   C3 16.798 VHL 4.099 OLA -29.77 RAL 186.10 RAD 6567.7 VEL 11.755 PTH 2.07 WHP 7.585 OPA 10.34 RAP 203.73 ECC 1.2765
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             110.99 8 1 41
110.98 11 57 52
                    7 43 17
                                                                                             110.99
                                                                                                                           504.0
                                                                                                                                         24.26
                                                                              52.27
                                 1103.99
                                                  21.60
                                                               340.63
       80.42
                                                                                                                          5287.2
                                                                                                                                         24.27
                  10 19 44
                                5887.15
                                                  21.61
                                                               281.43
                                                                               52.27
       99.58
                                                                                             112.64 10 10 55
109.14 12 22 34
                                                                                                                                         22.75
                                                                                                                           62.6
                    9 59 53
                                   662.57
                                                  19.82
                                                               307.46
                                                                               51.50
                                                                                                                                                       267.97
                                                                                                                          5203.8
                                                                                                                                         25.81
      100.00
                  10 45 50
                                 5803.80
                                                  23.41
                                                               275.95
                                                                               52.98
                                                                                             122.55 9 34 1
99.47 15 6 50
                                                                                                                          185.5
                                                                                                                                          15.27
                                                                                                                                                       305.38
                    9 20 55
                                   785.55
                                                  11.06
                                                               311.95
                                                                               46.74
                                                               237.03
                                                                                                                          4653.6
                                                                                                                                          33.95
                                                                               55.75
      110.00
                  13 41 17
                                 5253.59
                                                  33.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1822.9 SR 379.2 SS 495.3
CRT -.9686 CRS .9867 CST -.9234
                                                                   SCT 4811.6 SCR 382.1 SG3 136.3
RRT -.3097 RRF -.3741 RTF .8508
SCB 4826.8 R23 .1147 R13 -.8510
SCI 4813.1 SG2 363.2 THA 178.58
    TDE-1.2548 TRA -.9924 TC3-5.1064 BAU 1.1468
    RDE .2711 RRA .0204 RC3 -.0431 FAU .03196
                                                                                                                      LSA 1916.0 MSA 201.3 SSA $1.6
   FDE -.5355 FRA .1986 FC3-1.6483 BSP 14942
BDE 1.2838 BRA .9926 BC3 5.1066 FSP -428
                                                                                                                      EL1 1859.6 EL2 92.4 ALF 168.58
                                                                       FLIGHT TIME 160.00
                                                                                                                                 ARRIVAL DATE JAN 10 1958
  HELIOCENTRIC CONIC
                                                                       DISTANCE 478.157
   RL 151.81 LAL -.00 LOL 309.99 VL 25.933 GAL -3.08 AZL 93.58 MCA 240.20 SMA 123.35 ECC .23655 INC 3.5813 V1 29.348
RP 107.83 LAP 3.11 LOP 190.14 VP 37.226 GAP 11.65 AZP 88.22 TAL 190.04 TAP 70.24 RCA 94.17 APO 152.53 V2 35.145
RC 168.808 GL -23.67 GP 15.10 ZAL 106.76 ZAP 162.08 ETS 54.56 ZAE 129.15 ETE 167.50 ZAC 63.14 ETC 6.58 CLP-170.23
  PLANETOCENTRIC CONIC
                                                                                                 2.07 WHP 7.685 DPA
   C3 16.230 VHL 4.029 DLA -30.18 RAL 190.00 RAD 6567.7 VEL 11.751 PTH
                                                                                                                              8.64 RAP 205.60 ECC 1.2671
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    7 48 50 1128.06
                                                  22.08
                                                               342.62
                                                                               55.75
                                                                                            111.11
                                                                                                         6 7 38
                                                                                                                           528.1
                                                                                                                                        24.75
                                                                                                                                                       334.62
       79.09
                                                                                             111.10 12 22 47
111.11 6 7 38
111.10 12 22 47
122.22 9 55 14
100.02 15 18 29
                                                                                                                          5247.3
                                                                                                                                                       270.86
                   10 45 19
                                                   22.09
                                                               278.66
                                                                               55.75
                                                                                                                                          24.76
                                 5647.33
                                                                                                                                          24.75
                                                                                                                                                        334.82
                               1128.06
                                                   22.08
                                                                342.62
                                                                               55.75
                                                                                                                           528.1
                    7 48 50
                                                                                                                          5247.3
                                                                                                                                          24.76
                                                                                                                                                       270.86
                  10 45 19
                               5847.33
                                                   22.09
                                                               278.66
                                                                               55.75
      100.91
                                                                                                                                                        303.78
                                                                                                                           157.2
                    9 42 37
                                   757.17
                                                   12.09
                                                                310.40
                                                                               50.51
                                                                                                                                          16.26
      110.00
                                                                                                                                                       228.90
                  13 50 42
                                                               237.99
                                                                               59.13
                                                                                                                         4666.2
                                                                                                                                          33.89
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 4872.9 SCR 394.0 SC3 134.9
RRT -.3195 RRF -.3666 RTF .8529
SCB 4888.8 R23 .0976 R13 -.8531
SCI 4874.5 SC2 373.2 THA 178.51
                                                                                                                      ST 1881.0 SR 390.8 SS 495.2
CRT -.9808 CRS .9796 CST -.9297
   TOE-1.2901 TRA -.7973 TC3-5.3610 BAU 1.1632
    RDE .2747 RRA .0225 RC3 -.0437 FAU .03060
                                                                                                                     LSA 1975,0 MSA 187.8 55A 23.5
   FOE -.5165 FRA .2497 FC3-1.6323 BSP 15165
BOE 1.3190 BRA .7976 BC3 5.3612 FSP -425
                                                                                                                      ELI 1919,8 ELZ 74.7 ALF 168.46
                                                                                                                                 ARRIVAL DATE JAN 12 1968
                                                                       FLIGHT TIME 162.00
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 483.789
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 25.867 GAL -2.57 AZL 93.38 MCA 243.42 SMA 122.96 ECC .23868 INC 3.3833 V1 29.348 RP 107.86 LAP 3.03 LOP 193.37 VP 37.168 GAP 11.90 AZP 88.48 TAL 188.27 TAP 71.69 RCA 93.61 APO 152.30 V2 35.134 RC 170.755 GL -22.56 GP 14.39 ZAL 103.53 ZAP 163.06 ETS 55.34 ZAE 129.36 ETE 168.01 ZAC 60.87 ETC 6.39 CLP-170.97
   PLANETOCENTRIC CONIC
    C3 15.806 VHL 3.976 DLA -30.60 RAL 194.10 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 7.794 DPA
                                                                                                                             7.02 RAP 207.53 ECC 1.2601
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            111.28 8 15 27
111.27 12 47 28
                                                                                                                                       25.21
                                                                                                          8 15 27
                                                                                                                           550.3
                                                                                                                                                      336.64
                  7 56 17 1150.33
11 10 35 5813.02
                                                  22.52
                                                               344.47
                                                                             59.56
       77.89
                                                   22.53
                                                               276.28
                                                                               59.56
                                                                                                                          5213.0
                                                                                                                                          25.22
                                                                                                                                                       258.46
       102.11
                                                                                             111.28 8 15 27
111.27 12 47 28
                                                                                                                                                       336.64
                  7 56 17 1150.33
11 10 35 5613.02
                                                                                                                           550.3
                                                                                                                                          25.21
                                                   22.52
                                                               344.47
                                                                               59.56
       77.89
                                                  22.53
                                                               276.28
                                                                               59.56
                                                                                                                          5213.0
                                                                                                                                         25.22
                                                                                                                                                       26A.46
      102.11
                                                                                             121.86 10 17 40
100.69 15 28 34
                                                   13.09
                                                                308.88
                                                                               54.62
                                                                                                                           129.5
                                                                                                                                          17.21
                                                                                                                                                       302.19
                   10 5 31
14 0 32
                                   729.51
      110.00
                               5281.84
                                                                                                                          4681.8
                                                                                                                                          33.79
                                                                                                                                                       230.11
                                                               239.17
                                                                               62.83
      110.00
                                                   32.66
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   RRT -,3274 RRF -,3597 RTF .8545
SGB 4939.0 R23 .0829 R13 -,8546
SGI 4924.1 SGZ 382.7 THA 178.45
                                                                                                                     ST 1933.3 SR 402.1 SS 491.8
CRT -.9896 CRS ..9705 CST -.9348
LSA 2027.3 MSA 175.3 SSA 25.4
    TOE-1.3224 TRA -.5902 TC3-5.5708 BAU 1.1772
    ROE .2789 RRA .0227 RC3 -.0428 FAU .02911
FDE -.4951 FRA .3015 FC3-1.5944 BSP 15300
                                                                                                                      EL1 1973.9 EL2 56.8 ALF 168.36
    BOE 1.3515 BRA .5907 BC3 5.5710 FSP -417
                                                                        FLIGHT TIME 164.00
                                                                                                                                 ARRIVAL DATE JAN 14 1968
LAUNCH DATE AUG 3 1967
                                                                       DISTANCE 489.400
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 25.801 GAL -2.05 AZL 93.20 MCA 246.64 SMA 122.57 ECC .24106 INC 3.1962 V1 29.348
RP 107.90 LAP 2.93 LOP 196.60 VP 37.111 GAP 12.17 AZP 88.73 TAL 186.49 TAP 73.13 RCA 93.02 APO 152.12 V2 35.122
RC 172.686 GL -21.40 GP 13.77 ZAL 100.13 ZAP 163.97 ETS 56.33 ZAE 129.54 ETE 168.46 ZAC 58.58 ETC 6.24 CLP-171.71
  PLANETOCENTRIC CONIC
                                                                                                                             5.48 RAP 209.49 ECC 1.2555
    C3 15.528 WHL 3.941 DLA -30.99 RAL 198.39 RAD 6567.6 VEL 11.701 PTH 2.06 VHP 7.913 OPA
   LNCH AZMTH LNCH TIME L-I TIME
T6.85 8 5 50 1170.23
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           63.69
                                                                                                                           570.2
                                                   22.90
                                                               346.12
                                                                                                                                          25.61
                                                                                                                                                        338.28
                                                                                                                                                       266.50
      103.15
                  11 35 15
                                  5785.10
                                                   22.91
                                                                274.35
                                                                               63.69
                                                                                                                           5185.1
                                                                                                                                          25.62
                                                                                                                           570.2
                                                                                                                                          25.61
                                                                                                                                                        338.28
                   8 5 50
                                 1170.23
                                                   22.90
                                                                346.12
                                                                               63.69
       76.85
                   11 35 15
                                                                                63.69
                                                                                                                           5185.1
                                                                                                                                          25.62
                                                                                                                                                       266.50
      103.15
                                 5785.10
                                                   22.91
                                                                274.35
                                                                                                                                                        300.72
                   10 29 9
                                   704.06
                                                                307.47
                                                                                                                           104.1
                                                                                                                                          18.07
                                                   14.00
                                                                                59.02
      110.00
                                                                                                                          4699.3
                                                                240.48
                                                                                                                                          33.67
                                                                                                                                                       231.46
      110.00
                   14 11 6 5299.27
                                                   32.44
                                                                                66.87
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1984.9 SR 413.7 SS 488.2
CRT -.9950 CRS .9599 CST -.9396
    TDE-1.3555 TRA -.3778 TC3-5.7424 BAU 1.1921
                                                                    SGT 4977.6 SGR 416.3 SG3 131.4
    ROE .2844 RRA .0217 RC3 -.0392 FAU .02772
FOE -.4749 FRA .3500 FC3-1.5454 83P 15517
BOE 1.3850 BRA .3784 BC3 5.7425 FSP -414
                                                                  RRT -.3575 RRF -.3572 RTF .8577
SGB 4995.0 R23 .0702 R13 -.8579
                                                                                                                     LSA 2078.8 MSA 164.3 SSA 27.2
                                                                                                                      EL1 2027.1 EL2 40.4 ALF 168.28
                                                                    SG1 4979.6 SG2 391.8 THA 178.37
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ARRIVAL DATE JAN 16 1968

EL1 2091.3 EL2 70.5 ALF 167.67

LAUNCH DATE AUG 3 1967

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HELIOCENTRIC CONIC
                                                                                 DISTANCE 494.989
 RL 151.81 LAL -.00 LOL 309.99 VL 25.736 GAL -1.51 AZL 93.02 MCA 249.85 SMA 122.20 ECC .24370 INC 3.0182 V1 29.348 RP 107.94 LAP 2.83 LOP 199.82 VP 37.055 GAP 12.44 AZP 88.96 TAL 184.71 TAP 74.56 RCA 92.42 APO 151.97 V2 35.110 RC 174.603 GL -20.19 GP 13.20 ZAL 96.57 ZAP 164.82 ETS 57.54 ZAE 129.71 ETE 168.87 ZAC 56.27 ETC 6.14 CLP-172.45
   PLANETOCENTRIC CONIC
    C3 15.399 VHL .3.924 OLA -31.33 RAL 202.84 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 8.041 DPA
                                                                                                                                              4.81 RAP 211.51 ECC 1.2534
   C3 13.39 VPL .3.924 ULA -31.33 MAL ZUZ.84 NAU 6367.6 VEL 11.695 PTH Z.06 VPP 8.041 DPA 4.61 RAP 211.51 ECC 1.2534 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.99 8 17 34 1187.36 23.19 347.53 68.12 111.69 8 37 21 587.4 25.92 339.69 104.01 11 59 2 5764.23 23.20 272.90 68.12 111.68 13 35 7 5164.2 25.93 265.04 104.01 11 59 2 5764.23 23.20 272.90 68.12 111.68 13 35 7 5164.2 25.93 265.04 110.00 10 52 57 682.52 14.77 306.27 63.70 121.19 11 4 19 82.5 18.79 299.46
                                                                                                          121.19 11 4 19
102.18 15 51 27
                     14 22 50 5317.07
                                                                                                                                           4717.1
                                                                                                                                                             33.53
                                                                                                                                                                            232.83
                                                         32.19
                                                                        241.80
                                                                                          71.21
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5029.8 SCR 426.7 SC3 129.7
RRT - .3473 RRF - .3564 RTF .8616
SCB 5047.9 R23 .0589 R13 - .8618
SCI 5032.0 SC2 400.0 THA 178.30
                                                                                                                                      ST 2026.2 SR 424.8 SS 481.6

CRT -.9974 CRS .9473 CST -.9433

LSA 2119.6 MSA 156.0 SSA 28.8
    TDE-1.3835 TRA -.1555 TC3-5.8594 BAU 1.2063
    RDE .2909 RRA .0190 RC3 -.0335 FAU .02636
FDE -.4531 FRA .3977 FC3-1.4819 BSP 15720
BDE 1.4137 BRA .1566 BC3 5.8595 FSP -411
                                                                                                                                       EL1 2070.1 EL2 29.9 ALF 168.19
                                                                                                                                                   ARRIVAL DATE JAN 18 1968
                                                                                 FLIGHT TIME 168.00
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 500.554
  HELIOCENTRIC CONIC
   RL 151.81 LAL -.00 LOL 309.99 VL 25.673 GAL -.96 AZL 92.85 MCA 253.07 SMA 121.83 ECC .24662 INC 2.8475 V1 29.348
RP 107.97 LAP 2.72 LOP 203.04 VP 36.999 GAP 12.72 AZP 89.17 TAL 182.93 TAP 75.99 RCA 91.78 APO 151.87 VZ 35.097
RC 176.504 GL -18.95 GP 12.69 ZAL 92.89 ZAP 165.61 ETS 58.99 ZAE 129.87 ETE 169.23 ZAC 53.94 ETC 6.07 CLP-173.17
   PLANETOCENTRIC CONIC
    C3 15.427 VHL 3.928 DLA -31.60 RAL 207.43 RAD 6567.6 VEL 11.697 PTH
                                                                                                               2.06 VHP 8.180 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                       8 31 25 1201.72
12 21 47 5750.68
                                                         23.36
                                                                         348.70
                                                                                          72.82
                                                                                                         111.91
                                                                                                                         8 51 27
                                                                                                                                            601.7
                                                                                                                                                           26.13
                                                                                                                                                                           340.85
        75.35
                                                                                                          111.90 13 57 38
                                                         23.37
                                                                                          72.82
                                                                                                                                            5150.7
                                                                                                                                                              26.14
                                                                                                                                                                             264.09
                     12 21 47
                                                                         271.95
       104.65
                     6 31 25 1201.72
12 21 47 5750.66
                                                                                                           111.91
                                                                                                                         8 51 27
                                                                                                                                             601.7
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                                                         23.36
                                                                         348.70
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        75.35
                                                                                                          111.90 13 57 38
120.94 11 27 20
102.87 16 5 3
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                                                         23.37
                                                                         271.95
                                                                                          72.82
       104.65
                                                                                                                                              66.8
                                                                                                                                                              19.31
                                                                                                                                                                             298.54
                     11 16 14
                                        666.81
                                                         15.32
                                                                         305.39
                                                                                          68.58
       110.00
                                                                                                                                           4733.6
                     14 36 9
                                     5333.59
                                                                        243.03
                                                                                          75.65
                                                                                                                                                              33.38
                                                                                                                                                                             234.10
                                                         31.94
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5074.7 SCR 436.1 SC3 127.7
RRT -.3562 RRF -.3563 RTF .8653
SCB 5093.4 R23 .0493 R13 -.8654
SCI 5077.1 SC2 407.3 THA 178.24
    TOE-1.4025 TRA .0782 TC3-5.9093 BAU 1.2188
ROE .2981 RRA .0146 RC3 -.0269 FAU .02496
                                                                                                                                      ST 2050.9 SR 435.0 SS 471.3
CRT -.9969 CRS .9318 CST -.9457
    FDE -.4287 FRA .4455 FC3-1.4007 BSP 15880
BDE 1.4338 BRA .0795 BC3 5.9094 FSP -405
                                                                                                                                      LSA 2143.3 MSA 151.2 SSA 29.9
                                                                                                                                       EL1 2096.3 EL2 33.4 ALF 168.06
                                                                                                                                                  ARRIVAL DATE JAN 20 1968
                                                                                 FLIGHT TIME 170.00
LAUNCH DATE AUG 3 1967
                                                                                DISTANCE 506.091
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.610 GAL -.38 AZL 92.68 MCA 256.28 SMA 121.47 ECC .24983 INC 2.6826 VI 29.348
RP 108.01 LAP 2.61 LOP 206.26 VP 36.943 GAP 13.02 AZP 89.36 TAL 181.14 TAP 77.43 RCA 91.12 APO 151.82 V2 35.084
RC 178.389 GL -17.65 GP 12.23 ZAL 89.12 ZAP 166.34 ETS 60.68 ZAE 130.01 ETE 169.56 ZAC 51.60 ETC 6.05 CLP-173.89
   PLANETOCENTRIC CONIC
     C3 15.620 VHL 3.952 DLA -31.77 RAL 212.11 RAD 6567.6 VEL 11.705 PTH 2.06 VHP 8.330 DPA
                                                                                                                                              1.25 RAP 215.64 ECC 1.2571
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    8 47 22 1213.11
12 43 13 5744.90
8 47 22 1213.11
12 43 13 5744.90
                                                                                       77.74
                                                                                                        112.12 9 7 35
112.11 14 18 58
112.12 9 7 35
                                                                                                                                                         26.20
                                                                                                                                                                         341.74
                                                                                                                                           613.1
                                                                        349.58
         74.95
                                                         23.41
                                                                                                                                                                            263.68
                                                                        271.53
                                                                                          77.75
                                                                                                                                           5144.9
                                                                                                                                                             26.21
                                                         23.42
        105.05
                                                                                                                                                                            341'.74
                                                                                          77.74
                                                                                                                                             613.1
                                                                                                                                                            26.20
                                                         23.41
                                                                         349.58
         74.95
                                                                                                          112.12 9 7 35
112.11 14 18 58
120.81 11 49 13
103.43 16 20 39
                                                                                                                                                                            263.68
                                                         23.42
                                                                        271.53
                                                                                          77.75
                                                                                                                                           5144.9
                                                                                                                                                            26.21
       105.05
                                                                                                                                                                            298.07
                     11 36 14
                                                         15.59
                                                                         304.94
                                                                                          73.62
                                                                                                                                             58.9
                                                                                                                                                             19.56
                                        658.91
       110.00
                     11 38 14 DD.91
14 51 32 5347.09
                                                                                                                                           4747.1
                                                                                                                                                             33.25
                                                                                                                                                                            235.13
                                                                        244.03
                                                                                          80.75
                                                         31.73
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2057.5 SR 444.2 SS 458.0
CRT -.9936 CRS .9136 CST -.9474
                                                                             SGT 5117.1 SGR 444.7 SG3 125.6
     TOE-1.4114 TRA .3201 TC3-5.8933 BAU 1.2307
                                                                            RRT -.3655 RRF -.3578 RTF .8708
SGB 5136.4 R23 .0402 R13 -.8709
SGI 5119.7 SGZ 413.7 THA 178.17
    RDE .3064 RRA .0090 RC3 -.0187 FAU .02365
FOE -.4029 FRA .4903 FC3-1.3107 BSP 16047
                                                                                                                                       LSA 2148.7 MSA 150.3 SSA 30.3
                                                                                                                                       EL1 2104.3 EL2 49.2 ALF 167.89
     BOE 1.4443 BRA .3203 BC3 5.8933 FSP -403
                                                                                 FLIGHT TIME 172.00
                                                                                                                                                   ARRIVAL DATE JAN 22 1968
LAUNCH DATE AUG 3 1967
                                                                                 DISTANCE 511.598
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.549 GAL .22 A7L 92.52 MCA 259.49 SMA 121.12 ECC .25338 INC 2.5223 VI 29.348 RP 108.05 LAP 2.48 LOP 209.48 VP 36.888 GAP 13.33 A7P 89.54 TAL 179.36 TAP 78.85 RCA 90.43 APO 151.81 V2 35.071 RC 180.257 GL -16.33 GP 11.82 ZAL 85.30 ZAP 187.02 ETS 62.63 ZAE 130.14 ETE 169.85 ZAC 49.24 ETC 6.07 CLP-174.61
   PLANETOCENTRIC CONIC
     C3 15.990 VHL 3.999 DLA -31.83 RAL 216.85 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 8.491 DPA
                                                                                                                                               -. OA RAP 217.75 ECC 1.2632
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.82 9 5 19 1221.32 23.31 350.16 82.86 112.31 9 25 40 621.3 26.13 342.33
                                                                                      82.86
                     9 5 19 1221.32
13 3 1 5747.29
9 5 19 1221.32
                                                                         271.67
                                                                                          82.87
                                                                                                           112.29
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                                                                                                                                            5147.3
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                                                          23.33
        105.18
                                                                                          82.86
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13 3 1
11 58 17
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                                                                                           82.87
        105.18
                                     5747.29
                                                                                                           120.84 12 9 17
103.80 16 38 30
                                                                         305.03
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                                                          15.54
        110.00
                                        660.45
                                                                                                                                            4756.2
                     15 9 14 5356.15
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                                                          31.59
                                                                         244.69
                                                                                          85.90
                                                                                                                                                             33.16
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5151.7 SCR 451.9 SC3 123.5
RRT -.3726 RRF -.3597 RTF .8723
SCB 5171.5 R23 .0351 R13 -.8724
                                                                                                                                     ST 2043.1 SR 451.8 SS 442.5
CRT -,9872 CRS .8891 CST -.9466
     TDE-1.4079 TRA .5784 TC3-5.8004 BAU 1.2399
     ROE .3153 RRA .0008 RC3 -.0115 FAU .02215
FOE -.3745 FRA .5418 FC3-[.1995 BSP 16078
BOE 1.4428 BRA .5784 BC3 5.8004 FSP -385
                                                                                                                                      LSA 2132.9 MSA 156.2 SSA 29.8
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FLIGHT TIME 166.00

SG1 5154.4 SG2 419.2 THA 178.12

ARRIVAL DATE JAN 24 1968

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LAUNCH DATE AUG 3 1967
                                                                                        DISTANCE 517.071
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.488 GAL .84 AZL 92.37 HCA 262.70 SHA 120.78 ECC .25727 INC 2.3654 V1 29.348 RP 108.09 LAP 2.35 LOP 212.69 VP 36.834 GAP 13.66 AZP 89.70 TAL 177.58 TAP 80.28 RCA 89.71 APO 151.86 V2 35.058 RC 182.108 GL -14.98 GP 11.45 ZAL 81.48 ZAP 167.64 ETS 64.86 ZAE 130.26 ETE 170.11 ZAC 46.88 ETC 6.14 CLP-175.32
    PLANETOCENTRIC CONIC
    C3 16.551 VHL 4.068 OLA -31.77 RAL 221.57 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 8.664 OPA -1.28 RAP 219.90 ECC 1.2724 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   9 45 36
14 56 52
                                                                                                                                                                            25.91
                                                                                                                    112.47
                       9 25 10 1226.09
13 20 54 5758.25
9 25 10 1226.09
                                                                                               88.11
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                                                               23.07
                                                                                350.41
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112.46 14 56 52
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          74.96
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                       13 20 54 5758.25
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        105.04
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103.95 16 58 42
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                                            672.37
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        110.00
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        110.00
                       15 29 22
                                          5359.97
                                                                31.53
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 2010.3 SR 458.0 SS 424.6
CRT -.9775 CRS .8612 CST -.9460
                                                                                     SCT 5187.1 SCR 458.2 SC3 121.3
RRT - .3817 RRF - .3630 RTF .8783
SCB 5207.3 R23 .0276 R13 - .8784
SCI 5190.1 SC2 423.3 THA 178.06
     TOE-1.3928 TRA .8409 TC3-5.6479 BAU 1.2497
     ROE .3252 RRA -.0079 RC3 -.0025 FAU .02091
                                                                                                                                                     LSA 2098.4 MSA 165.3 55A 28.6
    FOE -.3451 FRA .5859 FC3-1.0937 BSP 16306
BOE 1.4303 BRA .8410 BC3 5.6479 FSP -387
                                                                                                                                                      EL1 2059.7 EL2 94.3 ALF 167.42
                                                                                                                                                                    ARRIVAL DATE JAN 26 1968
LAUNCH DATE AUG 3 1967
                                                                                           FLIGHT TIME 176.00
                                                                                          DISTANCE 522.507
   HELTOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.429 GAL 1.48 AZL 92.21 MCA 265.91 SMA 120.45 ECC .26154 INC 2.2109 V1 29.348 RP 108.13 LAP 2.21 LOP 215.90 VP 36.780 GAP 14.00 AZP 89.84 TAL 175.81 TAP 81.71 RCA 88.95 APO 151.95 V2 35.045 RC 183.942 GL -13.63 GP 11.10 ZAL 77.67 ZAP 168.21 ETS 67.36 ZAE 130.37 ETE 170.35 ZAC 44.51 ETC 6.27 CLP-176.02
   PLANETOCENTRIC CONIC
     C3 17.321 VHL 4.162 DLA -31.56 RAL 226.25 RAD 6567.7 VEL 11.777 PTH
                                                                                                                           2.08 WHP 8.851 DPA
                                                                                                                                                               -2.47 RAP 222.08 ECC 1.2851
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     112.60 10 7 18
112.59 15 12 49
112.60 10 7 18
112.59 15 12 49
121.37 12 42 28
103.90 17 20 57
                        9 46 51 1227.06
13 36 31 5778.21
                                                                22.67
                                                                                 350.31
                                                                                                    93.44
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         75.40
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                                                                22.68
                                                                                 273.72
                                                                                                     93.44
        104.60
                                                                                                     93.44
                                                                                                                                                             627.1
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                                          1227.06
                                                                22.67
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          75.40
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                         13 36 31
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                                         5778.21
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        104.60
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                                            694.57
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        110.00
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                        15 51 39
                                         5358.70
                                                                                 244.88
                                                                                                    96.72
        110.00
                                                                31.55
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 5211.6 SGR 463.0 SG3 118.9
RRT -. 3886 RRF -. 3658 RTF . 8824
                                                                                                                                                      ST 1954.2 SR 462.1 SS 405.0
CRT -.9633 CRS .8245 CST -.9437
     TDE-1.3599 TRA 1.1211 TC3-5.4227 BAU 1.2557
     ROE .3396 RRA -.0186 RC3 .0048 FAU .01953
FOE -.3129 FRA .6337 FC3 -.9763 BSP 16369
                                                                                      SG8 5232.1 R23 .0224 R13 -.8825
                                                                                                                                                      LSA 2040.4 HSA 180.4 SSA 26.9
                                                                                      SG1 5214.7 SG2 426.3 THA 178.01
                                                                                                                                                      EL1 2004.5 EL2 120.9 ALF 167.12
     BOE 1.4007 BRA 1.1213 BC3 5.4227 FSP -380
                                                                                                                                                                   ARRIVAL DATE JAN 28 1968
                                                                                          FLIGHT TIME 178.00
LAUNCH DATE AUG 3 1967
                                                                                          DISTANCE 527.899
    HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 25.370 GAL 2.15 AZL 92.06 HCA 269.11 SMA 120.13 ECC .26622 INC 2.0577 VI 29.348 RP 108.18 LAP 2.06 LOP 219.10 VP 36.727 GAP 14.37 AZP 89.97 TAL 174.04 TAP 83.15 RCA 88.15 APO 152.11 V2 35.032
     RC 185.758 GL -12.28 GP 10.80 ZAL 73.93 ZAP 168.73 ETS 70.16 ZAE 130.47 ETE 170.57 ZAC 42.13 ETC 6.45 CLP-176.73
    PLANETOCENTRIC CONIC
     C3 18.322 VML 4.280 DLA -31.27 RAL 230.81 RAC 6567.7 VEL 11.820 PTH 2.09 VMP 9.052 DPA -3.60 RAP 224.28 ECC 1.3015
     C3 18.322 VHL 4.280 DLA -31.27 RAL 230.81 RAD 6567.7 VEL 11.820 PTM 2.09 VMP 9.052 DPA -3.60 RAP 224.28 ECC 1.3015 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.14 10 10 12 1223.97 22.11 349.82 98.80 112.69 10 30 36 624.0 24.99 342.10 103.86 13 49 35 5807.44 22.13 275.69 98.80 112.68 15 26 23 5207.4 25.01 267.96 103.86 13 49 35 5807.44 22.13 275.69 98.80 112.69 10 30 36 624.0 24.99 342.10 103.86 13 49 35 5807.44 22.13 275.69 98.80 112.68 15 26 23 5207.4 25.01 267.96 110.00 12 43 24 726.10 13.22 308.70 93.99 121.82 12 55 31 126.1 17.33 302.00 110.00 16 15 33 5353.31 31.64 244.49 102.30 103.68 17 44 47 4753.3 33.19 235.60
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SCT 5237.5 SCR 466.8 SC3 116.7
RRT -.3962 RRF -.3707 RTF .8871
SCB 5258.2 R23 .0183 R13 -.8871
                                                                                                                                                      ST 1887.0 SR 464.4 55 386.9
     TOE-1.3163 TRA 1.4101 TC3-5.1516 BAU 1.2619
                                                                                                                                                      CRT -.9442 CRS .7814 CST -.9413
     RDE .3468 RRA -.0307 RC3 .0118 FAU .01825
FDE -.2815 FRA .6807 FC3 -.8623 BSP 16493
BDE 1.3612 BRA 1.4104 BC3 5.1517 FSP -375
                                                                                                                                                      LSA 1971.3 MSA 199.2 SSA 25.1
                                                                                      SGI 5240.8 SG2 428.3 THA 177.96
                                                                                                                                                      ELI 1937.6 ELZ 149.0 ALF 166.84
                                                                                                                                                                    ARRIVAL DATE JAN 30 1968
                                                                                           FLIGHT TIME 180.00
LAUNCH DATE AUG 3 1967
                                                                                           DISTANCE 533.244
    HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.313 GAL 2.86 AZL 91.90 HCA 272.31 SMA 119.81 ECC .27136 INC 1.9049 VI 29.34A
RP 108.22 LAP 1.90 LOP 222.31 VP 36.675 GAP 14.76 AZP 90.08 TAL 172.27 TAP 84.58 RCA 87.30 APO 152.32 VZ 35.019
RC 187.557 GL -10.95 GP 10.51 ZAL 70.29 ZAP 169.18 ETS 73.27 ZAE 130.56 ETE 170.77 ZAC 39.76 ETC - 6.70 CLP-177.44
    PLANETOCENTRIC CONIC
     C3 19.578 VHL 4.425 DLA -30.85 RAL 235.23 RAD 6567.8 VEL 11.873 PTH 2.11 VMP 9.269 DPA -4.69 RAP 226.50 ECC 1.3222
     C3 19.578 VHL 4.425 DLA -30.85 RAL 235.23 RAD 6567.8 VEL 11.873 PTM 2.11 VMP 9.269 DPA -4.69 RAP 226.30 ECC 1.3222 LNCH AZMTM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.21 10 35 25 1215.66 21.43 348.89 104.15 112.75 10 55 40 615.7 24.32 341.21 102.79 13 59 37 5847.01 21.44 278.35 104.15 112.73 15 37 4 5247.0 24.33 270.67 17.21 10 35 25 1215.66 21.43 348.89 104.15 112.75 10 55 40 615.7 24.32 341.21 102.79 13 59 37 5847.01 21.44 278.35 104.15 112.75 10 55 40 615.7 24.32 341.21 102.79 13 59 37 5847.01 21.44 278.35 104.15 112.73 15 37 4 5247.0 24.33 270.67 110.00 12 53 45 765.47 11.79 310.86 98.92 122.32 13 6 31 165.5 15.97 304.25 110.00 16 40 26 5345.21 31.76 243.89 107.91 103.55 18 9 31 4745.2 33.27 234.99
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 1810.3 SR 464.8 SS 370.4
CRT -.9187 CRS .7307 CST -.9391
LSA 1892.3 MSA 221.3 SSA 23.2
                                                                                     SGT 5260.7 SGR 469.4 SG3 114.5
RRT -.4040 RRF -.3765 RTF .8924
     TOE-1.2598 TRA 1.7113 TC3-4.8408 BAU 1.2671
     RDE .3586 RRA -.0440 RC3 .0181 FAU .01705
FDE -.2503 FRA .7278 FC3 -.7538 BSP 16625
BDE 1.3098 BRA 1.7118 BC3 4.8409 FSP -371
                                                                                     SGB 5281.6 R23 .0147 R13 -.8925
SG1 5264.2 SG2 429.1 THA 177.92
                                                                                                                                                      ELI 1860.5 EL2 178.6 ALF 166.60
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FLIGHT TIME 174.00

ARRIVAL CATE FEB 1 1968

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FLIGHT TIME 142.97
LAUNCH DATE AUG 3 1967
                                                                                                    DISTANCE 534.534
    HELIOCENTRIC CONIC
     RL 151.41 LAL -.00 LOL 309.99 VL 25.256 GAL 3.59 AZL 91.75 MCA 275.51 SMA 119.50 ECC .27699 INC 1.7515 V1 29.348
RP 104.26 LAP 1.74 LOP 225.51 VP 36.623 GAP 15.17 AZP 90.17 TAL 170.52 TAP 86.03 RCA 86.40 APO 152.60 V2 35.005
RC 189.337 GL -9.65 GP 10.26 ZAL 66.76 ZAP 169.58 ETS 76.68 ZAE 130.64 ETE 170.95 ZAC 37.39 ETC 7.02 CLP-174.15
    PLANETOCENTRIC CONIC
     C3 21.122 VHL 4.596 DLA -30.34 RAL 239.46 RAD 6567.9 VEL 11.937 PTH 2.12 VMP 9.503 DPA -5.73 RAP 228.75 ECC 1.3476
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.64 11 2 43 1200.71 20.61 347.40 109.44 112.76 11 22 44 600.7 23.52 339.78
                                                                                                                                112.76 11 22 44
112.75 14 16 13
112.75 14 16 13
112.75 14 16 13
122.83 13 15 50
102.97 18 34 34
                        11 2 43 1200.71
                                                                                                                                                                               10.2
                                                 610.17
                                                                       20.62
                                                                                          303.92
                                                                                                              109.45
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         101.36
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                         11: 2 43 1200.71
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13 2 19
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         110.00
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                                                                                          243.20
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                        17 5 36
         110.00
                                              5335.89
                                                                       31.91
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              RET - 4110 RET - 3819 RTF .8974
SGB 5298.0 R23 .0117 R13 -.8974
SGB 5298.6 SG2 428.6 THA 177.89
     TOE-1.1893 TRA 2.0272 TC3-4.4955 BAU 1.2695
ROE .3708 RRA -.0588 RC3 .0228 FAU .01583
FOE -.2181 FRA .7764 FC3 -.6488 BSP 16721
BOE 1.2457 BRA 2.0281 BC3 4.4955 FSP -366
                                                                                                                                                                     ST 1727.8 SR 462.9 SS 355.5
CRT -.8849 CRS .6699 CST -.9370
LSA 1806.9 MSA 246.4 SSA 21.5
                                                                                                                                                                      EL1 1776.4 EL2 209.7 ALF 166.47
                                                                                                    FLIGHT TIME 184.00
                                                                                                                                                                                      ARRIVAL DATE FEB 3 1958
LAUNCH DATE AUG 3 1967
   HELIOCENTRIC CONIC
                                                                                                    DISTANCE 543.762
     RL 151.81 LAL -.00 LOL 309.99 VL 25.201 GAL 4.36 AZL 91.60 MCA 278.71 SMA 119.20 ECC .28316 INC 1.5966 VI 29.348 RP 108.30 LAP 1.58 LOP 228.70 VP 36.573 GAP 15.61 AZP 90.24 TAL 168.78 TAP 87.48 RCA 85.45 APO 152.96 V2 34.992 RC 191.100 GL -8.40 GP 10.02 ZAL 63.38 ZAP 169.91 ETS 80.38 ZAE 130.71 ETE 171.12 ZAC 35.02 ETC 7.43 CLP-178.86
    PLANETOCENTRIC CONIC
C3 22.990 VHL 4.799 DLA -29.74 RAL 243.48 RAD 6567.9 VEL 12.015 PTH 2.14 VMP 9.757 DPA -6.72 RAP 231.01 ECC 1.3784
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
80.51 11 32 53 1176.12 19.69 345.16 114.66 112.75 11 52 29 576.1 22.61 337.59
99.49 14 7 56 675.77 19.71 306.39 114.67 112.73 14 19 11 75.8 22.62 300.82
100.00 13 46 22 744.67 17.57 312.52 113.66 114.58 13 58 47 144.7 20.74 305.16
100.00 14 37 8 5670.48 21.86 280.29 115.59 110.92 16 14 58 5270.5 24.51 272.49
110.00 13 9 25 861.28 8.26 316.02 108.41 123.29 13 23 46 261.3 12.58 309.60
110.00 17 30 34 5326.64 32.05 242.52 119.02 102.58 18 59 21 4726.6 33.45 233.57
   PLANETOCENTRIC CONIC
                                                                                              MIO-COURSE EXECUTION ACCURACY

SCT 5286.9 SGR 470.0 SG3 110.1

RRT -.4172 RRF -.3670 RTF .9021

SGB 5307.8 R23 .0090 R13 -.9022

SGI 5290.6 SG2 426.8 TMA 177.86
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ST 1644.5 SR 458.9 SS 343.3
CRT -.8403 CRS .5985 CST -.9357
     TOE-1.1038 TRA 2.3614 TC3-4.1254 BAU 1.2680
     ROE .3851 RRA -.0750 RC3 .0257 FAU .01459
FOE -.1851 FRA .8274 FC3 -.5493 BSP 16727
BOE 1.1684 BRA 2.3626 BC5 4.1255 FSP -358
                                                                                                                                                                     LSA 1719.7 MSA 273.8 SSA 20.0
                                                                                                                                                                     ELI 1697.0 EL2 242.0 ALF 166.52
                                                                                                                                                                                     ARRIVAL DATE FEB 5 1968
                                                                                                    FLIGHT TIME 186.00
LAUNCH DATE AUG 3 1967
                                                                                                    DISTANCE 548.918
    HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 25.147 GAL 5.17 AZL 91.44 MCA 281.90 SMA 118.91 ECC .28993 INC 1.4391 VI 29.348
RP 108.34 LAP 1.41 LOP 231.90 VP 36.523 GAP 16.09 AZP 90.30 TAL 167.05 TAP 88.95 RCA 84.43 APO 153.39 VZ 34.979
RC 192.846 GL -7.19 GP 9.81 ZAL 60.16 ZAP 170.18 ETS 84.37 ZAE 130.76 ETE 171.27 ZAC 32.66 ETC 7.94 CLP-179.58
    PLANETOCENTRIC CONIC
      C3 25.226 VHL 5.023 DLA -29.08 RAL 247.26 RAD 6568.0 VEL 12.108 PTH 2.17 VHP 10.033 DPA -7.66 RAP 233.30 ECC 1.4152
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 112.69 12 27 9
112.68 14 15 29
                                                                                                         119.78
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                        12 8 15 1133.84
           63.09
                                                                     18.69
                                                                                         341.59
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                          14 2 46
                                                763.53
                                                                       18.70
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           96.91
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108.65 17 1 46
123.68 13 30 36
102.24 19 23 28
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                        13 28 22
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          100.00
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                          15 25 20
                                             5786.65
                                                                       23.79
                                                                                         274.81
                                                                                                            121.84
         100.00
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                         13 15 21 914.96
17 54 50 5318.45
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                                                                       32:17
                                                                                         241.91
                                                                                                             124.46
         110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 5295.3 SCR 468.3 SC3 107.9
RRT -.4237 RRF -.3933 RTF .9075
SCB 5516.0 R23 .0070 R13 -.9075
SCI 5299.1 SC2 423.9 THA 177.84
                                                                                                                                                                     ST 1571.3 SR 453.2 SS 335.2
CRT -.7861 CRS .5246 CST -.9372
LSA 1642.0 MSA 300.4 SSA 18.6
      TOE-1.0119 TRA 2.7070 TC3-3.7544 BAU 1.2662
     ROE .3960 RRA -.0920 RC3 .0277 FAU .01345
FDE -.1543 FRA .8784 FC3 -.4615 BSP 16819
                                                                                                                                                                      EL1 1612.4 EL2 273.0 ALF 166.84
      BOE 1.0866 BRA 2.7085 BC3 3.7545 FSP -353
                                                                                                                                                                                     ARRIVAL DATE FEB 7 1968
                                                                                                    FLIGHT TIME 188.00
LAUNCH DATE AUG 3 1967
   HELIOCENTRIC CONIC
                                                                                                    DISTANCE 553.991
     RL 151.81 LAL -.00 LOL 309.99 VL 25.093 GAL 6.03 AZL 91.28 MCA 285.09 SMA 118.62 ECC .29737 INC 1.2780 V1 29.348
RP 108.38 LAP 1.23 LOP 255.09 VP 36.473 GAP 16.60 AZP 90.33 TAL 165.34 TAP 90.43 RCA 83.35 APO 153.90 V2 34.966
RC 194.574 GL -6.05 GP 9.61 ZAL 57.11 ZAP 170.38 ETS 88.60 ZAE 130.80 ETE 171.41 ZAC 30.31 ETC 8.57 CLP 179.70
    PLANETOCENTRIC CONIC
     C3 27.883 VHL 5.280 OLA -28.37 RAL 250.81 RAD 6568.1 VEL 12.217 PTH 2.20 VHP 10.332 OPA -8.55 RAP 235.59 ECC 1.4589
     C3 27.883 VHL 5.280 OLA -28.37 RAL 250.81 RAD 6568.1 VEL 12.217 PTH 2.20 VHP 10.332 OPA -8.55 RAP 235.59 ECC 1.4589 LNCH AZMTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 88.12 13 343 1025.11 17.61 333.14 124.78 112.61 13 20 49 425.1 20.53 325.67 91.88 13 35 34 921.92 17.63 325.60 124.79 112.60 13 50 56 321.9 20.54 318.13 100.00 13 21 8 946.62 10.78 325.68 121.45 118.05 13 37 17 368.6 14.45 318.81 100.00 16 0 50 5741.69 24.74 271.81 127.55 107.34 17 36 32 5141.7 26.88 263.66 110.00 13 20 22 971.05 4.11 321.82 117.41 123.96 13 36 33 371.0 8.54 315.54 110.00 18 18 6 5312.03 32.26 241.43 129.79 101.97 19 46 38 4712.0 33.57 232.44
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             SGT 5363.9 SGR 465.4 SG3 105.9

RRT -.4303 RRF -.4008 RTF .9176

SGB 5384.1 R23 .0038 R13 -.9176

SGI 5367.7 SGZ 419.8 THA 177.85
                                                                                                                                                                    ST 1529.9 SR 445.9 SS 330.5

CRT -.7133 CRS .4481 CST -.9450

LSA 1594.1 MSA 327.5 SSA 16.9

EL1 1563.9 EL2 305.7 ALF 167.78
      TOE -.9112 TRA 3.1422 TC3-3.3848 BAU 1.2618
     ROE .4092 RRA -.1105 RC3 .0284 FAU .01234
FOE -.1243 FRA .9315 FC3 -.3831 BSP 16880
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BOE .9989 BRA 3.1442 BC3 3.3849 FSP -348

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ARRIVAL DATE FEB 9 1968
                                                                                             FLIGHT TIME 190.00
LAUNCH DATE AUG 3 1967
                                                                                             DISTANCE 558.968.
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 25.041 GAL 6.94 AZL 91.11 MCA 288.28 SMA 118.35 ECC .30555 INC 1.1121 V1 29.348
RP 108.42 LAP 1.06 LOP 238.28 VP 36.425 GAP 17.15 AZP 90.35 TAL 163.66 TAP 91.94 RCA 82.19 APO 154.51 V2 34.953
RC 196.285 GL -4.97 GP 9.43 ZAL 54.24 ZAP 170.51 ETS 93.05 ZAE 130.82 ETE 171.55 ZAC 27.98 ETC 9.34 CLP 178.96
    PLANETOCENTRIC CONIC
      C3 31.025 VHL 5.570 DLA -27.64 RAL 254.11 RAD 6568.2 VEL 12.345 PTH 2.23 VHP 10.659 DPA -9.39 RAP 237.90 ECC 1.5106
     C3 31.025 VHL 5.570 DLA -27.64 RAL 254.11 RAD 6568.2 VEL 12.345 PTH 2.23 VHP 10.659 DPA -9.39 RAP 237.90 ECC 1.5100 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PQ CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 38 26 1177.28 11.87 341.58 127.51 115.90 12 58 3 577.3 15.26 334.54 90.00 14 27 11 823.21 21.24 319.84 131.56 109.18 14 40 55 223.2 23.67 312.01 100.00 13 16 57 1052.76 8.05 330.43 125.50 118.89 13 34 30 452.8 11.84 323.69 100.00 16 31 21 5711.00 25.34 269.73 133.00 106.41 18 6 32 5111.0 27.35 261.50 110.00 13 24 36 1028.72 1.91 324.84 121.73 124.14 13 41 45 428.7 6.38 318.60 110.00 18 40 11 5307.81 32.32 241.11 134.99 101.79 20 8 39 4707.8 33.61 232.12
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 5298.4 SGR 460.7 SG3 103.8
RRT -.4355 RRF -.4061 RTF .9186
SGB 5318.4 R23 .0040 R13 -.9186
SGI 5302.2 SG2 414.5 THA 177.82
                                                                                                                                                         ST 1461.7 SR 437.0 SS 329.1

CRT -.6461 CRS .3712 CST -.9473

LSA 1521.6 MSA 346.9 SSA 16.4

EL1 1490.1 EL2 327.1 ALF 168.51
     TOE -.8021 TRA 3.4515 TC3-3.0216 BAU 1.2533
      RDE .4225 RRA -.1289 RC3 .0280 FAU .01125
     FOE -.0951 FRA .9863 FC3 -.3138 BSP 16941
     BOE .9066 BRA 3.4539 BC3 3.0217 FSP -342
                                                                                                                                                                         ARRIVAL DATE FEB 11 1968
                                                                                              FLIGHT TIME 192.00
LAUNCH DATE -AUG 3 1967
                                                                                             DISTANCE 563.834
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 24.990 GAL 7.90 AZL 90.94 HCA 291.47 SHA 118.08 ECC .31456 INC .9401 VI 29.348
RP 108.46 LAP .87 LOP 241.46 VP 36.378 GAP 17.75 AZP 90.34 TAL 162.00 TAP 93.47 RCA 80.94 APO 155.22 VZ 34.941
RC 197.979 GL -3.95 GP 9.27 ZAL 51.56 ZAP 170.56 ETS 97.66 ZAE 130.83 ETE 171.68 ZAC 25.67 ETC 10.30 CLP 178.21
    PLANETOCENTRIC CONIC
     C3 34.731 VHL 5.893 DLA -26.89 RAL 257.17 RAD 6568.4 VEL 12.494 PTH 2.26 VHP 11.016 DPA -10.19 RAP 240.22 ECC 1.5716
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       117.10 12 47 33
107.82 15 16 46
119.44 13 33 4
105.73 18 33 19
124.18 13 46 21
101.72 20 29 24
                                                                                                  131.20
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          90.00 12 26 7 1286.73
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                         16 58 30
                                            5689.30
                       13 28 14 1087.34
19 0 58 5306.05
                                                                    -.33
                                                                                    327.90
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                                                                                                      140.07
                                                                                   240.98
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SCT 5292.5 SCR 454.7 SC3 101.9

RRT -.4403 RRF -.4119 RTF .9242

SCB 5312.0 R23 .0029 R13 -.9242

SCI 5296.3 SC2 407.9 THA 177.82
                                                                                                                                                           ST 1428.1 SR 426.5 SS 331.0

CRT -.5621 CRS .2947 CST -.9549

LSA 1482.6 MSA 363.9 SSA 15.4
      TOE -.6821 TRA 3.8568 TC3-2.6689 BAU 1.2393
     RDE .4358 RRA -.1486 RC3 .0263 FAU .01012
FOE -.0658 FRA 1.0451 FC3 -.2523 BSP 16900
                                                                                                                                                           EL1 1449.3 EL2 347.6 ALF 169.88
      BOE .8095 BRA 3.8597 BC3 2.6691 FSP -334
                                                                                                                                                                         ARRIVAL DATE FEB 13 1968
                                                                                              FLIGHT TIME 194.00
LAUNCH DATE AUG 3 1967
                                                                                            DISTANCE 568.567
     RL 151.81 LAL -.00 LOL 309.99 VL 24.939 GAL 8.92 AZL 90.76 MCA 294.65 SMA 117.81 ECC .32449 INC .7605 VI 29.348
RP 108.50 LAP .69 LOP 244.65 VP 36.332 GAP 18.40 AZP 90.32 TAL 160.38 TAP 95.03 RCA 79.58 APO 156.04 V2 34.929
RC 199.655 GL -3.00 GP 9.12 ZAL 49.05 ZAP 170.53 ETS 102.37 ZAE 130.81 ETE 171.81 ZAC 23.39 ETC 11.49 CLP 177.45
    PLANETOCENTRIC CONIC
      C3 39.097 VHL 6.253 DLA -26.13 RAL 259.99 RAD 6568.5 VEL 12.667 PTH 2.30 VHP 11.407 DPA -10.93 RAP 242.53 ECC 1.6434
      UNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       117.79 12 41 46
106.94 15 46 4
119.76 13 32 22
105.25 18 57 32
124.10 13 50 25
101.75 20 48 51
                                                                                                   134.97
          90.00 12 18 47 1378.88
                                                                  5.65
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           90.00
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                                              738.31
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         100.00
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                        13 31 18 1146.41
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         110.00
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         110.00
                         19 20 25
                                             5306.82
                                                                   32.33
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                      HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1410.3 SR 415.0 SS 335.6
CRT -.4768 CRS .2269 CST -.9633
LSA 1460.7 MSA 374.2 SSA 14.6
                                                                                        SCT 5283.3 SGR 447.3 SG3 99.9

RRT - .4448 RRF - .4180 RTF .9301

SGB 5302.2 R23 .0021 R13 -.9301

SGI 5287.0 SG2 400.3 THA 177.83
      TDE -.5601 TRA 4.2805 TC3-2.3400 BAU 1.2232
      RDE .4494 RRA -.1685 RC3 .0242 FAU .00908
FDE -.0387 FRA 1.1057 FC3 -.2010 BSP 16946
BDE .7181 BRA 4.2838 BC3 2.3401 FSP -329
                                                                                                                                                           EL1 1425.1 EL2 361.0 ALF 171.46
                                                                                                                                                                          ARRIVAL DATE FEB 15 1968
                                                                                              FLIGHT TIME 196.00
LAUNCH DATE AUG 3 1967
                                                                                              DISTANCE 573.144
    HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 24.890 GAL 10.01 A7L 90.57 MCA 297.83 SMA 117.56 ECC .33547 INC .5716 V1 29.348
RP 108.53 LAP .51 LOP 247.83 VP 36.287 GAP 19.12 AZP 90.27 TAL 158.79 TAP 96.63 RCA 78.12 APO 157.00 VZ 34.917
RC 201.315 GL -2.11 GP 8.98 ZAL 46.73 ZAP 170.42 ETS 107.12 ZAE 130.76 ETE 171.93 ZAC 21.14 ETC 12.96 CLP 176.66
    PLANETOCENTRIC CONIC
      C3 44.240 VHL 6.651 OLA -25.38 RAL 262.58 RAD 6568.7 VEL 12.869 PTH 2.34 VHP 11.838 OPA -11.62 RAP 244.85 ECC 1.7281
     C3 44.240 VHL 6.651 0LA -25.38 RAL 262.58 RAO 6568.7 VEL 12.869 PTH 2.34 VHP 11.838 0PA -11.62 RAP 244.85 ECC 1.7281 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJRT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 13 42 1462.42 2.98 357.81 138.73 118.17 12 38 4 862.4 6.72 351.13 100.00 15 59 33 717.11 23.45 312.85 147.28 106.34 16 11 30 117.1 25.47 304.76 100.00 17 45 8 5664.72 26.19 266.55 148.12 104.94 19 19 33 5064.7 27.99 258.21 110.00 13 33 56 1205.49 -4.83 334.07 134.04 123.88 13 54 1 605.5 -.35 327.86 110.00 19 38 29 5310.08 32.29 241.28 149.79 101.89 21 6 59 4710.1 33.59 232.29 DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 1405.1 SR 402.5 SS 342.5
CRT -.3917 CRS .1654 CST -.9713
LSA 1452.7 MSA 378.2 SSA 13.8
                                                                                       SGT 5269.4 SGR 438.5 SG3 98.1
RRT -.4487 RRF -.4237 RTF .9360
SGB 5287.6 R23 .0016 R13 -.9360
SGI 5273.1 SG2 391.6 THA 177.85
      TOE -.4322 TRA 4.7283 TC3-2.0317 BAU 1.2017
      ROE .4630 RRA -.1887 RC3 .0215 FAU .00803
FDE -.0123 FRA 1.1700 FC3 -.1572 BSP 16972
                                                                                                                                                     ELI 1414.5 EL2 367.9 ALF 173.13
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BOE .6334 BRA 4.7321 BC3 2.0318 FSP -324

ARRIVAL DATE FEB 17 1968

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FLIGHT TIME 198.00
LAUNCH DATE AUG 3 1967
                                                                                           DISTANCE 577.535
   HELIOCENTRIC CONIC
     RL 151.81 LAL -.00 LOL 309.99 VL 24.843 GAL 11.19 AZL 90.37 HCA 301.01 SMA 117.31 ECC .34764 INC .3713 VI 29.348 RP 108.57 LAP ,32 LOP 251.01 VP 36.243 GAP 19.91 AZP 90.19 TAL 157.26 TAP 98.28 RCA 76.53 APO 158.10 V2 34.905 RC 202.957 GL -1.28 GP 8.85 ZAL 44.59 ZAP 170.23 ETS 111.84 ZAE 130.69 ETE 172.05 ZAC 18.94 ETC 14.81 CLP 175.85
    PLANETOCENTRIC CONIC
     C3 50.306 VML 7.093 OLA -24.64 RAL 264.95 RAO 6568.9 VEL 13.102 PTH 2.39 VMP 12.313 OPA -12.27 RAP 247.16 ECC 1.8279
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 9 50 1540.36 .47 2.16 142.44 118.31 12 35 31 940.4 4.25 355.52 90.00 16 22-20 703.55 23.71 311.94 152.02 105.96 16 34 3 103.5 25.67 303.82
         CH AZMTH LNCH TIME L-1 ....
90.00 12 9 50 1540.36
44 29 20 703.55
                                                                                                                     119.84 13 32 2 747.5
104.78 19 39 37 5059.6
123.53 13 57 12 664.2
102.13 21 23 49 4715.7
                      13 9 34 1347.53
18 5 17 5659.65
13 36 8 1264.23
19 55 13 5315.71
                                                                                 346.69
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152.80
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        100.00
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        100.00
                                                                26.28
                                                                                 337.17
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        110.00
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                                                                                241.70
        110.00
                                                                32.21
                                                                                                    154.43
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SCT 5251.5 SCR 428.3 SC3 96.3
RRT - .4516 RRF - .4288 RTF .9420
SCB 5268.9 R23 .0012 R13 - .9420
SCI 5255.1 SC2 381.8 THA 177.88
                                                                                                                                                        5T 1410.3 SR 389.1 SS 351.6
     TOE -.2985 TRA 5.2040 TC3-1.7452 BAU 1.1738
                                                                                                                                                       CRT -.3101 CRS .1106 CST -.9784
LSA 1456.7 MSA 376.5 SSA 13.1
    RDE .4767 RRA -.2088 RC3 .0184 FAU .00698
FDE .0134 FRA 1.2386 FC3 -.1201 BSP 16983
BDE .5624 BRA 5.2082 BC3 1.7453 FSP -318
                                                                                                                                                        EL1 1415.8 EL2 368.5 ALF 174.75
                                                                                            FLIGHT TIME 200.00
                                                                                                                                                                      ARRIVAL DATE FEB 19 1968
LAUNCH DATE AUG 3 1967
                                                                                           DISTANCE 581.702
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 24.796 GAL 12.45 AZL 90.16 MCA 304.19 SMA 117.07 ECC .36115 INC .1570 V1 29.348
RP 108.60 LAP .13 LOP 254.18 VP 36.200 GAP 20.78 AZP 90.09 TAL 155.79 TAP 99.98 RCA 74.79 APO 159.36 VZ 34.894
RC 204.581 GL -.50 GP 8.73 ZAL 42.63 ZAP 169.95 ETS 116.48 ZAE 130.58 ETE 172.17 ZAC 16.80 ETC 17.16 CLP 175.01
   PLANETOCENTRIC CONIC
     C3 57,478 VHL 7.581 DLA -23.92 RAL 267.12 RAD 6569.0 VEL 13.373 PTH
                                                                                                                            2.44 VMP 12.840 OPA -12.86 RAP 249.45 ECC 1.9459
    C3 57.478 VHL 7.581 OLA -23.92 RAL 267.12 RAO 6569.0 VEL 13.373 PTH 2.44 VHP 12.840 OPA -12.86 RAP 249.45 ECC 1.9459 LNCN AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PQ CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 6 44 1614.06 -1.91 6.27 146.08 118.26 12 33 38 1014.1 1.88 359.64 90.00 16 42 41 695.74 23.85 311.41 156.56 105.73 16 54 16 95.7 25.78 303.27 100.00 13 8 30 1414.69 -4.14 350.39 144.85 119.65 13 32 4 814.7 -.16 343.85 100.00 18 23 36 5658.39 26.30 266.11 157.30 104.74 19 57 54 5058.4 28.07 257.76 110.00 13 37 57 1322.33 -9.23 340.27 141.73 123.06 13 59 59 722.3 -4.81 333.97 110.00 20 10 36 5323.51 32.09 242.28 158.90 102.45 21 39 22 4723.5 33.47 233.32
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5230.3 SGR 416.5 SG3 94.5

RRT -.4534 RRF -.4328 RTF .9479

SGB 5246.9 R23 .0009 R13 -.9479

SGI 5233.8 SG2 371.0 THA 177.92
                                                                                                                                                      ST 1423.6 SR 374.8 SS 362.8

CRT - .2325 CRS .0604 CST - .9842

LSA 1470.3 MSA 369.8 SSA 12.4

EL1 1426.4 EL2 363.8 ALF 176.25
     TOE -.1558 TRA 5.7135 TC3-1.4790 BAU 1.1366
     ROE .4902 RRA -.2287 RC3 .0150 FAU .00587
FOE .0396 FRA 1.3130 FC3 -.0884 BSP 16884
BDE .5143 BRA 5.7181 BC3 1.4791 FSP -311
                                                                                                                                                                     ARRIVAL DATE FEB 21 1968
                                                                                           Ft 1GHT TIME 202.00
LAUNCH DATE AUG 3 1967
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 585.599
    RL 151.81 LAL -.00 LOL 309.99 VL 24.751 GAL 13.82 AZL 89.93 MCA 307.36 SMA 116.84 ECC .37619 INC .0699 V1 29.348
RP 108.64 LAP -.06 LOP 257.36 VP 36.159 GAP 21.75 AZP 89.96 TAL 154.39 TAP 101.76 RCA 72.89 APO 160.80 VZ 34.883
RC 206.187 GL .21 GP 8.63 ZAL 40.85 ZAP 169.58 ETS 121.00 ZAE 130.43 ETE 172.29 ZAC 14.73 ETC 20.19 CLP 174.13
    PLANETOCENTRIC CONIC
     C3 65.985 VHL 8.123 DLA -23.23 RAL 269.07 RAD 6569.3 VEL 13.687 PTH 2.50 VHP 13.426 DPA -13.41 RAP 251.72 ECC 2.0859
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   118.03 12 32 9 1084.2
105.64 17 12 28 92.5
119.28 13 32 8 879.6
104.80 20 14 34 5060.4
122.47 14 2 24 779.5
102.86 21 53 40 4733.2
                     12 4 5 1684.23
17 0 56 692.47
13 7 28 1479.63
18 40 13 5660.35
13 39 24 1379.50
20 24 47 5333.24
                                                                -4.17
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                                                               -11.33
                                                                                 343.36
                                                                                                    163.21
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                                                                             243.00
   DIFFERENTIAL CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      RRT - .4541 RRF - .4560 RTF .9538
SGB 5219.9 R23 .0008 R13 -.9538
SGI 5207.6 SG2 359.3 THA 177.97
                                                                                                                                                       ST 1441.0 SR 360.0 SS 375.5
CRT -.1645 CRS .0190 CST -.9888
     TOE -.0128 TRA 6.2526 TC3-1.2392 BAU 1.0932
     ROE .5039 RRA -.2477 RC3 .0117 FAU .00478
FOE .0641 FRA 1.3920 FC3 -.0627 BSP 16891
                                                                                                                                                        LSA 1489.3 MSA 359.2 SSA 11.8
                                                                                                                                                        ELI 1442.3 ELZ 354.7 ALF 177.50
     BOE .5040 BRA 6.2575 BC3 1.2392 FSP -306
                                                                                                                                                                     ARRIVAL DATE FEB 23 1968
LAUNCH DATE AUG 3 1967
                                                                                           FLIGHT TIME 204.00
                                                                                           DISTANCE 589.166
   HELIOCENTRIC CONIC
    RL 151.81 LAL -.00 LOL 309.99 VL 24.708 GAL 15.32 AZL 89.68 MCA 310.54 SMA 116.62 ECC .39299 INC .3224 V1 29.348

RP 108.67 LAP -.25 LOP 260.53 VP 36.119 GAP 22.83 AZP 89.79 TAL 153.08 TAP 103.62 RCA 70.79 APO 162.46 VZ 34.872

RC 207.774 GL .88 GP 8.53 ZAL 39.24 ZAP 169.11 ETS 125.35 ZAE 130.23 ETE 172.42 ZAC 12.76 ETC 24.15 CLP 173.21
   PLANETOCENTRIC CONIC
     C3 76.118 VHL 8.725 DLA -22.56 RAL 270.82 RAD 6569.5 VEL 14.052 PTH 2.56 VHP 14.081 DPA -13.90 RAP 253.96 ECC 2.2527
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 1 42 1751.20 -6.30 13.96 153.08 117.66 12 30 53 1151.2 -2.54 7.29
                                                                                 311.22
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                       18 55 16 5665.03
13 40 30 1435.46
20 37 41 5344.63
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103.33 22 6 45
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        110.00
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        110.00
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                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
    TOE .1358 TRA 6.8303 TC3-1.0208 BAU 1.0369
RDE .5176 RRA -.2654 RC3 .0084 FAU .00362
FDE .0885 FRA 1.4777 FC3 -.0412 BSP 16874
BDE .5351 BRA 6.8354 BC3 1.0209 FSP -301
                                                                                      SGT 5174.3 SGR 389.1 SG3 91.1
RRT -.4532 RRF -.4376 RTF .9595
SGB 5188.9 R23 .0008 R13 -.9595
                                                                                                                                                       ST 1460.9 SR 344.6 SS 390.0
CRT -.1037 CRS -.0174 CST -.9922
                                                                                                                                                        LSA 1511.7 MSA 346.0 SSA 11.2
                                                                                      SG1 5177.3 SG2 346.6 THA 178.04
                                                                                                                                                        EL1 1461.3 EL2 342.6 ALF 178.52
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ARRIVAL CATE FEB 25 1968

LAUNCH DATE AUG 3 1967

DISTANCE 592.328 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOU 309.99 VL 24.666 GAL 16.95 AZL 89.40 MCA 313.71 SMA 116.41 ECC .41180 INC .5982 VI 29.348
RP 108.70 LAP -.43 LOP 263.70 VP 36.081 GAP 24.04 AZP 89.59 TAL 151.88 TAP 105.59 RCA 68.47 APO 164.35 VZ .34.862
RC 209.341 GL 1.50 GP 8.43 ZAL 37.81 ZAP 168.55 ETS 129.52 ZAE 129.97 ETE 172.55 ZAC 10.93 ETC 29.44 CLP 172.23 PLANETOCENTRIC CONIC C3 88.253 VHL 9.394 DLA -21.92 RAL 272.38 RAD 6569.7 VEL 14.477 PTH 2.63 VHP 14.817 DPA -14.35 RAP 256.16 ECC 2.4524 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.17 12 29 42 1215.1 11 59 27 1815.11 17 31 57 696.20 -4.59 -8.30 17.59 156.42 90.00 105.74 17 43 34 118.20 13 32 0 25.78 96.2 23.84 311.44 168.95 90.00 1002.6 354.21 -6.50 100.00 13 5 17 1602.63 -10.35 .88 155.33 105.17 20 43 21 120.95 14 6 4 103.85 22 18 38 27.90 5071.9 258.73 19 8 49 26.07 267.05 169.63 5671.95 13 41 14 1489.94 20 49 21 5357.40 342.90 889.9 -11.07 110.00 -15.29 349.47 152.45 235.92 4757.4 33.15 110.00 31.57 244.79 171.25 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5140.4 SGR 373.3 SG3 89.5 RRT -,4503 RRF -,4372 RTF .9650 SGB 5154.0 R23 .0009 R13 -,9650 SGI 5143.2 SGZ 333.1 THA 178.12 ST 1481.0 SR 328.8 SS 406.4 TOE .2897 TRA 7.4516 TC3 -.8233 BAU .9714 CRT -. 0499 CRS -. 0493 CST -. 9947 ROE .5314 RRA -.2813 RC3 .0053 FAU .00236 FDE .1130 FRA 1.5712 FC3 -.0251 BSP 16845 LSA 1535.3 MSA 330.8 SSA 10.6 EL1 1481.1 EL2 328.4 ALF 179.33 BDE .6053 BRA 7.4569 BC3 .8233 FSP -296 APPIVAL DATE FER 27 1968 LAUNCH DATE AUG 3 1967 FLIGHT TIME 208.00 DISTANCE 594.985 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 24.626 GAL 18.75 AZL 89.10 MCA 316.87 SMA 116.21 ECC .43294 INC .9043 V1 29.348
RP 108.73 LAP -.62 LOP 266.87 VP 36.044 GAP 25.41 AZP 89.34 TAL 150.81 TAP 107.68 RCA 65.90 APO 166.53 V2 34.853 8.34 ZAL 36.56 ZAP 167.88 ETS 133.49 ZAE 129.64 ETE 172.70 ZAC 9.28 ETC 36.56 CLP 171.18 RC 210.889 GL 2.08 GP PLANETOCENTRIC CONIC C3 102.871 VHL 10.143 DLA -21.32 RAL 273.74 RAD 6570.0 VEL 14.974 PTH 2.70 VMP 15.647 DPA -14.75 RAP 258.29 ECC 2.6930 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 116.57 12 28 30 105.91 17 56 42 -6.53 1276.0 159.60 14.30 90.00 11 57 14 1875.99 -10.18 21.08 25.69 303.70 17 45 O 701.89 23.74 311.83 172.63 101.9 7.65 173.30 105.45 20 55 35 2.47 155.76 120.05 14 7 18 5.80 174.95 104.41 22 29 20 MID-COURSE EXECUTION ACCURACY 357.44 13 4 0 1660.49 -12.19 4.19 1060.5 -8.41 19 20 55 5680.67 13 41 35 1542.66 20 59 49 5371.26 50A0.7 27.78 259.35 100.00 25.91 267.65 -17.11 942.7 -12.99 33.00 345.78 352.47 4771.3 20 59 49 236.97 110.00 31.34 245.80 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 5104.4 SCR 356.2 SC3 88.0 RRT -.4448 RRF -.4341 RTF .9702 SCB 5116.8 R23 .0010 R13 -.9702 TOE .4527 TRA 8.1261 TC3 -.6441 BAU .8858 ST 1500.8 SR 312.7 55 425.3 CRT -.0011 CRS -.0791 CST -.9965 ROE .5453 RRA -.2948 RC3 .0025 FAU .00092 FOE .1386 FRA 1.6748 FC3 -.0077 BSP 16701 BDE .7088 BRA 8.1314 BC3 .6441 FSP -289 LSA 1559.5 MSA 314.4 SSA 10.0 SG1 5106.8 SG2 318.9 THA 178.22 ELI 1500.8 ELZ 312.7 ALF 179.99 ARRIVAL DATE FEB 29 1968 FLIGHT TIME 210.00 LAUNCH DATE AUG 3 1967 HELIOCENTRIC CONIC DISTANCE 597.012 RL 151.81 LAL -.00 LOL 309.99 VL 24.589 GAL 20.74 AZL 88.75 HCA 320.04 SMA 116.03 ECC .45677 INC 1.2484 V1 29.348 RP 108.76 LAP -.80 LOP 270.04 VP 36.010 GAP 26.96 AZP 89.04 TAL 149.90 TAP 109.94 RCA 63.03 APO 169.02 V2 34.844 7.90 ETC 46.12 CLP 170.05 2.61 GP 8.25 ZAL 35.50 ZAP 167.10 ETS 137.26 ZAE 129.23 ETE 172.85 ZAC RC 212.418 GL PLANETOCENTRIC CONIC C3 120.603 VHL 10.982 DLA -20.75 RAL 274.89 RAD 6570.3 VEL 15.554 PTH 2.77 VHP 16.588 DPA -15.11 RAP 260.36 ECC 2.9848 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.88 12 27 10 106.13 18 8 19 116.73 13 31 6 105.78 21 6 26 119.08 14 8 6 104.99 22 38 49 -8.34 1333.8 11 54 56 1933.76 162.62 17.58 -11.91 24.43 90.00 25.58 312.33 176.05 109.5 17 56 29 709.45 23.60 90.00 . 56 -10.20 1115.7 13 2 31 1715.67 -13.90 7.39 161.62 100.00 260.07 176.72 5090.8 27.64 19 31 35 5690.82 25.72 268.35 100.00 -14.79 348.60 13 41 33 1593.34 993.3 110.00 -18.81 355.41 158.91 4785.Q 32.63 238.08 178.39 110.00 21. 9 3 5385.92 31.09 246.87 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1516.2 SR 296.5 SS 445.9 CRT .0406 CRS -.1044 CST -.9977 SCT 5062.3 SGR 337.9 SG3 86.5 RRT -.4359 RRF -.4276 RTF .9750 SGB 5073.6 R23 .0011 R13 -.9750 SGI 5064.5 SG2 304.0 THA 178.33 TOE .6156 TRA 8.8511 TC3 -.4856 BAU .7830 ROE .5598 RRA -.3047 RC3 .0001 FAU-.00068 FOE .1633 FRA 1.7879 FC3 .0049 85P 16662 BOE .8321 BRA 8.8564 BC3 .4856 FSP -285 LSA 1580.2 MSA 297.4 SSA 9.4 EL1 1516.3 EL2 296.2 ALF ARRIVAL DATE MAR 2 1968 LAUNCH DATE AUG 3 1967 FLIGHT TIME 212.00 DISTANCE 598.241 HELIOCENTRIC CONIC RL 151.81 LAL -.00 LOL 309.99 VL 24.554 GAL 22.97 AZL 88.36 MCA 323.20 SMA 115.85 ECC .48370 INC 1.6411 V1 29.348
RP 108.78 LAP -.98 LOP 273.21 VP 35.978 GAP 28.73 AZP 88.69 TAL 149.18 TAP 112.38 RCA 59.82 APO 171.89 V2 34.836
RC 213.927 GL 3.11 GP 8.17 ZAL 34.64 ZAP 166.19 ETS 140.85 ZAE 128.72 ETE 173.03 ZAC 6.88 ETC 58.50 CLP 168.83 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 142.281 VHL 11.928 DLA -20.22 RAL 275.83 RAD 6570.5 VEL 16.236 PTH 2.85 VHP 17.660 DPA -15.42 RAP 262.33 ECC 3\3416
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
90.00 11 52 28 1988.27 -13.51 27.64 165.44 115.12 12 25 37 1388.3 -10.02 20.70
90.00 18 6 26 718.44 23.42 312.94 179.18 106.38 18 18 24 118.4 25.45 304.85
100.00 13 0 45 1767.95 -15.48 10.47 164.47 115.90 13 30 13 1168.0 -11.87 3.54
100.00 19 40 51 5702.03 25.51 269.12 179.85 106.13 21 15 53 5102.0 27.48 260.87
110.00 13 41 2 1641.66 -20.39 358.27 161.85 118.05 14 8 24 1041.7 -16.48 351.33
110.00 21 17 2 5401.08 30.81 247.97 181.56 105.59 22 47 3 4801.1 32.64 239.22 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1527.5 SR 280.2 SS 469.2 SGT 5016.1 SGR 318.5 SG3 85.1 RRT -.4225 RRF -.4164 RTF .9795 SGB 5026.2 R23 .0013 R13 -.9795 TOE .7830 TRA 9.6389 TC3 -.3444 BAU .6552 CRT .0781 CRS -.1279 CST -.9985 ROE .5749 RRA -.3099 RC3 -.0019 FAU-.00256 LSA 1597.9 MSA 280.1 SSA 8.8 EL1 1527.6 EL2 279.3 ALF .85 FOE .1885 FRA 1.9136 FC3 .0156 BSP 16604 BOE .9714 BRA 9.6439 BC3 .3444 FSP -281 SGI 5018.0 SG2 288.6 THA 178.46

FLIGHT TIME 206.00

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ARRIVAL DATE OCT 13 1967
                                                                           FLIGHT TIME 70.00
LAUNCH DATE AUG 4 1967
                                                                           DISTANCE 210.212
   HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 29.444 GAL -16.59 AZL 91.72 HCA 95.17 SHA 150.52 ECC .28564 INC 1.7191 V1 29.352 RP 108.14 LAP -1.71 LOP 46.12 VP 39.657 GAP -2.89 AZP 89.84 TAL 251.78 TAP 346.95 RCA 107.52 APO 193.51 V2 35.042 RC 72.534 GL -5.86 GP -21.58 ZAL 170.11 ZAP 70.26 ETS 8.72 ZAE 164.26 ETE 275.49 ZAC 111.67 ETC 7.87 CLP -68.71
   PLANETOCENTRIC CONIC
                                                                                                      2.52 VHP 5.216 DPA -8.21 RAP 152.50 ECC 2.1316
                                          9.57 RAL 139.52 RAD 6569.3 VEL 13.788 PTH
    C3 68.759 VHL 8.292 DLA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                   22 36 3 2821.70
13 3 34 4862.67
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15 17 45 4435.25
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                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       RRI .3923 RRF .5941 RTF .5583
SGB 757.5 R23 .1347 R13 .6781
SGI 636.2 SGZ 411.3 THA 35:58
                                                                                                                             ST 228.1 SR 340.1 SS 195.8
CRT -.5119 CRS .5831 CST -.9877
LSA 399.7 MSA 214.4 SSA 19.5
    TOE .2315 TRA -.7735 TC3 -.0433 BAU .1499
    RDE -.4781 RRA -.3836 RC3 -.1572 FAU .09316
FDE .4774 FRA-1.3166 FC3-1.1730 BSP 1241
BDE .5312 BRA .8634 BC3 .1630 FSP -539
                                                                                                                              EL1 367.1 EL2 181.6 ALF 115.65
                                                                                                                                         ARRIVAL DATE OCT 15 1967
                                                                            FLIGHT TIME 72.00
LAUNCH DATE AUG 4 1967
                                                                            DISTANCE 216.729
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 29.410 GAL -16.40 AZL 91.56 HCA 98.37 SMA 150.17 ECC .28261 INC 1.5621 V1 29.352
RP 108.10 LAP -1.55 LOP 49.33 VP 39.643 GAP -2.23 AZP 89.77 TAL 251.50 TAP 349.87 RCA 107.73 APO 192.61 V2 35.056
RC 74.652 GL -5.39 GP -22.35 ZAL 170.27 ZAP 75.11 ETS 6.96 ZAE 163.13 ETE 263.84 ZAC 113.56 ETC 7.03 CLP -73.87
   PLANETOCENTRIC CONIC
                                                                                                       2.51 VMP 5.078 DPA -8.28 RAP 150.51 ECC 2.1026
                                          9.98 RAL 139.78 RAO 6569.3 VEL 13.724 PTH
    C3 66.999 VHL 8.185 DLA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 33 50 2828.86 -28.27 83.93 27.01 91.76 23 20 58 2228.9 -27.72 75.31
                   22 33 50 2626.66
13 7 54 4843.17
0 4 2 2550.61
14 24 19 4596.65
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       110.00
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                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 631.3 SGR 513.9 SG3 198.9
RRT .4569 RRF .6259 RTF .6284
SGB 814.0 R23 .1343 R13 .7219
SG1 703.4 SG2 409.8 THA 32.85
                                                                                                                              ST 246.2 SR 333.9 SS 206.1
CRT -.4884 CRS .5950 CST -.9840
    TDE .2432 TRA -.8337 TC3 -.0831 BAU .1737
    ROE -.4617 RRA -.3915 RC3 -.1752 FAU .09731
                                                                                                                              LSA 405.2 MSA 223.5 SSA 19.6
    FOE .5216 FRA-1.3557 FC3-1.2574 BSF 1478
BDE .5218 BRA .9210 BC3 .1939 FSP -579
                                                                                                                             EL1 365.5 EL2 196.2 ALF 118.82
                                                                                                                                         ARRIVAL DATE OCT 17 1967
                                                                            FLIGHT TIME 74.00
LAUNCH DATE AUG 4 1967
                                                                            DISTANCE 223.199
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 29.367 GAL -16.22 AZL 91.40 MCA 101.58 SMA 149.75 ECC .27967 INC 1.4023 V1 29.352 RP 108.06 LAP -1.37 LOP 52.54 VP 39.624 GAP -1.60 AZP 89.72 TAL 251.10 TAP 352.68 RCA 107.87 APO 191.63 V2 35.069 RC 76.795 GL -4.90 GP -23.08 ZAL 170.37 ZAP 79.91 ETS 5.16 ZAE 161.47 ETE 253.73 ZAC 115.41 ETC 6.16 CLP -79.02
   PLANETOCENTRIC CONIC
    C3 65.284 VHL 8.080 DLA 10.39 RAL 140.12 RAD 6569.2 VEL 13.662 PTH 2.50 VHP 4.974 DPA -8.33 RAP 148.56 ECC 2.0744
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJERT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 91.49 23 19 6 2236.2

68.34 14 32 58 4223.5

92.24 0 44 53 1957.2

67.42 15 45 2 3977.7

94.32 2 0 41 1706.9

64.80 16 38 37 3800.7
                                                                                 27.07
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                   22 31 49 2836.16
13 12 34 4823.46
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15 25 16 4400.70
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        110.00
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                                                                                     16.52
                                                      23.90
                                                                    174.30
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RRT .5175 RRF .6554 RTF .6854
SGB 878.9 R23 .1345 R13 .7573
SG1 778.9 SG2 407.1 THA 30.21
                                                                                                                              ST 266.8 SR 325.9 SS 216.4
CRT -.4687 CRS .6096 CST -.9788
     TOE .2578 TRA -.8979 TC3 -.1277 BAU .2017
     RDE -.4433 RRA -.3964 RC3 -.1926 FAU .10038
                                                                                                                              LSA 413.1 MSA 230.7 SSA 19.8
     FDE .5657 FRA-1.3739 FC3-1.3312 BSP 1740
BDE .5128 BRA .9815 BC3 .2311 FSP -607
                                                                                                                              EL1 364.8 EL2 210.6 ALF 123.36
                                                                                                                                          ARRIVAL DATE OCT 19 1967
                                                                            FLIGHT TIME 76.00
 LAUNCH DATE AUG 4 1967
                                                                            DISTANCE 229.623
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 29.318 GAL -16.04 AZL 91.24 HCA 104.79 SNA 149.27 ECC .27682 INC 1.2387 V1 29.352
RP 108.02 LAP -1.20 LOP 55.75 VP 39.599 GAP -1.00 AZP 89.68 TAL 250.59 TAP 355.39 RCA 107.95 APO 190.59 V2 35.082
RC 78.958 GL -4.38 GP -23.76 ZAL 170.41 ZAP 84.60 ETS 3.31 ZAE 159.44 ETE 245.32 ZAC 117.18 ETC 5.27 CLP -84.10
   PLANETOCENTRIC CONIC
    C3 63.604 VHL 7.975 DLA 10.81 RAL 140.52 RAD 6569.2 VEL 13.600 PTH 2.49 VHP 4.902 DPA
                                                                                                                                      -8.38 RAP 146.70 ECC 2.0468
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.29 85.02 27.20 91.21 23 17 24 2243.7 -27.83 76.38 18.19 206.97 18.85 67.92 14 37 36 4203.4 15.04 199.71
     LNCH AZHTH LNCH TIME L-I TIME
                  22 30 0 2843.72
13 17 35 4803.37
         90.00
         90.00
                                                                                                                                                                   55.64
                                                                                                                  0 43 25
                                                                                                                                   1963.9
                                                                                                                                                  -29.24
                                                                                                      91.97
                                                                      64.39
                                                                                     27.15
        100.00
                      0 0 41
                                   2563.95
                                                     -29.83
                                                                                                                                                                  181.08
                                                                                                              15 49 30
                                                                                                                                   3958.4
                                                                                                                                                   16.33
                                                                                     16.23
                                                                                                      66.98
        100.00
                     14 33 31
                                     4558.38
                                                      19.61
                                                                    188.33
                                                                                                     94.09 1 59 43
64.33 16 42 34
                                                                                                                 1 59 43
                                                                                                                                   1712.0
                                                                                                                                                  -33.03
                                                                                                                                                                   35.89
                                                     -33.97
                                                                      45.01
                                                                                     26.89
        110.00
                      1 21 11 2312.04
                                                                                                                                 3783.0
                                                                                                                                                  19.74
                                                                                                                                                                  165.95
                                                                                     16.40
                                                                    173.19
        110.00
                     15 29 31
                                     4383.04
                                                      23.39
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 290.2 SR 317.1 SS 225.3
CRT -.4547 CRS .6209 CST -.9739
LSA 423.7 MSA 235.8 SSA 19.9
                                                                        SGT 784.8 SGR 538.5 SG3 214.5
RRT .5665 RRF .6789 RTF .7299
SGB 951.8 R23 .1370 R13 .7859
     TOE .2762 TRA -.9645 TC3 -.1762 BAU .2330
     ROE -.4240 RRA -.3988 RC3 -.2099 FAU .10260
     FOE .6024 FRA-1.3764 FC3-1.3965 BSP 2028
BOE .5060 BRA 1.0437 BC3 .2740 FSP -636
                                                                                                                               EL1 367.5 EL2 223.1 ALF 129.49
                                                                        SG1 861.7 SG2 404.1 THA 27.87
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LAUNCH DATE AUG 4 1967
                                                                                                 FLIGHT TIME 78.00
                                                                                                                                                                              ARRIVAL DATE OCT 21 1967
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 236.002
      RL 151.79 LAL -.00 LOL 310.95 VL 29.263 CAL -15.86 AZL 91.07 MCA 108.00 SMA 148.72 ECC .27404 INC 1.0701 V1 29.352
RP 107.98 LAP -1.02 LOP 58.96 VP 39.569 CAP -.43 AZP 89.67 TAL 249.99 TAP 357.99 RCA 107.97 APO 189.48 V2 35.094
RC 81.139 CL -3.83 CP -24.40 ZAL 170.37 ZAP 89.16 ETS 1.42 ZAE 157.15 ETE 238.49 ZAC 118.82 ETC 4.38 CLP -89.07
    PLANETOCENTRIC CONIC
      C3 61.951 VHL 7.871 OLA 11.24 RAL 140.98 RAO 6569.2 VEL 13.539 PTH 2.47 VMP 4.858 CPA -8.44 RAP 144.95 ECC 2.0196
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         22 28 18 2851.68
13 22 59 4782.68
23 55 18 2571.09
14 38 41 4538.51
                                                                                                                               90.92 23 15 49
67.50 14 42 42
                                                                   -28.30
                                                                                       85.60
                                                                                                        27.39
                                                                                                                                                                   2251.7
           90.00
                                                                                                                                                                                        -27.88
                                                                                                                                                                     4182.7
           90.00
                                                                    17.66
                                                                                                           18.84
                                                                                                                                                                                         14.45
                                                                                      205.68
                                                                                                                                             24 38 9
                                                                                                                                                                     1971.1
         100.00
                                                                   -29.85
                                                                                       64.92
                                                                                                           27.35
                                                                                                                                91.69
                                                                                                                                                                                                              56.16
                                                                                                                                                                                         -29.29
                                                                                                                                66.54 15 54 19
         100.00
                                                                   19.08
                                                                                      187.10
                                                                                                           18.20
                                                                                                                                                                     3938.5
                                                                                                                                                                                        15.74
                                                                                                                                                                                                           179.89
                           1 20 17 2317.45
15 34 6 4364.91
                                                                                                                                93.84
                                                                                                                                              1 58 55
                                                                                                                                                                     1717.4
                                                                                                                                                                                        -33.09
                                                                                                                                                                                                              36.30
         110.00
                                                                  -33.99
                                                                                       45.43
                                                                                                          27.11
                                                                                                                                63.85 16 46 51
                                                                                      172.06
                         15 34 6
                                                                                                                                                                    3764.9
                                                                                                                                                                                                            164.88
         110.00
                                                                   22.85
                                                                                                           16.34
                                                                                                                                                                                         19.15
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                           50T 873.9 SGR 548.4 SG3 219.4
RRT .6072 RRF .7017 RTF .7642
SGB 1031.8 R23 .1411 R13 .8085
                                                                                                                                                               ST 316.4 SR 307.0 SS 233.6

CRT -.4453 CRS .6319 CST -.9692

LSA 437.9 MSA 238.2 SSA 20.0
     TOE .2982 TRA-1.0326 TC3 -.2285 BAU .2664
     ROE - 4035 RRA - .3983 RC3 - .2265 FAU .10378
FOE .6341 FRA-1.3616 FC3-1.4503 BSP 2337
BOE .5017 BRA 1.1067 BC3 .3217 FSP -658
                                                                                           SG1 950.9 SG2 400.5 THA 25.75
                                                                                                                                                               EL1 374.9 EL2 232.0 ALF 136.94
                                                                                                                                                                              ARRIVAL DATE OCT 23 1967
LAUNCH DATE AUG 4 1967
                                                                                                 FLIGHT TIME 80.00
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 242.339
    RL 151.79 LAL -.00 LOL 310.95 VL 29.202 GAL -15.68 AZL 90.90 MCA 111.22 SMA 148.13 ECC .27132 INC .8950 V1 29.352 RP 107.94 LAP -.83 LOP 62.17 VP 39.536 GAP .11 AZP 89.68 TAL 249.30 TAP .52 RCA 107.94 APO 188.33 VZ 35.107 RC 83.336 GL -3.24 GP -25.00 ZAL 170.25 ZAP 93.53 ETS 359.49 ZAE 154.73 ETE 233.00 ZAC 120.31 ETC 3.51 CLP -93.89
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 60.318 VHL 7.766 OLA 11.69 RAL 141.51 RAO 6569.1 VEL 13.479 PTH 2.46 VHP 4.840 OPA -8.54 RAP 143.37 ECC 1.9927

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 26 40 2860.21 -28.51 86.22 27.64 90.61 23 14 20 2260.2 -27.93 77.58

90.00 13 28 50 4761.19 17.09 204.36 18.89 67.07 14 48 11 4161.2 13.84 197.19

100.00 23 53 56 2578.76 -29.86 65.49 27.61 91.39 24 36 55 1978.8 -29.35 56.73

100.00 14 44 15 4517.87 18.52 185.82 18.24 66.11 15 59 33 3917.9 15.13 178.67

110.00 1 19 31 2323.27 -34.02 45.88 27.40 93.57 1 58 14 1723.3 -33.15 36.75

110.00 15 39 5 4346.13 22.28 170.90 16.55 63.38 16 51 32 3746.1 18.52 183.78
   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                          SCT 969.3 SGR 555.8 SG3 222.0
RRT .6405 RRF .7216 RTF .7902
SGB 1117.4 R23 .1465 R13 .8257
SGI 1044.8 SG2 396.0 THA 23.79
     TOE .3241 TRA-1.1009 TC3 -.2840 BAU .3009
                                                                                                                                                               ST 345.3 SR 295.4 SS 241.7
CRT -.4407 CRS .6446 CST -.9646
     ROE - .3814 RRA - .3945 RC3 - .2421 FAU .10386
FOE .6629 FRA-1.3283 FC3-1.4907 85P 2659
BOE .5005 BRA 1.1694 BC3 .3732 FSP -670
                                                                                                                                                               LSA 456.2 MSA 237.5 SSA
                                                                                                                                                                                                                20.1
                                                                                                                                                               EL1 388.5 EL2 235.7 ALF 144.80
LAUNCH DATE AUG 4 1967
                                                                                                FLIGHT TIME 82.00
                                                                                                                                                                             ARRIVAL DATE OCT 25 1967
                                                                                                DISTANCE 248.635
    HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 29.136 GAL -15.50 AZL 90.71 MCA 114.44 SMA 147.50 ECC .26865 INC .7120 V1 29.352
RP 107.91 LAP -.65 LOP 65.39 VP 39.498 GAP .63 AZP 89.71 TAL 248.52 TAP 2.96 RCA 107.88 APO 187.13 VZ 35.119
RC 85.546 GL -2.61 GP -25.59 ZAL 170.06 ZAP 97.69 ETS 357.52 ZAE 152.25 ETE 228.57 ZAC 121.60 ETC 2.67 CLP -98.53
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 58.703 VHL 7.662 OLA 12.17 RAL 142.10 RAD 6569.1 VEL 13.419 PTH 2.45 VHP 4.845 OPA 8.68 RAP 141.95 ECC 1.9661

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 25 2 2869.55 -28.32 86.91 27.95 90.27 23 12 52 2269.6 -27.98 78.26

90.00 13 35 11 4738.61 16.49 202.98 19.01 66.65 14 54 9 4138.6 13.19 195.85

100.00 23 52 36 2587.16 -29.88 66.12 27.93 91.07 24 35 43 1987.2 -29.41 57.34

100.00 14 50 18 4496.23 17.91 184.50 18.35 65.66 16 5 15 3896.2 14.48 177.39

110.00 1 18 49 2329.69 -34.04 46.38 27.75 93.28 1 57.39 1729.7 -33.22 37.24

110.00 15 44 31 4326.47 21.67 169.69 16.42 62.90 16 56 37 3726.5 17.87 162.63
    DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                         SCT 1069.6 SGR 561.2 SG3 222.8
RRT .6677 RRF .7399 RTF .8098
SGB 1207.9 R23 .1541 R13 .8388
SGI 1142.8 SG2 391.0 THA 22.02
                                                                                                                                                              ST 377.2 SR 282.5 SS 249.3

CRT -.4401 CRS .6567 CST -.9608

L5A 478.7 MSA 234.0 SSA 20.2
     TOE .3542 TRA-1.1683 TC3 -.3423 BAU .3359
     RDE -.3582 RRA -.3878 RC3 -.2571 FAU .10305
     FOE .6864 FRA-1.2810 FC3-1.5197 BSP 2993
BOE .5038 BRA 1.2310 BC3 .4280 FSP -676
                                                                                                                                                               EL1 409.2 EL2 233.9 ALF 151.83
                                                                                                FLIGHT TIME 84.00
                                                                                                                                                                              ARRIVAL DATE OCT 27 1967
LAUNCH DATE AUG 4 1967
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 254.893
     RL 151.79 LAL -.00 LOL 310.95 VL 29.066 GAL -15.31 AZL 90.52 MCA 117.65 SMA 146.84 ECC .26604 INC .5191 VI 29.352 RP 107.87 LAP -.46 LOP 68.61 VP 39.457 GAP 1.12 AZP 89.76 TAL 247.67 TAP 5.32 RCA 107.77 APO 185.90 VZ 35.131 RC 87.767 GL -1.93 GP -26.17 ZAL 169.77 ZAP 101.61 ETS 355.51 ZAE 149.78 ETE 225.02 ZAC 122.70 ETC 1.87 CLP-102.96
    PLANETOCENTRIC CONIC
     C3 57.103 VHL 7.557 DLA 12.67 RAL 142.76 RAD 6569.0 VEL 13.359 PTH 2.44 VHP 4.871 DPA -8.89 RAP 140.72 ECC 1.9398 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                        22 23 21 2879.98
13 42 7 4714.66
                                                                                                                               89.88 23 11 21
66.21 15 0 41
                                                                                                                                                                     2280.0
                                                                                      87.67
                                                                                                          28.34
                                                                                                                                                                                        -28.03
                                                                                                                                                                                                              79.02
                                                                  -28.32
          90.00
                                                                                                                                66.21
                                                                   15.84
                                                                                      201.52
                                                                                                          19.19
                                                                                                                                                                     4114.7
                                                                                                                                                                                         12.49
          90.00
                        23 51 14 2596.56
14 56 55 4473.31
                                                                                                                                90.70 24 34 30
                                                                                       66.82
                                                                                                                                                                     1996.6
                                                                                                                                                                                                              58.04
        100.00
                                                                  -29.89
                                                                                                          28.33
                                                                                                                                                                                        -29.47
        100.00
                         14 56 55
                                                                   17.27
                                                                                     183.10
                                                                                                          18.51
                                                                                                                                65.21
                                                                                                                                            16 11 28
                                                                                                                                                                     3873.3
                                                                                                                                                                                        13.78
                                                                                                                                                                                                           176.05
                                                                 -34.07
                                                                                                                                92.95
                                                                                                                                                                     1736.9
                                          2336.93
4305.70
                                                                                       46.94
                                                                                                          28.17
                                                                                                                                              1 57 5
                                                                                                                                                                                        -33.29
                                                                                                                                                                                                             37.79
         110.00
                           1 18 8
                                                                                                                                62.40 17 2 12
                                                                                                                                                                    3705.7
                                                                                                                                                                                         17.16
                         15 50 26
                                                                   21.02
                                                                                     168.43
                                                                                                          16.56
                                                                                                                                                                                                            161.43
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         SGT 1173.5 SGR 564.9 SG3 221.8
RRT .6899 RRT .7572 RTF .8246
SGB 1302.4 R23 .1638 R13 .8490
                                                                                                                                                             ST 412.2 SR 268.6 SS 256.4

CRT -.4429 CRS .6676 CST -.9581

LSA 505.3 MSA 227.9 SSA 20.4
     TOE .3885 TRA-1.2338 TC3 -.4030 BAU .3710
     RDE -.3342 RRA -.3786 RC3 -.2715 FAU .10146
     FOE .7041 FRA-1.2230 FC3-1.5382 BSP 3339
BDE .5125 BRA 1.2906 BC3 .4859 FSP -679
                                                                                                                                                              EL1 436.1 EL2 227.6 ALF 157.45
                                                                                         SG1 1244.0 SG2 385.8 THA -20.42
```

ARRIVAL DATE OCT 29 1967

LAUNCH DATE AUG 4 1967

HELIOCENTRIC CONIC

FLIGHT TIME 86.00

DISTANCE 261.115

BOE .6205 BRA 1.4906 BC3 .7415 FSP

SGI 1665.9 SG2 363.2 THA 15.44

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LAUNCH DATE AUG 4 1967
                                                                                 FLIGHT TIME 94.00
                                                                                                                                                   ARRIVAL CATE NOV 5 1967
                                                                                 DISTANCE 285.678
   HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 28.667 GAL -14.30 AZL 89.32 MCA 133.77 SMA 143.18 ECC .25385 INC .6821 VI 29.352 RP 107.70 LAP .49 LOP 84.73 VP 39.212 GAP 3.26 AZP 90.47 TAL 242.43 TAP 16.20 RCA 106.84 APO 179.53 VZ 35.185
                            2.70 CP -29.84 ZAL 166.77 ZAP 117.19 ETS 344.38 ZAE 138.39 ETE 215.62 ZAC 124.98 ETC 358.33 CLP-121.78
          98.967 GL
    PLANETOCENTRIC CONIC
     C3 49.439 VHL 7.031 DLA 16.10 RAL 147.15 RAD 6568.8 VEL 13.069 PTH
                                                                                                              2.39 VHP 5.257 DPA -11.65 RAP 137.29 ECC 1.8136
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    22 10 7 2965.04
14 30 26 4558.24
                                                         -28.15
                                                                          93.89
                                                                                        31.59
                                                                                                           86.77 22 59 32
                                                                                                                                           2365.0
                                                                                                           63.88 15 46 24
87.68 24 24 59
62.76 16 54 53
                                                         11.33
                                                                         192.24
                                                                                          21.37
                                                                                                                                           3958.2
        100.00
                     23 40 26 2673.78
                                                                          72.55
                                                                                                                                           2073.8
                                                                                                                                                            -29.81
                                                                                                                                                                             63.75
                                                         -29.81
                                                                                          31.68
                    15 42 48 4324.73
                                                                                          20.60
                                                                                                                                           3724.7
                                                                                                                                                              9.07
        100.00
                                                        12.82
                                                                        174.31
                                                                                                           90.13 1 56 20
        110.00
                       1 12 30 2397.99
                                                        -34.18
                                                                          51.71
                                                                                          31.78
                                                                                                                                           1798.0
                                                                                                                                                           -33.79
                                                                                                                                                                             42.49
                     16 31 9
                                                                        160.65
                                                                                          18.43
                                                                                                                                           3573.3
                                                                                                                                                           12.51
       110.00
                                      4173.28
                                                        16.65
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            SGT 1719.1 SGR 562.1 SG3 198.0
RRT .7542 RRF .8351 RTF .8565
SGB 1808.7 R23 .2431 R13 .8703
SG1 1772.9 SG2 357.9 THA 14.46
                                                                                                                                      ST 648.5 SR 175.7 SS 299.7
CRT -. A725 CRS .7066 CST -. 9531
     TOE .6429 TRA-1.4971 TC3 -.7351 BAU .5353
    RDE - 1942 RRA - 2951 RC3 - 3398 FAU .08498
FDE .7641 FRA - 8218 FC3-1.4882 BSP 5107
BDE .6716 BRA 1.5259 BC3 .8099 FSP -617
                                                                                                                                      LSA 715.6 MSA 169.4 SSA 21.0
                                                                                                                                       EL1 654.1 EL2 153.5 ALF 172.27
                                                                                 FLIGHT TIME 96.00
LAUNCH DATE AUG 4 1967
                                                                                                                                                   ARRIVAL DATE NOV 8 1967
                                                                                 DISTANCE 291.748
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 28.580 GAL -14.09 A7L 89.00 MCA 137.00 SMA 142.42 ECC .25160 INC .9990 V1 29.352
RP 107.67 LAP .68 LOP 87.96 VP 39.157 GAP 3.63 AZP 90.73 TAL 241.22 TAP 18.22 RCA 106.59 APO 178.25 V2 35.195
RC 101.218 GL 4.00 GP -30.90 ZAL 165.76 ZAP 119.43 ETS 341.79 ZAE 136.30 ETE 214.89 ZAC 124.84 ETC 357.64 CLP-124.93
   PLANETOCENTRIC CONIC
                                                                                                              2.37 WHP 5.382 OPA -12.69 RAP 137.03 ECC 1.7904
    C3 48.026 VHL 6.930 DLA 17.08 RAL 148.32 RAD 6568.8 VEL 13.015 PTH
    LNCH AZHTH LNCH TIME L-I TIME
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          85.71 22 55 7
63.37 15 59 50
        90.00 22 5 13 2994.43
                                                                                          32.62
                                                        -28.02
                                                                         96.03
                                                                                                                                          2394.4
                                                                                                                                                          -28.32
                     14 44 36
         90.00
                                      4514.38
                                                         10.00
                                                                        189.71
                                                                                          22.20
                                                                                                                       15 59 50
                                                                                                                                            3914.4
                                                                                                                                                               6.35
                                                                                                            86.64 24"21 22
62.23 17 7 32
89.14 1 50 27
59.10 17 51 45
                    23 36 21 2700.51
15 56 8 4263.53
1 10 7 2419.43
        100.00
                                                         -29.72
                                                                          74.54
                                                                                          32.75
                                                                                                                                            2100.5
                                                                                                                                                             -29.87
                                                                                                                                            3683.5
       100.00
                                                         71.52
                                                                        171.94
                                                                                          21.40
                                                                                                                                                               7.72
                                                        -34.17
                                                                          53.36
                                                                                          32.95
                                                                                                                                           1819.4
                                                                                                                                                           -33.92
       110.00
                     16 42 47
                                      4137.38
                                                         15.41
                                                                        158.61
                                                                                                                                           3537.4
                                                                                                                                                             11.20
                                                                                          19.16
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY......
                                                                            RET .7604 RRF .8508 RTF .8586
SGB 1914.7 R23 .2654 R13 .8716
SGI 1881.7 SG2 354.2 THA 13.60
    TOE .7159 TRA-1.5305 TC3 -.8065 BAU .5656
RDE -.1623 RRA -.2717 RC3 -.3542 FAU .08075
                                                                                                                                      ST 713.5 SR 152.3 SS 311.4
CRT -.4687 CRS .7008 CST -.9541
    FOE .7732 FRA -.7333 FC3-1.4556 BSP
                                                           5474
                                                                                                                                      LSA 777.7 MSA 154.8 SSA
                                                                                                                                                                                21.1
                                                           - 599
                                                                                                                                       EL1 717.2 EL2 133.8 ALF 174.08
    BOE .7340 BRA 1.5544 BC3 .8808 FSP
                                                                                                                                                  ARRIVAL DATE NOV 10 1967
                                                                                 FLIGHT TIME 98.00
LAUNCH DATE AUG 4 1967
                                                                                DISTANCE 297.792
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 28.492 GAL -13.86 AZL -88.64 MCA 140.23 SMA 141.66 ECC .24942 INC 1.3567 VI 29.352 RP 107.65 LAP .87 LOP 91.19 VP 39.101 GAP 3.99 AZP 91.04 TAL 239.97 TAP 20.20 RCA 106.32 APO 176.99 VZ 35.204 RC 103.470 GL 5.50 GP -32.16 ZAL 164.57 ZAP 121.34 ETS 339.01 ZAE 134.23 ETE 214.42 ZAC 124.53 ETC 356.92 CLP-127.91
   PLANETOCENTRIC CONTC
    C3 46.697 VHL 6.833 OLA 18.23 RAL 149.61 RAD 6568.7 VEL 12.964 PTH 2.36 VHP 5.527 OPA -13.95 RAP 136.86 ECC 1.7685
    C3 46.697 VHL 6.833 OLA 18.23 RAL 149.61 RAD 6568.7 VEL 12.964 PTH 2.36 VHP 5.527 OPA -13.95 RAP 136.86 ECC 1.7685 LHCH AZHTH LHCH TIME L-[ TIME IN] LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 58 45 3031.51 -27.80 98.72 33.85 84.37 22 49 16 2431.5 -28.29 90.09 90.00 15 1 22 4463.22 8.43 186.77 23.26 62.87 16 15 45 3865.2 4.73 180.05 100.00 23 30 57 2734.15 -29.56 77.02 34.03 85.34 24 16 32 2134.2 -29.89 68.23 100.00 16 11 50 4235.80 10.00 169.22 22.42 61.68 17 22 26 3635.8 6.13 162.56 110.00 1 6 52 2446.40 -34.13 55.49 34.35 87.89 1 47 38 1846.4 -34.04 46.24 110.00 16 56 22 4096.32 13.96 156.31 20.09 58.48 18 4 38 3496.3 9.69 149.82
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           SGT 1943.2 SGR 559.1 SG3 183.1
RRT .7642 RRF .8663 RTF .8602
SGB 2022.0 R23 .2892 R13 .8725
SG1 1991.1 SG2 351.9 THA 12.81
                                                                                                                                    ST 788.0 SR 126.8 SS 325.4

CRT - 4507 CRS .6817 CST - .9558

LSA 850.2 MSA 140.3 SSA 21.1

EL1 790.2 EL2 112.9 ALF 175.77
    TOE .8002 TRA-1.5547 TC3 -.8787 BAU
                                                             . 5040
    ROE -.1286 RRA -.2454 RC3 -.3686 FAU .07630
    FOE .7840 FRA -.6438 FC3-1.4145 BSP 5847
BDE .8105 BRA 1.5739 BC3 .9529 FSP -578
    BDE .8105 BRA 1.5739 BC3 .9529 FSP
                                                                                                                                                  ARRIVAL DATE NOV 12 1967
LAUNCH DATE AUG 4 1967
                                                                                 FLIGHT TIME 100.00
                                                                                 DISTANCE 303.812
   RL 151.79 LAL -.00 LOL 310.95 VL 28.403 GAL -13.63 AZL 88.23 MCA 143.46 SMA 140.89 ECC .24731 INC 1.7666 V1 29.352 RP 107.62 LAP 1.05 LOP 94.42 VP 39.043 GAP 4.34 AZP 91.42 TAL 238.68 TAP 22.14 RCA 106.05 APO 175.74 V2 35.212 RC 105.723 GL 7.25 GP -33.64 ZAL 163.14 ZAP 122.91 ETS 336.01 ZAE 132.14 ETE 214.21 ZAC 124.05 ETC 356.16 CLP-130.74
   PLANETOCENTRIC CONIC
    C3 45.476 VHL 6.744 OLA 19.59 RAL 151.06 RAD 6568.7 VEL 12.917 PTH 2.35 VMP 5.694 DPA -15.46 RAP 136.72 ECC 1.7484
    ENCH AZMTH ENCH TIME L-I TIME INJEAT INJEONG INJET ASC INJEZHTH INJTIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                          82.68 22 41 19
62.38 16 35 4
83.69 24 9 56
61.14 17 40 23
86.31 1 43 41
57.83 18 19 56
                   21 50 0 3079.30
15 21 42 4402.13
23 23 39 2777.30
16 30 44 4179.36
                                                                                         35.30
                                                                                                                                           2479.3
                                                                       102.17
                                                                                                                                                          -28.16
                                                        -27.43
        90.00
                                                         6.52
                                                                        183.30
                                                                                         24.63
                                                                                                                                           3402.1
                                                                                                                                                             2.77
                                                                                                                                                                            176.63
        90.00
                                                                                                                                                                             71.44
                                                                                                                                           2177.3
                                                                                                                                                           -29.84
       100.00
                                                        -29.28
                                                                        80.20
                                                                                          35.55
       100.00
                                                         8.16
                                                                        166.04
                                                                                         23.74
                                                                                                                                           3579.4
                                                                                                                                                             4.24
                                                                                                                                                                            159.44
                                                                                                                                                           -34.14
       110.00
                      1 2 20 2480.82
                                                                                                                                           1880.8
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                                                       -34.01
                                                                         58.17
                                                                                          36.04
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       110.00
                                                                                         21.29
                                                                                                                                           3448.6
                      17 12 28
                                     4048.60
                                                        12.25
                                                                        153.68
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 875.2 SR 98.9 SS 343.0
CRT -.4011 CRS .6341 CST -.9578
LSA 936.5 MSA 126.5 SSA 20.8
                                                                           SCT 2054.6 SGR 556.8 SG3 174.4
RRT .7649 RRF .8808 RTF .8610
SG8 2128.7 R23 .3140 R13 .8728
     TOE .9001 TRA-1.5665 TC3 -.9497 BAU .6225
    ROE -.0923 RRA -.2151 RC3 -.3826 FAU .07148
FOE .7991 FRA -.5506 FC3-1.3608 B3P 6186
BOE .9048 BRA 1.5812 BC3 1.0238 FSP -550
                                                                           SG1 2099.5 SG2 351.0 THA 12.05
                                                                                                                                      EL1 876.1 EL2 90.5 ALF 177.38
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ARRIVAL CATE NOV 14 1967 FLIGHT TIME 102.00 LAUNCH DATE AUG 4 1967 01STANCE 309.810 HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 28.313 GAL -13.39 AZL 87.76 HCA 146.69 SMA 140.13 ECC .24528 INC 2.2443 VI 29.352
RP 107.60 LAP 1.23 LOP 97.66 VP 38.985 GAP 4.67 AZP 91.88 TAL 237.35 TAP 24.03 RCA 105.76 APO 174.50 V2 35.220
RC 107.975 GL 9.31 GP -35.40 ZAL 161.42 ZAP 124.09 ETS 332.76 ZAE 129.99 ETE 214.22 ZAC 123.44 ETC 355.31 CLP-133.45 PLANETOCENTRIC CONIC C3 44,418 VHL 6.665 DLA 21.21 RAL 152.71 RAD 6568.7 VEL 12.876 PTH 2.35 VMP. 5.891 OPA -17.28 RAP 136.58 ECC 1.7310 INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -26.80 106.70 37.02 80.49 22 30 5 2542.8 -27.84 98.19 4.12 179.06 26.46 61.96 16 59 18 3726.8 .34 172.43 LNCH AZMTH LNCH TIME L-I TIME 21 37 42 3142.77 15 47 11 4326.82 90.00 90.00 81.56 24 0 41 60.64 18 2 38 2234.0 -29.65 75.65 84.35 37.38 23 13 27 2834.04 -28.78 100.00 3510.8 1.93 100.00 16 54 8 4110.79 5.88 162.22 25.50 2525.53 -34.18 84.27 1 38 5 1925.5 52.42 110.00 0 55 59 -33.76 61.64 38.10 18 38 32 5.78 17 32 0 22.88 57.19 3392.1 110.00 3992.06 10.18 150.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2167.8 SGR 556.1 SG3 165.3 RRT .7622 RRF .8945 RTF .8621 SGB 2238.0 R23 .3390 R13 .8734 ST 977.1 SR 70.5 SS 362.9 CRT -.2704 CRS .5093 CST -.9607 TOE 1.0177 TRA-1.5661 TC3-1.0199 BAU .6498 ROE -.0546 RRA -.1815 RC3 -.3963 FAU .06657 FOE .8138 FRA -.4598 FC3-1.2976 8SP 6562 BOE 1.0191 BRA 1.5766 BC3 1.0942 FSP -525 LSA 1038.2 MSA 114.5 SSA 20.1 SG1 2209.9 SG2 353.1 THA 11.36 EL1 977.3 EL2 67.9 ALF 178.88 ARRIVAL DATE NOV 16 1967 LAUNCH DATE AUG 4 1967 FLIGHT TIME 104.00 **DISTANCE 315.787** HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 28.222 GAL -13.14 AZL 87.19 MCA 149.91 SMA 139.38 ECC .24333 INC 2.8119 V1 29.352 RP 107.58 LAP 1.41 LOP 100.90 VP 38.925 GAP 4.98 AZP 92.43 TAL 235.98 TAP 25.89 RCA 105.46 APO 173.29 V2 35.227 RC 110.226 GL 11.78 GP -37.52 ZAL 159.33 ZAP 124.83 ETS 329.21 ZAE 127.72 ETE 214.43 ZAC 122.70 ETC 354.34 CLP-136.07 PLANETOCENTRIC CONIC C3 43.599 VHL 6.603 DLA 23.17 RAL 154.63 RAD 6568.7 VEL 12.844 PTH 2.34 VHP 6.127 OPA -19.44 RAP 136.36 ECC 1.7175
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 21 19 24 3231.12 -25.65 112.92 39.02 77.58 22 13 15 2631.1 -27.11 104.55
90.00 16 20 47 4229.11 .98 173.60 29.02 61.70 17 31 16 3629.1 -2.81 166.97
100.00 22 58 34 2911.37 -27.88 89.92 39.54 78.76 23 47 5 2311.4 -29.15 81.34
100.00 17 24 18 4024.09 2.97 157.43 27.91 60.24 18 31 22 3424.1 -1.01 150.91
110.00 0 46 51 2584.90 -33.26 66.20 40.62 81.62 1 29 56 1984.9 -34.06 57.05
110.00 17 56 26 3923.32 7.62 146.93 25.04 56.58 19 1 50 3323.3 3.17 140.66 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2281.5 SGR 555.5 SG3 155.3 RRT .7544 RRF .9062 RTF .8634 SGB 2348.2 R23 .3629 R13 .8744 SGI 2320.6 SGZ 358.4 THA 10.67 ST 1099.4 SR 45.3 SS 386.6 CRT .1132 CRS .1254 CST -.9643 TOE 1.1607 TRA-1.5488 TC3-1.0852 BAU .6758 ROE -.0146 RRA -.1426 RC3 -.4080 FAU .06139 LSA 1161.3 MSA 105.2 SSA 18.8 FOE .8311 FRA -.3685 FC3-1.2190 BSP 6941 BDE 1.1608 BRA 1.5554 BC3 1.1594 FSP -498 FL1 1099.4 FL2 45.0 ALF .27 ARRIVAL CATE NOV 18 1967 FLIGHT TIME 106.00 LAUNCH DATE AUG 4 1967 DISTANCE 321.742 HELTOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 28.131 GAL -12.89 AZL 86.50 MCA 153.14 SNA 138.63 ECC .24145 INC 3.5021 V1 29.352 RP 107.56 LAP 1.58 LOP 104.13 VP 38.865 GAP 5.29 AZP 93.13 TAL 234.58 TAP 27.72 RCA 105.16 APO 172.10 V2 35.233 RC 112.475 GL 14.77 GP -40.06 ZAL 156.74 ZAP 125.07 ETS 325.33 ZAE 125.25 ETE 214.80 ZAC 121.85 ETC 353.21 CLP-138.65 PLANETOCENTRIC CONIC C3 43.151 VHL 6.569 DLA 25.56 RAL 156.90 RAD 6568.6 VEL 12.826 PTH 2.33 VHP 6.419 DPA -22.01 RAP 135.98 ECC 1.7102 C3 43.151 VPL 6.569 DLA 25.56 RAL 156.90 RAD 6568.6 VEL 12.826 PT 2.53 VPL 6.519 DPA 22.51 RAD 155.80 RAD 6568.6 VEL 12.826 PT 2.53 VPL 6.519 DPA 22.51 RAD 155.80 RAD 6568.6 VEL 12.826 PT 2.53 VPL 6.519 DPA 22.51 RAD 155.80 RAD 656.70 PT 25.50 RAD 155.80 RAD 656.70 PT 25.50 RAD 155.80 RAD 656.70 PT 25.50 RAD 155.80 RA 60.12 19 11 9 78.10 1 17 35 3306.4 -4.99 144.43 18 6 - 3 31.42 100.00 3906.40 -1.02 150.97 2066.4 -33.58 63.36 110.00 0 33 9 2666.36 -32.28 72.35 43.68 19 32 13 3236.7 -.14 110.00 18 28 16 3836.66 4.35 142.35 28.09 56.06 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RT 7392 RRF 9139 RTF 8651 SGB 2457.8 R23 3845 R13 8755 SG1 2430.2 SG2 367.0 THA 9.92 ST 1249.5 SR 40.5 SS 415.9 TOE 1.3410 TRA-1.5083 TC3-1.1393 BAU .6994 CRT .8215 CRS -.6977 CST -.9684 ROE .0281 RRA -.0957 RC3 -.4146 FAU .05577 LSA 1313.6 MSA 100.2 SSA 16.5 FOE .8533 FRA -.2742 FC3-1.1190 BSP 7285 BDE 1.3412 BRA 1.5113 BC3 1.2124 FSP -463 ELI 1250.0 EL2 23.1 ALF 1.53 ARRIVAL DATE NOV 20 1967 LAUNCH DATE AUG 4 1967 FLIGHT TIME 108.00 HELIOCENTRIC CONIC **DISTANCE 327.677** RL 151.79 LAL -.00 LOL 310.95 VL 28.039 GAL -12.62 AZL 85.63 HCA 156.36 SMA 137.89 ECC .23966 INC 4.3654 VI 29.352 RP 107.54 LAP 1.75 LOP 107.38 VP 38.804 GAP 5.58 AZP 94.00 TAL 233.14 TAP 29.51 RCA 104.84 APO 170.93 VZ 35.239 RC 114.720 GL 18.45 GP -43.15 ZAL 153.51 ZAP 124.69 ETS 321.07 ZAE 122.47 ETE 215.26 ZAC 120.91 ETC 351.83 CLP-141.27 PLANETOCENTRIC CONIC 2.34 WHP 6.794 DPA -25.07 RAP 135.32 ECC 1.7127 C3 43.304 VHL 6.581 DLA 28.51 RAL 159.68 RAD 6568.6 VEL 12.832 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 86.54 18 41 22 3621.90 -14.67 151.93 48.89 65.28 19 45 4 3221.9 -17.88 144.72 93.46 19 39 5 3634.91 -14.65 138.24 40.88 65.27 20 39 40 3034.9 -17.87 131.02 69.24 22 41 28 60.99 20 17 12 21 47 48 2620.4 -24.63 103.13 -22.00 110.95 44.12 100.00 3220.45 133.50 3111.6 -11.37 100,00 19 15 21 3711.59 -7.56 140.21 37.22 72.34 -30.29 47.25 75.34 0 57 20 2184.7 -32.27 110.00 0 10 55 2784.74 81.00 55.82 20 14 39 3120.1 130.05 19 12 39 136.26 32.63 -4.59 110.00 3720.07 -.10 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 2510.1 SGR 549.1 SG3 132.0 RRT .7128 RRF .9153 RTF .8682 ST 1434.9 SR 64.8 55 449.4 TOE 1.5721 TRA-1.4394 TC3-1.1754 BAU .7213 RDE .0707 RRA -.0398 RC3 -.4135 FAU .04986 FDE .8758 FRA -.1818 FC3 -.9967 BSP 7654 BDE 1.5737 BRA 1.4399 BC3 1.2460 FSP -428 CRT .9692 CRS -.9725 CST -.9730 LSA 1501.6 MSA 99.4 SSA 13.6 EL1 1436.2 EL2 15.9 ALF 2.51 SGB 2569.4 R23 .4018 R13 .8781

SG1 2541.1 SG2 380.5 THA 9.07

ARRIVAL CATE NOV 22 1967

LAUNCH CATE AUG 4 1967

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CISTANCE 333.589
  HÉLIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 27.948 GAL -12.35 AZL 84.52 MCA 159.58 SMA 137.16 ECC .23795 INC 5.4837 VI 29.352 RP 107.52 LAP 1.91 LOP 110.62 VP 38.743 GAP 5.86 AZP 95.14 TAL 231.68 TAP 31.26 RCA 104.52 APO 169.80 V2 35.244 RC 116.961 GL 23.03 GP -46.90 ZAL 149.39 ZAP 123.59 ETS 316.38 ZAE 119.24 ETE 215.70 ZAC 119.90 ETC 350.08 CLP-144.06
   PLANETOCENTRIC CONIC
                                                                                                      2.35 VHP 7.298 DPA -28.70 RAP 134.18 ECC 1.7322
    C3 44.490 VHL 6.670 CLA 32.17 RAL 163.20 RAD 6568.7 VEL 12.878 PTH
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                  17 20 28 4131.73
21 28 6 3338.68
17 20 28 4131.73
21 28 6 3338.68
                                                                                   45.73
                                                                                                    61.81
                                                                                                               18 29 20
                                                                                                                                 3531.7
                                                                                                                                                -19.83
                                                                                                                                                                168.69
                                                                   175.76
                                                    -16.19
        74.06
                                                                                                               22 23 45
                                                                                                                                  2738.7
                                                                                                                                                 -19.82
                                                                                                                                                                109.92
                                                                                    45.73
                                                                                                     51.01
                                                                   116.99
                                                    -16.17
       105.94
                                                                                    45.73
                                                                                                     61.81
                                                                                                               18 29 20
                                                                                                                                  3531.7
                                                                                                                                                 -19.83
                                                                                                                                                                168.69
                                                                   175.76
        74.06
                                                   -16.19
                                                                                                    61.81 18 29 20
61.81 22 23 45
66.50 24 12 3
56.50 21 24 21
                                                                                                                                                               109.92
                                                                                                                                  2738.7
                                                                                                                                                -19.82
                                                                                    45.73
                                                                   116.99
       105.94
                                                   -16.17
                                                                                                                                                 -28.52
                                                                                                                                  2385.7
                                                                                                                                                                  46.77
                   23 22 17 2985.67
20 25 28 3532.73
                                                                                    50.59
                                                   -25.57
                                                                    94.71
                                                                                                                                  2932.7
                                                                                                                                                -11.58
                                                                                                                                                                120.05
                                                                                    40.28
                                                    -7.23
                                                                   126.44
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RIT - 6660 RRF - 9035 RTF - 8734
SGB 2681.5 R25 - 4128 R13 - 8823
SGI 2651.7 SGZ 398.7 THA 7.97
                                                                                                                             ST 1667.3 SR 95.3 SS 488.2
    TOE 1.8823 TRA-1.3281 TC3-1.1778 BAU
                                                        .7394
                                                                                                                             CRT .9332 CRS -.9837 CST -.9780
    RDE .1089 RRA .0299 RC3 -.3977 FAU .04348
                                                                                                                             LSA 1736.9 MSA 102.8 SSA 10.4
   FOE .8999 FRA -.0894 FC3 -.8461 BSP 8028
BOE 1.8854 BRA 1.3265 BC3 1.2431 FSP -390
                                                                                                                             EL1 1669.7 EL2 34.2 ALF
                                                                                                                                                                    3.05
                                                                                                                                         ARRIVAL DATE NOY 24 1967
                                                                            FLIGHT TIME 112.00
                                                                            DISTANCE 339.477
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 27.857 GAL -12.07 A7L 83.00 MCA 162.79 SMA 136.44 ECC .23630 INC 6.9997 V1 29.352 RP 107.51 LAP 2.07 LOP 113.86 VP 38.681 GAP 6.13 AZP 96.69 TAL 230.18 TAP 32.97 RCA 104.20 APO 168.68 VZ 35.248 RC 119.197 GL 28.76 GP -51.49 ZAL 144.09 ZAP 121.59 ETS 311.11 ZAE 115.37 ETE 215.87 ZAC 118.87 ETC 347.72 CLP-147.28
   PLANETOCENTRIC CONIC
                                                                                                       2.37 VHP 8.013 OPA -32.97 RAP 132.25 ECC 1.7833
    C3 47.593 VHL 6.899 DLA 36.68 RAL 167.90 RAD 6568.8 VEL 12.998 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 65.64 16 48 54 4301.82 -17.61 189.94 52.70 57.28 18 0 35 3701.8 -21.79 183.11
                    22 37 9 3202.43
16 48 54 4301.82
22 37 9 3202.43
16 48 54 4301.82
22 37 9 3202.43
                                                                                                                23 30 32
                                                                                                                                  2602.4
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                                                                                                     57.28
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                                                    -17.59
                                                                    107.21
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                                                    -17.61
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                                                                                    52.69
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                                                    -17.59
                                                                    107.21
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57.28 23 30 32
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                                                                                    52.70
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                                                    -17.61
                                                                    189.94
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                                                    -17.59
                                                                    107.21
                                                                                    52.69
       114.36
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       RIGT 2744.4 SGR 518.2 SG3 103.4

RRT 5752 RRF .8594 RTF .8820

SGB 2792.9 R23 .4155 R13 .8892

SGI 2760.9 SG2 421.4 THA 6.35
                                                                                                                              ST 1959.8 SR 113.4 SS 532.8
CRT .8623 CRS -.9399 CST -.9828
    TOE 2.3194 TRA-1.1504 TC3-1.1231 BAU .7497
    ROE .1277 RRA .1202 RC3 -.3564 FAU .03652
FOE .9260 FRA .0046 FC3 -.6644 BSP 8370
BOE 2.3229 BRA 1.1567 BC3 1.1783 FSP -344
                                                                                                                              LSA 2031.1 MSA 110.1 SSA 7.4
                                                                                                                              EL1 1962.2 EL2 57.4 ALF
    BOE 2.3229 BRA 1.1567 BC3 1.1783 FSP
                                                                                                                                         ARRIVAL DATE NOV 26 1967
                                                                           FLIGHT TIME 114.00
LAUNCH DATE AUG 4 1967
                                                                           DISTANCE 345.335
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 27.765 GAL -11.78 AZL 80.82 MCA 165.98 SMA 135.73 ECC .23471 INC 9.1839 VI 29.352 RP 107.50 LAP 2.22 LOP 117.11 VP 38.619 GAP 6.38 AZP 98.91 TAL 228.66 TAP 34.64 RCA 103.88 APO 167.59 V2 35.252 RC 121.426 GL 35.93 GP -57.08 ZAL 137.27 ZAP 118.53 ETS 304.91 ZAE 110.58 ETE 215.22 ZAC 117.89 ETC 344.22 CLP-151.53
   PLANETOCENTRIC CONIC
    C3 54.654 VHL 7.393 CLA 42.09 RAL 174.54 RAD 6569.0 VEL 13.267 PTH 2.42 VHP 9.105 CPA -37.92 RAP 128.96 ECC 1.8995
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                  51.45 17 50 46
51.45 17 50 46
51.45 17 50 46
51.45 24 34 28
51.45 17 50 46
51.45 17 50 46
51.45 24 34 28
                                                                                                                                 3846.7
                                                                                                                                              -23.25 196.27
                   16 36 39 4446.65
23 42 21 3126.41
                                                    -18.39
                                                                   202.65
                                                                                 62.95
        57.46
                                                                                                                                  2526.4
                                                                                                                                                 -23.23
                                                    -18.38
                                                                    101.44
                                                                                    62.94
       122.54
                                                                                                                                  3846.7
                                                                                                                                                -23.25
                                                                    202.65
                                                                                    62.95
                    16 36 39
                                 4446.65
                                                    -18.39
        57.46
                                                                                                                                  2526.4
                                                                                                                                                 -23.23
                    23 42 21 3126.41
                                                    -18.38
                                                                    101.44
                                                                                    62.94
       122.54
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                                                                                                                                  3846.7
                                                    -18.39
                                                                    202.65
                                                                                    62.95
                    16 36 39 4446.65
        57.46
                                                                                                                                  2526.4
                                                                                                                                                 -23.23
                    23 42 21 3126.41
                                                                                    62.94
                                                                    101.44
       122.54
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                       SCT 2862.7 SCR 484.0 SC3 87.2
RRT .3671 RRF .7143 RTF .8968
SCB 2903.3 R23 .4050 R13 .9008
                                                                                                                             ST 2314.0 SR 94.5 SS 580.5
    TOE 2.9649 TRA -.8608 TC3 -.9818 BAU .7457
    RDE .0740 RRA .2363 RC3 -.2789 FAU .02914
FDE .9509 FRA .0981 FC3 -.4616 BSP 8721
                                                                                                                             CRT .5143 CRS -.6429 CST -.9874
                                                                                                                             LSA 2384.5 MSA 120.0 SSA
EL1 2314.5 EL2 81.0 ALF
                                                                                                                                                                      5.0
                                                                       SGI 2868.4 SGZ 449.3 THA 3.64
                                                                                                                                                                   1.20
    BOE 2.9658 BRA .8926 BC3 1.0206 FSP
                                                         -296
                                                                                                                                          ARRIVAL DATE NOV 28 1967
                                                                            FLIGHT TIME 116.00
LAUNCH DATE AUG 4 1967
                                                                            DISTANCE 351.150
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 27.675 GAL -11.48 AZL 77.38 MCA 169.15 SMA 135.04 ECC .23314 INC12.6179 V1 29.352 RP 107.49 LAP 2.36 LOP 120.35 VP 38.556 GAP 6.62 AZP 102.40 TAL 227.10 TAP 36.25 RCA 103.56 APO 166.52 V2 35.255 RC 123.648 GL 44.61 GP -63.82 ZAL 128.64 ZAP 114.24 ETS 296.56 ZAE 104.43 ETE 212.28 ZAC 117.17 ETC 338.17 CLP-158.51
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 49.51 16 46 8 4589.22 -17.39 214.82 78.10 44.56 18 2 38 3989.2 -23.00 200.15
                                                                                                 44.56 18 2 38
44.55 1 48 1
                    0 56 9 3111.46
16 46 8 4589.22
                                                    -17.38
                                                                     99.13
                                                                                     78.08
       130.49
                                                                                                                                                                 209.15
                                                                                                                                                  -23.00
                                                                                     78.10
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16 46 8 4589.22
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                                                                      MID-COURSE EXECUTION ACCURACY
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   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2683.3 SR 197.5 S5 630.7

CRT -.8417 CRS .7642 CST -.9914

LSA 2760.3 MSA 134.1 SSA 3.2
                                                                        SGT 2968.5 SGR 489.3 SG3 71.0
RRT -.1646 RRF .2138 RTF .9213
     TOE 3.9475 TRA -. 3499 TC3 -. 7255 BAU . 7067
    ROE - .2386 RRA .3702 RC3 - .1592 FAU .02136
FOE .9789 FRA .1995 FC3 - .2598 BSP 9061
BOE 3.9547 BRA .5094 BC3 .7428 FSP -245
                                                                        SG8 3008.5 R23 -.3747 R13 -.9196
                                                                                                                            ELI 2688.5 EL2 106.4 ALF 176.45
                                                                        SG1 2969.6 SG2 482.4 THA 178.40
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FLIGHT TIME 110.00

ARRIVAL DATE NOV 30 1967

LAUNCH DATE AUG 4 1967 HELIOCENTRIC CONIC DISTANCE 356.883 RL 151.79 LAL -.00 LOL 310.95 VL 27.585 GAL -11.15 AZL 71.21 HCA 172.24 SMA 134.36 ECC .23149 INC18.7877 V1 29.352 RP 107.48 LAP 2.49 LOP 123.60 VP 38.494 GAP 6.83 AZP 108.63 TAL 225.50 TAP 37.74 RCA 103.26 APO 165.46 V2 35.257 RC 125.861 GL 54.08 GP -71.27 ZAL 118.26 ZAP 108.64 ETS 281.38 ZAE 96.14 ETE 202.00 ZAC 117.24 ETC 324.50 CLP-174.53 PLANETOCENTRIC CONIC C3 115.847 VHL 10.763 DLA 52.65 RAL 199.49 RAD 6570.2 VEL 15.401 PTH 2.75 VHP 14.419 CPA -48.52 RAP 112.79 ECC 2.9065 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43.57 17 26 58 4741.28 -13.00 225.22 99.36 38.51 18 46 0 4141.3 -19.20 220.37 3173.83 4741.28 95.50 99.35 38.51 3 7 58 2573.8 -19.18 136.43 2 15 5 -12.98 100.35 220.37 43.57 17 26 58 -13.00 225.22 99.36 38.51 18 46 0 4141.3 -19.20 2 15 5 3173.83 4741.28 -12.98 100.35 99.35 38.51 3 7 58 2573.8 -19.18 95.50 136.43 38.51 18 46 0 4141.3 -19.20 220.37 -13.00 225.22 99.36 43.57 17 26 58 3 7 58 2573.8 -19.18 95.50 2 15 5 3173.83 -12.98 100.35 99.35 38.51 136.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2968.7 SGR 890.4 SG3 57.0 RRT -.7999 RRF -.6067 RTF .9603 ST 2807.4 SR 840.7 SS 693.4 CRT -.9853 CRS .9637 CST -.9951 TOE 5.2630 TRA .6797 TC3 -.3623 BAU .5628 RDE-1.5702 RRA .3427 RC3 -.0286 FAU .01291 FOE 1.0318 FRA .3417 FC3 -.0965 BSP 9236 SG8 3099.3 R23 -.3091 R13 -.9481 LSA 3007.4 MSA 157.1 SSA 1.9 BOE 5.4922 BRA .7612 BC3 .3634 FSP -194 SG1 3055.5 SG2 519.2 THA 166.10 EL1 2927.4 EL2 137.7 ALF 163.52 ARRIVAL DATE DEC 2 1967 FLIGHT TIME 120,00 LAUNCH DATE AUG 4 1967 DISTANCE 362.401 HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 27.495 GAL -10.77 AZL 57.40 HCA 175.13 SMA 133.69 ECC .22940 INC32.5950 V1 29.352 RP 107.48 LAP 2.62 LOP 126.85 VP 38.431 GAP 6.97 AZP 122.50 TAL 223.80 TAP 38.93 RCA 103.02 APO 164.36 V2 35.258 60.55 GP -74.34 ZAL 107.06 ZAP 102.00 ETS 241.00 ZAE 83.53 ETE 165.82 ZAC 119.88 ETC 283.79 CLP 140.35 RC 128.066 GL PLANETOCENTRIC CONIC C3 279.234 VHL 16.710 DLA 51.64 RAL 217.81 RAD 6571.6 VEL 20.014 PTH 3.14 VHP 22.532 DPA -50.04 RAP 93.78 ECC 5.5955 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 20 5 9 4277.0 225.07 44.83 18 43 52 4877.02 -5.17 229.73 123.72 34.55 -11.40 4 19 47 2726.8 102.04 3 24 20 3326.84 106.70 123.70 38.55 -11.39 -5.16 135.17 20 5 9 4277.0 4877.02 229.73 123.72 38.55 -11.40 225.07 44.83 18 43 52 -5.17 3326.84 2726.8 102.04 3 24 20 106.70 123.70 38.55 -11.39 135.17 -5.16 38.55 20 5 9 225.07 18 43 52 4877.02 -5.17 229.73 123.72 4277.0 -11.40 44.83 2726.A -11.39 3 24 20 106.70 123.70 38.55 102.04 135.17 3326.84 -5.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2017.9 SGR 2386.5 SG3 47.7 RRT -.9445 RRF -.9440 RTF .9990 TOE 4.4535 TRA 2.3794 TC3 -.0328 BAU .2058 ST 1577.1 SR 2214.0 SS 832.7 ROE-6.4067 RRA-1.6665 RC3 -.0443 FAU .00068 CRT -.9919 CRS .9909 CST-1.0000 FOE 1.2057 FRA .6627 FC3 -.0021 85P 9297 SGB 3125.2 R23 -.1936 R13 -.9801 LSA 2837.3 MSA 179.4 SSA 1.3 EL1 2713.3 ELZ 163.9 ALF 125.39 BOE 7.8025 BRA 2.9049 BC3 .0551 FSP SG1 3082.8 SG2 513.0 THA 129.94 -157 ARRIVAL DATE DEC 4 1967 FLIGHT TIME 122.00 LAUNCH DATE AUG 4 1967 DISTANCE 367.004 HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 27.407 GAL -10.20 A7L 17.29 MCA 177.13 SMA 133.04 ECC .22500 INC72.7131 V1 29.352 RP 107.48 LAP 2.74 LOP 130.10 VP 38.368 GAP 6.85 AZP 162.69 TAL 221.74 TAP 38.87 RCA 103.11 APO 162.97 V2 35.259 RC 130.261 GL 49.72 GP -55.11 ZAL 97.86 ZAP 95.87 ETS 194.01 ZAE 58.92 ETE 124.26 ZAC 131.00 ETC 228.16 CLP 100.30 PLANETOCENTRIC CONIC C31139.839 VHL 33.761 DLA 35.18 RAL 226.08 RAD 6573.0 VEL 35.512 PTH 3.52 VHP 44.795 CPA -35.79 RAP 67.03 ECC19.7589 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4718.36 .45 136.74 54.82 22 13 40 4118.4 204.40 20 55 1 2 19 9 210.54 68.19 -4.13 136.73 54.82 3 20 51 3102.7 128.37 134.50 111.81 3702.72 .47 4718.36 3702.72 -4.15 204.40 136.74 54.82 22 13 40 4118.4 210.54 68.19 20 55 1 .45 136.73 54.82 3 20 51 3102.7 -4.13 128.37 134.50 111.81 2 19 9 .47 204.40 22 13 40 4118.4 -4.15 20 55 1 4718.36 2 19 9 3702.72 136.74 54.82 .45 210.54 68.19 3102.7 128.37 3 20 51 -4.13 134.50 136.73 54.82 111.81 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 535.3 SR 1760.7 SS 1199.9 CRT .9303 CRS .9981 CST .9061 SGT 665.0 SGR 2678.9 SG3 44.3 RRT .6153 RRF -.9957 RTF -.5418 SGB 2760.2 R23 -.1200 R13 -.9926 TOE-3.1433 TRA .6826 TC3 -.0549 BAU 2.8080 CRT .9303 CRS .9981 CST .9061 LSA 2186.8 MSA 209.6 SSA 1.2 ROE-9.9215 RRA-8.2450 RC3 -.1759 FAU-.04258 FOE 1.7110 FRA 1.7408 FC3 .0323 BSP 8239 BOE10.4075 BRA 8.2732 BC3 .1843 FSP -142 SG1 2711.1 SG2 518.0 THA 80.98 EL1 1830.6 EL2 188.8 ALF 74.03 FLIGHT TIME 124.00 ARRIVAL DATE DEC 6 1967 LAUNCH DATE AUG 4 1967 **DISTANCE 376.221** HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 27.319 GAL -10.58 A7L 139.92 HCA 183.72 SMA 132.40 ECC .23330 INC49.9201 VI 29.352 RP 107.48 LAP 2.85 LOP 133.35 VP 38.305 GAP 8.07 A7P 40.14 TAL 221.32 TAP 45.04 RCA 101.51 APO 163.29 V2 35.259 RC 132.447 GL -57.73 GP 68.25 ZAL 101.34 ZAP 100.18 ETS 162.21 ZAE 74.19 ETE 233.31 ZAC 96.95 ETC 112.15 CLP 118.49 PLANETOCENTRIC CONIC C3 590.488 VHL 24.300 DLA -57.79 RAL 160.92 RAD 6572.5 VEL 26.679 PTH 3.38 VHP 30.351 OPA 79.75 RAP 341.37 ECC10.7179 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 70.03 147.78 3 16 27 1751.7 8.15 65.03 37.26 2 37 15 2351.74 1.39 66.91 70.05 147.78 12 8 55 109.3 8.16 291.57 11 57 5 295.45 709.25 1.41 142.74 147.78 3 16 27 1751.7 8.15 65.03 2 37 15 66.91 70.03 37.26 2351.74 1.39 291.57 11 57 5 70.05 147.78 12 8 55 109.3 8.16 709.25 295.45 1.41 142.74 3 16 27 65.03 2 37 15 2351.74 68.91 70.03 147.78 1751.7 8.15 1.39 37.26 147,78 12 8 55 295.45 70.05 109.3 8.16 291.57 11 57 5 142.74 709.25 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 207.7 SR 2455.2 SS 1257.1 CRT .5508 CRS -.9989 CST -.5886 LSA 2760.3 MSA 179.6 SSA 1.4 TOF -.6421 TRA 1.0703 TC3 -.0353 BAU 1.2770 SGT 525.8 SGR 3142.6 SG3 49.0 RRT -.4030 RRF .9927 RTF -.2934 SGB 3186.3 R23 -.1270 R13 .9914 RO-10.1303 RRA-4.2781 RC3 .1579 FAU-.01455 FDE-1.9975 FRA -.6730 FC3 .0213 BSP 9466 BOE10.1507 BRA 4.4099 BC3 .1618 FSP -151 SG1 3149.9 SG2 480.1 THA 93.95 EL1 2457.9 EL2 173.1 ALF 87.32

FLIGHT TIME 118.00

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ARRIVAL DATE DEC 8 1967
                                                                       FLIGHT TIME 126.00
LAUNCH DATE AUG 4 1967
  HELIOCENTRIC CONIC
                                                                       DISTANCE 381.462
   RL 151.79 LAL -.00 LOL 310.95 VL 27.231 GAL -10.13 A7L 117.61 MCA 186.37 SMA 131.78 ECC .23084 INC27.6074 VI 29.352 RP 107.48 LAP 2.95 LOP 136.60 VP 38.242 GAP 8.12 A7P 62.54 TAL 219.50 TAP 45.87 RCA 101.36 APO 162.19 V2 35.258 RC 134.624 GL -59.86 GP 71.51 ZAL 108.47 ZAP 108.06 ETS 111.07 ZAE 91.11 ETE 184.63 ZAC 90.34 ETC 60.59 CLP 167.77
  PLANETOCENTRIC CONIC
    C3 206.354 WHL 14.365 DLA -53.11 RAL 146.73 RAD 6571.2 VEL 18.102 PTH 3.01 WHP 17.359 DPA 78.57 RAP 231.15 ECC 4.3961
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 2617.1 SGR 2265.5 SG3 59.8
                                                                                                                       ST 1788.8 SR 1121.1 55 747.7
    TOE-4.2281 TRA-2.9921 TC3 -.0801 BAU .2210
                                                                                                                       CRT .9701 CRS -.9593 CST -.9992
                                                                   RRT .9581 RRF .9294 RTF .9953
SGB 3461.5 R23 -.2068 R13 .9772
   ROE-2.3432 RRA-3.1059 RC3 -.0028 FAU .00902
   FDE-1.1944 FRA -.7367 FC3 -.0376 BSP 10514
                                                                                                                       LSA 2226.2 MSA 244.3 SSA
                                                                                                                                                             1.4
                                                                                                                       EL1 2098.3 EL2 232.0 ALF 31.73
                                                                    SG1 3425.8 SG2 495.6 THA 40.70
   BOE 4.8340 BRA 4.3127 BC3 .0801 FSP
                                                     -190
                                                                        FLIGHT TIME 128.00
                                                                                                                                  ARRIVAL DATE DEC 10 1967
LAUNCH DATE AUG 4 1967
                                                                       DISTANCE 367.078
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 27.145 GAL -9.75 AZL 108.93 MCA 189.40 SMA 131.17 ECC .22957 INC18.9308 V1 29.352 RP 107.48 LAP 3.04 LOP 139.85 VP 38.179 GAP 8.29 AZP 71.31 TAL 217.79 TAP 47.19 RCA 101.05 APO 161.28 V2 35.256 RC 136.791 GL -95.58 GP 63.63 ZAL 114.48 ZAP 116.04 ETS 82.92 ZAE 101.13 ETE 159.39 ZAC 88.50 ETC 32.68 CLP-171.28
  PLANETOCENTRIC CONIC
                                                                                                                              68.52 RAP 206.80 ECC 2.8219
   C3 110.703 VHL 10.522 DLA -47.10 RAL 145.64 RAD 6570.1 VEL 15.233 PTH
                                                                                                  2.73 VHP 12.454 OPA
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 3476.1 SGR 890.9 SG3 74.5
RRT .8508 RRF .6796 RTF .9611
SGB 3588.5 R23 -.2900 R13 .9533
SGI 3559.2 SG2 457.3 THA 12.51
                                                                                                                       ST 1911.6 SR 266.9 SS 630.3
CRT .4485 CRS -.2817 CST -.9839
    TOE-3.1189 TRA-3.6538 TC3 -.3845 BAU .5702
   RDE .0056 RRA-1.1119 RC3 -.0233 FAU .01962
   FOE-1.0283 FRA -.7142 FC3 -.1335 BSP 10872
BDE 3.1189 BRA 3.8192 BC3 .3853 FSP -236
                                                                                                                       LSA 2013.3 MSA 263.0 SSA
                                                                                                                                                             2.2
                                                                                                                       EL1 1915.4 EL2 238.1 ALF
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                                                                                                                                 ARRIVAL DATE DEC 12 1967
                                                                       FLIGHT TIME 130.00
LAUNCH DATE AUG 4 1967
                                                                       OISTANCE 392.793
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 27.060 GAL -9.39 AZL 104.51 HCA 192.54 SMA 130.57 ECC .22874 INC14.5107 V1 29.352 RP 107.49 LAP 3.12 LOP 143.10 VP 38.117 GAP 8.48 AZP 75.82 TAL 216.11 TAP 48.64 RCA 100.70 APO 160.44 V2 35.254 RC 138.949 GL -50.82 GP 55.43 ZAL 118.94 ZAP 123.22 ETS 72.79 ZAE 108.14 ETE 152.92 ZAC 87.71 ETC 22.97 CLP-164.90
   PLANETOCENTRIC CONIC
    C3 74.474 VHL 8.630 OLA -42.20 RAL 147.37 RAD 6569.4 VEL 13.994 PTH 2.55 VHP 10.173 OPA 59.73 RAP 198.26 ECC 2.2257
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.31 2 49 29 1879.15 15.21 37.69 39.91 129.85 3 20 49 1279.2 20.23 31.57
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                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 3662.1 SGR 497.7 SC3 90.0
RRT .5301 RRF .2057 RTF .9322
SGB 3695.8 R23 -.3479 R13 .9293
SGI 3671.7 SG2 420.9 THA 4.18
                                                                                                                      ST 1806.2 SR 266.4 SS 592.7

CRT -.4943 CRS .7017 CST -.9662

LSA 1900.4 MSA 270.2 SSA 3.1
    TDE-2.3400 TRA-3.4238 TC3 -.7290 BAU .7259
RDE .3484 RRA -.4912 RC3 .0116 FAU .02707
FDE -.9775 FRA -.6785 FC3 -.3147 BSP 11306
    BOE 2.3658 BRA 3.4589 BC3 .7291 FSP -288
                                                                                                                       EL1 1811.1 EL2 230.9 ALF 175.76
                                                                        FLIGHT TIME 132.00
                                                                                                                                  ARRIVAL DATE DEC 14 1967
LAUNCH DATE AUG 4 1967
                                                                       DISTANCE 398.542
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 26.976 GAL -9.03 AZL 101.85 MCA 195.72 SMA 129.99 ECC .22815 INC11.8485 VI 29.352 MP 107.50 LAP 3.19 LOP 146.35 VP 38.054 GAP 8.69 AZP 78.58 TAL 214.42 TAP 50.14 RCA 100.33 APO 159.64 VZ 35.251 RC 141.095 GL -46.64 GP 48.37 ZAL 122.06 ZAP 129.38 ETS 67.70 ZAE 113.27 ETE 151.90 ZAC 86.99 ETC 18.40 CLP-162.74
   PLANETOCENTRIC CONIC
    C3 56.614 VHL 7.524 DLA -38.39 RAL 149.72 RAD 6569.0 VEL 13.341 PTH
                                                                                                 2.44 WHP 8.960 DPA 52.26 RAP 194.24 ECC 1.9317
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 62.91 3 24 17 1741.92 16.64 27.17 37.54 125.11 3 53 19 1141.9 21.12 20.58
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125.11 11 16 9
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                     9 40 40 5848.49
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3773.0 SGR 396.3 SG3 103.7
RRT .1986 RRF -.1913 RTF .9102
SG8 3793.7 R23 -.3816 R13 .9094
SG1 3773.8 SG2 388.3 THA 1.21
                                                                                                                      ST 1722.2 SR 301.0 SS 571.1
CRT -.6721 CRS .8697 CST -.9499
LSA 1818.6 MSA 274.3 SSA 4.1
    TOE-1.9053 TRA-3.1788 TC3-1.0699 BAU
                                                      .8103
   ROE .3815 RRA -.2708 RC3 .0369 FAU .03246
FOE -.9381 FRA -.6269 FC3 -.4964 BSP 11661
BDE 1.9431 BRA 3.1903 BC3 1.0706 FSP -332
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ELI 1734.2 EL2 221.3 ALF 173.19

ARRIVAL DATE DEC 16 1967

FLIGHT TIME 134,00 LAUNCH DATE AUG 4 1967 DISTANCE 404.304 HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 26.893 GAL -8.66 AZL 100.07 MCA 198.92 SMA 129.42 ECC .22775 INCIO.0671 VI 29.352 RP 107.51 LAP 3.25 LOP 149.60 VP 37.992 GAP 8.89 AZP 80.47 TAL 212.73 TAP 51.65 RCA 99.94 APO 158.90 V2 35.247 RC 143.232 GL -43.14 GP 42.50 ZAL 124.11 ZAP 134.57 ETS 64.38 ZAE 117.06 ETE 152.72 ZAC 86.11 ETC 15.67 CLP-162.12 PLANETOCENTRIC CONIC C3 46.199 VHL 6.797 OLA -35.49 RAL 152.20 RAD 6568.7 VEL 12.945 PTH 2.36 VHP 8.263 OPA 45.92 RAP 192.30 ECC 1.7603 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.65 3 59 4 1618.13 17.35 17.64 36.20 121.46 4 26 2 1018.1 21.38 10.73 121.46 4 26 2 121.45 11 3 32 121.45 4 26 2 121.45 11 3 32 121.45 11 3 32 121.46 4 26 2 121.45 11 3 32 271.09 5871.22 1618.13 36.21 5271.2 21.40 278.00 9 25 41 17.36 112.35 1018.1 21.38 10.73 36.20 67.65 3 59 4 17.35 17.64 5271.2 21.40 271.09 9 25 41 5871.22 3 59 4 1618.13 9 25 41 5871.22 36.21 17.36 278.00 112.35 10.73 1018.1 67.65 17.35 17.64 36.20 271.09 5271.2 21.40 17.36 112.35 278.00 36.21 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3871.1 SCR 360.5 SC3 114.5 RRT -.0007 RRF -.3967 RTF .8939 SCB 3887.9 R23 .3960 R13 -.8939 SCI 3871.1 SC2 360.5 THA 180.00 ST 1660.2 SR 309.2 SS 553.1 CRT -.7212 CRS .9194 CST -.9354 LSA 1755.3 MSA 277.0 SSA 5.1 TDE-1.6359 TRA-2.9707 TC3-1.4004 BAU .8655 RDE .3612 RRA -.1736 RC3 .0517 FAU .03616 FDE -.8947 FRA -.5634 FC3 -.6777 BSP 11977 EL1 1675.4 EL2 212.3 ALF 172.22 BDE 1.6754 BRA 2.9758 BC3 1.4014 FSP -367 APRIVAL DATE DEC 18 1967 FLIGHT TIME 136.00 LAUNCH DATE AUG 4 1967 HELIOCENTRIC CONIC DISTANCE 410.068 RL 151.79 LAL -.00 LOL 310.95 VL 26.811 GAL -8.29 AZL 98.79 MCA 202.14 SMA 128.87 ECC .22752 INC 8.7867 VI 29.352 RP 107.53 LAP 3.30 LOP 192.85 VP 37.929 GAP 9.10 AZP 81.85 TAL 211.03 TAP 53.16 RCA 99.55 APO 158.19 V2 35.243 RC 145.356 GL -40.22 GP 37.66 ZAL 125.30 ZAP 138.91 ETS 61.91 ZAE 119.88 ETE 154.21 ZAC 84.99 ETC 13.78 CLP-162.18 PLANETOCENTRIC CONIC C3 39.386 WHE 6.276 DLA -33.29 RAL 154.70 RAD 6568.5 VEL 12.679 PTH 2.30 VHP 7.846 DPA 40.53 RAP 191.53 ECC 1.6482
LNCH AZMTH LNCH TIME, L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1504.60 35.60 118.67 4 58 13 904.6 21.39 4 33 8 17.70 8.96 71.71 4 58 13 9 21 47 16.3 21.41 118.66 9 11 30 616.32 17.72 302.90 35.61 118.67 1.84 4 5A 13 904.6 21.39 71.71 4 33 6 1504.60 17.70 8.96 35.60 9 21 47 8 35 46 16.3 21.41 9 11 30 616.32 17.72 302.90 35.61 118.66 108.29 15.99 304.23 6 23 O 765.14 11.60 310.64 32.01 122.32 165.1 11 55 41 27.02 259.93 267.64 5091.8 10 20 49 5691.61 38.92 115.28 23.82 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3961.9 SCR 340.3 SC3 122.4 RRT -.1045 RRF -.4863 RTF .8813 SCB 3976.5 R23 .3957 R13 -.8816 ST 1613.5 SR 308.4 SS 535.6 CRT -.7427 CRS .9436 CST -.9223 LSA 1705.2 MSA 278.5 SSA 6.3 .9059 TOE-1.4550 TRA-2.7881 TC3-1.7197 BAU RDE .3349 RRA -.1227 RC3 .0527 FAU .03841 FDE -.8466 FRA -.4912 FC3 -.8442 BSP 12233 ELI 1629.9 EL2 204.4 ALF 171.79 SG1 3962.1 SG2 338.4 THA 179.48 BOE 1.4931 BRA 2.7908 BC3 1.7205 FSP -390 ARRIVAL DATE DEC 20 1967 LAUNCH DATE AUG 4 1967 FLIGHT TIME 138.00 DISTANCE 415.830 RL 151.79 LAL -.00 LOL 310.95 VL 26.730 GAL -7.91 AZL 97.82 MCA 205.36 SMA 128.33 ECC .22745 INC 7.8175 V1 29.352 RP 107.54 LAP 3.34 LOP 156.10 VP 37.867 GAP 9.31 AZP 82.93 TAL 209.32 TAP 54.68 RCA 99.14 APO 157.51 V2 35.237 RC 147.469 GL -37.78 GP 33.66 ZAL 125.82 ZAP 142.57 ETS 59.94 ZAE 122.00 ETE 155.89 ZAC 83.67 ETC 12.37 CLP-162.57 PLANETOCENTRIC CONIC C3 34.547 VHL 5.878 OLA -31.65 RAL 157.20 RAD 6568.4 VEL 12.487 PTH 2.26 VHP 7.592 DPA 35.91 RAP 191.48 ECC 1.5686 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
75.25 5 6 19 1399.41 17.92 1.03 35.54 116.54 5 29 38 799.4 21.33 353.77 116.54 5 29 38 116.53 9 9 13 8 58 17 655.27 17.93 306.00 35.55 104.77 5 29 38 9 9 13 8 7 11 353.77 799.4 21.33 116.54 1399.41 17.92 1.03 35.54 75.23 5 6 19 55.3 298.73 116.53 17.93 306.00 35.55 8 58 17 655.27 104.77 8 58 17 655.27 7 52 52 858.93 11 10 55 5531.79 258.9 309.47 123.27 8.34 315.90 29.90 110.00 110.38 12 43 7 4931.8 30.57 248.84 28.06 257.14 40.32 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1582.4 SR 307.2 SS 521.1 SGT 4054.3 SGR 327.3 SG3 128.3-RRT -.1640 RRF -.5213 RTF .8719 SG8 4067.5 R23 .3826 R13 -.8723 TOE-1.3321 TRA-2.6243 TC3-2.0346 BAU .9400 CRT -.7590 CRS .9594 CST -.9113 LSA 1671.0 MSA 279.0 SSA 7.5 RDE .3135 RRA -.0904 RC3 .0469 FAU .03967 FDE -.8007 FRA -.4184 FC3 -.9942 BSP 12534 EL1 1599.8 EL2 197.8 ALF 171.49 SG1 4054.7 SG2 322.8 THA 179.24 BOE 1.3685 BRA 2.6259 BC3 2.0352 FSP -408 ARRIVAL DATE DEC 22 1967 LAUNCH DATE AUG 4 1967 FLIGHT TIME 140.00 **DISTANCE 421.588** HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 26.650 GAL -7.52 AZL 97.05 HCA 208.58 SMA 127.80 ECC .22754 INC 7.0543 VI 29.352 RP 107.56 LAP 3.37 LOP 159.35 VP 37.805 GAP 9.53 AZP 83.80 TAL 207.60 TAP 56.19 RCA 98.72 APO 156.88 V2 35.231 RC 149.570 GL -35.71 GP 30.34 ZAL 125.79 ZAP 145.68 ETS 58.33 ZAE 123.60 ETE 157.55 ZAC 82.16 ETC 11.24 CLP-163.13 PLANETOCENTRIC CONIC C3 30.897 VHL 5.558 DLA -30.44 RAL 159.72 RAD 6568.2 VEL 12.340 PTH 2.23 VHP 7.439 DPA 31.90 RAP 191.93 ECC 1.5085 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.33 5 38 25 1301.76 18.09 353.78 35.92 114.91 6 0 6 701.8 21.30 346.41 8 57 56 96.7 301.83 114.90 8 46 20 696.65 18.11 309.20 35.93 6 0 6 701.8 346.41 114.91 5 38 25 1301.76 18.09 353.78 35.92 78.33 8 57 56 7 56 58 96.7 21.31 301.83 696.65 101.67 8 46 20 18.11 309.20 35.93 114.90 311.67 123.56 110.00 7 41 58 899.24 6.83 318.04 29.48 13 12 32 4835.2 241.78 11 41 56 5435.21 30.16 250.41 40.96 106.90 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY ST 1566.2 SR 308.0 SS 510.5 CRT - .7763 CRS .9714 CST - .9030 LSA 1652.5 MSA 278.4 SSA 8.8 EL1 1584.6 E12 101.0 CT DIFFERENTIAL CORRECTIONS SGT 4150.3 SGR 320.1 SG3 132.7 RRT - 2022 RRF - 5283 RTF .8652 SGB 4162.6 R23 .3597 R13 -.8657 SGI 4150.8 SG2 313.4 THA 179.10 TOE-1.2501 TRA-2.4722 TC3-2.3505 BAU .9710 ROE .2979 RRA -.0669 RC3 .0377 FAU .04027 FDE -.7598 FRA -.3479 FC3-1.1283 BSP 12895 EL1 1584.6 EL2 191.9 ALF 171.19 BOE 1.2851 BRA 2.4731 BC3 2.3508 FSP -425

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FLIGHT TIME 142.00
                                                                                                                                        ARRIVAL DATE DEC 24 1967
LAUNCH DATE AUG 4 1967
                                                                           DISTANCE 427.337
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 26.571 GAL -7.13 AZL 96.43 MCA 211.81 SMA 127.28 ECC .22779 INC 6.4345 V1 29.352 RP 107.58 LAP 3.39 LOP 162.60 VP 37.744 GAP 9.74 AZP 84.53 TAL 205.88 TAP 57.69 RCA 98.29 APO 156.28 V2 35.225 RC 151.657 GL -33.93 GP 27.57 ZAL 125.30 ZAP 148.35 ETS 57.02 ZAE 124.83 ETE 159.11 ZAC 80.51 ETC 10.32 CLP-163.80
   PLANETOCENTRIC CONIC
    C3 28.018 VHL 5.293 DLA -29.59 RAL 162.29 RAD 6568.1 VEL 12.223 PTH 2.20 VHP 7.354 DPA 28.39 RAP 192.71 ECC 1.4611
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
81.05 6 9 15 1211.64 18.29 347.16 36.67 113.67 6 29 27 611.6 21.34 339.71
                                   737.81
                                                                                                 113.66 8 48 18
116.07 8 21 52
111.30 10 57 58
123.69 7 54 45
104.28 13 34 27
                                                                                    36.67
                                                                                                                                   137.8
                                                                                                                                                                304.91
                      8 36 O
                                                     18.31
                                                                   312.36
                                                                                                                                                  21.35
        98.95
       100.00
                      8 8 4
                                     827.18
                                                     15.17
                                                                   317.47
                                                                                    35.15
                                                                                                                                  227.2
                                                                                                                                                  18.55
                                                                                                                                                                310.31
                      9 19 52 5885.55
                                                     21.49
                                                                   281.25
                                                                                    38.07
                                                                                                                                 5285.6
                                                                                                                                                  24.19
                                                                                                                                                                273.50
       100.00
       110.00
                      7 39 27
                                     917.40
                                                       6.15
                                                                   319.00
                                                                                   29.89
                                                                                                                                  317.4
                                                                                                                                                  10.53
                                                                                                                                                                312.65
                   12 4 59 5368.09
       110.00
                                                     31.39
                                                                   245.57
                                                                                    41.61
                                                                                                                                 4768.1
                                                                                                                                                 33.03
                                                                                                                                                                236.73
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SGT 4261.8 SGR 318.7 SG3 136.9

RRT -.2360 RRF -.5244 RTF .8623

SG8 4273.7 R23 .3291 R13 -.8627

SG1 4262.4 SG2 309.7 THA 178.98
                                                                                                                             ST 1569.3 SR 312.3 SS 506.4

CRT -.7977 CRS .9808 CST -.8986

LSA 1655.3 MSA 276.6 SSA 10.0
    TDE-1.2035 TRA-2.3320 TC3-2.6783 BAU 3.0033
    ROE .2881 RRA -.0472 RC3 .0283 FAU .04058
FOE -.7287 FRA -.2855 FC3-1.2539 BSP 13441
                                                                                                                             ELI 1589.2 ELZ 186.0 ALF 170.85
    BOE 1.2375 BRA 2.3325 BC3 2.6785 FSP
                                                        -451
                                                                            FLIGHT TIME 144.00
                                                                                                                                         ARRIVAL DATE DEC 26 1967
LAUNCH DATE AUG 4 1967
  HELIOCENTRIC CONIC
                                                                           DISTANCE 433.083
   RL 151.79 LAL -.00 LOL 310.95 VL 26.493 GAL -6.72 AZL 95.92 MCA 215.04 SMA 126.78 ECC .22818 INC 5.9182 V1 29.352 RP 107.60 LAP 3.39 LOP 165.85 VP 37.682 GAP 9.95 AZP 85.15 TAL 204.14 TAP 59.18 RCA 97.85 APO 155.71 V2 35.217 RC 153.730 GL -32.37 GP 25.23 ZAL 124.41 ZAP 150.66 ETS 55.98 ZAE 125.79 ETE 160.52 ZAC 78.73 ETC 9.55 CLP-164.51
   PLANETOCENTRIC CONIC
    C3 25.671 VHL 5.067 DLA -29.02 RAL 164.94 RAD 6568.0 VEL 12.126 PTH 2.17 VHP 7.315 DPA 25.27 RAP 193.75 ECC 1.4225
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                112.73 6 57 3
112.72 8 41 6
                                                                               37.73
                                                                                                                              530.9 21.46
        83.37 6 38 12 1130.88
                                                    18.54
                                                                   341.31
                                                                                                                                                                333.80
                                   775.12
        96.63
                     8 28 11
                                                     18.55
                                                                   315.23
                                                                                    37.73
                                                                                                                                   175.1
                                                                                                                                                  21.47
                                                                                                                                                                 307.71
                    7 53 55
       100.00
                                     885.23
                                                     13.40
                                                                   320.88
                                                                                    35.26
                                                                                                   116.97
                                                                                                               8 8 41
                                                                                                                                  285.2
                                                                                                                                                  16.92
                                                                                                                                                                 313.84
                                                                                                  9 55 9
                                  5784.04
                                                    23.85
                                                                   274.64
                                                                                    39.87
                                                                                                                                 5184.0
                                                                                                                                                  26.16
                                                                                                                                                                266.60
       100.00
                                                                                30.85
                     7 42 14
                                     922.02
                                                       5.97
                                                                   319.24
                                                                                                                                  322.0
                                                                                                                                                  10.36
                                                                                                                                                                 312.90
       110.00.
                                                                                                                              4720.0
                   12 23 19
                                  5320.02
                                                     32.15
                                                                   242.02
                                                                                    42.47
                                                                                                                                                  33.50
                                                                                                                                                                233.06
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 1535.7 SR 312.1 SS 482.0
CRT.-.8116 CRS .9883 CST -.8887
    TOE-1.1372 TRA-2.1511 TC3-2.9473 BAU 1.0115
                                                                       SGT 4279.3 SGR 315.5 SG3 134.2
                                                                      RRT -.2182 RRF -.4819 RTF .8499
SG8 4290.9 R23 .3028 R13 -.8503
SG1 4279.8 SG2 307.9 THA 179.07
    ROE .2757 ARA -.0370 RC3 .0088 FAU .03901
FOE -.6702 FRA -.1932 FC3-1.3156 89P 12965
BOE 1.1201 BRA 2.1515 BC3 2.9474 FSP -408
                                                                                                                             LSA 1616.7 MSA 272.3 SSA 11.4
                                                                                                                             EL1 1556.7 EL2 179.9 ALF 170.51
                                                                           FLIGHT TIME 146.00
                                                                                                                                        ARRIVAL DATE DEC 28 1967
LAUNCH DATE AUG 4 1967
                                                                           DISTANCE 438.816
   DISTANCE 438.816

RL 151.79 LAL -.00 LOL 310.95 VL 26.417 GAL -6.31 AZL 95.48 HCA 218.27 SMA 126.30 ECC .22875 INC 5.4790 V1 29.352

RP 107.63 LAP 3.39 LOP 169.09 VP 37.621 GAP 10.17 AZP 85.69 TAL 202.40 TAP 60.67 RCA 97.41 APO 155.19 V2 35.210

RC 155.789 GL -30.98 GP 23.24 TAL 123.17 ZAP 152.70 ETS 55.17 ZAE 126.55 ETE 161.80 ZAC 76.85 ETC 8.90 CLP-165.26
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23,716 VHL 4,870 DLA -28.68 RAL 167.68 RAD 6568.0 VEL 12.046 PTH
                                                                                                      2.15 VHP 7.309 OPA 22.47 RAP 194.99 ECC 1.3903
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 112.04 7 21 57
112.03 8 37 26
117.19 8 9 12
106.98 11 52 16
123.69 8 4 4
100.85 14 6 45
                                                                                                                                               21.67
                                                                                                                                 462.7
                                                                                  39.09
                                                                  336.42
        85.23
                     7 4 14 1062.72
                                                     18.84
                                   804.34
                                                                   317.50
                                                                                                                                  204.3
                                                                                                                                                  21.67
                                                                                                                                                                309.94
                     8 24 2
                                                                                    39.09
        94.77
                                                     18.85
                                                                                                                                   300.6
                                                                                                                                                  16.47
       100.00
                     7 54 11
                                     900.55
                                                     12.93
                                                                   321.77
                                                                                    36.28
                                                                                                                                 5129.8
                                                                                                                                                  27.06
                    10 16 46 5729.79
                                                                   271.00
                                                                                    41.43
       100.00
                                                     24.98
                                                                                   32.24
                                                                                                                                  317.6
                                                                                                                                                 10.53
       110 00
                     7 48 47
                                    917.57
                                                      6.14
                                                                   319.01
                   12 38 40 5285.53
                                                                                                                                 4685.5
                                                                                                                                                  33.77
       110.00
                                                                                   43.59
                                                     32.62
                                                                   239.44
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4376.5 SGR 321.1 SG3 136.1
RRT -.2384 RRF -.4641 RTF .8484
SGB 4388.3 R23 .2686 R13 -.8488
SGI 4377.2 SG2 311.8 THA 178.99
                                                                                                                             ST 1553.2 SR 319.8 SS 480.8
CRT -.8369 CRS .9936 CST -.8887
LSA 1635.3 MSA 267.2 SSA 12.7
    TDE-1.1251 TRA-2.0054 TC3-3.2740 BAU 1.0381
    RDE .2717 RRA -.0230 RC3 -.0016 FAU .03851
FDE -.6447 FRA -.1329 FC3-1.4056 BSP 13427
BDE 1.1575 BRA 2.0055 BC3 3.2740 FSP -422
                                                                                                                             EL1 1576.3 EL2 172.5 ALF 170.10
                                                                                                                                        ARRIVAL DATE DEC 30 1967
LAUNCH DATE AUG 4 1967
                                                                           FLIGHT TIME 148.00
                                                                          DISTANCE 444.539
    RL 151.79 LAL -.00 LOL 310.95 VL 26.342 GAL -5.89 AZL 95.10 MCA 221.50 SMA 125.82 ECC .22948 INC 5.0986 V1 29.352 RP 107.65 LAP 3.38 LOP 172.34 VP 37.560 GAP 10.38 AZP 86.18 TAL 200.65 TAP 62.15 RCA 96.95 APO 154.69 V2 35.201 RC 157.834 GL -29.72 GP 21.53 ZAL 121.62 ZAP 154.51 ETS 54.58 ZAE 127.16 ETE 162.94 ZAC 74.88 ETC 8.34 CLP-166.02
   PLANETOCENTRIC CONIC
    C3 22.063 VHL 4.697 DLA -28.54 RAL 170.55 RAD 6567.9 VEL 11.977 PTH 2.13 VHP 7.327 DPA 19.93 RAP 196.38 ECC 1.3631
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
86.26 7 24 10 1017.61 19.19 333.26 A0.74 111.44 7 41 R A17.6 21 A5 328.66
                                                                                                 111.54
                                                                                  40.74
                                                                                                                7 41 8
                                                                                                                                  417.6
        86.26
                      7 24 10 1017.61
                                                     19.19
                                                                                                                8 40 31
                                                                                    40.74
                                                                                                  111.75
117.13 8 16 5.
106.03 12 7 12
123.62 8 13 30
99.82 14 19 35
                                                                                                   111.53
                                                                                                                                   214.3
                                                                                                                                                  21.96
        93.74
                     8 26 57
                                    814.28
                                                     19.21
                                                                   318.36
                                                                                    37.86
                                                                                                                                   296.2
                                                                                                                                                  16.60
       100.00
                      8 1 35
                                     896.15
                                                     13.07
                                                                   321.51
                                                                                                                                 5099.0
                                                                                                                                                  27.52
                                                                                    43.08
       100.00
                    10 32 13
                                   5699.01
                                                     25.57
                                                                   268.91
                                                                                                                                   306.2
                                                                                                                                                  10.94
                                                                                                                                                                312.05
                                                       6.57
                                                                                    34.00
                     7 58 24
       110.00
                                    906.17
                                                                   318.41
                                                                                                                               4661.8
                                                                                                                                                  33.91
                    12 51 54 5261.76
                                                                                    45.01
       110.00
                                                     32.91
                                                                   237.65
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4461.8 SGR 328.7 SG3 136.8
RRT -.2520 RRF -.4428 RTF .8469
SGB 4473.9 R23 .2359 R13 -.8472
SG1 4462.5 SG2 318.1 THA 178.93
                                                                                                                            ST 1574.9 SR 328.2 SS 479.2
CRT -.8621 CRS .9969 CST -.8905
LSA 1658.3 MSA 260.2 SSA 14.1
    TOE-1.1226 TRA-1.8518 TC3-3.5973 BAU 1.0611
    ROE .2690 RRA -.0115 RC3 -.0121 FAU .03764
FOE -.6192 FRA -.0723 FC3-1.4768 BSP 13750
BOE 1.1543 BRA 1.8519 BC3 3.5973 FSP -427
                                                                                                                             ELI 1600.4 EL2 163.6 ALF 169.71
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ARRIVAL DATE JAN 1 1968 FLIGHT TIME 150.00 LAUNCH DATE AUG 4 1967 **DISTANCE 450.251** HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 26.268 GAL -5.45 A7L 94.76 MCA 224.73 SMA 125.36 ECC .23039 INC 4.7640 V1 29.352
RP 107.68 LAP 3.35 LOP 175.58 VP 37.500 GAP 10.61 A7P 86.61 TAL 198.90 TAP 63.63 RCA 96.48 APO 154.24 V2 35.192
RC 159.863 GL -28.55 GP 20.06 ZAL 119.78 ZAP 156.13 ETS 54.21 ZAE 127.66 ETE 163.95 ZAC 72.85 ETC 7.86 CLP-166.79 PLANETOCENTRIC CONIC C3 20.652 VHL 4.544 DLA -28.56 RAL 173.55 RAD 6567.8 VEL 11.918 PTH 2.12 VHP 7.365 DPA 17.59 RAP 197.89 ECC 1.3399 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 42.68 111.20 7 51 36 406.0 22.31 324.94 332.58 86.10 7 34 50 1006.01 19.60 8 53 30 8 28 46 794.07 194.1 309.42 317.07 42.69 111.19 22.32 19.61 93.90 8 40 16 116.87 8 28 46 278.4 313.43 320.48 39.90 100.00 8 14 8 878.42 13.61 12 18 24 8 25 28 14 31 5 5084.9 27.72 259.65 105.59 267.94 44.93 100.00 10 43 39 5684.93 25.83 289.4 311.13 123.51 110.00 317.52 8 10 38 889.39 7.20 36.11 99.17 4646.7 227.39 46.75 110.00 13 3 38 5246.72 33.08 236.51 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGE 4551.7 R23 .2057 R13 -.8458 SGE 4540.0 SG2 326.0 THA 178.87 ST 1603.0 SR 337.4 SS 478.1 CRT -.8871 CRS .9983 CST -.8939 LSA 1687.8 MSA 251.2 SSA 15.6 TDE-1.1294 TRA-1.6912 TC3-3.9182 BAU 1.0818 RDE .2676 RRA -.0020 RC3 -.0218 FAU .03654 FOE -.5950 FRA -.0125 FC3-1.5319 BSP 14019 BDE 1.1607 BRA 1.6912 BC3 3.9183 FSP -427 EL1 1630.9 EL2 153.1 ALF 169.33 ARRIVAL DATE JAN 3 1968 FLIGHT TIME 152.00 LAUNCH DATE AUG 4 1967 HELIOGENTRIC CONIC **DISTANCE 455.952** RL 151.79 LAL -.00 LOL 310.95 VL 26.195 GAL -5.01 AZL 94.47 MCA 227.95 SMA 124.91 ECC .23148 INC 4.4655 VI 29.352
RP- 107.71 LAP 3.31 LOP 178.82 VP 37.440 GAP 10.83 AZP 87.01 TAL 197.14 TAP 65.09 RCA 95.99 APO 153.82 V2 35.183
RC 161.876 GL -27.43 CP 18.78 ZAL 117.66 ZAP 157.60 ETS 54.04 ZAE 128.08 ETE 164.84 ZAC 70.75 ETC 7.45 CLP-167.56 PLANETOCENTRIC CONIC C3 19.446 VHL 4.410 DLA -28.71 RAL 176.72 RAD 6567.8 VEL 11.867 PTH 2.11 VHP 7.419 DPA 15.43 RAP 199.50 ECC 1.3200 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
20,05 333,80 44,92 110.99 7 55 40 420.1 22.73 326.12 LNCH AZMTH LNCH TIME L-I TIME 44.92 110.99 85.03 7 38 40 1020.12 20.05 333.60 9 14 13 22.74 151.3 94.97 9 1 42 751.29 20.06 .314.12 44.93 110.98 A 45 1A 249.8 17.92 311.69 100.00 8 31 8 849.79 14.49 318.80 42.36 116.44 12 26 40 5084.9 27.72 10 51 55 5684.90 25.83 267.94 46.99 105.59 100.00 8 39 41 14 41 38 309.99 8 25 13 868.40 7.99 316.40 38.56 123.35 268.4 12.32 110.00 33.16 4639.0 34.02 13 14 19 5259.05 235.93 48.81 98.83 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1639.2 SR 347.4 SS 478.2 CRT -.9110 CRS .9977 CST -.8990 SCT 4612.5 SCR 348.5 SC3 136.2 RRT -.2731 RRF -.4034 RTF .8448 SCB 4625.6 R23 .1783 R13 -.8451 TOE-1.1456 TRA-1.5241 TC3-4.2365 BAU 1.1014 ROE .2674 RRA .0060 RC3 -.0298 FAU .03534 FOE -.5731 FRA .0452 FC3-1.5732 BSP 14271 BOE 1.1764 BRA 1.5242 BC3 4.2366 FSP -426 LSA 1725.8 HSA 240.5 SSA 17.1 EL1 1669.7 EL2 140.6 ALF 168.99 SG1 4613.4 SG2 335.2 THA 178.81 ARRIVAL DATE JAN 5 1968 LAUNCH DATE AUG 4 1967 FLIGHT TIME 154.00 DISTANCE 461.639 RL 151.79 LAL -.00 LOL 310.95 VL 26.123 GAL -4.55 AZL 94.20 MCA 231.18 SMA 124.47 ECC .23276 INC 4.1962 V1 29.352 RP 107.74 LAP 3.27 LOP 182.06 VP 37.380 GAP 11.06 AZP 87.37 TAL 195.37 TAP 66.55 RCA 95.49 APO 153.44 VZ 35.172 RC 163.875 GL -26.36 GP 17.66 ZAL 115.29 ZAP 158.93 ETS 54.07 ZAE 128.43 ETE 165.63 ZAC 68.61 ETC 7.09 CLP-168.32 PLANETOCENTRIC CONIC C3 18.419 VHL 4.292 CLA -28.97 RAL 180.06 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 7.486 CPA 13.42 RAP 201.20 ECC 1.3031 LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 47.47 7 57 52 444.6 23.19 7 40 28 1044.57 20.53 335.80 110.90 83.61 9 38 16 101.3 23.20 20.55 310.63 47,47 110.88 9 26 35 701.27 96.39 9 6 5 12 32 8 210.6 19.00 309.29 316.49 45.26 115.79 100.00 8 52 35 810.61 15.66 260.62 10 57 9 5698.51 8 41 55 844.17 13 24 18 5237.72 5098.5 27.53 268.88 49.30 106.02 100.00 25.58 308.65 123.14 8 55 59 98.77 14 51 36 244.2 13.20 315.11 41.35 123.14 110.00 8.89 4637.7 34.03 51.21 110.00 33.17 235.82 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS ST 1679.8 SR 357.9 55 477.8 CRT -.9329 CRS .9952 CST -.9048 LSA 1768.0 MSA 228.2 SSA 18.7 SGT 4676.2 SGR 359.7 SG3 135.1 RRT -.2817 RRF -.3867 RTF .8441 SGB 4690.0 R23 .1538 R13 -.8443 TOE-1.1670 TRA-1.3480 TC3-4.5435 BAU 1.1188 ROE .2680 RRA .0123 RC3 -.0365 FAU .03398 FOE -.5513 FRA .1022 FC3-1.5974 BSP 14457 EL1 1712.9 EL2 126.4 ALF 168.70 SG1 4677.3 SG2 345.0 THA 178.75 BOE 1.1974 BRA 1.3480 BC3 4.5436 FSP -421 ARRIVAL DATE JAN 7 1968 FLIGHT TIME 156.00 LAUNCH DATE AUG 4 1967 DISTANCE 467.312 HELIOCENTRIC CONIC RL 151.79 LAL -.00 LOL 310.95 VL 26.052 GAL -4.08 A7L 93.95 MCA 234.40 SMA 124.04 ECC .23424 INC 3.9503 V1 29.352 RP 107.78 LAP 3.21 LOP 185.29 VP 37,321 GAP 11.29 A7P 87.70 TAL 193.60 TAP 68.00 RCA 94.98 APO 153.09 V2 35.162 RC 165.860 GL -25.29 GP 16.67 ZAL 112.67 ZAP 160.15 ETS 54.29 ZAE 128.73 ETE 166.33 ZAC 66.42 ETC 6.79 CLP-169.08 PLANETOCENTRIC CONIC C3 17.555 VHL 4.190 DLA -29.31 RAL 183.60 RAD 6567.7 VEL 11.787 PTH 2.08 VHP 7.564 DPA 11.54 RAP 202.97 ECC 1.2889 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 110.89 8 0 30 110.87 10 3 28 471.7 7 42 39 1071.70 21.03 338.00 50.33 82.12 299.44 51.7 23.70 21.05 307.19 50.34 97.88 651.75 158.7 9 31 52 20.38 758.74 17.17 313.36 48.61 114.85 100.00 9 19 14 262.70 5128.0 27.09 106.93 12 34 10 10 58 42 5727.98 25.01 270.88 51.81 110.00 9 0 31 817.64 9.88 313.69 44.48 122.89 9 14 9 217.6 14.14 98.95 15 1 16 4641.8 13 33 54 5241.84 236.14 53.95 34.01 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4745.0 SGR 371.7 SG3 134.3 RRT - .2929 RRF - .3750 RTF .8452 SGB 4759.5 R23 .1318 R13 -.8454 SG1 4746.3 SG2 355.3 THA 178.68 ST 1731.1 SR 369.2 SS 479.2 CRT -.9523 CRS .9909 CST -.9119 TOE-1.1972 TRA-1.1675 TC3-4.8450 BAU 1.1371 RDE .2899 RRA .0173 RC3 -.0404 FAU .03269 FDE -.5327 FRA .1551 FC3-1.6121 BSP 14706 LSA 1821.0 MSA 214.9 SSA 20.4 EL1 1766.6 EL2 110.4 ALF 168.47

BOE 1.2272 BRA 1.1676 BC3 4.8451 FSP -420

ARRIVAL DATE JAN 9 1968

LAUNCH DATE AUG 4 1967

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DISTANCE 472.969
   HELIOCENTRIC CONIC
   RL 151.79 LAL -,00 LOL 310.95 VL 25.983 GAL -3.60 AZL 93.72 MCA 237.63 SMA 123.62 ECC .23593 INC 3.7236 V1 29.352 RP 107.81 LAP 3.14 LOP 188.52 VP 37.262 GAP 11.53 AZP 88.00 TAL 191.82 TAP 69.45 RCA 94.45 APO 152.78 V2 35.151 RC 167.829 GL -24.23 GP 15.81 ZAL 109.82 ZAP 161.28 ETS 54.72 ZAE 128.99 ETE 166.96 ZAC 64.20 ETC 6.53 CLP-169.83
   PLANETOCENTRIC CONIC
    C3 16.844 VHL 4.104 DLA -29.69 RAL 187.33 RAD 6567.7 VEL 11.757 PTH 2.08 VHP 7.654 DPA 9.76 RAP 204.81 ECC 1.2772 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       110.00
                                                         33.03
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                             SGT 4808.9 SGR 383.7 SG3 133.1
RRT -.3038 RRF -.3660 RTF .8468
SGB 4824.2 R23 .1126 R13 -.8470
                                                                                                                                       ST 1786.6 SR 380.8 SS 480.2

CRT -.9683 CRS .9849 CST -.9190

LSA 1877.9 MSA 201.0 SSA 22.2
    TOE-1.2310 TRA -.9785 "C3-5.1254 BAU 1.1542
    RDE .2727 RRA .0208 RC3 -.0423 FAU .03134
FDE -.5144 FRA .2066 FC3-1.6108 BSP 14935
                                                                                                                                        EL1 1824.4 EL2 93.1 ALF 168.31
                                                                             SG1 4810.3 SG2 365.5 THA 178.60
    BDE 1.2609 BRA .9787 BC3 5.1256 FSP -417
                                                                                  FLIGHT TIME 160.00
                                                                                                                                                    ARRIVAL DATE JAN 11 1968
   DISTANCE 478.609

RL 151.79 LAL -.00 LOL 310.95 VL 25.914 GAL -3.10 AZL 93.51 HCA 240.85 SMA 123.21 ECC .23783 INC 3.5127 VI 29.352

RP 107.84 LAP 3.07 LOP 191.76 VP 37.204 GAP 11.78 AZP 88.29 TAL 190.04 TAP 70.89 RCA 93.91 APO 152.51 VZ 35.139

RC 169.783 GL -23.14 GP 15.03 ZAL 106.75 ZAP 162.31 ETS 55.36 ZAE 129.23 ETE 167.51 ZAC 61.94 ETC 6.32 CLP-170.58
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.32 7 51 40 1123.42 22.01 342.24 57.05 111.08 8 10 23 523.4 24.68 334.44 100.68 10 44 47 5853.40 22.02 279.09 57.06 111.06 12 22 21 5253.4 24.69 271.29
    C3 16.281 VHL 4.035 DLA -30.11 RAL 191.27 RAD 6567.7 VEL 11.733 PTH
                                                                                                                2.07 WHR 7.753 DPA
                                                                                                                                                 8.08 RAP 206.70 ECC 1.2679
                    7 51 40 1123.42
10 44 47 5853.40
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                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 1843,3 SR 392.6 SS 479.9

CRT - 9808 CRS .9773 CST - 9257

LSA 1935.6 MSA 187.2 SSA 24.1

EL1 1883.2 EL2 75.0 ALF 168.18
                                                                            SGT 4869.4 SGR 395.6 SG3 131.8
RRT -.3144 RRF -.3595 RTF .8490
SGB 4885.5 RZ3 .0958 RI3 -.8492
SGI 4871.0 SG2 375.5 THA 178.53
    TOE-1.2663 TRA -.7811 TC3-5.3779 BAU 1.1706
    RDE .2764 RRA .0226 RC3 -.0421 FAU .02997
    FOE - 4958 FRA .2568 FC3-1.5938 83P 15153
BOE 1.2961 8RA .7814 BC3 5.3780 FSP -414
                                                                                                                                                    ARRIVAL DATE JAN 13 1968
                                                                                  FLIGHT TIME 162.00
LAUNCH DATE AUG 4 1967
                                                                                 DISTANCE 484.231 --
    RL 151.79 LAL -.00 LOL 310.95 VL 25.847 GAL -2.59 AZL 93.31 MCA 244.07 SMA 122.81 ECC .23998 INC 3.3148 V1 29.352
RP 107.88 LAP 2.98 LOP 194.98 VP 37.146 GAP 12.03 AZP 88.55 TAL 188.25 TAP 72.33 RCA 93.34 APO 152.29 V2 35.128
RC 171.722 GL -22.01 GP 14.35 ZAL 103.48 ZAP 163.28 ETS 56.20 ZAE 129.44 ETE 168.01 ZAC 59.66 ETC 6.14 CLP-171.31
   PLANETOCENTRIC CONIC
    C3 15.864 VHL 3.983 DLA -30.52 RAL 195.41 RAD 6567.6 VEL 11.715 PTH 2.06 VHP 7.862 DPA
                                                                                                                                               6.48 RAP 208.64 ECC 1.2611
    LNCH AZHTH LNCH TIME L-I TIME INJ'LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.23 12 47 15
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       110.00
                                      5278.48
                                                          32.71
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             RT -3236 RRF -3541 RTF .8509
SGB 4935.9 R23 .0814 R13 -.8511
SGI 4920.9 SGZ 384.9 TMA 178.46
                                                                                                                                       ST 1894.4 SR 404.1 SS 476.7

CRT -.9897 CRS .9676 CST -.9311

LSA 1987.0 MSA 174.5 SSA 26.1
    TOE-1.2984 TRA -.5720 TC3-5.5855 BAU 1.1846
    RDE .2808 RRA .0226 RC3 -.0403 FAU .02853
FDE -.4753 FRA .3073 FC3-1.5570 BSP 15297
    BOE 1.3284 BRA .5724 BC3 5.5857 FSP
                                                             -408
                                                                                                                                        EL1 1936.1 EL2 56.7 ALF 168.07
                                                                                  FLIGHT TIME 164.00
                                                                                                                                                    ARRIVAL DATE JAN 15 1968
LAUNCH DATE AUG 4 1967
                                                                                  DISTANCE 489.832
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 25.781 GAL -2.06 AZL 93.13 MCA 247.29 SMA 122.43 ECC .24237 INC 3.1275 V1 29.352 RP 107.92 LAP .2.88 LOP 198.21 VP 37.088 GAP 12.29 AZP 88.79 TAL 186.47 TAP 73.76 RCA 92.75 APO 152.10 V2 35.116 RC 173.647 GL -20.85 GP 13.73 ZAL 100.04 ZAP 164.17 ETS 57.25 ZAE 129.63 ETE 168.45 ZAC 57.36 ETC 6.01 CLP-172.04
   PLANETOCENTRIC CONIC
    C3 15.594 VHL 3.949 DLA -30.90 RAL 199.73 RAD 6567.6 VEL 11.704 PTH 2.06 VHP 7.981 DPA
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.07 8 8 54 1166.07 22.81 345.77 65.08 111.44 8 28 20 566.1 25.52 337.93 102.93 11 35 4 5791.19 22.82 274.77 65.08 111.42 13 11 35 5191.2 25.53 266.93 77.07 8 8 54 1166.07 22.81 345.77 65.08 111.44 8 28 20 566.1 25.52 337.93
                                                                                                                                                4.96 RAP 210.63 ECC 1.2566
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       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 1944.5 SR 415.6 SS 472.9

CRT -.9951 CRS .9564 CST -.9363

LSA 2037.1 MSA 163.4 SSA 28.0

EL1 1988.0 EL2 40.1 ALF 167.99
                                                                             5GT 4974.2 SGR 418.0 SG3 128.6
RRT -.3345 RRF -.3524 RTF .8547
SGB 4991.7 R23 .0687 R13 -.8549
    TOE-1.3310 TRA -.3575 TC3-5.7534 BAU 1.1995
    RDE .2864 RRA .0213 RC3 -.0359 FAU .02718
    FOE -.4355 FRA .3544 FC3-1.5087 BSP 15515
BOE 1.3615 BRA .3581 BC3 5.7535 FSP -405
                                                                             SG1 4976.2 SG2 393.8 THA 178.38
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FLIGHT TIME 158.00

ARRIVAL DATE JAN 17 1968

LAUNCH DATE AUG 4 1967

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DISTANCE 495.411
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 25.715 GAL -1.51 AZL 92.95 HCA 250.50 SMA 122.05 ECC .24503 INC 2.9489 VI 29.352
RP 107.96 LAP 2.78 LOP 201.43 VP 37.031 GAP 12.57 AZP 89.02 TAL 184.68 TAP 75.18 RCA 92.14 APO 151.95 V2 35.103
RC 175.555 GL -19.64 GP 13.18 ZAL 96.44 ZAP 165.00 ETS 58.53 ZAE 129.80 ETE 168.84 ZAC 55.03 ETC 5.92 CLP-172.77
   PLANETOCENTRIC CONIC
    C3 15.477 VML 3.934 DLA -31.23 RAL 204.22 RAD 6567.6 VEL 11.699 PTH 2.06 VMP 8.110 DPA
                                                                                                                                 3.50 RAP 212.66 ECC 1.2547
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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11 58 55 5770.75
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                                                    32.26
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     RRI - .3447 RRF - .3510 RTF .8587
SGB 5042.4 R23 .0574 R13 - .8589
SGI 5026.3 SG2 401.7 THA 178.31
                                                                                                                          ST 1982.0 SR 426.5 SS 465.7
CRT -.9974 CRS .9427 CST -.9400
    TOE-1.3568 TRA -.1323 TC3-5.8638 BAU 1.2133
   ROE .2928 MRA .0182 RC3 -.0297 FAU .02583
FOE -.4334 FRA .4015 FC3-1.4451 BSP 15702
                                                                                                                          LSA 2074.1 MSA 155.2 SSA 29.6
                                                                                                                          EL1 2027.1 EL2 30.2 ALF 167.88
    BOE 1.3880 BRA .1335 BC3 5.8639 FSP -471
                                                                                                                                     ARRIVAL DATE JAN 19 1968
                                                                          FLIGHT TIME 168.00
LAUNCH DATE AUG 4 1967
                                                                        DISTANCE 500.965
  HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 25.651 GAL -.95 AZL 92.78 MCA 253.72 SMA 121.68 ECC .24797 INC 2.7775 V1 29.352 RP 107.99 LAP 2.67 LOP 204.65 VP 36.975 GAP 12.85 AZP 89.22 TAL 182.89 TAP 76.61 RCA 91.51 APO 151.85 V2 35.091 RC 177.448 GL -18.39 GP 12.88 ZAL 92.73 ZAP 165.77 ETS 60.05 ZAE 129.96 ETE 169.19 ZAC 52.69 ETC 5.87 CLP-173.48
   PLANETOCENTRIC CONIC
                                                                                                    2.06 WHP 8.249 DPA
                                                                                                                                  2.11 RAP 214.72 ECC 1.2554
    C3 15.518 WHL 3.939 DLA -31.48 RAL 208.84 RAD 6567.6 VEL 11.701 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              8 54 59
                    8 35 2 1197.10
                                                                                  74.28
                                                                                                                                597.1
                                                                                                                                              26.00
                                                                                                                                                            340.45
                                                                  348.30
                                                                                               111.86
                                                    23.25
       75.63
                                                                                                111.84 13 57 34
111.86 8 54 59
111.84 13 57 34
121.07 11 26 59
102.63 16 8 52
                                                                                                                               5158.0
                                                                                                                                               26.01
                                                                                                                                                             264.60
                                                                  272.45
                                                                                  74.29
      104.37
                   12 21 36 5757.96
                                                    23.26
                                                                                                                                597.1
                                                                                                                                               26.00
                                                                                                                                                             340.45
                                                                                  74.28
                  8 35 Z 119....
12 21 36° 5757.96
11 15 44 675.26
14 40 4 5327.79
                                                                  346.30
       75.63
                     8 35 2
                                  1197.10
                                                    23.25
                                                                                                                              5158.0
                                                                                                                                               26.01
                                                                                                                                                             264.60
                                                                  272.45
                                                                                  74.29
      104.37
                                                    23.26
                                                                                                                                 75.3
                                                                                                                                               19.03
                                                                                                                                                             299.04
                                                                  305.86
                                                                                  69.96
                                                    15.02
      110.00
                                                                                  77.36
                                                                                                                             4727.8
                                                                                                                                               33.44
                                                                                                                                                             233.65
      110.00
                                                                  242.60
                                                    32.03
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5071.7 SGR 437.7 SG3 125.2
RRT -.3549 RRF -.3535 RTF .8634
                                                                                                                          ST 2006.1 SR 436.8 SS 456.5
    TOE-1.3755 TRA .1021 TC3-5.9111 BAU 1.2264
                                                                                                                          CRT -.9966 CRS .9267 CST -.9428
    RDE .3003 RRA .0136 RC3 -.0223 FAU .02451
                                                                      SGB 5090.5 R23 .0482 R13 -.8635
SG1 5074.1 SG2 409.0 THA 178.23
                                                                                                                          LSA 2097.6 MSA 150.6 SSA 30.7
    FDE -.4107 FRA .4473 FC3-1.3672 BSP 15902
BDE 1.4079 BRA .1030 BC3 5.9112 FSP -398
                                                                                                                          EL1 2052.8 EL2 35.2 ALF 167.75
                                                                                                                                     ARRIVAL DATE JAN 21 1968
                                                                         FLIGHT TIME 170.00
LAUNCH DATE AUG 4 1967
                                                                        DISTANCE 506.492
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 25.588 GAL -.37 AZL 92.61 HCA 256.93 SHA 121.32 ECC .25122 INC 2.6117 V1 29.352 RP 108.03 LAP 2.54 LOP 207.87 VP 36.919 GAP 13.15 AZP 89.41 TAL 181.10 TAP 78.03 RCA 90.84 APO 151.80 V2 35.078 RC 179.325 GL -17.10 GP 12.23 ZAL 88.93 ZAP 166.48 ETS 61.81 ZAE 130.10 ETE 169.51 ZAC 50.34 ETC 5.87 CLP-174.20
   PLANETOCENTRIC CONIC
                                                                                                                                    .78 RAP 216.82 ECC 1.2588
    C3 15.728 VML 3.966 DLA -31.64 RAL 213.55 RAD 6567.6 VEL 11.710 PTH 2.06 VMP 8.399 DPA
    LNCH AYMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.27 8 51 21 1207.89 23.27 349.13 79.25 112.06 9 11 29 607.9 26.06 341.29 104.73 12 42 52 5753.24 23.29 272.10 79.26 112.04 14 18 45 5153.2 26.07 264.26
                                                                                              112.06 9 11 29
112.04 14 18 45
112.06 9 11 29
112.04 14 18 45
112.04 14 18 45
120.97 11 48 33
103.14 16 25 0
                                                                                                                                607.9
                                                                                                                                               26.06
                                                                                                                                                            341.29
                                  1207.89
                                                    23.27
                                                                  349.13
                                                                                  79.25
        75.27
                     8 51 21
                                                                                                                              5153.2
                                                                                                                                               26.07
                                                                                                                                                            264.26
       104.73
                   12 42 52 5753.24
                                                    23.29
                                                                  272.10
                                                                                  79.26
                                                                                                                                              19.23
                                                                                                                                                            298.67
                                                                                                                                 69.0
       110.00
                    11 37 24
                                    669.03
                                                    15.24
                                                                  305.51
                                                                                  75.01
                                                                                                                              4740.1
                                                                                                                                               33.32
                                                                                                                                                            234.60
                    14 56 0 5340.10
                                                    31.84
                                                                  243.51
                                                                                  82.31
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5106.4 SGR 445.7 SG3 123.0
RRT -.3630 RRF -.3539 RTF .8676
SGB $125.8 R23 .0395 R13 -.8678
SG1 5109.0 SG2 415.1 THA 178.17
                                                                                                                         ST 2006.6 SR 445.4 SS 442.0

CRT -.9928 CRS .9061 CST -.9438

LSA 2096.7 MSA 150.9 SSA 30.9
    TOE-1.3800 TRA .3495 TC3-5.8796 BAU 1.2363
    ROE .3083 RRA .0074 RC3 -.0147 FAU .02311
FOE -.3835 FRA .4935 FC3-1.2721 BSP 15987
BOE 1.4141 BRA .3496 BC3 5.8796 FSP -390
                                                                                                                          EL1 2054.7 EL2 52.2 ALF 167.56
                                                                                                                                      ARRIVAL DATE JAN 23 1968
                                                                          FLIGHT TIME 172.00
LAUNCH DATE AUG 4 1967
                                                                          DISTANCE 511.987
    RL 151.79 LAL -.00 LOL 310.95 VL 25.526 GAL .24 A7L 92.45 MCA 260.14 SHA 120.97 ECC .25479 INC 2.4502 V1 29.352 RP 108.07 LAP 2.41 LOP 211.08 VP 36,864 GAP 13.46 A7P 89.58 TAL 179.31 TAP 79.45 RCA 90.15 APO 151.79 VZ 35.065 RC 181.185 GL -15.77 GP 11.83 ZAL 85.09 ZAP 167.13 ETS 63.82 ZAE 130.23 ETE 169.79 ZAC 47.98 ETC 5.91 CLP-174.90
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.118 VHL 4.015 DLA -31.67 RAL 218.31 RAD 6567.6 VEL 11.726 PTH 2.07 VHP 8.561 DPA
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               84.40
                                                                                                              9 30 0
                                                                                                                                 615.3
                                                                                                                                               25.97
                                                                                                112.23
                   9 9 44 1215.27
13 2 25 5756.99
                                                    23.16
                                                                  349.63
                                                                                                            14 38 22
                                                                                                                               5157.0
                                                                                                                                               25.98
                                                                                                                                                             264.51
                                                                                  84.40
                                                                                                 112.22
                                                                  272.34
       104.82
                                                     23.17
                                                                                                                                 615.3
                                                                                                                                               25.97
                                                                                                                                                             341.61
                                                                                                 112.23
                                                                                                               9 30 0
                                 1215.27
5756.99
                                                                                  84.40
                     9 9 44
                                                     23.16
                                                                  349.63
        75.18
                                                                                                112.22 14 36 22
121.03 12 8 16
103.46 16 43 24
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                                                                                                                                               25.98
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                    13 2 25
                                                     23.17
                                                                  272.34
                                                                                  84.40
       104.82
                                                                                                                                 72.3
                                                                                                                                                19.12
                                                                                                                                                             298.87
                                                                  305.70
                                                                                  60.14
                   11 57 4
                                    672.34
                                                     15.12
       110.00
                                                                                                                             4747.9
                                                                                                                                               33.25
                                                                                                                                                             235.19
                    15 14 16 5347.91
                                                                                  87.50
                                                                  244.09
       110.00
                                                     31.72
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5144.6 SGR 452.6 SG3 121.0
RRT -.3709 RRF -.3556 RTF .8707
SGB 5164.4 R23 .0328 R13 -.8708
                                                                                                                           51 1989.0 SR 452.6 SS 425.7
     TOE-1.3737 TRA .6076 TC3-5.7861 BAU 1.2468
                                                                                                                           CRT -.9858 CRS .8797 CST -.9429
    RDE .3171 RRA -.0009 RC3 -.0068 FAU .02173
FDE -.3546 FRA .5421 FC3-1.1672 BSP 16133
BDE 1.4098 BRA .6076 BC3 5.7861 FSP -383
                                                                                                                          LSA 2077.7 MSA 157.4 SSA 30.2
                                                                      SG1 5147.3 SG2 420.1 THA 178.12
                                                                                                                          EL1 2038.5 EL2 74.2 ALF 167.34
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FLIGHT TIME 166.00

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LAUNCH DATE AUG 4 1967
                                                                          FLIGHT TIME 174,00
                                                                                                                                     ARRIVAL DATE JAN 25 1968
   HELIOCENTRIC CONIC
                                                                        DISTANCE 517.449
    RL 151.79 LAL -.00 LOL 310.95 VL 25.465 GAL .87 AZL 92.29 HCA 263.35 SMA 120.63 ECC .25872 INC 2.2921 V1 29.352 RP 108.11 LAP 2.28 LOP 214.29 VP 36.809 GAP 13.79 AZP 89.73 TAL 177.52 TAP 80.87 RCA 89.42 APO 151.84 V2 35.052
    RC 183.028 GL -14.43 GP 11.46 TAL 81.24 TAP 167.74 ETS 66.11 TAE 130.36 ETE 170.05 TAC 45.60 ETC 6.01 CLP-175.61
   PLANETOCENTRIC CONIC
    C3 16.704 VHL 4.087 DLA -31.58 RAL 223.05 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 8.735 DPA -1.72 RAP 221.11 ECC 1.2749
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              112.38
                                                                                                                                            25.72
                   9 30 5 1218.98
13 19 55 5769.60
                                                                                 89.67
                                                                                                             9 50 24
                                                                                                                               619.0
                                                                 349.79
       75.39
                                                    22.89
                                                                                                112.37 14 56 5
                                                                                                                                              25.73
                                                    22.90
                                                                 273.17
                                                                                 89.68
                                                                                                                              5169.6
       104.61
                                                                                                             9 50 24
                    9 30 5 1218.98
                                                                 349.79
                                                                                 89.67
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                                                                                                                                                            342.00
        75.39
                                                    22.89
                                                                                                112.38
                                                                                               112.37 14 56 5
121.24 12 25 44
103.57 17 4 3
       104.61
                   13 19 55 5769.60
                                                    22.90
                                                                 273.17
                                                                                 89.68
                                                                                                                              5169.6
                                                                                                                                              25.73
                                                                                                                                                            265.37
                                                                                 85.28
       110.00
                   12 14 19
                                   685.90
                                                    14.65
                                                                 306.46
                                                                                                                               85.9
                                                                                                                                              18.68
                                                                                                                                                            299.66
                                 5350.67
                                                                                                                              4750.7
                                                                 244.29
                                                                                 92.88
                                                                                                                                              33.22
                                                                                                                                                            235.40
       110.00
                   15 34 52
                                                   31.68
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5176.0 SGR 458.8 SG3 118.7
RRT -.3793 RRF -.3596 RTF .8756
SGB 5196.3 R23 .0273 R13 -.8756
SGI 5178.9 SG2 424.3 THA 178.06
                                                                                                                         ST 1954.4 SR 458.5 SS 408.9
CRT -.9752 CRS .8495 CST -.9421
    TDE-1.3562 TRA .8735 TC3-5.6208 BAU 1.2552
    RDE .3271 RRA -.0102 RC3 .0013 FAU .02040
FDE -.3261 FRA .5870 FC3-1.0573 BSP 16297
                                                                                                                          LSA 2041.6 MSA 167.9 SSA 28.9
                                                                                                                          EL1 2005.0 EL2 99.0 ALF 167.08
    80E 1.3951 BRA .8736 BC3 5.6208 FSP -381
LAUNCH DATE AUG 4 1967
                                                                          FLIGHT TIME 176.00
                                                                                                                                     ARRIVAL DATE JAN 27 1968
  HELIOCENTRIC CONIC
                                                                         DISTANCE 522.872
   RL 151.79 LAL -.00 LOL 310.95 VL 25.406 GAL 1.52 ATL 92.14 MCA 266.55 SMA 120.30 ECC .26304 INC 2.1360 V1 29.352 RP 108.16 LAP 2.13 LOP 217.50 VP 36.755 GAP 14.13 AZP 89.87 TAL 175.74 TAP 82.29 RCA 88.65 APO 151.94 V2 35.039 RC 184.853 GL -13.08 GP 11.13 ZAL 77.42 ZAP 168.28 ETS 68.68 ZAE 130.47 ETE 170.29 ZAC 43.23 ETC 6.15 CLP-176.31
   PLANETOCENTRIC CONIC
    C3 17.504 VHL 4.184 DLA -31.37 RAL 227.73 RAD 6567.7 VEL 11.785 PTH
                                                                                                   2.08 VHP 8.923 DPA
                                                                                                                                 -2.89 RAP 223.30 ECC 1.2881
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                   22.46
                                                                 349.59
                                                                                95.03
                                                                                               112.50 10 12 35
        75.90
                     9 52 16 1218.75
                                                                                                                               618.7
                                                                                                                                            25.31
                                                                                                                                                           341.83
                                                                                                112.49 15 11 36
112.50 10 12 35
112.49 15 11 36
121.58 12 40 51
103.49 17 26 39
       104.10
                   13 35 5 5791.40
                                                    22.47
                                                                 274.63
                                                                                 95.03
                                                                                                                              5191.4
                                                                                                                                              25.32
                                                                                                                                                            266.87
                                                                                                                               618.7
        75.90
                     9 52 16
                                  1218.75
                                                    22.46
                                                                 349.59
                                                                                 95.03
                                                                                                                                              25.31
                                                                                                                                                            341.83
                  13 35 5 5791.40
12 29 1 709.52
                                                   22.47
                                                                 274.63
                                                                                 95.03
                                                                                                                              5191.4
                                                                                                                                              25.32
                                                                                                                                                            266.87
       104.10
                                                                  307.78
                                                                                  90.39
                                                                                                                               109.5
                                                   13.41
                                                                                                                                              17.89
                                                                                                                                                            301.04
      110.00
                  15 57 30
                                                                                                                              4748.6
                                                                                                                                                            235.25
      110.00
                                  5348.63
                                                    31.71
                                                                 244.14
                                                                                 98.40
                                                                                                                                              33.24
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5200.1 SGR 463.4 SG3 116.7
RRT - .3868 RRF - .3629 RTF .8802
SG8 5220.7 R23 .0218 R13 - .8802
SG1 5203.2 SG2 427.0 THA 178.01
                                                                                                                          ST 1895.7 SR 462.1 SS 390.3
CRT -.9596 CRS .8094 CST -.9394
    TOE-1.3195 TRA 1.1570 TC3-5.3887 BAU 1.2610
    RDE .3374 RRA -.0215 RC3 .0088 FAU .01909
FDE -.2943 FRA .6349 FC3 -.9443 BSP 16334
                                                                                                                          LSA 1981.1 MSA 184.4 SSA 27.0
                                                                                                                          ELI 1947.1 ELZ 126.6 ALF 166.78
    BDE 1.3620 BRA 1.1572 BC3 5.3887 FSP -373
                                                                         FLIGHT TIME 178,00
                                                                                                                                    ARRIVAL DATE JAN 29 1968
LAUNCH DATE AUG 4 1967
                                                                         DISTANCE 528.252
   HELLOCENTRIC CONTC.
   RL 151.79 LAL -.00 LOL 310.95 VL 25.347 GAL 2.20 AZL 91.98 MCA 269.75 SMA 119.97 ECC .26778 INC 1.9812 VI 29.352 RP 108.20 LAP 1.98 LOP 220.71 VP 36.702 GAP 14.50 AZP 89.99 TAL 173.96 TAP 83.71 RCA 87.85 APO 152.10 V2 35.025 RC 186.660 GL -11.73 GP 10.82 ZAL 73.66 ZAP 168.78 ETS 71.55 ZAE 130.57 ETE 170.50 ZAC 40.85 ETC 6.36 CLP-177.01
   PLANETOCENTRIC CONIC
    C3 18.540 VHL 4.306 OLA -31.04 RAL 232.30 RAD 6567.8 VEL 11.829 PTH 2.09 VHP 9.125 OPA -4.01 RAP 225.51 ECC 1.3051
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            112.58 10 36 32
112.56 15 24 31
112.58 10 36 32
112.56 15 24 31
122.56 15 24 31
122.03 12 53 42
103.25 17 50 40
                                                                             100.40
                                                                                                                              613.8
                                                                                                                                           24.75
                                                                                                                                                        341.24
                 10 16 19 1213.80
                                                   21.89
                                                                 348.96
        76.72
                                                                                100.41
       103.28
                    13 47 28 5823.17
                                                                                                                             5223.2
                                                                                                                                              24.77
                                                                                                                                                           269.05
                                                    21.90
                                                                 276.77
                                                                                                                              613.8
                                                                                                                                              24.75
                                                                                                                                                           341.24
        76.72
                    10 16 19
                                  1213.80
                                                    21.89
                                                                 348.96
                                                                                100.40
       103.28
                                                                                                                                              24.77
                                                                                                                                                           269.05
                   13 47 28 5823.17
                                                   21.90
                                                                 276.77
                                                                                100.41
                                                                                                                             5223.2
       110.00
                    12 41 20
                                  742.16
                                                    12.64
                                                                 309.58
                                                                                95.41
                                                                                                                              142.2
                                                                                                                                             16.78
                                                                                                                                                           302.92
                   16 21 38 5342.81
                                                                 243.71
                                                                                103.99
                                                                                                                             4742.8
                                                                                                                                             33.30
                                                                                                                                                           234.80
       110.00
                                                  31.80
   DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 5226.6 SGR 467.0 SG3 114.5
RRT -.3948 RRF -.3682 RTF .8856
SG8 5247.4 R23 .0177 R13 -.8857
SG1 5229.9 SG2 428.8 THA 177.97
                                                                                                                        ST 1828.2 SR 464.1 SS 373.3

CRT -.9387 CRS .7634 CST -.9372

LSA 1911.8 MSA 204.3 SSA 25.1

EL1 1879.8 EL2 155.6 ALF 166.50
    TOE-1.2732 TRA 1.4475 TC3-5.1137 BAU 1.2675
    ROE .3486 RRA -.0337 RC3 .0158 FAU .01787
FDE -.2637 FRA .6807 FC3 -.8345 BSP 16468
    BOE 1.3200 BRA 1.4479 BC3 5.1138 FSP
                                                     - 369
LAUNCH DATE AUG 4 1967
                                                                         FLIGHT TIME 180.00
                                                                                                                                     ARRIVAL DATE JAN 31 1968
                                                                         01STANCE 533.582
    RL 151.79 LAL -.00 LOL 310.95 VL 25.289 GAL 2.91 AZL 91.83 MCA 272.95 SMA 119.65 ECC .27298 INC 1.8265 V1 29.352 RP 108.24 LAP 1.82 LOP 223.91 VP 36.649 GAP 14.89 AZP 90.09 TAL 172.19 TAP 85.14 RCA 86.99 APO 152.32 VZ 35.012 RC 188.449 GL -10.41 GP 10.55 ZAL 70.01 ZAP 169.21 ETS 74.70 ZAE 130.66 ETE 170.69 ZAC 38.47 ETC 6.64 CLP-177.71
   PLANETOCENTRIC CONIC
    C3 19.839 VHL 4.454 DLA -30.60 RAL 236.71 RAD 6567.8 VEL 11.884 PTH 2.11 VHP 9.344 DPA -5.08 RAP 227.75 ECC 1.3265
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                  NJ LUNY INJ RT ASC INJ AZMTH INJ TIME
347.83 105.76 112.62 11 2 24
279.66 105.77 112.61 15 34 23
347.83 105.76 112.62 11 2 24
279.66 105.77 112.61 15 34 23
311.78 100.34 122.52 13 4 35
243.11 109.61 102.91 18 15 30
MID-COURSE EXECUTION ACCURACY
SGT 5247.5 ACR ARA 2 4C3 112 4
                                                                                                                                           24.06
        77.89
                10 42 21
                                 1203.08
                                                   21.18
                                                                 347.83
                                                                                                                               603.1
                                                                                                                                                           340.16
                                                                                                                                                            271.99
       102.11
                   13 56 37
                                  5865.86
                                                    21.19
                                                                 279.66
                                                                                                                              5265.9
                                                                                                                                              24.07
                  10 42 21
                                  1203.08
                                                   21.18
                                                                 347.83
                                                                                                                               603.1
                                                                                                                                              24.06
                                                                                                                                                            340.16
                   13 56 37
                                  5865.86
                                                   21.19
                                                                 279.66
                                                                                                                              5265.9
                                                                                                                                              24.07
                                                                                                                                                           271.99
       102.11
                   12 51 33
                                   762.34
                                                   11.18
                                                                 311.78
                                                                                                                              182.3
                                                                                                                                              15.39
                                                                                                                                                            305.20
       110.00
                                                   31.93
                                                                                                                              4734.6
                   16 46 35
                                  5534.60
                                                                 243.11
                                                                                                                                              33.37
                                                                                                                                                           234.17
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1750.7 SR 463.9 SS 357.5
CRT -.9105 CRS .7076 CST -.9346
LSA 1831.8 MSA 227.9 SSA 23.2
                                                                    SGT 5247.5 SGR 469.2 SG3 112.4
RRT -.4022 RRF -.3736 RTF .8907
SGB 5268.4 R23 .0142 R13 -.8908
    TOE-1.2122 TRA 1.7519 TC3-4.7956 BAU 1.2719
    ROE .3602 RRA -.0475 RC3 .0214 FAU .01666
FOE -.2321 FRA .7280 FC3 -.7268 BSP 16589
BOE 1.2646 BRA 1.7525 BC3 4.7957 FSP -364
                                                                    SG1 5250.9 SG2 429.3 THA 177.93
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EL1 1801.5 EL2 186.4 ALF 166.29

ARRIVAL CATE FEB 2 1968

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LAUNCH DATE AUG 4 1967
                                                                             FLIGHT TIME 182.00
                                                                             DISTANCE 538.857
  HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 25.232 GAL 3.66 AZL 91.67 MCA 276.15 SMA 119.35 ECC .27868 INC 1.6711 V1 29.352 RP 108.28 LAP 1.66 LOP 227.11 VP 36.597 GAP 15.30 AZP 90.18 TAL 170.43 TAP 86.58 RCA 86.09 APO 152.61 V2 34.999 RC 190.221 GL -9.13 GP 10.30 ZAL 66.48 ZAP 169.58 ETS 78.15 ZAE 130.74 ETE 170.87 ZAC 36.09 ETC 7.00 CLP-178.42
   PLANETOCENTRIC CONIC
    C3 21.432 VHL 4.629 DLA -30.06 RAL 240.93 RAD 6567.9 VEL 11.950 PTH 2.13 VHP 9.581 DPA -6.10 RAP 230.01 ECC 1.3527
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 79.46 11 10 48 1184.58 20.34 346.08 111.07 112.62 11 30 33 584.6 23.23 338.46
                    11 10 48 1184.58
14 1 48 633.30
                                                                                                    112.61 14 12 21
112.62 11 30 33
112.61 14 12 21
123.00 13 13 50
102.53 18 40 30
                                                                                                                                                                    297.90
                                                                                                                                      33.3
                                                                                                                                                     23.25
                                                       20.36
                                                                     305.52
                                                                                    111.07
       100.54
                                                                                                                                                                    338.46
                                                                     346.08
                                                                                    111.07
                                                                                                                                      584.6
                                                                                                                                                     23.23
                     11 10 48 1184.58
                                                       20.34
        79.46
                                                                                                                                                                    297.90
                                                                                                                                      33.3
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                                                                     305.52
                                                                                    111.07
                                                       20.36
       100.54
                    14 1 48
                                    633.30
                                                                                                                                                                    307.79
                                                                                                                                     228.5
                                                                                                                                                     13.76
                                                        9.48
                                                                     314.27
                                                                                    105.15
       110.00
                     13 0 2
                                     828.49
                                                                                                                                   4725.4
                                                                                                                                                    33.46
                                                                                                                                                                    233.47
                                                                     242.43
                                                                                    115.20
                    17 11 45
                                   5325.42
                                                       32.07
      110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5263.5 SGR 469.9 SG3 110.3
RRT -.4091 RRF -.3792 RTF .8959
SGB 5284.4 R23 .0111 R13 -.8960
SGI 5267.0 SG2 428.5 THA 177.89
                                                                                                                                ST 1670.1 SR 461.5 S5 344.0
CRT -.8732 CRS .6424 CST -.9327
    TOF-1.1384 TRA 2.0706 1C3-4.4469 BAU 1.2742
    RDE .3723 RRA -.0626 RC3 .0257 FAU .01546
FOE -.2004 FRA .7764 FC3 -.6247 BSP 16683
                                                                                                                                LSA 1748.0 MSA 254.2 SSA 21.4
                                                                                                                                EL1 1718.8 EL2 218.5 ALF 166.21
    BOE 1.1977 BRA 2.0715 BC3 4.4470 FSP
                                                          -359
                                                                                                                                            ARRIVAL DATE FEB 4 1968
                                                                             FLIGHT TIME 184.00
LAUNCH DATE AUG 4 1967
                                                                             DISTANCE 544.068
  HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 25.177 GAL 4.44 AZL 91.51 HCA 279.35 SMA 119.05 ECC .28493 INC 1.5138 V1 29.352 RP 108.32 LAP 1.49 LOP 230.30 VP 36.546 GAP 15.75 AZP 90.25 TAL 168.68 TAP 88.03 RCA 85.13 APO 152.97 V2 34.986 RC 191.975 GL -7.89 GP 10.07 ZAL 63.10 ZAP 169.90 ETS 81.88 ZAE 130.81 ETE 171.03 ZAC 33.72 ETC 7.45 CLP-179.13
  PLANETOCENTRIC CONIC
    C3 23.357 VHL 4.833 DLA -29.45 RAL 244.93 RAD 6567.9 VEL 12.031 PTH 2.15 VMP 9.837 DPA -7.07 RAP 232.29 ECC 1.3844 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   116.29
                                                                                                    112.59 12 2 11
                   11 42 58 1153.64
                                                                                                                                      553.6
                                                                                                                                                   22.30
                                                                                                                                                                    335.81
                                                      19.41
                                                                     343.37
        81.57
                                                                                                                 14 13 19
                                                                                                                                      106.0
                                                                                                                                                      22.31
                                                                                                                                                                     302.94
                                     705.97
                                                       19.42
                                                                     310.50
                                                                                     116.29
                                                                                                      112.58
        9A.43
                     14 1 33
                                                                                                     115.72 13 43 39
109.49 16 33 55
123.43 13 21 45
102.16 19 5 11
                                                                                                                                      206.3
                                                                                                                                                      19.12
                                                                                                                                                                     309.02
                                                       15.79
                    13 30 13
                                      806.32
                                                                     316.23
                                                                                     114.58
       100.00
                    14 56 59 5816.56
                                                                                                                                     5216.6
                                                                                                                                                      25.57
                                                                                                                                                                     268.84
                                                       23.13
                                                                     276.78
                                                                                    117.82
       100.00
                                                        7.59
                                                                                                                                      279.2
                                                                                                                                                      11.93
                                                                                                                                                                     310.58
                     13 7 6
                                                                     316.98
                                                                                    109.84
                                     879.15
      110.00
                                   5316.50
                                                                     241.76
                                                                                    120.72
                                                                                                                                     4716.5
                                                                                                                                                      33.53
                                                                                                                                                                    232.79
                    17 36 35
      110.00
                                                       32.20
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                                ST 1590.2 SR 457.0 SS 333.6
CRT -.8243 CRS .5674 CST -.9323
                                                                         SGT 5272.3 SGR 469.2 SG3 108.2
RRT - .4152 RRF - .3844 RTF .9011
    TOE-1.0495 TRA 2.4073 TC3-4.0742 BAU 1.2723
    ROE .3845 RRA -.0790 RC3 .0282 FAU .01426
FOE -.1681 FRA .8270 FC3 -.5284 BSP 16681
BOE 1.1177 BRA 2.4086 BC3 4.0743 FSP -352
                                                                         SG8 5293.1 R23 .0087 R13 -.9011
SG1 5275.9 SG2 426.6 THA 177.87
                                                                                                                                LSA 1663.9 MSA 282.4 SSA 19.9
                                                                                                                                EL1 1635.3 EL2 251.6 ALF 166.34
                                                                                                                                           ARRIVAL CATE FEB 6 1968
                                                                             FLIGHT TIME 186.00
LAUNCH DATE AUG 4 1967
                                                                             DISTANCE 549.206
   HELIOCENTRIC CONIC
   RL 151.79 LAL -.00 LOL 310.95 VL 25.122 GAL 5.26 A7L 91.35 MCA 282.54 SMA 118.75 ECC .29180 INC 1.3539 V1 29.352
RP 108.36 LAP 1.32 LOP 233.49 VP 36.496 GAP 16.23 A7P 90.29 TAL 166.95 TAP 89.49 RCA 84.10 APO 153.40 V2 34.973
RC 193.712 GL -6.70 GP 9.86 ZAL 59.89 ZAP 170.14 ETS 85.88 ZAE 130.87 ETE 171.19 ZAC 31.36 ETC 8.01 CLP-179.84
   PLANETOCENTRIC CONTC.
    C3 25.661 VHL 5.066 CLA -28.77 RAL 248.69 RAC 6568.0 VEL 12.126 PTH 2.17 VHP 10.116 CPA -8.00 RAP 234.58 ECC 1.4223
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  112.52 12 41 13
112.51 14 5 5
117.34 13 35 7
107.01 17 13 16
123.78 13 28 35
101.63 19 29 9
                                                                                                                                                 21.28
                                                                                                                                 496.4
                                                                                                                                                                    331.19
                    12 22 56 1096.42
13 51 36 809.41
13 19 55 911.44
                                                                    338.70
                                                                                 121.40
                                                      18.39
        84.69
                                                                     317.68
                                                                                    121.41
                                                                                                                                      209.4
                                                                                                                                                     21.30
                                                                                                                                                                    310.17
                                                       18.40
        95.31
                                                                     322.40
                                                                                    118.61
                                                                                                                                     311.4
                                                                                                                                                     16.15
                                                                                                                                                                    315.42
                                                       12.59
       100.00
                                                                                                                                     5157.7
                                                                                                                                                     26.61
                                                                                                                                                                    264.77
                                                       24.41
                                                                     272.88
                                                                                    123.78
                    15 37 18 5757.66
       100.00
                                                                                                                                                                    313.50
                                                                                    114.41
                                                                                                                                     333.1
                                                                                                                                                      9.95
                                                        5.55
                                                                     319.63
       110.00
                     13 13 2
                                     933.11
                                                                                                                                     4708.8
                                                                                                                                                     33.60
                                                                                                                                                                    232.19
                    18 0 41 5308.76
                                                                                    126.15
                                                                     241.18
       110.00
                                                       32.31
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 1522.1 SR 450.9 SS 327.0
CRT -.7650 CRS .4900 CST -.9348
L9A 1590.9 MSA 309.4 SSA 18.5
                                                                         SCT 5279.7 SCR 467.2 SC3 106.1
    TOE -.9545 TRA 2.7563 TC3-3.7011 BAU 1.2698
                                                                         RRT -.4216 RRF -.3907 RTF .9066
SGB 5300.3 R23 .0067 R13 -.9066
SGI 5283.4 SGZ 423.4 THA 177.85
    ROE .3973 RRA -.0963 RC3 .0297 FAU .01313
FCE -.1377 FRA .8781 FC3 -.4430 BSP 16804
BOE 1.0339 BRA 2.7580 BC3 3.7012 FSP -347
                                                                                                                                EL1 1562.0 EL2 283.0 ALF 166.79
                                                                                                                                            ARRIVAL DATE FEB 8 1968
                                                                              FLIGHT TIME 188.00
LAUNCH DATE AUG 4 1967
                                                                             DISTANCE 554.258
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 25.068 GAL 6.13 A7L 91.19 MCA 285.73 SMA 118.47 ECC .29935 INC 1.1899 V1 29.352 RP 108.40 LAP 1.15 LOP 236.68 VP 36.447 GAP 16.74 AZP 90.32 TAL 165.24 TAP 90.97 RCA 83.00 APO 153.93 V2 34.960 RC 195.431 GL -5.57 GP 9.66 ZAL 56.85 ZAP 170.32 ETS 90.12 ZAE 130.91 ETE 171.33 ZAC 29.01 ETC 8.70 CLP 179.44
   PLANETOCENTRIC CONIC
                                                                                                         2.20 VHP 10.419 CPA -8.87 RAP 236.89 ECC 1.4674
    C3 28.399 WHL 5.329 DLA -28.05 RAL 252.21 RAD 6568.1 VEL 12.238 PTH
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                    114.62 13 5 28
110.26 14 9 46
118.39 13 31 26
106.68 17 45 52
124.03 13 34 33
101.58 19 52 7
                    12 47 19
                                                                     336.33
                                                                                    125.11
                                                                                                                                      ARR.5
                                                                                                                                                     17.66
                                                                                                                                                                     329.12
                                     1088.47
                                                       14.45
        90.00
                                                                                                                                                                     314.98
                     13 55 18
                                                                     322.71
                                                                                                                                      267.7
                                                                                                                                                      22.80
                                     867.72
                                                       20.22
                                                                                     127.61
        90.00
                                                                                                                                                                     320.62
                                                                                     122.73
                                                                                                                                      399.7
                                                                                                                                                      13.50
                                                        9.78
                                                                     327.44
                     13 14 46
                                      999.67
       100.00
                                                                                                                                                                     262.12
                                                                                                                                                      27.22
                                                                                                                                     5119.8
                     16 10 32
                                                       25.17
                                                                     270.33
                                                                                     129.40
       100.00
                                     5719.60
                                                                                                                                                        7.86
                                                                                                                                      389.4
                                                                                                                                                                     316.51
                     13 16 3
                                      989.36
                                                        3.42
                                                                     322.78
                                                                                    118.65
       110.00
                                                                                                                                   4702.9
                                                                                                                                                      33.64
                                                                                                                                                                    231.74
                                                                                     131.47
                    18 23 45
                                     5302.87
                                                       32.39
                                                                     240.74
       110.00
                                                                                                                               ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                        SGT 5282.5 SGR 463.8 SG3 104.1
RRT -.4273 RRF -.3969 RTF .9122
SGB 5302.8 R23 .0051 R13 -.9123
SGI 5286.2 SG2 419.0 THA 177.84
                                                                                                                              ST 1465.5 SR 443.1 SS 323.6

CRT -.6941 CRS .4103 CST -.9399

LSA 1528.7 MSA 334.3 SSA 17.3

EL1 1498.9 EL2 311.9 ALF 167.60
    TOE -.8494 TRA 3.1223 TC3-3.3306 BAU 1.2646
    RDE .4103 RRA -.1145 RC3 .0299 FAU .01203
FDE -.1078 FRA .9311 FC3 -.3669 BSP 16848
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BOE .9433 BRA 3.1244 BC3 3.3307 FSP -342

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ARRIVAL DATE FEB 10 1968
                                                                                                                        FLIGHT TIME 190.00
 LAUNCH DATE AUG 4 1967
                                                                                                                        DISTANCE 559.212
     HELIOCENTRIC CONIC
       RL 151.79 LAL -.00 LOL 310.95 VL 25.016 GAL 7.05 AZL 91.02 MCA 288.92 SMA 118.19 ECC .30765 INC 1.0209 V1 29.352
RP 108.44 LAP .97 LOP 239.87 VP 36.399 GAP 17.30 AZP 90.33 TAL 163.55 TAP 92.47 RCA 81.83 APO 154.55 V2 34.947
RC 197.134 GL -4.51 GP 9.49 ZAL 53.99 ZAP 170.42 ETS 94.53 ZAE 130.93 ETE 171.47 ZAC 26.68 ETC 9.56 CLP 178.70
     PLANETOCENTRIC CONIC
       C3 31.637 VHL 5.625 DLA -27.31 RAL 255.48 RAD 6568.3 VEL 12.370 PTH 2.23 VHP 10.750 DPA -9.69 RAP 239.21 ECC 1.5207
       C3 31.637 VML 5.625 OLA -27.31 RAL 255.48 RAD 6568.3 VEL 12.370 PTM 2.23 VMP 10.750 DPA -9.69 RAP 259.21 ECC 1.3207 LNCH AZMITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 28 2 1221.59 10.54 344.15 128.65 116.43 12 48 23 621.6 14.01 337.19 90.00 14 40 43 788.73 22.00 317.59 133.55 108.29 14 55 52 188.7 24.29 309.68 100.00 13 11 39 1080.64 7.13 331.99 126.83 119.11 13 29 40 480.6 10.96 325.29 100.00 16 39 47 5692.95 25.68 268.49 134.79 105.84 18 14 40 5093.0 27.61 260.22 110.00 13 22 19 1047.13 1.21 325.80 123.18 124.16 13 39 46 447.1 5.68 319.57 110.00 18 45 36 5299.23 32.44 240.47 136.66 101.43 20 13 55 4699.2 33.67 231.46
                                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                SGT 5280.8 SGR 458.9 SG3 102.2
RRT -.4326 RRF -.4030 RTF .9180
SG8 5300.7 R23 .0038 R13 -.9180
SG1 5284.5 SG2 413.5 THA 177.83
                                                                                                                                                                                                       ST 1424.2 SR 433.9 SS 323.9
CRT -.6138 CRS .3320 CST -.9472
       TDE -.7367 TRA 3.5077 TC3-2.9688 BAU 1.2557
       ROE .4235 RRA -.1336 RC3 .0290 FAU .01096
FOE -.0788 FRA .9865 FC3 -.2999 BSP 16893
                                                                                                                                                                                                        LSA 1481.7 MSA 355.1 SSA 16.3
       BOE .8498 BRA 3.5102 BC3 2.9689 FSP -337
                                                                                                                                                                                                        ELI 1450.4 ELZ 336.4 ALF 168.80
                                                                                                                         FLIGHT TIME 192.00
                                                                                                                                                                                                                          ARRIVAL DATE FEB 12 1968
LAUNCH DATE AUG 4 1967
                                                                                                                        DISTANCE 564.051
    HELIOCENTRIC CONIC
      RL 151.79 LAL -.00 LOL 310.95 VL 24.964 GAL 8.02 AZL 90.85 MCA 292.10 SMA 117.92 ECC .31680 INC .8455 V1 29.352 RP 108.48 LAP .78 LOP 243.06 VP 36.351 GAP 17.91 AZP 90.32 TAL 161.89 TAP 93.99 RCA 80.56 APO 155.28 V2 34.935 RC 198.819 GL -3.51 GP 9.33 ZAL 51.32 ZAP 170.45 ETS 99.09 ZAE 130.93 ETE 171.59 ZAC 24.37 ETC 10.62 CLP 177.96
    PLANETOCENTRIC CONIC
       C3 35.457 VHL 5.955 DLA -26.55 RAL 258.52 RAD 6568.4 VEL 12.523 PTH 2.27 VHP 11.112 DPA -10.46 RAP 241.53 ECC 1.5835
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 18 44 1321.43 7.46 349.87 132.46 117.40 12 40 45 721.4 11.07 343.05 90.00 15 14 12 746.38 22 88 314.80 138.97 107.16 15 26 39 146.4 25.01 306.78
                                                                                                                                                             107.16 15 26 39
119.57 13 28 51
105.23 18 40 38
124.17 13 44 23
101.38 20 34 27
                                                                                                                                    138.97
                                                                                                                                                                                                                 146.4
                                                                                                                                                                                                                                          25.01
             90.00
                               15 14 12
                                                           746.36
                                                                                     22.88
                                                                                                            314.60
                              13 9 34 1157.27
17 6 4 5673.81
13 25 58 1105.78
19 6 9 5298.06
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           100.00
                                                                                       4.57
                                                                                                            336.24
                                                                                     26.03
                                                                                                            267.18
                                                                                                                                   139.98
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           100.00
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                                                                                                            328.86
                                                                                                                               127.40
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           110.00
                                                         5298.06 32.45
                                                                                                            240.38
                                                                                                                                    141.72
                                                                                                                                                                                                               4698.1
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                                                                                                                                                                                                                                                                231.37
    DIFFERENTIAL CORRECTIONS
                                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                                       ST 1398.0 SR 423.1 S5 327.3
CRT -.5251 CRS .2551 CST -.9558
                                                                                                                  SGT 5274.4 SGR 452.5 SG3 100.4
RRT -.4370 RRF -.4086 RTF .9238
SGB 5293.7 R23 .0028 R13 -.9238
       TOE -.6133 TRA 3.9170 TC3-2.6178 BAU 1.2410
       RDE .4367 RRA -.1533 RC3 .0270 FAU .00985
FDE -.0497 FRA 1.0457 FC3 -.2406 BSP 16852
                                                                                                                                                                                                        LSA 1450.2 MSA 370.6 SSA 15.3
                                                                                                                                                                                                     EL1 1416.8 EL2 355.3 ALF 170.36
       BOE .7528 BRA 3.9200 BC3 2.6180 FSP -329
                                                                                                                  SG1 5278.1 SG2 406.7 THA 177.84
                                                                                                                                                                                                                         ARRIVAL CATE FEB 14 1968
                                                                                                                        FLIGHT TIME 194.00
LAUNCH CATE AUG 4 1967
                                                                                                                        DISTANCE 568.754 -
     HELTOCENTRIC CONTC.
      RL 151.79 LAL -.00 LOL 310.95 VL 24.914 GAL 9.06 AZL 90.66 MCA 295.29 SMA 117.66 ECC .32690 INC .6620 VI 29.352
RP 108.51 LAP .60 LOP 246.24 VP 36.305 GAP 18.57 AZP 90.28 TAL 160.26 TAP 95.55 RCA 79.19 APO 156.12 V2 34.923
RC 200.487 GL -2.58 GP 9.18 ZAL 48.83 ZAP 170.40 ETS 103.73 ZAE 130.91 ETE 171.72 ZAC 22.10 ETC 11.93 CLP 177.19
     PLANETOCENTRIC CONIC
       C3 39.959 VHL 6.321 DLA -25.79 RAL 261.31 RAD 6568.5 VEL 12.701 PTH 2.31 VHP 11.509 DPA -11.19 RAP 243.86 ECC 1.6576
       C3 39.959 VHL 6.321 OLA -25.79 RAL 261.31 RAD 6568.5 VEL 12.101 PIM 2.31 VMP 11.309 UPA -11.119 RAT 25.00 CC 1.370 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 12 46 1409.28 4.68 354.83 136.29 117.96 12 36 15 809.3 8.59 348.11 90.00 15 42 28 718.93 23.42 312.97 144.11 106.40 15 54 27 118.9 25.44 304.88 100.00 13 8 4 1230.74 2.09 340.28 134.86 119.83 13 28 34 630.7 6.04 335.73
                              12 12 46 1409.28
15 42 28 718.93
13 8 4 1230.74
17 29 52 5660.73
13 29 4 1164.82
19 25 21 5299.42
                                                                                                                                                             104.81 19 4 13
124.04 13 48 29
101.44 20 53 40
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                                                                                                                                  144.99
           100.00
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                                                                                                           266.28
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           110.00
                                                                                     -3.29
                                                                                                           331.94
                                                                                                                                  131.51
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           110.00
                                                                                     32.43
                                                                                                           240.49
                                                                                                                                  146.64
                                                                                                                HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                SCT 5264.1 SGR 444.8 SG3 98.5
RRT -.4412 RRF -.4145 RTF ..9299
SGB 5282.9 R23 .0020 R13 -.9299
SGI 5267.8 SG2 398.9 THA 177.85
                                                                                                                                                                                                      ST 1387.2 SR 411.3 SS 333.1

CRT -.4365 CRS .1879 CST -.9647

LSA 1435.4 MSA 379.0 SSA 14.5

EL1 1399.6 EL2 366.8 ALF 172.08
       TOE - .4877 TRA 4.3444 TC3-2.2912 BAU 1.2240
       RDE .4501 RRA -.1733 RC3 .0246 FAU .00882 FOE -.0227 FRA 1.1068 FC3 -.1912 BSP 16898
       BOE .6637 BRA 4.3478 BC3 2.2913 FSP
                                                                                        - 324
                                                                                                                                                                                                                          ARRIVAL DATE FEB 16 1968
LAUNCH DATE AUG 4 1967
                                                                                                                        FLIGHT TIME 196.00
                                                                                                                        DISTANCE 573.295
     HELIOCENTRIC CONIC
      RL 151.79 LAL -.00 LOL 310.95 VL 24.865 GAL 10.17 AZL 90.47 MCA 298.47 SMA 117.40 ECC .33808 INC .4687 VI 29.352 RP 108.55 LAP .41 LOP 249.42 VP 36.260 GAP 19.30 AZP 90.22 TAL 158.68 TAP 97.15 RCA 77.71 APO 157.09 V2 34.911 RC 202.138 GL -1.71 GP 9.04 ZAL 46.52 ZAP 170.27 ETS 108.39 ZAE 130.87 ETE 171.84 ZAC 19.86 ETC 13.58 CLP 176.41
     PLANETOCENTRIC CONIC
       C3 45.264 VHL 6.728 OLA -25.03 RAL 263.88 RAD 6568.7 VEL 12.908 PTH 2.35 VHP 11.947 CPA -11.86 RAP 246.18 ECC 1.7449
      C3 45.264 VML 6.728 DLA -25.U3 RAL 263.B8 RAU 0308. VEL 12.306 FM 2.507 FM 
                                                                                                                                                             119.89 13 28 36
104.55 19 25 42
123.79 13 52 6
101.60 21 11 34
                                                                                                                                                                                                                 701.6
                                                                                                                                                                                                                                                               337.65
                                                                                                                                                                                                                                           3.67
                               13 6 54 1301.65
                                                                                       -.31
                                                                                                            344.17
                                                                                                                                   138.75
                                                                                                                                                                                                               5052.7
                                17 51 30
                                                        5652.66
                                                                                     26.40
                                                                                                           265.72
                                                                                                                                   149.82
                                                                                                                                                                                                                                         28.14
                                                                                                                                                                                                                 623.8
                                                                                                                                                                                                                                          -1.05
                                                                                                                                                                                                                                                                328.81
                                                     1223.82
5303.26
                               13 31 43
                                                                                     -5.53
                                                                                                            335.04
                                                                                                                                   135.51
                                                                                                           240.77
                                                                                                                                                                                                               4703.3
                                                                                                                                                                                                                                         33.64
                                                                                                                                                                                                                                                               231.77
                                19 43 11
                                                                                     32.38
                                                                                                                                   151.41
                                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                               SGT 5249.5 SGR 435.6 SG3 96.7
RRT - .4445 RRF - .4198 RTF .9360
SGB 5267.5 R23 .0015 R13 - .9360
SGI 5253.1 SG2 390.0 THA 177.88
                                                                                                                                                                                                     ST 1388.5 SR 398.6 SS 341.1
CRT -.3495 CRS .1274 CST -.9730
LSA 1434.5 MSA 380.9 SSA 13.7
       TOE -.3558 TRA 4.7971 TC3-1.9852 BAU 1.2014
       RDE .4637 RRA -.1933 RC3 .0216 FAU .00779
FDE .0037 FRA 1.1717 FC3 -.1490 BSP 16917
BDE .5844 BRA 4.8010 BC3 1.9853 FSP -319
                                                                                                                                                                                                      ELI 1396.0 EL2 371.5 ALF 173.83
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ARRIVAL DATE FEB 18 1968
                                                                                                    FLIGHT TIME 198.00
LAUNCH DATE AUG 4 1967
                                                                                                    DISTANCE 577.645
   HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.817 GAL 11.36 AZL 90.26 MCA 301.64 SMA 117.16 ECC .35046 INC .2634 V1 29.352 RP 108.59 LAP .22 LOP 252.60 VP 36.216 GAP 20.10 AZP 90.14 TAL 157.15 TAP 98.80 RCA 76.10 APO 158.21 V2 34.899 RC 203.771 GL -.89 GP 8.92 TAL 44.40 ZAP 170.06 ETS 113.01 ZAE 130.79 ETE 171.96 ZAC 17.67 ETC 15.68 CLP 175.60
    PLANETOCENTRIC CONIC
                                                                                                                                        2.40 VHP 12.430 DPA -12.48 RAP 248.49 ECC 1.8480
    C3 51.526 VHL 7.178 DLA -24.29 RAL 266.22 RAD 6568.9 VEL 13.149 PTH 2.40 VHP 12.430 DPA -12.48 RAP 248.49 ECC 1.8480 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 5 10 1566.42 -.38 3.61 143.82 118.31 12 31 16 966.4 3.41 356.89 90.00 16 29 16 689.41 23.97 310.98 153.73 105.55 16 40 45 89.4 25.87 302.83 100.00 13 5 56 1370.26 -2.64 347.94 142.56 119.79 13 28 46 770.3 1.35 341.42 100.00 18 11 11 5648.84 26.47 265.45 154.47 104.42 19 45 20 5048.8 28.19 257.07 110.00 13 33 56 1282.43 -7.74 338.14 139.41 123.40 13 55 18 682.4 -3.29 331.87 110.00 19 59 40 5309.43 32.30 241.24 156.03 101.86 21 28 9 4709.4 33.59 232.24
     C3 51.526 VHL 7.178 DLA -24.29 RAL 266.22 RAD 6568.9 VEL 13.149 PTH
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                             5GT 5230.6 SCR 425.0 SG3 95.0
RRT -.4469 RRF -.4244 RTF .9421
                                                                                                                                                                      ST 1399.3 SR 385.0 SS 351.1
CRT -.2675 CRS .0740 CST -.9800
      TDE -.2183 TRA 5.2775 TC3-1.7018 BAU 1.1723
      RDE .4772 RRA -.2132 RC3 .0183 FAU .00675
                                                                                               568 5247.9 R23 .0012 R13 -.9421
                                                                                                                                                                     LSA 1444.7 MSA 377.1 SSA 13.0
     FDE .0294 FRA 1.2410 FC3 -.1135 BSP 16923
BDE .5248 BRA 5.2818 BC3 1.7019 FSP -314
                                                                                               SG1 5234.1 SG2 380.0 THA 177.91
                                                                                                                                                                      EL1 1403.4 EL2 369.9 ALF 175.48
                                                                                                                                                                                       ARRIVAL DATE FEB 20 1968
                                                                                                     FLIGHT TIME 200.00
                                                                                                     DISTANCE 581.763
   HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.770 GAL 12.65 AZL 90.04 MCA 304.82 SMA 116.92 ECC .36423 INC .0414 V1 29.352 RP 108.62 LAP .04 LOP 255.77 VP 36.174 GAP 20.99 AZP 90.03 TAL 155.68 TAP 100.51 RCA 74.33 APO 159.50 V2 34.888
                                   -.14 GP 8.80 ZAL 42.46 ZAP 169.76 ETS 117.55 ZAE 130.67 ETE 172.08 ZAC 15.54 ETC 18.37 CLP 174.75
     RC 205.386 GL
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 58.935 VHL 7.677 OLA -23.58 RAL 268.36 RAO 6569.1 VEL 13.427 PTH 2.45 VHP 12.967 DPA -13.05 RAP 250.79 ECC 1.9699

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 12 2 26 1638.77 -2.71 7.65 147.48 118.20 12 29 45 1038.8 1.08 1.08 1.02

90.00 16 49 0 683.27 24.08 310.57 158.24 105.37 17 0 25 83.3 25.96 302.40

100.00 13 5 3 1436.68 -4.88 351.60 146.28 119.53 13 29 0 836.7 -.91 345.06

100.00 18 29 5 5648.64 26.47 265.44 158.94 104.42 20 3 13 5048.6 28.19 257.06

110.00 13 35 46 1340.35 -9.89 341.24 143.22 122.89 13 58 7 740.3 -5.49 334.91

110.00 20 14 51 5317.74 32.18 241.85 160.49 102.21 21 43 28 4717.7 33.52 232.88
                                                                                                                                                                       ORBIT CETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5208.7 SGR 413.0 SG3 93.3
RRT -.4480 RRF -.4278 RTF .9482
                                                                                                                                                                       ST 1417.6 SR 370.6 SS 363.3
CRT -.1906 CRS .0256 CST -.9856
LSA 1463.8 MSA 368.7 SSA 12.3
     TDE -.0718 TRA 5.7922 TC3-1.4389 BAU 1.1337
      RDE .4906 RRA -.2328 RC3 .0148 FAU .00565
                                                                                              5G8 5225.0 R23 .0010 R13 -.9482
5G1 5212.0 SG2 369.0 THA 177.96
      FOE .0557 FRA 1.3163 FC3 -.0631 BSP 16635
                                                                                                                                                                      EL1 1419.4 EL2 363.3 ALF 176.95
      BOE .4959 BRA 5.7969 BC3 1.4389 FSP -307
                                                                                                                                                                                     ARRIVAL DATE FEB 22 1968
                                                                                                     FLIGHT TIME 202.00
LAUNCH DATE AUG 4 1967
                                                                                                     DISTANCE 585.601
    HELLOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.725 GAL 14.05 AZL 89.81 MCA 307.99 SMA 116.69 ECC .37957 INC .1915 V1 29.352 RP 108.65 LAP -.15 LOP 258.95 VP 36.133 GAP 21.97 AZP 89.88 TAL 154.29 TAP 102.29 RCA 72.40 APO 160.98 V2 34.87A RC 206.983 GL .56 GP 8.70 ZAL 40.69 ZAP 169.37 ETS 121.95 ZAE 130.52 ETE 172.21 ZAC 13.50 ETC 21.89 CLP 173.87
     PLANETOCENTRIC CONIC
      C3 67.731 VHL 8.230 DLA -22.88 RAL 270.28 RAD 6569.3 VEL 13.751 PTH 2.51 VHP 13.564 DPA -13.58 RAP 253.06 ECC 2 1147
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                117.92 12 28 33 1107.8

105.31 17 18 5 81.3

119.13 13 29 12 900.9

104.51 20 19 31 5051.5

122.26 14 0 32 797.3

102.64 21 57 33 4727.9
                         12 0 5 1707.83
17 6 44 681.34
13 4 11 1500.92
18 45 19 5651.51
13 37 14 1397.26
20 28 45 5327.93
                                                                                                                                                                                             -1.15
                                                                                                          151.04
                                                                                         11.52
                                                                       -4.92
                                                                                                                                                                                                                      302.27
                                                                                                                                                                                                   25.98
                                                                                                              162.55
                                                                                          310.44
                                                                       24.11
                                                                                                                                                                                                                      348.59
                                                                                                                                                                                                   -3.08
                                                                                                              149.89
                                                                       -7.02
                                                                                          355.17
          100.00
                                                                                                                                                                                                   28.16
                                                                                                                                                                                                                      257.26
                                                                                                              163.23
          100.00
                                                                       26.42
                                                                                         265.64
                                                                                                                                                                                                                      337.92
                                                                                                                                                                                                   -7.64
                                                                                                              146.91
                                                                                          344.33
          110,00
                                                                      -11.96
                                                                                                                                                                                                   33.44
                                                                                                                                                                                                                      233.66
                                                                                                              164.78
                                                                      32.03
                                                                                          242.61
          110.00
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 5181.9 SGR 399.6 SG3 91.7

RRT - .4480 RRF - .4903 RTF .9542

SGB 5197.3 R23 .0009 R13 -.9542

SGI 5185.0 SG2 357.0 THA 178.01
                                                                                                                                                                      ST 1438.9 SR 355.7 SS 376.8
CRT -.1237 CRS -.0145 CST -.9899
      TOE .0759 TRA 6.3376 TC3-1.2020 BAU 1.0885
      ROE .5043 RRA -.2512 RC3 .0113 FAU .00456
FOE .0805 FRA 1.3964 FC3 -.0583 BSP 16832
                                                                                                                                                                      LSA 1487.1 MSA 356.8 SSA 11.7
EL1 1439.6 EL2 352.8 ALF 178.14
      BOE .5100 BRA 6.3425 BC3 1.2020 FSP -302
                                                                                                                                                                                       APRIVAL DATE FER 24 1968
                                                                                                     FLIGHT TIME 204.00
                                                                                                     DISTANCE 589.096
     RL 151.79 LAL -.00 LOL 310.95 VL 24.682 GAL 15.57 AZL 89.55 MCA 311.16 SMA 116.47 ECC .39671 INC .4501 VI 29.352 RP 108.69 LAP -.34 LOP 262.12 VP 36.093 GAP 23.07 AZP 89.70 TAL 152.99 TAP 104.16 RCA 70.26 APO 162.67 V2 34.867 RC 208.560 GL 1.21 GP 8.60 ZAL 39.11 ZAP 168.89 ETS 126.20 ZAE 130.31 ETE 172.34 ZAC 11.58 ETC 26.58 CLP 172.94
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 78.221 VML 8.844 DLA -22.22 RAL 272.01 RAD 6569.5 VEL 14.127 PTH 2.57 VMP 14.233 DPA -14.05 RAP 255.30 ECC 2.2873
     C3 78.221 VHL 8.844 DLA -22.22 RAL 272.01 RAD 6569.5 VEL 14.127 PTH 2.57 VHP 14.233 DPA -14.05 RAP 255.30 ECC 2.2873 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 57 55 1773.81 -7.01 15.24 154.50 117.51 12 27 29 1173.8 -3.27 8.55 90.00 17 22 39 682.84 24.09 310.54 166.64 105.36 17 34 2 82.8 25.96 302.37 100.00 13 3 15 1562.95 -9.06 358.64 153.40 118.61 13 29 18 963.0 -5.17 352.01 100.00 19 0 0 5656.97 26.35 266.02 167.31 104.69 20 34 17 5057.0 28.09 257.66 110.00 13 38 21 1452.93 -13.98 347.39 150.49 121.51 14 2 34 852.9 -9.71 340.90 110.00 20 41 24 5339.76 31.85 243.49 168.87 103.13 22 10 24 4739.8 33.33 234.57
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                       ST 1461.7 SR 340.3 SS 392.1
CRT -.0645 CRS -.0494 CST -.9931
                                                                                               SGT 5151.1 SGR 384.8 SG3 90.1
RRT -.4462 RRF -.4311 RTF .9600
       TDE .2290 TRA 6.9222 TC3 -.9867 BAU 1.0319
      RDE .5181 RRA -.2683 RC3 .0080 FAU .00340
FDE .1054 FRA 1.4835 FC3 -.0376 BSP 15815
                                                                                                                                                                    LSA 1512.9 MSA 342.5 SSA 11.1
EL1 1461.9 EL2 339.6 ALF 179.09
                                                                                               SGB 5165.5 R25 .0009 R13 -.9600
SGI 5154.0 SGZ 344.2 THA 178.08
       BDE .5664 BRA 6.9274 BC3 .9868 FSP -297
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LAUNCH DATE AUG 4 1967
                                                                                   FLIGHT TIME 206.00
                                                                                                                                                     ARRIVAL CATE FEB 26 1968
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 592.169
    RL 151.79 LAL -.00 LOL 310.95 VL 24.640 GAL 17.24 AZL 89.27 MCA 314.33 SMA 116.26 ECC .41593 INC .7346 V1 29.352
RP 108.72 LAP -.53 LOP 265.29 VP 36.055 GAP 24.31 AZP 89.49 TAL 151.81 TAP 106.14 RCA 67.90 APO 164.61 VZ 34.858
RC 210.118 GL 1.81 GP 8.50 ZAL 37.70 ZAP 168.31 ETS 130.28 ZAE 130.04 ETE 172.48 ZAC 9.82 ETC 32.95 CLP 171.95
                            1.81 GP
    RC 210.118 GL
   PLANETOCENTRIC CONIC
     C3 90.797 VML 9.529 DLA -21.59 RAL 273.53 RAD 6569.8 VEL 14.565 PTH 2.64 VMP 14.984 DPA -14.48 RAP 257.49 ECC 2.4943
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90,00
                     11 55 51 1836.81
17 36 54 687.10
                                                          -6.97
                                                                                       157.83
                                                                                                           116.97
                                                                                                                        12 26 28
                                                                                                                                             1236.8
                                                                          18.83
                                                                                                                                                                -5.29
                                                                                                            105.48 17 48 21
                                                                                                                                                                25.90
                                                          24.01
                                                                                          170.52
                                                                                                                                               87.1
         90.00
                                                                          310.83
                                                                                                           117.98 13 29 16
104.94 20 47 38
120.67 14 4 13
103.66 22 22 3
                     13 2 13 1622.63
19 13 13 5664.56
                                                                            2.02
                                                                                          156.77
                                                                                                                                             1022.6
                                                                                                                                                                -7.16
                                                                                                                                                                               355.32
       100.00
                                                        -10.99
                                                                                                                                                               27.99
       100.00
                                                         26.20
                                                                         266.54
                                                                                         171.18
                                                                                                                                             5064.6
                                                                                                                                                                               258.20
                     13 39 6 1507.03
20 52 50 5352.91
                                                                                        153.94
                                                                                                                                               907.0
                                                                                                                                                                               343.83
       110.00
                                                       -15.89
                                                                         350.43
                                                                                                                                                             -11.70
                                                                                                                                             4752.9
                                                                                                                                                                               235.57
                                                         31.64
                                                                         244.46
                                                                                          172.76
                                                                                                                                                                33.20
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             RIG-COURSE EXECUTION ACCORDER

SGT 5116.5 SGR 368.7 SG3 88.5

RRT -.4422 RRF -.4296 RTF ..9655

SGB 5129.8 R23 .0010 R13 -.9655

SGI 5119.1 SG2 330.6 THA 178.17
    TOE .3880 TRA 7.5513 TC3 -.7923 BAU .9618
                                                                                                                                        ST 1484.1 SR 324.6 SS 409.3
CRT -.0122 CRS -.0804 CST -.9954
    RDE .5320 RRA -.2833 RC3 .0049 FAU .00213
FOE .1304 FRA 1.5786 FC3 -.0203 BSP 16777
                                                                                                                                        LSA 1539.0 MSA 326.6 SSA 10.5
                                                                                                                                         EL1 1484.1 EL2 324.5 ALF 179.84
    BDE .6565 BRA 7.5566 BC3 .7923 FSP -293
LAUNCH DATE AUG 4 1967
                                                                                   FLIGHT TIME 208,00
                                                                                                                                                      ARRIVAL DATE FEB 28 1968
  HELIOCENTRIC CONIC
                                                                                  DISTANCE 594.717
   RL 151.79 LAL -.00 LOL 310.95 VL 24.601 GAL 19.07 AZL 88.95 MCA 317.50 SMA 116.06 ECC .43753 INC 1.0514 V1 29.352
RP 108.74 LAP -.71 LOP 268.46 VP 36.019 GAP 25.71 AZP 89.22 TAL 150.75 TAP 108.25 RCA 65.28 APO 166.84 V2 34.848
RC 211.656 GL 2.38 GP 8.42 ZAL 36.48 ZAP 167.63 ETS 134.16 ZAE 129.71 ETE 172.62 ZAC 8.28 ETC 41.66 CLP 170.90
   PLANETOCENTRIC CONIC
    C3 105.969 VHL 10.294 DLA -20.99 RAL 274.86 RAD 6570.0 VEL 15.077 PTH 2.71 VHP 15.833 DPA -14.85 RAP 259.62 ECC 2.7440 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        161.01
                                                                                                           116.33 12 25 23
                                                                                                                                            1296.8
                                                                          22.24
        90.00
                     11 53 47 1896.79
                                                         -10.81
                                                                                                                                                             -7.18
                                                                                                                                                                                15.48
                     17 49 33 693.59
13 1 1 1679.77
19 24 59 5673.89
13 39 27 1559.31
                                                                                                           105.67 18 1 7
117.25 13 29 1
105.24 20 59 33
119.75 14 5 27
104.24 22 32 30
                                                                          311.27
                                                                                                                                                93.6
                                                                                                                                                                25.81
                                                                                                                                                                                303.12
        90.00
                                                         23.89
                                                                                          174.16
                                                                                                                                              1079.8
                                                                                          159.99
       100.00
                                                         -12.79
                                                                                                                                                                -9.04
                                                                                                                                                                                358.53
                                                                            5.31
                                                                                       174.81
       100.00
                                                         26.03
                                                                         267.19
                                                                                                                                              5073.9
                                                                                                                                                               27.87
                                                                                                                                                                               258.87
                                                         -17.68
                                                                          353.43
                                                                                         157.24
                                                                                                                                              959.3
                                                                                                                                                              -13.59
                                                                                                                                                                               346.70
       110.00
                    21 3 3 5367.11
                                                                                                                                             4767.1
                                                                         245.50
                                                                                                                                                                33.04
                                                                                                                                                                               236.65
       110.00
                                                         31.41
                                                                                          176.42
  DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             SGT 5079.5 SGR 351.4 SGS 87.1
RRT -,4352 RRF -.4252 RTF .9708
SGB 5091.7 R23 .0011 R13 -.9708
SGI 5081.8 SG2 316.2 THA 178.27
    TOE .5561 TRA 8.2540 TC5 -.6165 BAU .8731
                                                                                                                                         ST 1505.3 SR 308.5 SS 428.9 CRT .0348 CRS -.1090 CST -.9969
    ROE .5460 RRA -.2957 RC3 .0021 FAU .00067
FOE .1565 FRA 1.6840 FC3 -.0055 BSP 16641
                                                                                                                                        LŞA 1564.9 MSA 309.7 SSA 9.9
ELI 1505.3 EL2 308.3 ALF .43
    BDE .7793 BRA 8.2393 BC3 .6163 FSP -286
                                                                                  FLIGHT TIME 210.00
                                                                                                                                                     ARRIVAL DATE MAR 1 1968
LAUNCH DATE AUG 4 1967
                                                                                  DISTANCE 596.606 -
   HELIOCENTRIC CONIC
    RL 151.79 LAL -.00 LOL 310.95 VL 24.563 GAL 21.11 AZL 88.59 HCA 320.66 SMA 115.88 ECC .46190 INC 1.4084 V1 29.352 RP 108.77 LAP -.89 LOP 271.62 VP 35.985 GAP 27.30 AZP 88.91 TAL 149.87 TAP 110.53 RCA 62.35 APO 169.40 VZ 34.840 RC 213.175 GL 2.89 GP 8.33 ZAL 35.45 ZAP 166.83 ETS 137.86 ZAE 129.28 ETE 172.78 ZAC 7.08 ETC 53.36 CLP 169.76
   PLANETOCENTRIC CONIC
    C3 124.401 VHL 11.154 DLA -20.43 RAL 275.98 RAD 6570.5 VEL 15.676 PTH 2.79 VHP 16.797 DPA -15.19 RAP 261.68 ECC 3.0473
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 51 36 1953.65 -12,50 25.60 164.02 115.61 12 24 10 1353.6 -8.95 18.71 90.00 12 59 36 1734.20 -14.46 8.48 163.04 116.45 13 28 30 1134.2 -10.80 1.61 100.00 19 35 21 5684.55 25.84 267.92 178.19 105.58 21 10 5 5084.6 27.73 259.63
                                                                                                        115.61 12 24 10
105.91 18 12 21
116.45 13 28 30
105.58 21 10 5
118.75 14 6 14
104.84 22 41 44
                                                                                       160.37
                    13 39 24 1609.52
21 12 2 5382.05
       110.00
                                                         -19.34
                                                                          356.36
                                                                                                                                             1009.5
                                                                                                                                                             -15.36
                                                                                                                                                                               349.51
                                                                         246.59
                                                                                         179.83
                                                                                                                                             4782.1
                                                                                                                                                              32.87
                                                                                                                                                                              237.79
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                                   SGT 5036.7 SGR 532.8 SG3 85.6

RRT - 4247 RRF - 4170 RTF . 9756

SGB 5047.7 R23 .0013 R13 - .9756

SGI 5038.7 SG2 301.2 THA 178.39
    TOE .7249 TRA 8.9691 TC3 -.4606 BAU .7660
ROE .5607 RRA -.3041 RC3 -.0002 FAU-.00096
                                                                                                                                                                                 450.4
                                                                                                                                        CRT .0753 CRS -.1338 CST -.9980
                                                                                                                                                                                  9.3
    FOE .1821 FRA 1.7994 FC3 .0067 88P 16593
BDE .9164 BRA 8.9742 BC3 .4606 FSP -282
                                                                                                                                        LSA 1586.8 MSA 292.5 SSA
ELI 1521.8 EL2 291.5 ALF
LAUNCH DATE AUG 4 1967
                                                                                   FLIGHT TIME 212.00
                                                                                                                                                     ARRIVAL DATE MAR 3 1968
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 597.661
    RL 151.79 LAL -.00 LOL 310.95 VL 24.529 GAL 23.39 AZL 88.18 MCA 323.82 SMA 115.70 ECC .48946 INC 1.8169 V1 29.352
RP 108.80 LAP -1.07 LOP 274.79 VP 35.954 GAP 29.12 AZP 88.53 TAL 149.18 TAP 113.00 RCA 59.07 APO 172.34 VZ 34.832
RC 214.674 GL 3.38 GP 8.25 ZAL 34.62 ZAP 165.89 ETS 141.39 ZAE 128.75 ETE 172.96 ZAC 6.31 ETC 68.06 CLP 168.51
   PLANETOCENTRIC CONIC
    C3 146.971 VML 12.123 OLA -19.91 RAL 276.88 RAO 6570.6 VEL 16.380 PTH 2.86 VMP 17.897 OPA -15.48 RAP 263.63 ECC 3.4188
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 49 14 2007.20 -14.08 28.76 166.82 114.84 12 22 41 1407.2 -10.59 21.80 90.00 18 10 14 711.41 25.56 312.47 180.62 106.18 18 22 5 111.4 25.55 304.36
                                                                                                            115.59 13 27 39
105.95 21 19 12
117.70 14 6 30
105.45 22 49 42
                     12 57 53 1785.66
                                                         -16.00
                                                                          11.53
                                                                                          165.87
                                                                                                                                              1185.7
                                                                                                                                                              -12.43
                                                                                                                                                                                  4.56
                      19 44 16
                                     5696.22
                                                         25.62
                                                                         268.72
                                                                                          181.27
                                                                                                                                              5096.2
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       100.00
                     13 36 53
                                     1657.17
                                                         -20.68
                                                                          359.21
                                                                                          163.29
                                                                                                                                             1057.2
                                                                                                                                                              -17.01
                                                                                                                                                                               352.22
       110.00
                     21 19 45
                                       5597.48
                                                         30.88
                                                                         247.71
                                                                                          182.95
                                                                                                                                             4797.5
                                                                                                                                                              32.69
                                                                                                                                                                               238.95
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    TOE .8982 TRA 9.7677 TC3 -.3221 BAU .6329
                                                                              SGT 4989.7 SGR 313.1 SG3 84.2
RRT -.4091 RRF -.4036 RTF .9800
SGB 4999.5 R23 .0014 R13 -.9800
                                                                                                                                        ST 1533.1 SR 276.2 SS 474.5
CRT .1117 CRS -.1571 CST -.9988
    RDE .5761 RRA -.3075 RC3 -.0022 FAU-.00290
FDE .2082 FRA 1.9276 FC3 .0171 88P 16533
80E 1.0671 BRA 9.7725 BC3 .3221 FSP -278
                                                                                                                                        LSA 1605.0 MSA 275.1 SSA 8.7
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SG1 4991.4 SG2 285.6 THA 178.52

EL1 1533.4 EL2 274.4 ALF 1.19

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ARRIVAL DATE MAR 5 1968
                                                                                                     FLIGHT TIME 214.00
LAUNCH DATE AUG 4 1967
                                                                                                     DISTANCE 597.656
   HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.498 GAL 25.96 AZL 87.71 MCA 326.98 SMA 115.55 ECC .52069 INC 2.2919 VI 29.352 RP 108.82 LAP -1.25 LOP 277.95 VP 35.925 GAP 31.22 AZP 88.08 TAL 148.75 TAP 115.73 RCA 55.38 APO 175.72 V2 34.824 RC 216.153 GL 3.82 GP 8.16 ZAL 34.01 ZAP 164.81 ETS 144.74 ZAE 128.09 ETE 173.16 ZAC 6.07 ETC 84.15 CLP 167.14
    PLANETOCENTRIC CONIC
     C3 174.846 VHL 13.223 DLA -19.44 RAL 277.55 RAD 6570.9 VEL 17.210 PTH 2.94 VHP 19.160 DPA -15.74 RAP 265.46 ECC 3.8775
     C3 174.846 VML 13.223 OLA -19.44 RAL 277.55 RAD 6570.9 VEL 17.210 PTH 2.94 VMP 19.160 DPA -15.74 RAP 265.46 ECC 3.8775 LNCM AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 18 13 721.99 23.36 313.17 183.37 106.48 18 30 15 122.0 25.39 305.10 100.00 12 55 48 1833.89 -17.40 14.43 168.45 114.70 13 26 22 1233.9 -13.92 7.36 100.00 19 51 42 5708.59 25.39 269.56 184.03 106.33 21 26 50 5108.6 27.38 261.33 110.00 13 37 51 1702.11 -22.28 1.95 165.96 116.62 14 6 13 1102.1 -18.52 354.82 110.00 21 26 8 5413.13 30.59 248.83 185.74 106.06 22 56 21 4813.1 32.48 240.13
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 4938.5 SGR 292.5 SG3 82.9

RRT -.3867 RRF -.3831 RTF .9840

SG8 4947.2 R23 _0016 R13 -.9840

.SG1 4939.8 SG2 269.7 THA 178.68
                                                                                                                                                                        ST 1538.8 SR 260.2 SS 501.8
CRT .1454 CRS -.1799 CST -.9992
      TOE 1.0759 TRAID.6379 TC3 -.1996 BAU
                                                                             .4667
     ROE .5926 RRA -.3042 RC3 -.0036 FAU-.00526
FOE .2351 FRA 2.0710 FC3 .0260 BSP 16435
BOE 1.2283 BRA10.6422 BC3 .1997 FSP -274
                                                                                                                                                                       LSA 1618.9 MSA 257.8 SSA 8.1
                                                                                                                                                                         EL1 1539.3 EL2 257.4 ALF
                                                                                                                                                                                        ARRIVAL DATE MAR 7 1968
                                                                                                      FLIGHT TIME 216.00
                                                                                                      DISTANCE 596.289
   HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.470 GAL 28.87 AZL 87.15 MCA 330.13 SMA 115.42 ECC .55612 INC 2.8547 VI 29.352 RP 108.84 LAP -1.42 LOP 281.12 VP 35.900 GAP 33.65 AZP 87.52 TAL 148.62 TAP 118.76 RCA 51.23 APO 179.60 V2 34.817 RC 217.613 GL 4.23 GP 8.07 ZAL 33.64 ZAP 163.54 ETS 147.94 ZAE 127.28 ETE 173.38 ZAC 6.30 ETC 98.84 CLP 165.61
    PLANETOCENTRIC CONIC
                                                                                                                                          3.02 WHP 20.618 OPA -15.97 RAP 267.14 ECC 4.4492
     C3 209.585, VHL 14.477 OLA -19.01 RAL 277.96 RAD 6571.2 VEL 18.191 PTH
     C3 209.585, WHL 14.477 OLA -19.01 RAL 277.96 RAO 6571.2 VEL 18.191 PTH 3.02 WHP 20.618 OPA -15.97 RAP 267.14 ECC 4.4492 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 24 33 733.28 23.14 313.93 185.76 106.80 18 36 46 133.3 25.22 305.88 100.00 12 53 14 1878.57 -18.65 17.16 170.72 113.80 13 24 33 1278.6 -15.27 9.99 100.00 19 57 33 5721.40 25.14 270.43 186.42 106.73 21 32 54 5121.4 27.19 262.23 110.00 13 36 12 1743.95 -23.53 4.55 168.32 115.54 14 5 16 1143.9 -19.90 357.29 110.00 .21 31 5 5428.78 30.29 249.95 188.17 106.66 23 1 33 4828.8 32.27 241.30
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 4883.8 SGR 271.2 SG3 81.7
RRT -.3546 RRF -.3527 RTF .9874
SG8 4891.3 R23 .0017 R13 -.9874
SG1 4884.7 SG2 253.5 THA 178.87
                                                                                                                                                                        ST 1538.1 SR 244.5 SS 532.8
CRT .1779 CRS -.2035 CST -.9995
      TOE 1.2578 TRA11.5890 TC3 -.0916 BAU .2569
      RDE .6107 RRA -.2922 RC3 -.0045 FAU-.00823
                                                                                                                                                                        LSA 1628.3 MSA 240.7 SSA
EL1 1538.8 EL2 240.5 ALF
                                                                                                                                                                                                                               7.6
      FOE .2631 FRA 2.2326 FC3 .0340 BSP 16234
      BOE 1.3982 BRA11.5927 BC3 .0917 FSP -268
                                                                                                                                                                                                                             1.66
                                                                                                                                                                                        ARRIVAL DATE HAR 9 1968
                                                                                                     FLIGHT TIME 218.00
LAUNCH DATE AUG 4 1967
                                                                                                     DISTANCE 593.169
    HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.448 GAL 32.19 A7L 86.46 MCA 333.28 SMA 115.31 ECC .59628 INC 3.5367 V1 29.352
RP 108.86 LAP -1.59 LOP 284.28 VP 35.879 GAP 36.48 A7P 86.84 TAL 148.87 TAP 122.16 RCA 46.55 APO 184.06 V2 34.811
RC 219.054 GL 4.60 GP 7.98 ZAL 33.55 ZAP 162.07 ETS 150.99 ZAE 126.27 ETE 173.64 ZAC 6.83 ETC 110.26 CLP 163.89
    PLANETOCENTRIC CONIC
      C3 253.275 VHL 15.915 DLA -18.63 RAL 278.09 RAD 6571.5 VEL 19.354 PTH 3.10 VHP 22.309 DPA -16.17 RAP 268.61 ECC 5.1683
     C3 253.275 VHL 15.915 DLA -18.63 RAL 278.09 RAD 6571.5 VE, 19.354 PTM 3.10 VMP 22.309 DPA -16.17 RAP 268.61 ECC 5.1683
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 18 29 5 745.04 22.90 314.71 187.73 107.12 18 41 30 145.0 25.03 306.69
100.00 12 50 5 1919.35 -19.75 19.69 172.63 112.91 13 22 4 1319.4 -16.47 12.42
100.00 20 1 41 5734.44 24.88 271.32 188.40 107.12 21 37 16 5134.4 26.99 263.15
110.00 13 33 49 1782.32 -24.64 6.98 170.31 114.88 14 3 31 1182.3 -21.12 359.60
110.00 21 34 26 5444.24 29.98 251.05 190.17 107.24 23 5 11

DIFFFERNTIAL CORRECTIONS

MID-COMPASE FRECUTION ACCURACY

OBSIT DETERMINATION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                SCT 4820.8 SCR 249.5 SC3 80.5
RRT -.3092 RRF -.3086 RTF .9903
SCB 4827.3 R23 .0017 R13 -.9903
SCI 4821.4 SCZ 237.3 THA 179.08
                                                                                                                                                                        ST 1527.6 SR 229.3 SS 567.2
CRT .2088 CRS -.2272 CST -.9997
      TOE 1.4319 TRA12.6162 TC3 .0013 BAU .0166
     ROE .6311 RRA -.2685 RC3 -.0047 FAU-.01194
FOE .2903 FRA 2.4130 FC3 .0408 BSP 16129
BOE 1.5648 BRA12.6190 BC3 .0049 FSP -265
                                                                                                                                                                         LSA 1630.1 MSA 224.2 SSA
                                                                                                                                                                         EL1 1528.3 EL2 224.1 ALF
                                                                                                                                                                                         ARRIVAL DATE MAR 11 1968
                                                                                                      FLIGHT TIME 220.00
LAUNCH DATE AUG 4 1967
                                                                                                      DISTANCE 587.801
    HELIOCENTRIC CONIC
     RL 151.79 LAL -.00 LOL 310.95 VL 24.432 GAL 36.02 AZL 85.61 MCA 336.43 SMA 115.23 ECC .64162 INC 4.3856 VI 29.352

RP 108.88 LAP -1.75 LOP 287.44 VP 35.862 GAP 39.81 AZP 85.98 TAL 149.60 TAP 126.03 RCA 41.30 APO 189.16 V2 34.805

RC 220.476 GL 4.93 GP 7.87 ZAL 33.77 ZAP 160.35 ETS 153.90 ZAE 125.03 ETE 173.93 ZAC 7.48 ETC 118.17 CLP 161.94
    PLANETOCENTRIC CONIC
      C3 308.700 VHL 17.570 DLA -18.30 RAL 277.88 RAD 6571.8 VEL 20.737 PTH 3.18 VMP 24.279 DPA -16.35 RAP 269.85 ECC 6.0804
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  111.58 12 12 9
107.45 18 44 15
112.06 13 18 46
107.52 21 39 42
113.48 14 0 50
107.81 23 7 1
                                                                                                                                                                                                  -15.70
                                                                                                           174.91
                                                                                                                                                                               1583.1
                                                 2183.08
                                                                       -18.79
                                                                                              39.50
           90.00 11 35 46
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                         18 31 36 757.10
12 46 10 1955.90
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                                                                                           315.51
                                                                                                               189.22
           90.00
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                                                                        -20.70
                                                                                            21.99
                                                                                                             174.10
          100.00
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                                                                                           272.20
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                           20 3 55
                                                 5747.55
                                                                         24.62
          100.00
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                          15 30 33 1816.86
                                                                                              9.21
                                                                       -25.59
                                                                                                              17,1.87
          110.00
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          110.00
                           21 36 Z
                                                 5459.35
                                                                        29.67
                                                                                            252.12
                                                                                                               191.70
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 1506.9 SR 214.8 SS 605.7
CRT .2400 CRS -.2528 CST -.9998
                                                                                                SGT 4790.7 SGR 228.1 SG3 79.4
RRT - .2447 RRF - .2451 RTF .9927
SGB 4756.2 R23 .0017 R13 - .9927
       TOE 1.5967 TRAI3.7228 TC3 .0808 BAU .3341
      ROE .6546 RRA -.2297 RC3 -.0044 FAU-.01673
FDE .3169 FRA 2.6159 FC3 .0469 83P 15961
80E 1.7257 8RA13.7248 8C3 .0810 FSP -262
                                                                                                                                                                      LSA 1624.9 MSA 208.4 SSA 6.5
                                                                                                                                                                        EL1 1507.8 EL2 208.4 ALF 2.00
                                                                                                 SG1 4751.1 SG2 221.2 THA 179.33
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ARRIVAL DATE OCT 14 1967
                                                                                                    FLIGHT TIME 70.00
LAUNCH DATE AUG 5 1967
                                                                                                    DISTANCE 211.500
   HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 29.568 GAL -16.88 AZL 91.64 MCA 95.81 SMA 151.73 ECC .29042 INC 1.6378 V1 29.356
RP 108.12 LAP -1.63 LOP 47.72 VP 39.752 GAP -2.49 AZP 89.83 TAL 253.07 TAP 348.88 RCA 107.67 APO 195.80 V2 35.049
RC 73.590 GL -5.49 GP -21.87 ZAL 170.85 ZAP 73.40 ETS 7.54 ZAE 163.84 ETE 266.75 ZAC 113.33 ETC 7.29 CLP -72.07
    PLANETOCENTRIC CONIC
      C3 71.385 VHL 8.449 DLA 9.83 RAL 139.93 RAD 6569.4 VEL 13.883 PTH
                                                                                                                                       2.53 VHP 5.230 DPA -7.89 RAP 150.85 ECC 2.1748
     C3 71.385 VML 8.449 DLA 9.85 KAL 139.93 KAU 139.93 KAU 139.95 KAU 
                                                                                                                                                    0 44 30
                                                                                                                                                                                                                      55.42
                                                                                                                                                                            1960.9
                                                                                                                                                                                               -29.22
                                                                                           64.17
                                                                                                               28.19
                                                                                                                                     92.09
         100.00
                            0 1 49 2560.95
                                                                     -29.83
                                                                                                                                     68.34 15 36 46
                                                                                                                                                                                                                    184.59
         100.00
                          14 19 49 4616.38
                                                                      21.12
                                                                                         191.98
                                                                                                               19.68
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                                                                                                                                                                                                17.99
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                         1 21 5 2312.91
15 17 3 4437.16
                                                                                                                                     94.05
                                                                                                                                                    1 59 38
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                                                                                                                                                                                               -33.04
         110.00
                                                                    -33.97
                                                                                           45.07
                                                                                                               27.92
                                                                                                                                                 16 31 0
         110.00
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                                                                                                                                                                                                 21.46
                                                                     24.94
                                                                                         176.63
                                                                                                               17.92
                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                             SGT 601.4 SGR 497.8 SG3 184.8

RRT .4225 RRF .5936 RTF .6003

SGB 780.7 R23 .1280 R13 .6962

SG1 666.0 SG2 407.5 THA 32.88
                                                                                                                                                                      ST 237.4 $R 536.7 $S 196.4

CRT -.5061 CRS .6091 CST -.9840

LSA 401.9 MSA 215.4 $5A 19.3
     TOE .2439 TRA -.8245 TC3 -.0659 BAU
                                                                           . 1620
     ROE -.4822 RRA -.3871 RC$ -.1565 FAU .09353
     FOE .4997 FRA-1.2875 FC3-1.1343 BSP 1346
BOE .5404 BRA .9108 BC3 .1698 FSP -533
                                                                                                                                                                      EL1 366.6 EL2 188.1 ALF 117.40
                                                                                                                                                                                     ARRIVAL DATE OCT 16 1967
LAUNCH DATE AUG 5 1967
                                                                                                    FLIGHT TIME 72.00
                                                                                                    DISTANCE 217.987
   HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 29.524 GAL -16.69 AZL 91.48 MCA 99.02 SMA 151.29 ECC .28725 INC 1.4784 V1 29.356 RP. 108.08 LAP -1.46 LOP 50.93 VP 39.731 GAP -1.84 AZP 89.77 TAL 252.70 TAP 351.72 RCA 107.83 APO 194.74 V2 35.062 RC 75.721 GL -5.02 GP -22.58 ZAL 170.98 ZAP 78.20 ETS 5.77 ZAE 162.33 ETE 256.09 ZAC 115.18 ETC 6.45 CLP -77.20
   PLANETOCENTRIC CONIC
     C3 69.519 VHL 8.338 DLA 10.23 RAL 140.24 RAD 6569.5 VEL 13.816 PTH 2.52 VHP 5.110 OPA -7.93 RAP 148.92 ECC 2.1441 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                          2245.7
                                                                                                                                                                                              -27.84
                        22 29 43 2845.71
                                                                                         85.16
                                                                                                             28.27
                                                                                                                                   91.14 23 17 9
                                                                                                                                                                                                                       76.53
          90.00
                                                                     -28.30
                                                                                                                                     68.79 14 28 30
91.85 0 42 51
67.89 15 40 41
                        13 7 46 4843.88
0 0 4 2567.01
14 24 3 4597.81
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           90.00
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                                                                                         209.50
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                                                                                                                                                                                                                       55.86
         100.00
                                                                      -29.84
                                                                                           64.62
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         100.00
                                                                      20.64
                                                                                         190.81
                         1 19 49 2317.42
15 20 47 4420.17
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                                                                                                               27.98
                                                                                                                                     93.84
         110.00
                                                                     -33.99
                                                                                           45.42
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        110.00
                                              4420.17
                                                                      24.46
                                                                                         175.54
                                                                                                               17.69
                                                                                                                                                                                                                     168.18
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 667.9 SGR 510.1 SG3 193.8
RRT .4819 RRF .6219 RTF .6605
SGB 840.4 R23 .1279 R13 .7348
SG1 736.1 SG2 405.5 THA 30.24
     TOE .2574 TRA -.8868 TC3 -.1061 BAU .1884
ROE -.4649 RRA -.3925 RC3 -.1728 FAU .09693
                                                                                                                                                                      ST 256.6 SR 330.0 SS 206.5
CRT -.4865 CRS .6237 CST -.9788
                                                                                                                                                                      LSA 408.7 MSA 223.5 SSA 19.4
EL1 365.9 EL2 202.2 ALF 121.20
     FOE .5439 FRA-1.3117 FC3-1.2071 BSP 1591
BOE .5314 BRA .9698 BC3 .2027 FSP -562
                                                                                                                                                                                     ARRIVAL DATE OCT 18 1967
                                                                                                    FLIGHT TIME 74.00
LAUNCH DATE AUG 5 1967
                                                                                                   DISTANCE 224.426
    HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 29.474 GAL -16.50 A7L 91.32 MCA 102.23 SMA 150.78 ECC .28417 INC 1.3160 V1 29.356 RP 108.04 LAP -1.29 LOP 54.14 VP 39.705 GAP -1.23 A7P 89.72 TAL 252.22 TAP 354.45 RCA 107.93 APO 193.62 V2 35.075 RC 77.874 GL -4.52 GP -23.25 ZAL 171.05 ZAP 82.92 ETS 3.97 ZAE 160.41 ETE 247.15 ZAC 116.96 ETC 5.59 CLP -82.29
    PLANETOCENTRIC CONIC
      C3 67.701 VHL 8.228 DLA 10.63 RAL 140.61 RAD 6569.3 VEL 13.750 PTH 2.51 VHP 5.022 DPA -7.96 RAP 147.05 ECC 2.1142
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               90.89 23 15 29
68.36 14 32 57
91.61 24 37 28
67.45 15 44 55
93.63 1 57 29
64.86 16 38 11
                                                                                                                                                                                            -27.88
                                                                                                           28.36
                                                                                                                                                                       2252.7
                                                                                                                                                                                                                      77.03
           90.00 22 27 56 2852.66
                                                                     -28.30
                                                                                         85.67
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                                                                                                               19.97
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           90.00
                         13 12 33 4824.34
                                                                      18.72
                                                                                         208.28
                                                                                                                                                                                                                     56.32
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                          23 54 35 2573.22
                                                                     -29.85
                                                                                         65.08
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          100.00
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         100.00
                         14 28 36 4579.01
                                                                     20.16
                                                                                        189.62
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                         1 18 47 2322.04
15 24 49 4402.95
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20.38
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         110.00
                                                                     -34.01
                                                                                          45.78
                                                                                                               28.10
                                                                     23.97
                                                                                         174.45
                                                                                                               17.54
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                                                                                                                                                                                                                    167.14
         110.00
    DIFFERENTIAL CORRECTIONS
                                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                                                                    ST 278.5 SR 322.3 SS 215.5

CRT -.4720 CRS .6354 CST -.9737

LSA 417.8 MSA 230.0 SSA 19.5

EL1 367.5 EL2 215.3 ALF 126.36
                                                                                             SGT 743.4 SGR 521.5 SG3 201.3
RRT .5326 RRF .6483 RTF .7083
SGB 908.1 R23 .1300 R13 .7664
SG1 813.6 SG2 403.3 THA 27.90
     TOE .2745 TRA -.9521 TC3 -.1503 BAU .2185
      RDE -.4467 RRA -.3956 RC3 -.1889 FAU .09952
     FOE .5814 FRA-1.3209 FC3-1.2727 BSP 1861
BOE .5243 BRA 1.0310 BC3 .2414 FSP -591
                                                                                                                                                                                     ARRIVAL DATE OCT 20 1967
LAUNCH DATE AUG 5 1967
                                                                                                    FLIGHT TIME 76.00
                                                                                                    DISTANCE 230.819
   HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 29.417 GAL -16.32 AZL 91.15 MCA 105.44 SMA 150.20 ECC .28116 INC 1.1496 V1 29.356
RP 108.00 LAP -1.11 LOP 57.35 VP 39.675 GAP -.64 AZP 89.69 TAL 251.64 TAP 357.08 RCA 107.97 APO 192.43 V2 35.088
RC 80.046 GL -4.00 GP -23.87 ZAL 171.05 ZAP 87.52 ETS 2.12 ZAE 158.19 ETE 239.87 ZAC 118.63 ETC 4.72 CLP -87.28
    PLANETOCENTRIC CONIC
     C3 65.919 VHL 8.119 DLA 11.04 RAL 141.05 RAD 6569.3 VEL 13.685 PTH 2.50 VHP 4.963 DPA -8.00 RAP 145.29 ECC 2.0849
     LNCH AZMTH LNCH TIME L-I TIME ... INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                90.62 23 13 59
67.94 14 37 44
91.36 24 36 12
67.01 15 49 28
93.41 1 56 42
64.39 16 42 15
                                                                                                                                                                                             -27.92
                                                                                                                                                                        2259.9
           90.00 22 26 19 2859.90
                                                                                                           28.51
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                                                                     -28.31
                                                                                          86.20
           90.00
                         13 17 40
                                              4604.37
                                                                      18.22
                                                                                         207.03
                                                                                                               19.93
                                                                                                                                                                            4204.4
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                                                                                                                                                                            1979.7
                         23 53 12 2579.69
                                                                     -29.86
                                                                                          65.56
                                                                                                               28.48
                                                                                                                                                                                               -29.36
                                                                                                                                                                                                                      56.79
         100.00
                          14 33 28
                                              4559.80
                                                                      19.65
                                                                                         188.42
                                                                                                               19.30
                                                                                                                                                                            3959.8
                                                                                                                                                                                                16.37
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         100.00
                          1 17 56 2326.87
15 29 10 4385.39
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                                                                     -34.03
                                                                                           46.16
                                                                                                               28.28
                                                                                                                                                                                               -33.19
                                                                    23.45
                                                                                                                                                                            3785.4
                                                                                         173.34
                                                                                                               17.45
                                                                                                                                     64.39
                                                                                                                                                   16 42 15
                                                                                                                                                                                                 19.81
                                                                                                                                                                                                                    166.09
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 827.0 SGR 531.2 SG3 206.9
RRT .5753 RRF .6720 RTF .7457
SGB 982.9 R23 .1336 R13 .7915
SG1 897.7 SG2 400.3 THA 25.76
                                                                                                                                                               ST 303.0 SR 313.4 SS 223.6
CRT -.4622 CRS .6468 CST -.9688
LSA 430.0 MSA 234.2 SSA 19.7
      TOE .2951 TRA-1.0193 TC3 -.1961 BAU .2510
     RDE -.4271 RRA -.3959 RC3 -.2045 FAU .10114
FDE .6142 FRA-1.3136 FC3-1.3263 85P 2155
BDE .5191 BRA 1.0935 BC3 .2848 FSP -615
                                                                                                                                                                    ELI 372.8 ELZ 225.8 ALF 132.90
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ARRIVAL DATE OCT 22 1967
                                                                               FLIGHT TIME 78.00
LAUNCH DATE AUG 5 1967
                                                                               DISTANCE 237.168
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 29.354 GAL -16.13 AZL 90.98 MCA 108.65 SMA 149.58 ECC .27822 INC .9777 V1 29.356 RP 107.96 LAP -.93 LOP 60.57 VP 39.639 GAP -.08 AZP 89.69 TAL 250.97 TAP 359.62 RCA 107.96 APO 191.20 V2 35.101 RC 82.236 GL -3.44 GP -24.45 ZAL 170.97 ZAP 91.95 ETS .24 ZAE 155.81 ETE 234.00 ZAC 120.15 ETC 3.88 CLP -92.14
   PLANETOCENTRIC CONIC
    C3 64.164 VHL 8.010 DLA 11.47 RAL 141.55 RAD 6569.2 VEL 13.621 PTH 2.49 VHP 4.932 DPA -8.06 RAP 143.67 ECC 2.0560
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 24 48 2867.57 -28.32 86.76 28.73 90.34 23 12 36 2267.6 -27.97 78.11
                                                                                                          67.52 14 42 55
91.09 24 35 3
                                                                                                                                         4183.7
                                                                                                                                                         14.48
                                                                                                                                                                          198.54
                    13 23 11 4783.74
                                                        17.68
                                                                       205.75
                                                                                         19.94
                                                                                                                                                         -29.40
                                                                                                                                                                           57.30
                    23 51 56 2586.55
14 38 44 4539.99
                                                                                                                                         1986.6
                                                       -29.87
                                                                        66.07
                                                                                         28.70
                                                                                                          66.58 15 54 24
93.17 1 56 5
63.92 16 46 40
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                                                                       187.19
                                                                                         19.30
                                                        19.12
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                       1 17 13 2332.00
                                                       -34.05
                                                                        46.56
                                                                                        28.52
                                                                                                                                         3767.3
                                                                                                                                                          19.22
                                                                                                                                                                          165.02
                    15 33 53 4367.31
                                                                       172.21
                                                                                         17.43
                                                       22.92
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 330.2 SR 303.0 SS 231.9
CRT -.4571 CRS .6600 CST -.9639
                                                                           SGT 917.2 SGR 536.4 SG3 210.3
RRT .6104 RRF .6925 RTF .7742
SGB 1063.6 R23 .1385 R13 .8108
SG1 987.0 SG2 396.3 THA 23.78
    TOE .3194 TRA-1.0873 TC3 -.2492 BAU .2847
    RDE -.4059 RRA -.3929 RC3 -.2192 FAU .10165
    FOE .6442 FRA-1.2879 FC3-1.3716 BSP 2460
                                                                                                                                    LSA 445.8 MSA 235.5 SSA 19.8
ELI 383.3 EL2 232.1 ALF 140.33
                                                                                                                                                 ARRIVAL DATE OCT 24 1967
                                                                                FLIGHT TIME 80.00
LAUNCH DATE - AUG 5 1967
                                                                                DISTANCE 243.475
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 29.286 GAL -15.95 A7L 90.80 MCA 111.87 SMA 148.91 ECC .27534 INC .7991 V1 29.356 RP 107.92 LAP -.74 LOP 63.78 VP 39.600 GAP .45 AZP 89.70 TAL 250.21 TAP 2.08 RCA 107.91 APO 189.91 V2 35.113 RC 84.440 GL -2.85 GP -25.01 ZAL 170.82 ZAP 96.18 ETS 358.32 ZAE 153.36 ETE 229.28 ZAC 121.50 ETC 3.06 CLP -96.82
   PLANETOCENTRIC CONIC
    C3 62.433 VHL 7.901 OLA 11.91 RAL 142.12 RAD 6569.2 VEL 13.557 PTH 2.48 VHP 4.925 DPA -8.16 RAP 142.22 ECC 2.0275 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 23 20 2875.88 -28.32 87.37 29.00 90.03 23 11 16 2275.9 -28.01 78.72
                                                                                                          67.09 14 48 31
90.80 24 33 58
66.14 15 59 45
92.92 1 55 34
63.44 16 51 28
                                                                                                                                                                          197.25
                                      4762.24
                                                                       204.42
                                                                                         20.02
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         90.00
                     13 29
                                                        17.12
                    23 50 44 2594.00
14 44 26 4519.35
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                                                                                         28.99
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       100.00
                                                        -29.88
                                                                         66.62
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                                                        18.56
                                                                       185.91
                                                                                         19.37
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       100.00
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                      1 16 36 2337.60
                                                       -34.07
                                                                         47,00
                                                                                         28.83
                                                                                                                                         1737.6
                                                                                                                                                        -33.29
                                                                                                                                                         18.60
       110.00
                     15 36 59
                                      4348.51
                                                        22.35
                                                                       171.05
                                                                                         17.47
                                                                                                                                         3748.5
                                                                                                                                                                          163.92
   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                                     ST 360.2 SR 291.6 SS 239.2

CRT -.4562 CRS .6715 CST -.9601

LSA 465.6 MSA 234.1 SSA 19.9
                                                                           SGT 1012.7 SGR 544.1 SG3 212.1
RRT .6394 RRF .7118 RTF .7960
SGB 1149.6 R23 .1456 R13 .8259
    TOE .3477 TRA-1.1549 TC3 -.3031 BAU .3193
    RDE -.3839 RRA -.3675 RC3 -.2335 FAU .10134
    FOE .6675 FRA-1.2499 FC3-1.4053 BSP 2781
BDE .5179 BRA 1.2182 BC3 .3826 FSP -639
                                                                                                                                     EL1 400.3 EL2 233.5 ALF 147.50
                                                                            $61 1080.7 $62 392.0 THA 22.00
                                                                                                                                                ARRIVAL DATE OCT 26 1967
                                                                               FLIGHT TIME 82.00
LAUNCH DATE AUG 5 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 249.739
    RL 151.77 LAL -.00 LOL 311.91 VL 29.214 GAL -15.76 AZL 90.61 MCA 115.09 SMA 148.21 ECC .27252 INC .6121 V1 29.356 RP 107.89 LAP -.55 LOP 67.00 VP 39.557 GAP .96 AZP 89.74 TAL 249.38 TAP 4.46 RCA 107.82 APO 188.60 V2 35.125 RC 86.655 GL -2.21 GP -25.56 ZAL 170.57 ZAP 100.18 ETS 356.37 ZAE 150.90 ETE 225.48 ZAC 122.65 ETC 2.27 CLP-101.30
   PLANETOCENTRIC CONIC
    C3 60.722 VHL 7.792 DLA 12.38 RAL 142.74 RAD 6569.1 VEL 13.494 PTH 2.47 VHP 4.940 DPA -8.32 RAP 140.95 ECC 1.9993
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 21 51 2865.05 -28.32 88.04 29.34 89.70 23 9.56 2285.0 -28.06 79.39
90.00 13 35 37 4739.60 16.51 203.04 20.17 66.67 14 54 37 4139.6 13.22 195.91
                                                                                                          90.48 24 32 55
65.69 16 5 34
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       100.00
                     23 49 33 2602.23
                                                      -29.89
                                                                        67.24
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                                                                       184.58
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       100.00
                     14 50 37
                                      4497.65
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16 56 41
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                                                      -34,09
                                                                        47.48
                                                                                         29.20
                                                                                                          92.63
       110.00
                      1 16 3 2343.85
                                                                                                                                                          17.94
                                                                                                                                         3728.8
                                                                       169.84
                                                                                         17.56
                                                                                                          62.95
                     15 44 32
                                      4328.79
                                                       21.75
       110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 393.0 SR 279.0 SS 246.0
CRT -.4587 CRS .6827 CST -.9570
LSA 489.3 MSA 230.1 SSA 20.0
                                                                            SGT 1112.3 SGR 548.0 SG3 212.2
    TDE .3800 TRA-1.2213 TC3 -.3595 BAU .3542
                                                                           RRT .6633 RRF .7298 RTF .8125
SGB 1240.0 R23 .1546 R13 .8374
SGI 1178.0 SG2 387.3 THA 20.40
    RDE -.3608 RRA -.3794 RC3 -.2472 FAU .10022
    FDE .6859 FRA-1.2000 FC3-1.4289 BSP 3117
BDE .5240 BRA 1.2789 BC3 .4363 FSP -646
                                                                                                                                     EL1 423.5 EL2 230.0 ALF 153.64
                                                                                                                                                 ARRIVAL DATE OCT 28 1967
                                                                                FLIGHT TIME 84.00
LAUNCH DATE AUG 5 1967
                                                                                DISTANCE 255.968
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 29.137 GAL -15.56 AZL 90.41 HCA 118.31 SMA 147.47 ECC .26976 INC .4147 V1 29.356 RP 107.85 LAP -.37 LOP 70.22 VP 39.511 GAP 1.44 AZP 89.80 TAL 248.47 TAP 6.77 RCA 107.69 APO 187.26 V2 35.137 RC 88.880 GL -1.52 GP -26.12 ZAL 170.24 ZAP 103.95 ETS 354.37 ZAE 148.47 ETE 222.42 ZAC 123.60 ETC 1.53 CLP-105.57
   PLANETOCENTRIC CONIC
                                                                                                                                            -8.56 RAP 139.87 ECC 1.9715
    C3 59.030 VHL 7.683 DLA 12.89 RAL 143.43 RAD 6569.1 VEL 13.431 PTH
                                                                                                             2.46 VHP 4.974 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 20 17 2895.38 -28.31 88.80 29.74 89.32 23 8 32 2295.4 -28.10 80.14 90.00 13 42 42 4715.50 15.86 201.57 20.37 66.23 15 1 17 4115.5 12.51 194.49
                                                                                                         89.32 23 8 32
66.23 15 1 17
90.11 24 31 49
                    23 48 17 2611.53
14 57 22 4474.58
                                                                                                                                         2011.5
                                                                                                                                                          -29.56
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                                                        -29.89
                                                                        67.93
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                                                                                                          65.24 16 11 56
92.30 1 54 41
62.46 17 2 23
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                                                       17.30
                                                                        183.18
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                                                                                                                                                         -33.42
                       1 15 30
                                   2350.97
                                                       -34.11
                                                                         48.04
                                                                                         29.65
                                                                                                                                                           17.24
                                                                                                                                         3707.9
                     15 50 35 4307.91
                                                                       168.57
                                                                                         17.72
       110.00
                                                        21.09
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 1214.9 SGR 550.0 SG3 210.7
RRT .6829 RRF .7467 RTF .8249
SGB 1333.6 R23 .1655 R13 .8452
                                                                                                                                   ST 428.9 SR 265.1 SS 252.8
CRT -.4642 CRS .6939 CST -.9547
    TDE .4166 TRA-1.2853 TC3 -.4181 BAU .3887
     RDE -.3365 RRA -.3687 RC3 -.2603 FAU .09836
                                                                                                                                   LSA 517.4 MSA 223.5 SSA
    FOE .7008 FRA-1.1400 FC3-1.4426 BSP 3458
BDE .5355 BRA 1.3371 BC3 .4925 FSP -647
                                                                                                                                                                              20.2
                                                                                                                                     EL1 452.4 EL2 222.6 ALF 158.56
                                                                           SG1 1277.7 SG2 382.0 THA 18.94
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ARRIVAL DATE OCT 30 1967

EL1 620.3 EL2 166.4 ALF 170.27

LAUNCH DATE AUG 5 1967

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DISTANCE 262.160
   HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 29.058 GAL -15.37 AZL 90.21 MCA 121.53 SMA 146.71 ECC .26705 INC .2046 V1 29.356 RP 107.62 LAP -.17 LOP 73.44 VP 39.463 GAP 1.90 AZP 80.89 TAL 247.49 TAP 9.02 RCA 107.53 APO 185.89 VZ 35.149 RC 91.113 GL -.76 GP -26.71 ZAL 169.81 ZAP 107.45 ETS 352.32 ZAE 146.12 ETE 219.97 ZAC 124.33 ETC .82 CLP-109.62
    PLANETOCENTRIC CONIC
     C3 57.358 VHL 7.574 CLA 13.44 RAL 144.19 RAD 6569.0 VEL 13.368 PTH 2.44 VHP 5.025 OPA -8.89 RAP 138.98 ECC 1.9440
     C3 37.338 VML 7.374 DLA 13.44 RAL 144.19 RAD 6569.0 VEL 13.368 PTH 2.44 VMP 5.025 DPA -8.89 RAP 138.98 ECC 1.9440 LNCM AZMTM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 18 32 2907.25 -28.30 89.66 30.22 88.88 23 6 59 2307.2 -28.15 81.00 100.00 13 50 28 4689.58 15.14 200.01 20.65 65.78 15 8 38 4089.6 11.74 192.98 100.00 23 46 54 2622.23 -29.89 68.72 30.24 89.69 24 30 36 2022.2 -29.61 59.93 100.00 15 4 47 4449.82 16.59 181.69 19.96 64.77 16 18 57 3849.8 13.05 174.68 110.00 1 14 53 259.25 -34.14 48.68 30.17 91.92 1 54 12 1759.2 -33.49 39.50 110.00 15 57 13 428.58 20.38 167.2 17.95 61.95 17 8 39 3685.6 16.47 160.28
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 468.4 SR 249.3 SS 260.5

CRT -4724 CRS .7070 CST -.9523

LSA 550.4 MSA 214.5 SSA 20.3

EL1 486.6 EL2 211.5 ALF 162.48
                                                                                           SGT 1319.5 SGR 549.6 SG3 207.6
RRT .6991 RRF .7621 RTF .8338
     TOE .4585 TRA-1.3457 TC3 -.4784 BAU .4223
     ROE -.3103 RRA -.3550 RC3 -.2727 FAU .09574
                                                                                           SGB 1429.3 R23 .1779 R13 .8523
SG1 1379.0 SG2 376.0 THA 17.58
     FDE .7162 FRA-1.0684 FC3-1.4451 BSP 3791
BDE .5536 BRA 1.3917 BC3 .5507 FSP -636
                                                                                                                                                                                APRIVAL DATE NOV 1 1967
                                                                                                 FLIGHT TIME 88.00
LAUNCH DATE AUG 5 1967
   HELIOCENTRIC CONIC
                                                                                                 DISTANCE 268.319 --
    RL 151.77 LAL -.00 LOL 311.91 VL 28.975 GAL -15.16 AZL 89.98 MCA 124.75 SMA 145.94 ECC .26440 INC .0140 V1 29.356
RP 107.78 LAP .02 LOP 76.66 VP 39.412 GAP 2.34 AZP 90.01 TAL 246.45 TAP 11.20 RCA 107.35 APO 184.52 V2 35.160
RC 93.362 GL .07 GP -27.34 ZAL 169.27 ZAP 110.69 ETS 350.20 ZAE 143.84 ETE 218.02 ZAC 124.85 ETC .15 CLP-113.44
    C3 55.711 VHL 7.464 OLA 14.04 RAL 145.01 RAD 6569.0 VEL 13.307 PTH 2.43 VMP 5.093 OPA -9.34 RAP 138.28 ECC 1.9169 LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 16 30 2921.12 -28.27 90.68 30.78 88.38 23 5 11 2321.1 -28.20 82.01 90.00 13 59 6 4661.38 14.35 198.32 21.00 65.32 15 16 47 4061.4 10.90 191.34 100.00 23 45 17 2634.79 -29.88 69.66 30.82 89.20 24 29 12 2034.8 -29.67 60.86 100.00 15 13 0 4422.95 15.80 180.08 20.30 64.29 16 26 43 3622.9 12.22 173.13 110.00 16 4 33 4261.45 19.61 65.78 18.25 61.42 17 15 35 3661.5 15.64 144.01
   PLANETOCENTRIC CONIC
                                                                                        49.45 30.79 91.47 1 53 37
165.78 18.25 61.42 17 15 35
MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 1425.9 SGR 548.9 SG3 203.8
RRT .7128 RRF .7782 RTF .8406
SGB 1527.9 R23 .1930 R13 .8570
SGI 1482.3 SG2 370.3 THA 16.40
                                                                                                                                                                ST 511.6 SR 232.6 SS 267.7

CRT -.4814 CRS .7168 CST -.9514

LSA 587.7 MSA 204.1 SSA 20.4
     TOE .5050 TRA-1.4025 TC3 -.5408 BAU .4554
     ROE - .2837 RRA - .3398 RC3 - .2855 FAU .09280
     FOE .7256 FRA -.9949 FC3-1.4421 85P
                                                                       4141
                                                                       -628
                                                                                                                                                                 EL1 525.8 EL2 198.4 ALF 165.55
     BOE .5793 BRA 1.4429 BC3 .5115 FSP
                                                                                                 FLIGHT TIME 90.00
                                                                                                                                                                               ARRIVAL DATE NOV 3 1967
LAUNCH DATE AUG 5 1967
                                                                                                DISTANCE 274.446
    HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 28.889 GAL -14.96 AZL 89.74 MCA 127.98 SMA 145.15 ECC .26182 INC .2622 V1 29.356
RP 107.75 LAP .21 LOP 79.89 VP 39.358 GAP 2.75 AZP 90.16 TAL 245.36 TAP 13.33 RCA 107.15 APO 183.15 V2 35.170
RC 95.596 GL 1.00 GP -28.06 ZAL 168.62 ZAP 113.66 ETS 347.99 ZAE 141.64 ETE 216.49 ZAC 125.16 ETC 359.50 CLP-117.05
    PLANETOCENTRIC CONTC
     C3 54.092 VML 7.355 DLA 14.72 RAL 145.91 RAD 6569.0 VEL 13.246 PTH 2.42 VMP 5.175 DPA -9.92 RAP 137.74 ECC 1.8902
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 14 2 2937.61 -28.24 91.88 31.44 87.77 23 3 0 2337.6 -28.25 83.22 90.00 14 8 45 4630.35 13.46 196.47 21.45 64.85 15 25 56 4030.3 9.96 189.54 100.00 23 43 18 2649.74 -29.86 70.77 31.50 88.62 24 27 28 2049.7 -29.74 61.97 100.00 15 22 10 4393.45 14.92 178.33 20.72 63.80 16 35 24 3793.4 11.28 171.43
                        1 13 11 2380.83
16 12 43 4235.12
                                                                                        50.37
                                                                                                           31.52
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         110.00
                                                                  -34.17
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60.87 17 23 18
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                                                                                      164.23
                                                                                                           18.63
         110.00
                                                                  18.74
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           RET . 7242 RRF . . 7944 RTF . . 8455
SGB 1628.3 R23 . . 2103 R13 . . 8604
SG1 1586.9 SG2 . 364.8 TMA . 15.32
                                                                                                                                                                ST 559.2 SR 214.4 SS 275.7
CRT -.4908 CRS .7254 CST -.9510
     TOE .5575 TRA-1.4539 TC3 -.6049 BAU .4877
     RDE -.2559 RRA -.3224 RC3 -.2983 FAU .08946
                                                                                                                                                                LSA 630.4 MSA 192.1 SSA 20.6
     FDE .7340 FRA -.9170 FC3-1.4318 BSP 4497
BDE .6134 BRA 1.4892 BC3 .6745 FSP -618
                                                                                                                                                                EL1 570.2 EL2 183.2 ALF 168.10
     BDE .6134 BRA 1.4892 BC3 .6745 FSP
                                                                                                                                                                               ARRIVAL DATE NOV 5 1967
L'AUNCH DATE AUG 5 1967
                                                                                                 FLIGHT TIME 92.00
                                                                                                 DISTANCE 280.544
     RL 151.77 LAL -.00 LOL 311.91 VL 28.801 GAL -14.74 AZL 89.47 HCA 131.20 SMA 144.35 ECC .25930 INC .5285 V1 29.356
RP 107.72 LAP .40 LOP 83.11 VP 39.303 GAP 3.15 AZP 90.35 TAL 244.21 TAP 15.41 RCA 106.92 APO 181.78 V2 35.180
RC 97.843 GL 2.03 GP -28.87 ZAL 167.85 ZAP 116.34 ETS 345.67 ZAE 139.51 ETE 215.32 ZAC 125.27 ETC 358.87 CLP-120.44
    PLANETOCENTRIC CONIC
     C3 52.510 VHL 7.246 OLA 15.48 RAL 146.90 RAD 6568.9 VEL 13.186 PTH 2.41 VHP 5.273 OPA -10.65 RAP 137.35 ECC 1.8642
                                                                INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
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                                              4206.07
                                                                    17.77
                                                                                       162.54
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 1642.1 SGR 545.4 SG3 193.6
RRT .7336 RRF .8107 RTF .8491
SGB 1730.3 R23 .2299 R13 .8628
SGI 1692.5 SG2 359.6 THA 14.36
                                                                                                                                                               ST 612.1 SR 194.6 SS 284.5
CRT -.4991 CRS .7317 CST -.9512
      TOE .6164 TRA-1.4997 TC3 -.6708 BAU
                                                                         .5192
      RDE -.2267 RRA -.3029 RC3 -.3113 FAU .08582
                                                                                                                                                               LSA 679.0 MSA 178.9 SSA 20.7
     FOE .7416 FRA -.8366 FC3-1.4149 BSP 4857
BDE .6568 BRA 1.5300 BC3 .7395 FSP -605
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FLIGHT TIME 86.00

ARRIVAL DATE NOV 7 1967

LAUNCH DATE AUG 5 1967

DISTANCE 286.614 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 28.712 GAL -14.52 AZL 89.18 MCA 134.43 SMA 143.55 ECC .25684 INC .8222 V1 29.356 RP 107.69 LAP .59 LOP 86.34 VP 39.246 GAP 3.54 AZP 90.58 TAL 243.01 TAP 17.44 RCA 106.68 APO 180.41 V2 35.190 3.20 GP -29.81 TAL 166.94 TAP 118.73 ETS 343.22 TAE 137.45 ETE 214.47 TAC 125.19 ETC 358.23 CLP-123.64 RC 100.092 GL PLANETOCENTRIC CONIC C3 50.977 VHL 7.140 DLA 16.35 RAL 147.99 RAD 6568.9 VEL 13.128 PTH 2.40 VHP 5.385 DPA -11.56 RAP 137.09 ECC 1.8389 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22 7 6 2981.93 14 32 14 4556.61 33.12 86.16 22 58 48 2381.9 -28.31 -28.08 95.12 90.00 15 48 10 185.33 22.70 63.86 3956.6 7.68 90.00 11.28 192.15 87.05 24 22 28 62.75 16 56 27 2090.0 -29.85 64.95 33.24 100.00 23 37 38 2690.01 15 44 23 4323.76 -29.76 73.76 3723.8 167.48 100.00 12.79 174.26 21.93 89.44 1 50 20 1812.9 -33.88 43.64 110.00 1 10 7 2412.90 16 32 19 4173.63 -34.18 52.87 33.40 17 41 52 59.71 3573.6 12.52 160.67 19.73 110.00 16.66 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY RIG-COURSE EXECUTION ACCOUNTS RRT 1750.5 SGR 542.0 SG3 187.1 RRT .7408 RRF .8264 RTF .8513 SGB 1832.5 R23 .2511 R13 .8640 SGI 1797.9 SG2 354.5 TMA 13.45 ST 671.8 SR 172.4 SS 295.8 CRT -.5053 CRS .7361 CST -.9514 TDE .6842 TRA-1.5376 TC3 -.7375 BAU .5490 RDE -.1954 RRA -.2804 RC3 -.3241 FAU .08176 FDE .7529 FRA -.7507 FC3-1.3885 BSP 5195 BDE .7116 BRA 1.5630 BC3 .8056 FSP -583 LSA 735.5 MSA 164.7 SSA 20.8 EL1 677.7 EL2 147.5 ALF 172.24 ARRIVAL DATE NOV 9 1967 LAUNCH DATE AUG 5 1967 FLIGHT TIME 96.00 HELIOCENTRIC CONIC OISTANCE 292.657 RL 151.77 LAL -.00 LOL 311.91 VL 28.621 CAL -14.30 AZL 88.85 MCA 137.66 SMA 142.74 ECC .25447 INC 1.1504 V1 29.356 RP 107.66 LAP .78 LOP 89.57 VP 39.188 CAP 3.90 AZP 90.85 TAL 241.76 TAP 19.42 RCA 106.42 APO 179.06 V2 35.199 RC 102.344 GL 4.54 GP -30.91 ZAL 165.86 ZAP 120.82 ETS 340.60 ZAE 135.42 ETE 213.90 ZAC 124.94 ETC 357.58 CLP-126.67 PLANETOCENTRIC CONIC 63.34 16 2 2 85.98 24 18 44 62.20 17 9 30 -29.65 2117.6 -29.89 67.01 100.00 23 33 26 2717.64 75.80 34.35 15 56 6 4261.56 1 7 41 2435.03 22.77 3681.6 7.65 165.11 100.00 11.46 171.83 1 48 16 1835.0 -33.99 88.42 110.00 -34.15 54.60 34.61 59.10 17 53 15 152.02 16 44 18 3537.0 11.18 110.00 4136.96 15.39 156.59 20.50 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS RRT .7461 RRF .8429 RTF .8530 SGB 1937.1 R23 .2746 R13 .8651 SGI 1905.0 SG2 351.0 THA 12.65 ST 739.0 SR 148.9 SS 307.8 CRT -.5051 CRS .7327 CST -.9528 TDE .7608 TRA-1.5682 TC3 -.8062 BAU .5785 RDE -.1633 RRA -.2561 RC3 -.3378 FAU .07764 FOE .7620 FRA -.6671 FC3-1.3576 BSP 5558 BOE .7781 BRA 1.5890 BC3 .8741 FSP -566 LSA 800.0 MSA 150.4 SSA 20.9 EL1 742.9 EL2 127.9 ALF 174.01 FLIGHT TIME 98.00 ARRIVAL DATE NOV 11 1967 LAUNCH DATE AUG 5 1967 DISTANCE 298.677 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 28.529 GAL -14.07 A7L 88.48 MCA 140.89 SMA 141.94 ECC .25216 INC 1.5221 VI 29.356
RP 107.63 LAP .96 LOP 92.80 VP 39.128 GAP 4.25 A7P 91.18 TAL 240.48 TAP 21.36 RCA 106.14 APO 177.73 V2 35.208
RC 104.596 GL 6.08 GP -32.21 ZAL 164.58 ZAP 122.58 ETS 337.78 ZAE 133.41 ETE 213.59 ZAC 124.52 ETC 356.89 CLP-129.53 PLANETOCENTRIC CONIC C3 48.134 VHL 6.938 OLA 18.53 RAL 150.52 RAD 6568.8 VEL 13.019 PTH 2.38 VHP 5.663 DPA -14.00 RAP 136.84 ECC 1.7922 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 55 19 3050.93 -27.66 100.12 35.46 83.68 22 46 9 2450.9 -28.25 91.50 83.68 22 46 9 62.83 16 18 32 90.00 21 55 19 3050.93 90.00 15 4 13 4458.98 100.00 23 27 49 2752.61 186.53 24.69 3859.0 179.61 8.30 78.39 35.67 84.63 24 13 42 2152.6 -29.88 69.61 -29.45 100.00 162.38 16 14 23 61.65 17 24 56 3632.5 6.03 9.89 169.04 23.85 100.00 4232.53 -34.08 36.06 87.13 1 45 22 1863.0 -34.10 47.54 110.00 1 4 19 56.78 2463.01 58.46 18 6 34 3494.9 149.74 13.91 156.23 110.00 16 5A 19 4094.90 21.48 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1970.6 SGR 537.8 SG3 173.0 RRT .7488 RRF .8592 RTF .8543 SG8 2042.6 R23 .2997 R13 .8658 SG1 2012.6 SG2 349.0 THA 11.91 ST 815.8 SR 123.5 SS 322.0 CRT -.4932 CRS .7182 CST -.9546 LSA 874.9 MSA 136.3 SSA 20.8 TOE .8492 TRA-1.5891 TC3 -.8754 BAU .6071 RDE -.1296 RRA -.2289 RC3 -.3516 FAU .07331 FDE .7724 FRA -.5823 FC3-1.3185 BSP 5924 EL1 818.1 EL2 107.1 ALF 175.66 BOE .8590 BRA 1.6056 BC3 .9433 FSP ARRIVAL DATE NOV 13 1967 FLIGHT TIME 100.00 LAUNCH DATE AUG 5 1967 DISTANCE 304.674 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 28.435 GAL -13.83 AZL 88.05 MCA 144.11 SMA 141.13 ECC .24994 INC 1.9494 V1 29.356
RP 107.61 LAP 1.14 LOP 96.04 VP 39.068 GAP 4.59 AZP 91.58 TAL 239.15 TAP 23.27 RCA 105.86 APO 176.41 V2 35.216
RC 106.849 GL 7.88 GP -33.75 ZAL 163.06 ZAP 124.00 ETS 334.73 ZAE 131.36 ETE 213.50 ZAC 123.96 ETC 356.13 CLP-132.26 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 46.885 VHL 6.847 DLA 19.93 RAL 152.02 RAD 6568.8 VEL 12.971 PTH 2.37 VHP 5.836 DPA -15.60 RAP 136.77 ECC 1.7716
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 21 46 6 3101.00 -27.23 103.72 36.96 81.93 22 37 47 2501.0 -28.07 95.16
90.00 15 25 23 4395.75 6.31 182.94 26.15 62.34 16 38 39 3795.7 2.56 176.27
100.00 23 20 9 2797.72 -29.12 81.70 37.24 82.92 24 6 47 2197.7 -29.79 72.96
100.00 16 34 1 4174.26 7.99 165.76 25.24 61.10 17 43 36 3574.3 4.07 159.16 1 41 15 50.34 U 59 36 2498.89 -33.92 59.57 37.82 85.48 1898.9 -34.17 110.00 18 22 26 147.12 153.53 110.00 17 15 0 4045.85 12.15 22.75 57.80 3445.9 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 905.9 SR 95.4 SS 339.9 CRT -.4539 CRS .6795 CST -.9569 SCT 2080.4 SCR 535.1 SC3 164.9 RRT .7481 RRF .8742 RTF .8551 SCB 2148.1 R23 .3255 R13 .8661 TOE .9540 TRA-1.5976 TC3 -.9434 BAU .6339 RDE -. 0933 RRA -. 1977 RC3 -. 3646 FAU . 06865 FDE .7876 FRA -.4945 FC3-1.2676 BSP 6261 LSA 964.2 MSA 123.1 SSA 20.4 -520 SG1 2119.7 SG2 348.5 THA 11.20 EL1 907.0 EL2 84.9 ALF 177.24 BOE .9585 BRA 1.6096 BC3 1.0114 FSP

FLIGHT TIME 94.00

ARRIVAL CATE NOV 15 1967

LAUNCH DATE AUG 5 1967

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DISTANCE 310.649
   HELLOCENTRIC CONTC
    RL 151.77 LAL -.00 LOL 311.91 VL 28.342 GAL -13.58 AZL 87.55 MCA 147.34 SMA 140.34 ECC .24780 INC 2.4491 V1 29.356 RP 107.59 LAP 1.32 LOP 99.28 VP 39.006 GAP 4.91 AZP 92.06 TAL 237.79 TAP 25.13 RCA 105.56 APO 175.12 V2 35.223 RC 109.101 GL 10.02 GP -35.59 ZAL 161.24 ZAP 125.02 ETS 331.41 ZAE 129.24 ETE 213.63 ZAC 123.27 ETC 355.30 CLP-134.88
   PLANETOCENTRIC CONIC
    C3 45.820 VHL 6.769 DLA 21.59 RAL 153.73 RAD 6568.7 VEL 12.930 PTH 2.36 VHP 6.040 DPA -17.50 RAP 136.67 ECC 1.7541
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    ENCH AZHTH ENCH TIME L-I TIME
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                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 2191.8 SGR 533.9 SG3 156.2
RRT .7435 RRF .8883 RTF .8562
SG8 2255.9 R23 .351.2 R13 .8668
SG1 2228.4 SG2 351.2 THA 10.53
                                                                                                                                    ST 1011.6 SR 66.6 SS 360.2
CRT -.3430 CRS .5733 CST -.9602
    TOE 1.0780 TRA-1.5927 TC3-1.0099 BAU .6604
    ROE -.0558 RRA -.1627 RC3 -.3773 FAU .06388
                                                                                                                                    LSA 1069.9 MSA 111.8 SSA 19.7
    FDE .8027 FRA -.4086 FC3-1.2069 BSP
                                                          6627
                                                                                                                                    EL1 1011.9 EL2 62.6 ALF 178.70
    BDE 1.0794 BRA 1.6010 BC3 1.0781 FSP
                                                          -496
                                                                                                                                                ARRIVAL DATE NOV 17 1967
LAUNCH DATE AUG 5 1967
                                                                                FLIGHT TIME 104.00
                                                                               DISTANCE 316.602
  HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 28.247 GAL -13.33 A7L 86.95 MCA 150.57 SMA 139.55 ECC .24574 INC 3.0456 V1 29.356 RP 107.57 LAP 1.50 LOP 102.51 VP 38.944 GAP 5.22 AZP 92.65 TAL 236.39 TAP 26.96 RCA 105.26 APO 173.85 V2 35.230 RC 111.351 GL 12.57 GP -37.79 ZAL 159.02 ZAP 125.59 ETS 327.79 ZAE 126.98 ETE 213.93 ZAC 122.46 ETC 354.33 CLP-137.43
   PLANETOCENTRIC CONIC
    C3 45.029 WHL 6.710 DLA 23.62 RAL 155.72 RAD 6568.7 VEL 12.899 PTH 2.35 VMP 6.286 DPA -19.77 RAP 136.47 ECC 1.7411 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 13 10 3262.64 -25.17 115.10 40.76 76.59 22 7 33 2662.6 -26.77 106.80
                    16 27 51 4213.82
22 53 21 2939.66
17 30 21 4012.04
0 43 11 2608.30
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                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 2304.0 SGR 532.8 SG3 146.8
RRT .7330 RRF .8997 RTF .8577
SGB 2364.8 R23 .3756 R13 .8679
SGI 2337.7 SG2 357.2 THA 9.85
                                                                                                                                    ST 1138.5 SR 40.1 SS 384.3
CRT .0219 CRS .2116 CST -.9640
    TOE 1.2293 TRA-1.5702 TC3-1.0709 BAU .6856
    RDE -.0164 RRA -.1222 RC3 -.3877 FAU .05883
                                                                                                                                    LSA 1197.7 MSA 103.5 SSA 18.2
    FOE .8203 FRA -.3224 FC3-1.1311 8SP 7000
BOE 1.2294 8RA 1.5749 8C3 1.1389 FSP -471
                                                                                                                                    EL1 1138.5 EL2 40.1 ALF
    BOE 1.2294 BRA 1.5749 BC3 1.1389 FSP
                                                                                                                                                                              .04
                                                                                                                                                ARRIVAL DATE NOV 19 1967
                                                                                FLIGHT TIME 106.00
LAUNCH DATE AUG 5 1967
                                                                               DISTANCE 322.536
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 28.153 GAL -13.07 AZL 86.23 HCA 153.80 SHA 138.78 ECC .24377 INC 3.7747 V1 29.356 RP 107.55 LAP 1.67 LOP 105.75 VP 38.881 GAP 5.52 AZP 93.39 TAL 234.96 TAP 28.76 RCA 104.95 APO 172.60 VZ 35.236 RC 113.598 GL 15.67 GP -40.45 7AL 156.29 ZAP 125.64 ETS 323.82 ZAE 124.49 ETE 214.37 ZAC 121.56 ETC 353.18 CLP-139.96
   PLANETOCENTRIC CONTC
    C3 44.661 VML 6.683 DLA 26.09 RAL 158.09 RAD 6568.7 VEL 12.885 PTH 2.35 VHP 6.593 DPA -22.46 RAP 136.09 ECC 1.7350
    UNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 38 18 3413.00 -22.41 125.25 42.79 72.23 21 35 11 2813.0 -24.64 117.28 90.00 17 21 37 4059.34 -4.49 164.12 35.06 62.01 18 29 16 3459.3 -8.20 157.41
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62.01 18 29 16
73.76 23 18 19
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                    22 27 17 3061.66
18 15 19 3885.91
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       110.00
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                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 2415.6 SGR 529.6 SG3 136.1
RRT .7133 RRF .9061 RTF .8596
SG8 2472.9 R23 .3972 R13 .8694
SG1 2445.6 SG2 366.6 THA 9.09
                                                                                                                                   ST 1294.8 SR 34.0 S5 414.2
CRT .8228 CRS -.7159 CST -.9683
    TOE 1.4210 TRA-1.5226 TC3-1.1192 BAU .7081
    RDE .0252 RRA -.0732 RC3 -.3924 FAU .05333
FDE .8432 FRA -.2329 FC3-1.0337 BSP 7329
                                                                                                                                   LSA 1356.1 NSA 99.5 SSA 15.8
EL1 1295.1 EL2 19.3 ALF 1.24
                                                          7329
-436
    BOE 1.4212 BRA 1.5244 BC3 1.1860 FSP
                                                                                                                                                ARRIVAL DATE NOV $1 1967
LAUNCH DATE AUG 5 1967
                                                                                FLIGHT TIME 108.00
                                                                                DISTANCE 328.449
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 28.059 GAL -12.80 AZL 85.31 MCA 157.02 SMA 138.01 ECC .24188 INC 4.6927 V1 29.356
RP 107.53 LAP 1.83 LOP 109.00 VP 38.817 GAP 5.80 AZP 94.32 TAL 233.50 TAP 30.52 RCA 104.63 APO 171.39 V2 35.241
RC 115.842 GL 19.50 GP -43.67 ZAL 152.86 ZAP 125.05 ETS 319.47 ZAE 121.66 ETE 214.89 ZAC 120.58 ETC 351.76 CLP-142.56
   PLANETOCENTALC CONIC
    C3 44.985 VML 6.707 OLA 29.15 WAL 161.00 RAD 6568.7 VEL 12.898 PTH 2.35 VMP 6.991 OPA -25.65 RAP 135.38 ECC 1.7403 
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 
82.78 18 12 1 3930.54 -14.70 159.93 42.97 64.54 19 17 32 3330.5 -18.01 152.76
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64.53 21 10 13
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                    18 12 1 3930.54
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21 28 52 3296.10
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61,50 20 37 53
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                                                                                                                                         2696.1
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                                                                       137.04
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                                     3655.11
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                                                        -29.52
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       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 2529.8 SCR 524.9 SC3 124.4
RRT .6801 RRF .9043 RTF .8635
SCB 2583.7 R23 .4138 R13 .8726
                                                                                                                                   ST 1487.2 SR 58.0 SS 448.1
CRT ,9492 CRS -.9749 CST -.9732
     TOE 1,6678 TRA-1,4451 TC3-1,1482 BAU .7291
     RDE .0651 RRA -.0146 RC3 -.3890 FAU .04754
                                                                                                                                   LSA 1551.1 MSA 99.6 SSA 12.8
EL1 1488.2 EL2 18.2 ALF 2.12
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FLIGHT TIME 102.00

SG1 2555.4 SG2 381.0 THA 8.22

FOE .8658 FRA -.1458 FC3 -.9149 8SP 7705 80E 1.6691 8RA 1.4451 8C3 1.2123 FSP -404

ARRIVAL DATE NOV 23 1967 LAUNCH DATE AUG 5 1967 FLIGHT TIME 110.00 HELIOCENTRIC CONIC DISTANCE 334.340 RL 151,77 LAL -.00 LOL 311.91 VL 27.964 GAL -12.52 AZL 84.11 HCA 160.23 SMA 137.26 ECC .24007 INC 5.8915 V1 29.356 RP 107.52 LAP 1.99 LOP 112.24 VP 38.754 GAP 6.08 AZP 95.55 TAL 232.02 TAP 32.25 RCA 104.30 APO 170.21 V2 35.246 RC 118.080 GL 24.26 GP -47.59 ZAL 148.51 ZAP 123.71 ETS 314.66 ZAE 118.35 ETE 215.33 ZAC 119.55 ETC 349.93 CLP-145.38 PLANETOCENTRIC CONIC C3 46.511 VHL 6.820 DLA 32.94 RAL 164.73 RAD 6568.7 VEL 12.957 PTH 2.36 VHP 7.532 DPA -29.42 RAP 134.12 ECC 1.7655 C3 46.511 WH 6.820 DLA 32.94 RAI 164.73 RAD 6568.7 VEL 12.957 PTM 2.36 VRP 7.532 DRA -29.42 RAP 134.12 ECC 17.635 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.57 21 40 54 3516.78 -16.17 179.14 48.15 60.91 18 21 34 3576.0 -19.93 172.13 107.57 21 40 54 3516.78 -16.16 115.31 48.14 60.90 22 36 11 2716.8 -19.91 108.29 107.57 21 40 54 3516.78 -16.16 115.31 48.14 60.90 22 36 11 2716.8 -19.91 108.29 110.00 23 5 41 3056.09 -23.58 99.21 52.21 64.50 23 56 37 2456.1 -26.81 91.53 110.00 20 46 22 3484.64 -9.03 123.87 43.74 56.89 21 44 26 2884.6 -13.32 117.41 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2645.0 SGR 514.2 SG3 111.3 ST 1728.7 SR 85.1 SS 487.4 TOE 2.0020 TRA-1.3207 TC3-1.1403 BAU .7454 RDE .0974 RRA .0589 RC3 -.3697 FAU .04126 FDE .8904 FRA -.0581 FC3 -.7680 BSP 8069 806 2.0044 BRA 1.3220 BC3 1.1987 FSP -367 RRT .6205 RRF .8844 RTF .8698 SGB 2694.5 R23 .4233 R13 .8778 SG1 2664.6 SGZ 400-2 THA 7.04 .8930 CRS -.9634 CST -.9783 CRT LSA 1795.1 MSA 103.7 SSA 9.7 EL1 1730.4 EL2 38.3 ALF 2.52 BOE 2.0044 BRA 1.3220 BC3 1.1967 FSP - 367 FLIGHT TIME 112.00 ARRIVAL DATE NOV 25 1967 LAUNCH DATE AUG 5 1967 **DISTANCE 340.206** HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 27.870 GAL -12.23 AZL 82.47 MCA 163.44 SMA 136.51 ECC .23833 INC 7.5343 VI 29.356
RP 107.50 LAP 2.14 LOP 115.48 VP 38.689 GAP 6.34 AZP 97.23 TAL 230.50 TAP 33.94 RCA 103.98 APO 169.05 V2 35.250
RC 120.312 GL 30.23 GP -52.38 ZAL 142.92 ZAP 121.44 ETS 309.23 ZAE 114.34 ETE 215.42 ZAC 118.53 ETC 347.42 CLP-148.71 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC C3 90.306 VHL 7.093 DLA 37.59 RAL 169.74 RAD 6568.9 VEL 13.102 PTH 2.39 VHP 8.312 DPA -33.85 RAP 131.98 ECC 1.8279 LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 64.17 16 44 41 4338.07 -17.47 192.79 55.63 56.17 17 56 59 3738.1 -21.79 186.05 115.83 22 48 12 3193.90 -17.45 106.43 55.62 56.16 23 41 26 2593.9 -21.77 99.69 64.17 16 44 41 4338.07 -17.47 192.79 55.63 56.17 17 56 59 3738.1 -21.79 186.05 115.83 22 48 12 3193.90 -17.45 106.43 55.62 56.16 23 41 26 2593.9 -21.77 99.69 64.17 16 44 41 4338.07 -17.47 192.79 55.63 56.17 17 56 59 3738.1 -21.79 186.05 56.17 17 56 59 56.16 23 41 26 56.17 17 56 59 56.16 23 41 26 56.17 17 56 59 56.16 23 41 26 99.59 22 48 12 106.43 55.62 2593.9 -21.77 115.03 3193.90 -17.45 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 2760.7 SGR 492.3 SG3 96.8 RRT .5020 RRF .6187 RTF .8801 SGB 2804.3 R23 .4233 R13 .8861 SGI 2772.0 SG2 424.0 THA 5.24 ST 2031.2 SR 95.8 SS 532.6 TOE 2.4778 TRA-1.1216 TC3-1.0709 BAU .7525 RDE .1018 RRA .1543 RC3 -.3237 FAU .03440 FDE .9175 FRA .0314 FC3 -.5919 BSP 8396 BDE 2.4798 BRA 1.1322 BC3 1.1188 FSP -322 CRT .7659 CRS -.8691 CST -.9833 LSA 2099.1 MSA 111.6 SSA 6.9 EL1 2032.6 EL2 61.6 ALF 2.07 ARRIVAL DATE NOV 27 1967 FLIGHT TIME 114.00 LAUNCH DATE AUG 5 1967 DISTANCE 346.041 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 27.777 GAL -11.93 AZL 80.06 MCA 166.63 SMA 135.79 ECC .23665 INC 9.9374 V1 29.356 RP 107.49 LAP 2.29 LOP 118.73 VP 38.625 GAP 6.59 AZP 99.67 TAL 228.95 TAP 35.58 RCA 103.65 APO 167.92 V2 35.253 37.67 GP -58.22 ZAL 135.75 ZAP 118.07 ETS 302.71 ZAE 109.32 ETE 214.48 ZAC 117.62 ETC 543.58 CLP-153.31 RC 122.538 GL PLANETOCENTRIC CONIC C3 58.901 VHL 7.675 DLA 43.09 RAL 176.91 RAD 6569.1 VEL 13.426 PTH 2.45 VHP 9.524 DPA -38.94 RAP 128.28 ECC 1.9694 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 50,14 17 51 3 199.05 3860.8 205.30 66.65 16 36 22 4480.78 -17.96 56.05 24 45 50 95.06 50.14 2529.0 -22.95 23 53 41 3129.03 16 36 22 4480.78 101.30 66.64 123.95 -17.94 199.05 205.30 66.65 50.14 17 51 3 3880.8 -22.96 56.05 -17.96 50.14 24 45 50 50.14 17 51 3 50.14 24 45 50 95.06 2529.0 -22.95 -17.94 101.30 66.64 123.95 23 53 41 3129.03 199.05 -17.96 205.30 66.65 -22.96 56 05 16 36 22 4480.78 95.06 101.30 66.64 2529.0 -22.95 -17.94 123.95 23 53 41 3129.03 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2875.8 SCR 465.4 SC3 81.4 RRT .2266 RRF .6064 RTF .8977 SCB 2913.2 R23 .4084 R13 .9001 SCI 2877.7 SC2 453.0 THA 2.15 ST 2389.2 SR 85.4 SS 580.8 CRT -.0321 CRS -.1224 CST -.9880 TDE 3.1830 TRA -.7959 TC3 -.9123 BAU .7431 RDE .0077 RRA .2755 RC3 -.2414 FAU .02714 FDE .9439 FRA .1213 FC3 -.3989 BSP 8770 LSA 2457.2 MSA 122.0 SSA EL1 2389.2 EL2 85.4 ALF 179.93 BOE 3.1830 BRA .8423 BC3 .9437 FSP ARRIVAL DATE NOV 29 1967 FLIGHT TIME 116.00 LAUNCH DATE AUG 5 1967 **DISTANCE 351.826** HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 27.684 GAL -11.62 A7L 76.20 MCA 169.78 SMA 135.07 ECC .23497 INC13.7994 V1 29:356 RP 107.49 LAP 2.43 LOP 121.98 VP 38.561 GAP 6.82 A7P 103.59 TAL 227.37 TAP 37.15 RCA 103.34 APO 166.81 V2 35.256 RC 124.755 GL 46.95 GP -65.19 ZAL 126.74 ZAP 113.43 ETS 293.53 ZAE 102.82 ETE 210.64 ZAC 117.05 ETC 336.59 CLP-161.37 PLANETOCENTRIC CONIC C3 79.366 VML 8.909 DLA 48.86 RAL 187.71 RAD 6569.6 VEL 14.167 PTH 2.58 VMP 11.601 DPA -44.42 RAP 121.78 ECC 2.3062 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.36 16.51 10 4624.08 -16.39 217.16 82.83 43.30 18 8 14 4024.1 -22.13 211.67 16 51 10 2527.3 94.10 1 8 58 3127.29 -16.38 99.60 82.81 43.29 -22.11 131.64 18 8 14 4024.1 211.67 -16.39 217.16 82.83 43.30 -22.13 16 51 10 4624 .DB 48.36 -16.38 82.61 43.29 2 1 6 2527.3 -22.11 94.10 3127.29 131.64 1 8 58 99.60 16 51 10 -16.39 82.83 43.30 18 8 14 4024.1 -22.13 211.67 4624.08 217.16 48.36 3127.29 99.60 82.61 2 1 6 2527.3 -22.11 94.10 1 8 56 43.29 -16.38 131.64 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2968.5 SCR 529.0 SC3 66.1 RRT -.3838 RRF -.0234 RTF .9265 SCB 3015.2 R23 -.3704 R13 -.9223 ST 2736.0 SR 304.9 SS 634.0 CRT -.9300 CRS .8765 CST -.9921 TOE 4.2528 TRA -.2049 TC3 -.6376 BAU .6886 ROE -.4372 RRA .4018 RC3 -.1211 FAU .01942 FOE .9780 FRA .2239 FC3 -.2119 B3P 9059 BOE 4.2752 BRA .4510 BC3 .6490 F3P -229 LSA 2821.7 MSA 137.3 SSA 2.9 ELI 2750.7 ELZ 111.5 ALF 174.07 SG1 2975.6 SG2 487.3 THA 175.98

MINISTER OF STREET

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ARRIVAL DATE DEC 1 1967
                                                                                               FLIGHT TIME 118.00
LAUNCH DATE AUG 5 1967
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 357.515
     RL 151.77 LAL -.00 LOL 311.91 VL 27.591 GAL -11.28 AZL 69.01 HCA 172.85 SMA 134.38 ECC .23317 INC20.9861 V1 29.356 RP 107.48 LAP 2.56 LOP 125.23 VP 38.496 GAP 7.01 AZP 110.84 TAL 225.74 TAP 38.58 RCA 103.04 APO 165.71 V2 35.258
                              55.83 GP -72.49 TAL 116.09 TAP 107.51 ETS 275.31 TAE 93.90 ETE 197.20 TAC 117.54 ETC 319.66 CLP 178.72
     RC 126.964 GL
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43.38 17 39 14 4775.52 -11.25 226.67 105.02 38.06 18 58 50 4175.5 -17.50 221.92 136.62 2 28 26 3205.62 -11.24 101.53 105.00 38.06 3 21 52 2605.6 -17.49 96.79 43.38 17 39 14 4775.52 -11.25 226.67 105.02 38.06 18 58 50 4175.5 -17.50 221.92 136.62 2 28 26 3205.62 -11.24 101.53 105.00 38.06 3 21 52 2605.6 -17.49 96.79 136.62 2 28 26 3205.62 -11.24 101.53 105.00 38.06 3 21 52 2605.6 -17.40 06.70 138.06 18 58 50 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 105.00 1
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                                                                 -11.24
        136.62
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                          SGT 2888.5 SGR 1120.8 SG3 53.6
RRT -.8706 RRF -.7289 RTF .9698
SGB 3098.3 R23 -.2920 R13 -.9542
                                                                                                                                                             ST 2708.7 SR 1106.7 SS 707.9

CRT -.9902 CRS .9738 CST -.9960

LSA 3006.1 MSA 161.7 SSA 1.6
     TOE 5.5147 TRA 1.0026 TC3 - .2726 BAU .5003
    ROE-2.2595 RRA .2280 RC3 -.0092 FAU .01082
FOE 1.0498 FRA .3828 FC3 -.0683 BSP 9228
                                                                                          SG1 3054.1 SG2 521.6 THA 160.75
                                                                                                                                                              ELI 2922.6 EL2 143.3 ALF 157.92
     BOF 5.9597 BRA 1.0282 BC3 .2728 FSP
                                                                       -182
                                                                                                                                                                            ARRIVAL DATE DEC 3 1967
                                                                                               FLIGHT TIME 120.00
LAUNCH DATE AUG 5 1967
                                                                                               DISTANCE 362.923
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 27.500 GAL -10.88 A7L 52.01 HCA 175.64 SHA 133.69 ECC .23074 INC37.9860 V1 29.356
RP 107.48 LAP 2.68 LOP 128.47 VP 38.431 GAP 7.12 A7P 127.91 TAL 223.99 TAP 39.64 RCA 102.84 APO 164.54 V2 35.259
RC 129.165 GL 60.34 GP -72.55 7AL 104.98 7AP 100.72 ETS 228.20 7AE 79.73 ETE 134.21 7AC 121.46 ETC 271.46 CLP 128.33
   PLANETOCENTRIC CONIC
    C3 365.836 VHL 19.127 OLA 49.61 RAL 221.32 RAD 6572.0 VEL 22.071 PTH 3.24 VHP 25.690 OPA -48.78 RAP 88.84 ECC 7.0207 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 47.40 19 2 4 4888.92 -3.43 228.83 128.41 40.48 20 23 33 4288.9 -9.49 223.99
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        132.60
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   DIFFERENTIAL CORRECTIONS
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                         SCT 1490.1 SCR 2703.3 SC3 46.1
RRT -.9239 RRF -.9659 RTF ..9902
SCB 3088.5 R23 -.1702 R13 -.9845
                                                                                                                                                              ST 1022.8 SR 2389.4 SS 892.1
     TOE 3.2196 TRA 2.4559 TC3 -.0088 BAU .4127
                                                                                                                                                              CRT -.9843 CRS .9935 CST -.9980
LSA 2741.9 MSA 181.6 SSA 1.4
     ROE-7.8715 RRA-2.7831 RC3 -.0839 FAU-.00383
    FOE 1.2909 FRA .7901 FC3 .0091 BSP
BOE 8.5045 BRA 3.7117 BC3 .0844 FSP
                                                                      9233
-151
                                                                                          SG1 3046.7 SG2 506.4 THA 117.80
                                                                                                                                                              EL1 2593.8 EL2 166.2 ALF 112.95
                                                                                                                                                                            ARRIVAL DATE DEC 5 1967
                                                                                               FLIGHT TIME 122.00
LAUNCH DATE AUG 5 1967
                                                                                               DISTANCE 367.066
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 27.409 GAL -10.21 AZL 3.79 MCA 177.20 SMA 133.03 ECC .22507 INC86.2079 V1 29.356 RP 107.48 LAP 2.79 LOP 131.72 VP 38.367 GAP 6.87 AZP 176.21 TAL 221.76 TAP 38.96 RCA 103.09 APO 162.96 V2 35.259 RC 131.355 GL 43.92 GP -47.96 ZAL 96.83 ZAP 95.13 ETS 190.37 ZAE 51.94 ETE 123.30 ZAC 135.07 ETC 220.97 CLP 97.68
    PLANETOCENTRIC CONIC
      C31505.907 VHL 38.806 DLA 28.86 RAL 226.02 RAD 6573.2 VEL 40.338 PTH 3.56 VHP 51.261 DPA -29.35 RAP 63.27 ECC25.7834
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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          84.16
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2 1 58 3746.75
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59.36 5 21 55
60.13 24 47 52
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                        23 46 31 4169.49
4 27 3 3292.49
23 37 56 4196.51
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                                                                   7.63
         100.00
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                                                                                    113.30
                                                                                                        146.87
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         110.00
                                                                                     161.99
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                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 821.0 SGR 2415.2 SG3 44.0
RRT .7640 RRF -.9972 RTF -.7152
                                                                                                                                                             ST 617.0 SR 1415.8 SS 1229.2
CRT .9442 CRS .9984 CST .9240
LSA 1962.2 MSA 214.2 SSA 1.1
      TOE-4.1774 TRA .0851 TC3 -.0698 BAU 3.6814
      RDE-9.0722 RRA-9.0316 RC3 -.1690 FAU-.06012
                                                                                          SG8 2551.0 R23 -.1276 R13 -.9917
     FOE 1.7409 FRA 2.0632 FC3 .0346 BSP 7365
BOE 9.9877 BRA 9.0320 BC3 .1829 FSP -137
                                                                                          SG1 2499.1 SG2 512.0 THA 74.79
                                                                                                                                                              ELI 1532.9 ELZ 187.6 ALF 67.27
                                                                                                                                                                            ARRIVAL DATE DEC 7 1967
                                                                                               FLIGHT TIME 124.00
LAUNCH DATE AUG 5 1967
                                                                                               DISTANCE 376.697
     RL 151.77 LAL -.00 LOL 311.91 VL 27.319 GAL -10.67 AZL 133.43 MCA 184.22 SMA 132.37 ECC .23453 INC43.4272 VI 29.356
RP 107.48 LAP 2.90 LOP 134.97 VP 38.302 GAP 8.20 AZP 46.65 TAL 221.46 TAP 45.67 RCA 101.33 APO 163.42 VZ 35.259
RC 133.537 GL -59.27 GP 70.74 ZAL 102.95 ZAP 101.80 ETS 153.63 ZAE 78.62 ETE 224.96 ZAC 95.03 ETC 102.36 CLP 128.29
    PLANETOCENTRIC CONIC
     C3 460.934 VHL 21.469 DLA -57.60 RAL 196.50 RAD 6572.3 VEL 24.129 PTH 3.31 VHP 26.652 DPA 82.68 RAP 316.75 ECC 8.5858
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      64.89
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                                                                                       NID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 556.9 SGR 3205.9 SG3 50.2
RRT .4857 RRF .9876 RTF .6137
SGB 3253.9 R23 -.1405 R13 .9895
                                                                                                                                                             ST 538.8 SR 2308.2 SS 1081.8
CRT .9339 CRS -.9975 CST -.9568
      TOE-2.0143 TRA .2441 TC3 -.0185 BAU .8123
                                                                                                                                                                        .9339 CRS -.9975 CST -.9568
     ROE-8.2682 RRA-4.5323 RC3 .1305 FAU-.00721
FDE-1.7150 FRA -.7085 FC3 .0135 89P 9685
80E 8.5101 BRA 4.5389 BC3 .1318 FSP -156
                                                                                                                                                             LSA 2598.1 MSA 195.3 SSA
                                                                                          SG1 3217.6 SG2 485.0 THA 85.07
                                                                                                                                                              EL1 2362.8 EL2 188.2 ALF 77.62
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ARRIVAL DATE DEC 9 1967 FLIGHT TIME 126.00 LAUNCH CATE AUG 5 1967 HELIOCENTRIC CONIC DISTANCE 382.047 RL 151.77 LAL -.00 LOL 311.91 VL 27.230 GAL -10.24 AZL 115.42 MCA 186.99 SMA 131.74 ECC .23235 INC25.4203 V1 29.356
RP 107.48 LAP 2.99 LOP 138.22 VP 38.238 GAP 8.29 AZP 64.74 TAL 219.67 TAP 46.65 RCA 101.13 APO 162.34 V2 35.257
RC 135.709 GL -59.03 GP 70.03 ZAL 110.03 ZAP 109.85 ETS 103.08 ZAE 93.46 ETE 176.84 ZAC 89.79 ETC 51.65 CLP 173.78 PLANETOCENTRIC CONIC C3 179.973 VHL 13.415 DLA -51.93 RAL 146.58 RAD 6570.9 VEL 17.358 PTH 2.95 VHP 16.152 DPA 76.35 RAP 222.45 ECC 3.9619 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 141.43 2 32 42 141.42 10 45 48 141.43 2 32 42 141.42 10 45 48 141.43 2 32 42 141.43 2 32 42 141.44 10 45 48 49.79 1572.3 8.57 53.91 44.46 1 56 30 2172.33 58.64 14.78 10 35 32 8.59 295.05 49.81 15.4 14.80 290.32 135.54 616.44 14.78 53.91 1 56 30 2172.33 8.57 58.64 49.79 1572.3 135.54 10 35 32 616.44 8.59 295.05 49.81 16.4 14.80 290.32 8.57 49.79 1572.3 14.78 53.91 1 56 30 2172.33 58.64 295.05 49.81 16.4 14.80 290.32 10 35 32 616.44 8.59 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY \$T 1862.8 SR 829.0 SS 702.1 CRT .9505 CRS -.9235 CST -.9970 TDE-4.0439 TRA-3.3586 TC3 -.1292 BAU .3142 SGT 2918.2 SGR 1890.6 SG3 61.6 RRT .9524 RRF .8994 RTF .9888 SGB 3477.1 R23 -.2271 R13 .9723 RDE-1.4846 RRA-2.5702 RC3 -.0189 FAU .01156 FOE-1.1232 FRA -.7301 FC3 -.0556 BSP 10555 LSA 2141.8 MSA 251.7 SSA 1.5 BOE 4.3078 BRA 4.2292 BC3 .1306 FSP -196 SG1 3442.6 SG2 488.3 THA 32.41 EL1 2025.2 EL2 237.0 ALF 23.27 FLIGHT TIME 128.00 ARRIVAL DATE DEC 11 1967 **DISTANCE 387.678** HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 27.142 CAL -9.86 AZL 107.93 MCA 190.05 SMA 131.11 ECC .23112 INC17.9333 V1 29.356 RP 107.49 LAP 3.08 LOP 141.48 VP 38.173 CAP 8.46 AZP 72.32 TAL 217.95 TAP 48.00 RCA 100.81 APO 161.42 V2 35.255 RC 137.871 GL -54.42 GP 61.81 ZAL 115.78 ZAP 117.71 ETS 80.60 ZAE 102.71 ETE 157.44 ZAC 88.16 ETC 29.48 CLP-169.88 PLANETOCENTRIC CONIC C3 102.493 VHL 10.124 DLA -46.07 RAL 146.43 RAD 6570.0 VEL 14.961 PTH 2.70 VHP 11.985 0PA 66.40 RAP 204.55 ECC 2.6868 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 134.61 2 54 31 134.60 11 47 24 134.60 2 54 31 47 24 1405.1 18.50 52.01 2 21 6 2005.14 12.96 47.00 43.61 41.42 5259.2 127.99 10 9 44 5859.23 12.97 273.43 43.62 18.51 267.85 2 21 6 2005,14 10 9 44 5859.23 2 21 6 2005,14 10 9 44 5859.23 1405.1 52.01 12.96 47,00 43.61 18.50 41.42 5259.2 267.85 12.97 273.43 43.62 18.51 1405.1 18.50 41.42 52.01 12.96 47.00 43.61 5259.2 267.45 127.99 12.97 273.43 43.62 18.51 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3513.1 SGR 784.8 SG3 76.2 RRT .8137 RRF .6105 RTF .9539 ST 1865.5 SR 244.2 55 610.3 TDE-2.8947 TRA-3.6449 TC3 -.4471 BAU .6131 ROE .1218 RRA -.9572 RC3 -.0192 FAU .02119 FOE -.9961 FRA -.7021 FC3 -.1790 BSP 10978 CRT .2109 CRS -.0098 CST -.9795 SGB 3599.7 R23 -.3072 R13 .9470 LSA 1959.9 MSA 266.6 SSA 2.4 SG1 3571.7 SG2 448.7 THA 10.47 BOE 2.8973 BRA 3.7685 BC3 .4475 FSP EL1 1866.2 EL2 238.6 ALF -243 ARRIVAL DATE DEC 13 1967 FLIGHT TIME 130.00 LAUNCH DATE AUG 5 1967 DISTANCE 393.391 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 27.056 GAL -9.49 AZL 103.95 MCA 193.19 SMA 130.51 ECC .23026 INC13.9521 VI 29.356 RP 107.50 LAP 3.16 LOP 144.73 VP 38.109 GAP 8.65 AZP 76.40 TAL 216.26 TAP 49.45 RCA 100.46 APO 160.56 VZ 35.253 RC 140,023 GL -49.72 GP 53.84 7AL 120,00 ZAP 124.69 ETS 71.99 7AE 109.28 ETE 152.59 ZAC 87.31 ETC 21.34 CLP-164.71 PLANETOCENTRIC CONIC C3 71.133 VML 8.434 DLA -41.36 RAL 148.36 RAD 6569.4 VEL 13.874 PTH 2.53 VMP 9.976 DPA 57.87 RAP 197.54 ECC 2.1707 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 128.87 3 25 30 128.86 11 29 7 128.87 3 25 30 128.86 11 29 7 128.87 3 25 30 128.86 11 29 7 3 25 30 2 54 35 1854.50 9 51 41 5845.92 29.50 40.10 1254.5 20.33 58.49 15.41 35.72 20.34 274.50 40.11 5245.9 268.28 121.51 15.43 1254.5 20.33 29.50 2 54 35 1854.50 15.41 35.72 40.10 58.49 9 51 41 5845.92 15.43 274.50 40.11 5245.9 20.34 268.28 121.51 2 54 35 1854.50 35.72 40.10 1254.5 20.33 29.50 15.41 58.49 40.11 268.28 5245.9 20.34 9 51 41 5845.92 274.50 121.51 15.43 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3670.6 SGR 476.2 SG3 90.7 RRT .4943 RRF .1491 RTF .9253 SGB 3701.3 R23 -.3614 R13 .9227 ST 1760.8 SR 271.6 SS 576.2 CRT -.5223 CRS .7379 CST -.9609 TOE-2.2064 TRA-3.3992 TC3 -.7866 BAU .7482 ROE .3565 RRA -.4522 RC3 .0144 FAU .02802 FOE -.9477 FRA -.6598 FC3 -.3411 BSP 11323 LSA 1852.4 MSA 273.3 SSA 3.3 SG1 3678.2 SG2 413.1 THA 3.72 EL1 1766.6 EL2 230.8 ALF 175.31 BOE 2,2351 BRA 3,4292 BC3 .7868 FSP -290 FLIGHT TIME 132.00 ARRIVAL DATE DEC 15 1967 LAUNCH DATE AUG 5 1967 DISTANCE 399.132 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 26.970 GAL -9.13 A7L 101.49 MCA 196.38 SMA 129.92 ECC .22965 INC11.4913 V1 29.356
RP 107.51 LAP 3.22 LOP 147.98 VP 38.045 GAP 8.85 A7P 78.96 TAL 214.56 TAP 50.94 RCA 100.08 APO 159.75 V2 35.249
RC 142.165 GL -45.65 GP 47.06 ZAL 122.93 ZAP 130.64 ETS 67.38 ZAE 114.09 ETE 152.07 ZAC 86.48 ETC 17.29 CLP-162.94 PLANETOCENTRIC CONIC C3 55.031 VHL 7.418 DLA -37.73 RAL 150.76 RAD 6569.0 VEL 13.281 PTH 2.43 VHP 8.885 DPA 50.64 RAP 194.18 ECC 1.9057 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 16.66 25.38 37.99 124 36 3 66 25 LNCH AZMTH LNCH TIME L-I TIME 124.36 3 58 21 124.35 11 13 20 3 29 41 1719.97 9 35 43 5856.49 63.95 276.35 38.00 5256.5 21.06 269.69 16.68 116.05 21.05 18.72 3 29 41 1719.97 37.99 1120.0 16.66 25.36 63.95 21.06 269.69 9 35 43 38.00 5256.5 5856.49 16.68 276.35 116.05 21.05 18.72 1120.0 3 29 41 1719.97 25.38 37.99 16.66 63.95 269.69 9 35 43 276.35 36.00 5256.5 21.06 5856.49 116.05 16.68 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1681.4 SR 298.3 SS 554.7 CRT -.6643 CRS .8737 CST -.9439 SGT 3778.9 SGR 389.3 SG3 103.3 TOE-1.8152 TRA-3.1637 TC3-1.1216 BAU .8256 ROE .3733 RRA -.2617 RC3 .0377 FAU .03295 FDE -.9066 FRA -.6041 FC3 -.5184 BSP 11673 BDE 1.8552 BRA 3.1746 BC3 1.1222 FSP -330 RRT .1967 RRF -.2022 RTF .9039 968 3798.9 R23 -.3914 R13 .9030 SG1 3779.7 SG2 381.5 THA 1.18 LSA 1774.0 MSA 277.2 SSA 4.3

EL1 1693.3 EL2 221.4 ALF 173.16

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ARRIVAL DATE DEC 17 1967
                                                                                                                     FLIGHT TIME 134.00
LAUNCH DATE AUG 5 1967
                                                                                                                     DISTANCE 404.884
     HELIOCENTRIC CONIC
      RL 151.77 LAL -.00 LOL 311.91 VL 26.885 GAL -8.76 A7L 99.82 HCA 199.58 SMA 129.34 ECC .22922 INC 9.8162 V1 29.356 RP 107.52 LAP 3.28 LOP 151.23 VP 37.981 GAP 9.06 A7P 80.74 TAL 212.85 TAP 52.44 RCA 99.69 APO 158.99 V2 35.245 RC 144.295 GL -42.26 GP 41.44 7AL 124.82 ZAP 135.63 ETS 64.28 ZAE 117.66 ETE 153.05 ZAC 85.47 ETC 14.80 CLP-162.47
     PLANETOCENTRIC CONIC
       C3 45.382 VHL 6.737 DLA -34.96 RAL 153.25 RAD 6568.7 VEL 12.913 PTH 2.35 VHP 8.250 DPA 44.51 RAP 192.59 ECC 1.7469
      C3 43.382 VHL 6.737 BLA -34.96 KAL 193.29 KAU 05081.7 VEL 12.913 PIM 2.39 VMP 8.291 DPA 44.51 RAP 192.59 ECC 1.7469 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 68.58 4 4 37 1597.69 17.27 15.97 36.83 120.88 4 31 15 997.7 21.24 9.03 111.42 9 20 38 5882.69 17.29 278.86 36.84 120.87 10 58 40 5282.7 21.25 271.91 68.58 4 4 37 1597.69 17.27 15.97 36.83 120.88 4 31 15 997.7 21.24 9.03 111.42 9 20 38 5882.69 17.29 278.86 36.84 120.87 10 58 40 5282.7 21.25 271.91 68.58 4 4 37 1597.69 17.27 15.97 36.83 120.88 4 31 15 997.7 21.24 9.03 111.42 9 20 38 5882.69 17.29 278.86 36.84 120.87 10 58 40 5282.7 21.25 271.91 68.58 4 4 37 1597.69 17.27 15.97 36.83 120.88 4 31 15 997.7 21.24 9.03 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.91 10 58 40 5282.7 21.25 271.9
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           111.42
                                                                                                               MID-COURSE EXECUTION ACCURACY
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     DIFFERENTIAL CORRECTIONS
                                                                                                               SGT 3876.3 SGR 355.1 SG3 113.3
RRT .0201 RRF -.3847 RTF .8878
SGB 3892.5 R23 -.4028 R13 .8877
                                                                                                                                                                                                   ST 1622.5 SR 304.4 SS 536.4
CRT -.7085 CRS .9196 CST -.9286
       TDE-1.5680 TRA-2.9623 TC3-1.4460 BAU .8778
       RDE .3522 RRA -.1731 RC3 .0476 FAU .03627
                                                                                                                                                                                                 LSA 1713.1 MSA 279.8 SSA 5.4
       FOE -: 8620 FRA - .5383 FC3 - .6919 BSP 11987
                                                                                                                                                                                                   ELI 1637.0 EL2 212.9 ALF 172.30
       BDE 1.6071 BRA 2.9674 BC3 1.4468 FSP -362
                                                                                                                SG1 3876.3 SG2 355.1 THA .11
                                                                                                                                                                                                                    ARRIVAL DATE DEC 19 1967
LAUNCH DATE AUG 5 1967
                                                                                                                      FLIGHT TIME 136.00
                                                                                                                      DISTANCE 410.638
    HELIOCENTRIC CONIC
      RL 151.77 LAL -.00 LOL 311.91 VL 26.802 GAL -8.38 AZL 98.60 HCA 202.80 SMA 128.78 ECC .22896 INC 8.5977 V1 29.356
RP 107.55 LAP 3.32 LOP 154.88 VP 37.918 GAP 9.26 AZP 82.07 TAL 211.14 TAP 53.94 RCA 99.29 APO 158.26 V2 35.240
RC 146.414 GL -39.43 GP 36.80 ZAL 125.90 ZAP 139.82 ETS 61.93 ZAE 120.32 ETE 154.57 ZAC 84.26 ETC 13.06 CLP-162.58
     PLANETOCENTRIC CONIC
                                                                                                                                                                 2.30 VHP 7.866 DPA 39.29 RAP 192.03 ECC 1.6410
       C3 38.946 VHL 6.241 DLA -32.87 RAL 155.75 RAD 6568.5 VEL 12.662 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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114.09 12 7 52
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           110.00
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                                                                                                               MID-COURSE EXECUTION ACCURACY
     CIFFERENTIAL CORRECTIONS
                                                                                                               SCT 3966.6 SCR 335.4 SC3 120.4
RRT -.0768 RRF -.4662 RTF .8753
SCB 3980.8 R23 .3997 R13 -.8755
SCI 3966.7 SC2 334.4 THA 179.63
                                                                                                                                                                                                  ST 1577.8 SR 303.8 SS 518.9

CRT - .7298 CRS .9434 CST - .9149

LSA 1664.9 MSA 281.2 SSA 6.6
       TOE-1.3999 TRA-2.7837 TC3-1.7597 BAU .9165
       RDE .3279 RRA -.1243 RC3 .0469 FAU .03822
FDE -.8140 FRA -.4657 FC3 -.8497 BSP 12240
                                                                                                                                                                                                   ELI 1593.6 EL2 205.6 ALF 171.86
       BOE 1.4378 BRA 2.7864 BC3 1.7673 FSP -382
                                                                                                                                                                                                                    ARRIVAL CATE CEC 21 1967
                                                                                                                      FLIGHT TIME 138.00
LAUNCH DATE AUG 5 1967
                                                                                                                     DISTANCE 416.389
     HELIOCENTRIC CONIC
      RL 151.77 LAL -.00 LOL 311.91 VL 26.720 GAL -7.99 AZL 97.67 HCA 206.02 SMA 128.23 ECC .22886 INC 7.6669 VI 29.356
RP 107.55 LAP 3.36 LOP 157.73 VP 37.854 GAP 9.47 AZP 83.10 TAL 209.42 TAP 55.44 RCA 98.88 APO 157.58 V2 35.234
RC 148.521 GL -37.06 GP 32.97 ZAL 126.33 ZAP 143.35 ETS 60.05 ZAE 122.32 ETE 156.24 ZAC 82.85 ETC 11.73 CLP-162.99
      PLANETOCENTRIC CONIC
       C3 34.378 VHL 5.857 DLA -31.31 RAL 158.25 RAD 6568.4 VEL 12.477 PTH 2.26 VHP 7.631 DPA 34.81 RAP 192.13 ECC 1.5646 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                         255.60
            110.00
                                                                                                               MID-COURSE EXECUTION ACCURACY
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     DIFFERENTIAL CORRECTIONS
                                                                                                               SCT 4058.8 SGR 323.2 SG3 125.7
RRT -.1353 RRF -.4986 RTF .8660
SGB 4071.6 R23 .3842 R13 -.8664
                                                                                                                                                                                                   ST 1548.2 SR 303.4 SS 504.4
CRT -.7471 CRS .9596 CST -.9034
        TOE-1.2853 TRA-2.6218 TC3-2.0704 BAU .9498
       ROE .3085 RRA -.0923 RC3 .0405 FAU .03929
FOE -.7690 FRA -.3936 FC3 -.9915 BSP 12545
                                                                                                                                                                                                 LSA 1632.2 MSA 281.7 SSA 7.8
                                                                                                               SG1 4059.0 SG2 320.2 THA 179.38
                                                                                                                                                                                                 ELI 1565.0 ELZ 199.5 ALF 171.53
        BOE 1.3219 BRA 2.6235 BC3 2.0708 FSP -399
                                                                                                                                                                                                                     ARRIVAL CATE DEC 23 1967
                                                                                                                      FLIGHT TIME 140.00
 LAUNCH DATE AUG 5 1967
                                                                                                                     DISTANCE 422.136
       RL 151.77 LAL -.00 LOL 311.91 VL 26.639 GAL -7.60 AZL 96.93 MCA 209.25 SMA 127.70 ECC .22892 INC 6.9289 VI 29.356 RP 107.57 LAP 3.38 LOP 160.98 VP 37.791 GAP 9.68 AZP 83.95 TAL 207.69 TAP 56.94 RCA 98.46 APO 156.93 V2 35.228 RC 150.615 GL -55.05 GP 29.78 ZAL 126.22 ZAP 146.35 ETS 58.52 ZAE 123.85 ETE 157.86 ZAC 81.27 ETC 10.68 CLP-163.57
      PLANETOCENTRIC CONIC
       C3 30.771 VHL 5.547 DLA -30.16 RAL 160.78 RAD 6568.2 VEL 12.335 PTH 2.22 VMP 7.491 DPA 30.92 RAP 192.67 ECC 1.5064
       C3 30.771 VHL 5.547 DLA -30.16 RAL 1607,78 RAU 6368.2 VEL 12.333 FIN 2.22 VAT 7.03 DLA 30.52 LAT 1NJ 2 LAT
                                                                                                                                    36.84
                                                                                                                                                           114.63
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                                                         715.10
                                                                                    17.98
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                                                       1281.26
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              79.15
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123.66 7 53 7
106.31 13 16 53
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            100.85
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                              11 46 34 5419.77
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                                                                                                          249.31
                                                                                                                                   41.94
                                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                 ST 1533.0 SR 305.3 SS 494.0
CRT -.7659 CRS .9719 CST -.8947
LSA 1615.0 MSA 281.0 SSA 9.1
                                                                                                               SGT 4154.8 SGR 317.0 SG3 129.8
RRT -.1754 RRF -.5054 RTF .8596
        TOE-1.2091 TRA-2.4707 TC3-2.3832 BAU .9805
        RDE .2947 RRA -. 0683 RC3 .0313 FAU .03976
                                                                                                              SGB 4166.9 R23 .3594 R13 -.8600
SGI 4155.2 SG2 312.1 THA 179.23
        FOE -. 7294 FRA -. 3246 FC3-1.1185 BSP 12912
                                                                                                                                                                                                 ELI 1551.0 ELZ 194.0 ALF 171.19
        BDE 1.2445 BRA 2.4716 BC3 2.3834 FSP -415
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ARRIVAL DATE DEC 25 1967
                                                                        FLIGHT TIME 142.00
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 427.875
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.559 GAL -7.20 AZL 96.33 MCA 212.47 SMA 127.18 ECC .22914 INC 6.3261 V1 29.356 RP 107.59 LAP 3.39 LOP 164.22 VP 37.729 GAP 9.89 AZP 84.66 TAL 205.96 TAP 58.43 RCA 98.04 APO 156.32 V2 35.221 RC 152.696 GL -33.30 GP 27.11 ZAL 125.67 ZAP 148.94 ETS 57.28 ZAE 125.02 ETE 159.38 ZAC 79.56 ETC 9.82 CLP-164.23
   PLANETOCENTRIC CONIC
    C3 27.958 VHL 5.288 QLA -29.36 RAL 163.36 RAD 6568.1 VEL 12.220 PTH 2.20 VMP .7.412 OPA 27.50 RAP 193.53 ECC 1.4601
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             589.3
                                                                                                                                           21.19
                                                                                             113.46 6 36 11
       81.92
                    6 16 22 1189.28
                                                   18.17
                                                                345.45
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116.66 8 11 10
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                                                                313.88
                                                                                37.64
                    8 29 30
                                 759.10
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        98.08
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                    7 56 46
                                   864.06
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                                                                319.64
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      100.00
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110.32 11 9 16
123.75 7 52 0
103.82 13 37 47
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                    9 31 48 5847.60
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                                                                278.81
      100.00
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                                                    5.76
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                                                                                                                                            10.15
                                   927.73
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      110.00
                    7 36 33
                                                                319.55
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                                5356.70
                                                   31.58
                                                                244.73
      110.00
                  12 8 30
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 4254.7 SGR 316.0 SG3 133.1
RRT--,2068 RRF -.4992 RTF .8557
SGB 4266.5 R23 .3284 R13 -.8561
SGI 4255.3 SG2 309.2 THA 179.12
                                                                                                                       ST 1531.2 SR 309.9 SS 487.8
CRT -.7876 CRS .9814 CST -.8894
LSA 1612.6 MSA 279.1 SSA 10.4
    TOE-1.1618 TRA-2.3253 TC3-2.7013 BAU 1.0097
   RDE .2855 RRA -.0488 RC3 .0213 FAU .03981
FOE -.6962 FRA -.2601 FC3-1.2327 BSP 13334
                                                                                                                        EL1 1550.8 EL2 188.5 ALF 170.81
    BOE 1.1964 BRA 2.3259 BC3 2.7013 FSP -432
                                                                                                                                   ARRIVAL DATE DEC 27 1967
                                                                        FLIGHT TIME 144.00
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 433.611
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.480 GAL -6.79 A7L 95.82 MCA 215.70 SMA 126.67 ECC .22952 INC 5.8216 V1 29.356 RP 107.62 LAP 3.39 LOP 167.47 VP 37.666 GAP 10.10 AZP 85.27 TAL 204.21 TAP 59.91 RCA 97.60 APO 155.75 V2 35.214 RC 154.762 GL -31.78 GP 24.85 ZAL 124.72 ZAP 151.19 ETS 56.30 ZAE 125.94 ETE 160.75 ZAC 77.73 ETC 9.09 CLP-164.94
  PLANETOCENTRIC CONIC
    C3 25.650 VHL 5.065 DLA -28.83 RAL 166.02 RAD 6568.0 VEL 12.125 PTH
                                                                                                  2.17 WHP 7.377 DPA 24.45 RAP 194.63 ECC 1.4221
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     6 46 29 1105.12
                                                                                36.74
                                                                                             112.57
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                                                   18.43
                                                                339.36
       84.35
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       95.65
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                                                                317,04
                                                                                               112.56
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                                                                322.05
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      100.00
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                                   905.46
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       100.00
                  10 1 46 5763.42
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                                                                273.26
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                    7 40 4
                                   930.41
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                                                                319.69
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      110.00
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                                                                 241.37
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                                 5311.24
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 4275.4 SGR 314.3 SG3 130.7
RRT -.1944 RRF -.4597 RTF .8435
                                                                                                                        ST 1499.9 SR 310.9 SS 464.9

CRT -.8034 CRS .9890 CST -.8793

LSA 1577.0 MSA 274.6 SSA 11.7
    TDE-1.1008 TRA-2.1454 TC3-2.9704 BAU 1.0186
    RDE .2745 RRA -.0377 RC3 .0031 FAU .03627
FDE -.6412 FRA -.1215 FC3-1.2917 BSP 12925
BDE 1.1345 BRA 2.1457 BC3 2.9704 FSP -393
                                                                    SGB 4286.9 R23 .3006 R13 -.8438
SG1 4275.8 SG2 308.3 THA 179.18
                                                                                                                        EL1 1520.9 EL2 182.6 ALF 170.41
                                                                                                                                  ARRIVAL DATE DEC 29 1967
                                                                        FLIGHT TIME 146.00
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 439.333
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.403 GAL -6.37 AZL 95.39 MCA 218.93 SMA 126.18 ECC .23007 INC 5.3908 VI 29.356 RP 107.64 LAP 3.38 LOP 170.71 VP 37.604 GAP 10.31 AZP 85.80 TAL 202.46 TAP 61.39 RCA 97.15 APO 135.21 V2 35.205 RC 156.813 GL -30.41 GP 22.93 ZAL 123.44 ZAP 153.17 ETS 55.55 ZAE 126.67 ETE 161.99 ZAC 75.81 ETC 8.48 CLP-165.68
   PLANETOCENTRIC CONIC
    C3 23.720 VHL 4.870 OLA -28.52 RAL 168.77 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 7.373 DPA 21.70 RAP 195.91 ECC 1.3904
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM TNJ 2 LAT INJ 2 LONG
                                                                                           111.91 7 31 38 431.1

111.90 8 28 35 236.0

117.39 8 5 20 315.4

106.53 11 56 58 5115.0

123.74 8 2 34 324.6

100.55 14 9 6 4678.6
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                                                   18.74
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                    7 14 27 1031.10
       86.41
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                                   836.05
        93.59
                    8 14 39
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                                                                322.63
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                    7 50 4
                                   915.43
      100.00
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                                                                                                                                            27.29
                                                   25.27
                                                                270.00
                                                                                42.59
                  10 21 43 5714.99
      100.00
                                                                                                                                                         313.04
                                                                                                                                            10.27
                   7 47 9 924.59
12 41 7 5278.59
                                                    5.87
                                                                319.36
                                                                                33.21
      110.00
                                                                                                                                                         229.86
                                                                238.92
                                                                                                                                            33.61
                                                   32.70
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1520.2 SR 319.5 SS 465.2
CRT -.8307 CRS .9942 CST -.8803
                                                                   SGT 4377.8 SGR 320.9 SG3 132.7
RRT -.2202 RRF -.4455 RTF .8429
    TOE-1.0937 TRA-2.0013 TC3-3.2995 BAU 1.0463
    ROE .2715 RRA -.0230 RC3 -.0061 FAU .03782
FDE -.6186 FRA -.1150 FC3-1.3802 BSP 13422
BDE 1.1269 BRA 2.0014 BC3 3.2996 FSP -410
                                                                                                                       LSA 1599.0 MSA 269.3 SSA 13.1
                                                                   SGB 4389.6 R23 .2655 R13 -.8433
SG1 4378.4 SG2 313.0 THA 179.07
                                                                                                                        ELI 1543.5 EL2 175.2 ALF 169.97
                                                                                                                                   APRIVAL DATE DEC 31 1967
                                                                        FLIGHT TIME 148.00
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 445.046
  HELIOCENTRIC CONSC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.327 GAL -5.94 AZL 95.02 MCA 222.16 SMA 125.70 ECC .23079 INC 5.0164 V1 29.356 RP 107.67 LAP 3.36 LOP 173.96 VP 37.543 GAP 10.53 AZP 86.28 TAL 200.70 TAP 62.86 RCA 96.69 APO 154.71 V2 35.197 RC 158.850 GL -29.16 GP 21.28 ZAL 121.84 ZAP 154.93 ETS 55.02 ZAE 127.27 ETE 163.09 ZAC 73.81 ETC 7.95 CLP-166.43
   PLANETOCENTRIC CONIC
    C3 22.081 VHL 4.699 DLA -28.41 RAL 171.66 RAD 6567,9 VEL 11.977 PTH 2.13 VHP 7.394 DPA 19.21 RAP 197.34 ECC 1.3634
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                  851.12
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123.66 8 12 24
99.58 14 21 41
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                   10 36 21
                                 5687.29
                                                                268.11
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       100.00
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                     7 57 12
                                   912.20
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                                                                 318.73
       110.00
                    12 54 5
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                                                                                                                                            33.94
                                                                                46.10
       110.00
                                  5256.13
                                                   32.97
                                                                237.22
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                   SG1 4465.0 SGR 329.3 SG3 133.5
RRT -.2378 RRF -.4273 RTF .8419
SG8 4477.2 R23 .2327 R13 -.8422
SG1 4465.7 SG2 319.8 THA 178.99
                                                                                                                       ST 1543.2 SR 328.6 SS 464.6
CRT -.8576 CRS .9973 CST -.8828
    TDE-1.0944 TRA-1.8475 TC3-3.6235 BAU 1.0697
    RDE .2695 RRA -.0111 RC3 -.0155 FAU .03697
                                                                                                                      LSA 1623.7 MSA 262.0 SSA 14.5
EL1 1569.0 EL2 166.3 ALF 169.53
    FOE -.5952 FRA -.0570 FC3-1.4496 BSP 13775
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-416

BOE 1.1271 BRA 1.8475 BC3 3.6236 FSP

ARRIVAL DATE JAN 2 1968

EL1 1732.3 EL2 111.7 ALF 168.19

LAUNCH DATE AUG 5 1967

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DISTANCE 450.749
   HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.252 GAL -5.50 AZL 94.69 MCA 225.38 SMA 125.23 ECC .23169 INC 4.6860 V1 29.356
RP 107.70 LAP 3.33 LOP 177.20 VP 37.481 GAP 10.74 AZP 86.71 TAL 198.94 TAP 64.32 RCA 96.22 APO 154.25 V2 35.187
RC 160.871 GL -28.00 GP 19.85 ZAL 119.96 ZAP 156.51 ETS 54.71 ZAE 127.76 ETE 164.06 ZAC 71.74 ETC 7.50 CLP-167.18
   PLANETOCENTRIC CONIC
    C3 20.679 VHL 4.547 DLA -28.45 RAL 174.69 RAD 6567.8 VEL 11.919 PTH 2.12 VHP 7.432 DPA 16.91 RAP 198.88 ECC 1.3403
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               43.80
                                                                                             111.12
                                                                                                           8 0 25
                                                                                                                             378.2
                                   978.20
                                                                 330.51
                    7 44 6
8 32 9
                                                   19.52
       87.15
                                 978.20
822.51
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      100.00
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                   8 9 47
13 5 39
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      110.00
                                  894.68
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                                                                 317.80
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      110.00
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                                 5242.07
                                                   33.13
                                                                236.16
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4539.8 SGR 338.9 SG3 133.4

RRT - .2505 RRF - .4080 RTF .8405

SGB 4552.5 R23 .2028 R13 - .8408

SGI 4540.6 SG2 328.1 THA 178.92
                                                                                                                        ST 1569.9 SR 338.2 SS 463.4
CRT -.8837 CRS .9983 CST -.8867
    TOE-1.1023 TRA-1.6843 TC3-3.9424 BAU 1.0899
    RDE .2684 RRA -.0014 RC3 -.0243 FAU .03586
FDE -.5719 FRA .0016 FC3-1.5013 BSP 14023
BDE 1.1345 BRA 1.6843 BC3 3.9424 FSP -416
                                                                                                                        LSA 1652.2 MSA 252.7 SSA 16.0
                                                                                                                        EL1 1598.4 EL2 155.5 ALF 169.12
                                                                                                                                   ARRIVAL DATE JAN 4 1968
LAUNCH DATE AUG 5 1967
                                                                         FLIGHT TIME 152,00
                                                                        DISTANCE 456.439
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 26.178 GAL -5.05 AZL 94.39 MCA 228.61 SMA 124.78 ECC .23277 INC 4.3907 V1 29.356 RP 107.73 LAP 3.29 LOP 180.44 VP 37.420 GAP 10.97 AZP 87.09 TAL 197.17 TAP 65.78 RCA 95.73 APO 153.82 VZ 35.178 RC 182.878 GL -26.89 GP 18.61 ZAL 117.80 ZAP 157.94 ETS 54.60 ZAE 128.16 ETE 164.93 ZAC 69.62 ETC 7.11 CLP-167.94
   PLANETOCENTRIC CONIC
                                                                                                  2.11 VHP 7.486 OPA 14.78 RAP 200.52 ECC 1.3206
    C3 19,479 VHL 4.413 DLA -28.62 RAL 177.88 RAD 6567.8 VEL 11.868 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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       94.30
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267.32
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      100.00
                     8 28 56
                                   859.61
                                                   14.19
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                                5675.88
873.16
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123.38 8 39 11
98.66 14 43 32
                  10 55 29
                                                   26.00
                                                                                 48.22
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      100,00
                                                    7.81
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      110.00
                    8 24 36
                                  873.16
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      110.00
                  13 16 16
                                 5235.10
                                                   33.20
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1605.6 SR 348.6 SS 463.6
CRT -.9087 CRS .9973 CST -.8924
                                                                    SGT 4612.3 SGR 349.8 SG3 133.0
RRT - 2631 RRF - 3915 RTF .8400
    TOE-1.1198 TRA-1.5154 TC3-4.2597 BAU 1.1093
    RDE .2685 RRA .0066 RC3 -.0314 FAU .03466
                                                                    SG8 4625.5 R23 .1755 R13 -.8403
SG1 4613.2 SG2 337.4 THA 178.85
                                                                                                                       LSA 1689.9 MSA 241.8 SSA 17.5
EL1 1636.8 EL2 142.7 ALF 168.75
    FOE -.5509 FRA .0575 FC3-1.5406 8SP 14271
    BOE 1.1515 BRA 1.5154 BC3 4.2599 FSP -415
                                                                                                                                   ARRIVAL DATE JAN 6 1968
                                                                        FLIGHT TIME 154.00
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 462.117
    RL 151.77 LAL -.00 LOL 311.91 VL 26.105 GAL -4.59 A7L 94.12 MCA 231.84 SMA 124.33 ECC .23404 INC 4.1234 VI 29.356 RP 107.76 LAP 3.24 LOP 183.67 VP 37.360 GAP 11.19 A7P 87.45 TAL 195.39 TAP 67.23 RCA 95.23 APO 153.43 V2 35.167 RC 184.869 GL -25.82 GP 17.52 7AL 115.38 ZAP 159.24 ETS 54.69 7AE 128.51 ETE 165.70 ZAC 67.46 ETC 6.78 CLP-168.69
   PLANETOCENTRIC CONIC
    C3 18.456 VHL 4.296 OLA -28.88 RAL 181.25 RAD 6567.7 VEL 11.825 PTH 2.09 VHP 7.554 DPA 12.80 RAP 202.25 ECC 1.3037
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
                                                                334.94
                                                                                                                                          23.12
                     7 44 54 1033.34
                                                                                              110.84 8 2 7
                                                                                                                             433.3
                                                                                                                                                        327.23
                                                   20.46
                                                                              48.66
        84.06
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                                 713.47
                    9 23 45
                                                    20.48
                                                                 311.50
                                                                                 48.67
                                                                                               110.83
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                                                                                                                                                          303.79
        95.94
                                                                                 46.35
                                                                                               115.96
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                                                                                                                                                          309.90
                     8 50 29
                                   820.50
                                                    15.37
                                                                 317.07
       100.00
                                                                                               105.74 12 35 40
                   11 0 51
                                5689.59
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                                                                 268.26
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       100.00
                     8 41 33
                                   848.60
                                                     8.73
                                                                 315.35
                                                                                 42.50
                                                                                               123.18
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       110.00
                                                                                                123.15 5 77 4c
98.62 14 53 30
                   13 26 16 5234.25
                                                                                                                            4634.2
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                                                                                                                                                          226.42
                                                                 235.56
                                                                                52.41
       110.00
                                                   33.21
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY -
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1645.2 SR 359.3 SS 463.2

CRT -.9315 CRS .9943 CST -.8988

LSA 1731.4 MSA 228.9 SSA 19.2

ELI 1679.1 EL2 128.1 ALF 168.43
    TOE-1.1420 TRA-1.3370 TC3-4.5650 BAU 1.1264
                                                                     SGT 4674.5 SGR 361.2 SG3 131.9
    ROE .2694 RRA .0128 RC3 -.0372 FAU .03332
FOE -.5299 FRA .1131 FC3-1.5628 BSP 14448
                                                                    RRT -.2735 RRF -.3764 RTF .8594
SGB 4688.5 R23 .1513 R13 -.8597
SGI 4675.6 BGZ 347.4 THA 178.78
    BOE 1.1733 BRA 1.5371 BC3 4.5651 FSP
                                                       -410
                                                                         FLIGHT TIME 156.00
                                                                                                                                    ARRIVAL DATE JAN 8 1968
LAUNCH DATE AUG 5 1967
                                                                        DISTANCE 467.780
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 26.034 GAL -4.11 AZL 93.88 HCA 235.06 SMA 123.90 ECC .23552 INC 3.8790 V1 29.356 RP 107.79 LAP 3.18 LOP 186.91 VP 37.300 GAP 11.42 AZP 87.78 TAL 193.61 TAP 68.67 RCA 94.72 APO 153.08 V2 35.156 RC 166.846 GL -24.78 GP 16.57 ZAL 112.72 ZAP 180.44 ETS 54.97 ZAE 128.81 ETE 166.38 ZAC 65.25 ETC 6.49 CLP-169.44
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.46 7 46 14 1063.69 20.97 337.38 51.57 110.84 8 3 58 463 7 23 61
    C3 17.597 VHL 4.195 DLA -29.22 RAL 184.82 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 7.632 DPA 10.94 RAP 204.04 ECC 1.2896
                                                                                             INJ Acres
110.84 8 2 22
440.83 10 1 52
29 40
                    9 50 51
                                                   20.96
                                                                 307.63
                                                                                51.57
                                                                                                                               60.9
                                                                                                                                             23.62
                                                                                                                                                          300.04
                                   660.87
        97.54
                                  770.01
                                                   16.85
                                                                                               115.06
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                                                                                                                                             20.09
                                                                                                                                                          306.76
                                                                 314.06
                                                                                 49.73
       100.00
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                   11 2 56 5717.83
9 0 20 821.95
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                                                                                                                             5117.8
                                                                                                                                             27.25
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                                                   25.21
                                                                 270.19
                                                                                53.13
                                                                                               106.62
       100.00
                                                                                               122.93 9 14 2
98.81 15 3 14
                                                                                                                             221.9
                                                                                                                                             13.99
                                                                                                                                                          307.42
                                                     9.72
                                                                 313.92
                                                                                 45.67
       110.00
                   13 35 56 5238.65
                                                                                 55.18
                                                                                                                             4638.6
                                                                                                                                             34.02
                                                                                                                                                          226.76
                                                    33.16
                                                                 235.90
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 4742.7 SCR 373.3 SC3 131.2
RRT -2862 RRF -.3663 RTF .8408
SCB 4757.4 R23 .1297 R13 -.8410
SCI 4743.9 SC2 357.6 TMA 178.70
                                                                                                                       ST 1695.8 SR 370.9 SS 464.7

CRT -.9515 CRS .9895 CST -.9066

LSA 1784.0 MSA 215.1 SSA 20.9
    TOE-1.1730 TRA-1.1546 TC3-4.8653 BAU 1.1446
    ROE .2715 RRA .0178 RC3 -.0401 FAU .03204
FDE -.5121 FRA .1645 FC3-1.5764 83P 14705
80E 1.2040 BRA 1.1547 8C3 4.8654 FSP -410
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FLIGHT TIME 150.00

JPL TM 33-99

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ARRIVAL DATE JAN 10 1968
LAUNCH DATE AUG 5 1967
                                                                      FLIGHT TIME 158.00
                                                                     DISTANCE 473.427
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 25.964 GAL -3.62 AZL 93.65 MCA 238.28 SMA 123.48 ECC .23721 INC 3.6532 V1 29.356 RB 107.83 LAP 3.11 LOP 190.14 VP 37.240 GAP 11.66 AZP 88.08 TAL 191.82 TAP 70.10 RCA 94.19 APO 152.77 V2 35.145 RC 168.808 GL -23.69 GP 15.72 ZAL 109.83 ZAP 161.53 ETS 55.46 ZAE 129.07 ETE 166.98 ZAC 63.01 ETC 6.25 CLP-170.18
   PLANETOCENTRIC CONIC
                                                                                                                          9.18 RAP 205.90 ECC 1.2780
    C3 16.890 VHL 4.110 OLA -29.61 RAL 188.59 RAD 6567.7 VEL 11.759 PTH
                                                                                              2.08 VHP 7.721 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         110.91 8 7 37
110.89 10 27 58
113.66 10 2 22
108.15 12 35 18
122.65 9 34 2
99.20 15 13 0
                                                                                                                                    24.11
                                                                                                                    492.2
                                                                           54.80
                                                                                                                                                    331.93
                    7 49 25 1092.24
                                                              339.70
       80.95
                                                 21.46
                                                                                                                          13.4
                                                                                                                                       24.13
                                                                                                                                                    296.75
                                                              304.52
                                                                              54.81
                                613.38
                                                  21.48
       99.05
                   10 17 45
                                                                                                                           99.9
                                                                                                                                       21.86
                                                                                                                                                    302.31
                                                                             53.65
                                                 18.82
                                                              309.78
      100.00
                    9 50 42
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                                                                             55.84
                                5769.00
                                                              273.64
      100.00
                   10 59 9
                                                 24.17
                                                                                                                                                     305.87
                                                                                                                         194.2
                                                                                                                                       14.97
                                                 10.74
                                                              312.42
                                                                              49.18
      110.00
                    9 20 48
                                  794.16
                  13 45 32 5247.50
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                                                                             58.30
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                                                                                                                                        33.98
                                                 33.07
                                                              236.57
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 4806.2 SGR 385.5 SG3 130.1
RRT -.2983 RRF -.3585 RTF .8427
SGB 4821.6 R23 .1107 R13 -.8429
SG1 4807.6 SG2 367.8 THA 178.62
                                                                                                                    ST 1750.0 SR 382.6 SS 465.5
CRT -.9680 CRS ..9830 CST -.9143
    TOE-1.2070 TRA -.9636 TC3-5.1444 BAU 1.1617
    RDE .2744 RRA .0210 RC3 -.0412 FAU .03072
                                                                                                                   LSA 1839.8 MSA 200.8 SSA 22.8
    FOE -.4942 FRA .2148 FC3-1.5744 BSP 14929
BOE 1.2378 BRA .9638 BC3 5.1446 FSP 2407
                                                                                                                    EL1 1788.9 EL2 93.9 ALF 168.02
                                                                                                                               ARRIVAL DATE JAN 12 1968
                                                                      FLIGHT TIME 160,00
LAUNCH DATE AUG 5 1967
  HELIOCENTRIC CONIC
                                                                      DISTANCE 479.057
   RL 151.77 LAL -.00 LOL 311.91 VL 25.895 GAL -3.12 AZL 93.44 HCA 241.50 SHA 123.07 ECC .23912 INC 3.4427 V1 29.356 RP 107.86 LAP 3.03 LOP 193.37 VP 37.181 GAP 11.91 AZP 88.36 TAL 190.03 TAP 71.53 RCA 93.64 APO 152.50 VZ 35.134 RC 170.755 GL -22.59 GP 14.97 ZAL 106.72 ZAP 162.55 ETB 56.16 ZAE 129.31 ETE 167.52 ZAC 60.74 ETC 6.06 CLP-170.92
   PLANETOCENTRIC CONIC
    C3 16.333 WHL 4.041 DLA -30.03 RAL 192.56 RAD 6567.7 VEL 11.735 PTH 2.07 VHP 7.821 DPA 7.52 RAP 207.81 ECC 1.2688 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            7.52 RAP 207.81 ECC 1.2688
                                                              341.82
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                   10 44 8
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5860.06
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99.74 15 23 3
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                                                              237.51
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      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  RRT - 3102 RRF - 3534 RTF .8453
SGB 4882.4 R23 .0942 R13 - .8455
SGI 4867.8 SG2 377.7 THA 178.54
                                                                                                                    ST 1805.6 SR 394.5 SS 465.3
CRT -.9808 CRS .9748 CST -.9215
    TDE-1.2423 TRA -.7642 TC3-5.3945 BAU 1.1780
    RDE .2782 RRA .0227 RC3 -.0400 FAU .02939
FDE -.4763 FRA .2635 FC3-1.5576 BSP 15147
BDE 1.2751 BRA .7645 BC3 5.3946 FSP -405
                                                                                                                    LSA 1896.5 MSA 186.6 SSA 24.8
                                                                                                                    EL1 1846.6 EL2 75.3 ALF 167.88
                                                                                                                              APRIVAL DATE JAN 14 1968
                                                                      FLIGHT TIME 162.00
LAUNCH DATE AUG 5 1967
                                                                      DISTANCE 484.669
    RL 151.77 LAL -.00 LOL 311.91 VL 25.827 GAL -2.60 AZL 93.24 HCA 244.72 SMA 122.67 ECC .24128 INC 3.2449 VI 29.356 RP 107.90 LAP 2.93 LOP 196.60 VP 37.123 GAP 12.16 AZP 88.61 TAL 188.24 TAP 72.96 RCA 93.07 APO 152.27 V2 35.122
    RC 172.686 GL -21.47 GP 14.30 7AL 103.42 7AP 163.49 ETS 57.06-7AE 129.52 ETE 168.00 7AC 58.44 ETC
                                                                                                                                         5.90 CLP-171.65
   PLANETOCENTRIC CONIC
    C3 15.923 VHL 3.990 OLA -30.45 RAL 196.73 RAD 6567.6 VEL 11.718 PTH 2.06 VHP 7.930 OPA
                                                                                                                           5.94 RAP 209.76 ECC 1.2621
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          111.20
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                    8 2 17 1141.36
11 9 53 5825.35
                                                                             62.26
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                                                 22.36
                                                              343.73
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                  11 9 53
                                 5825.35
                                                  22.38
                                                              277.14
                                                                              62.27
       101.65
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                    8 2 17 1141.36
11 9 53 5825.35
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                                                  22.36
                                                              343.73
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       78.35
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                                                                                                                        5225.4
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                                                                                            111.18
                   11 9 53
                                                  22.38
                                                              277.14
                                                                              62.27
       101.65
                                                                                            122.00 10 17 53
                                                                                                                         139.8
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                  10 5 33
                                                  12.72
                                                               309.45
                                                                              57.21
                                  739.82
                               5274.89
                                                                                                                       4674.9
                                                                                                                                                    229.58
                                                                                            100.39
                                                                                                       15 33 42
                   14 5 47
                                                  32.75
                                                              238.64
                                                                              64.47
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 4914.8 SGR 408.6 SG3 127.3
RRT -.3201 RRF -.3486 RTF .8476
SGB 4931.8 R23 .0799 R13 -.8477
SGI 4916.6 SG2 387.0 THA 178.47
                                                                                                                    ST 1854.8 SR 406.0 SS 461.9
    TDE-1.2740 TRA -.5532 TC3-5.5982 BAU 1.1917
                                                                                                                    CRT -.9898 CRS .9644 CST -.9273
    ROE .2826 RRA .0224 RC3 -.0376 FAU .02796
FDE -.4560 FRA .3126 FC3-1.5200 BSP 15293
                                                                                                                    LSA 1946.2 MSA 173.6 SSA 26.8
                                                                                                                    EL1 1897.9 EL2 56.6 ALF 167.77
    BDE 1.3049 BRA .5536 BC3 5.5983 FSP -399
                                                                                                                               ARRIVAL DATE JAN 16 1968
                                                                      FLIGHT TIME 164.00
                                                                      DISTANCE 490.261
    RL 151.77 LAL -.00 LOL 311.91 VL 25.760 GAL -2.07 AZL 93.06 HCA 247.94 SHA 122.28 ECC .24368 INC 3.0574 V1 29.356
RP 107.94 LAP 2.83 LOP 199.82 VP 37.065 GAP 12.42 AZP 88.85 TAL 186.44 TAP 74.38 RCA 92.48 APO 152.08 V2 35.110
RC 174.803 GL -20.30 GP 13.70 ZAL 99.94 ZAP 164.36 ETS 58.18 ZAE 129.71 ETE 168.43 ZAC 56.13 ETC 5.79 CLP-172.37
   PLANETOCENTRIC CONIC
    C3 15.663 VHL 3.958 DLA -30.61 RAL 201.09 RAD 6567.6 VEL 11.707 PTH 2.06 VHP 8.049 DPA
                                                                                                                            4.43 RAP 211.77 ECC 1.2578
    111.38 13 11 24
121.68 10 40 57
101.09 15 45 18
                                                                                                                                                     301.42
                                                                                                                                        17.67
                                                                                                                          116.1
                   10 29 1 716.08
14 17 7 5291.16
                                                                              61.66
       110.00
                                                  13.57
                                                               308.14
                                                                                                                         4691.2
                                                                                                                                         33.73
                                                                                                                                                     230.83
                                                                              69.70
       110.00
                                                  32.54
                                                               239.87
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 4968.5 SGR 419.5 SG3 125.9
RRT -.3313 RRF -.3473 RTF .8513
SCB 4986.2 R23 .0673 R13 -.8515
                                                                                                                    ST 1902.0 8R 417.4 SS 457.5
CRT -.9952 CRS .9523 CST -.9325
LSA 1993.5 MSA 162.5 SSA 28.8
    TOE-1.3051 TRA -.3358 TC3-5.7613 BAU 1.2064
    RDE .2882 RRA .0207 RC3 -.0326 FAU .02662
    FDE -.4361 FRA .3594 FC3-1.4716 BSP 15497
                                                                   SG1 4970.5 SG2 395.7 THA 178.39
                                                                                                                     ELI 1946.8 EL2 39.9 ALF 167.67
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BDE 1.3366 BRA .3364 BC3 5.7614 FSP -396

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FLIGHT TIME 166.00
                                                                                                                                                                 ARRIVAL CATE JAN 18 1968
LAUNCH DATE AUG 5 1967
                                                                                         DISTANCE 495.829
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 25.694 GAL -1.51 AZL 92.88 MCA 251.16 SMA 121.90 ECC .24636 INC 2.8783 VI 29.356 RP 107.97 LAP 2.72 LOP 203.04 VP 37.007 GAP 12.69 AZP 89.07 TAL 184.64 TAP 75.80 RCA 91.87 APO 151.93 V2 35.097 RC 176.504 GL -19.09 GP 13.16 ZAL 96.31 ZAP 165.17 ETS 59.52 ZAE 129.88 ETE 168.81 ZAC 53.79 ETC 5.72 CLP-173.08
   PLANETOCENTRIC CONIC
     C3 15.557 VHL 3.944 DLA -31.13 RAL 205.62 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 8.178 DPA
                                                                                                                                                             3.00 RAP 213.81 ECC 1.2560
    C3 15.557 VHL 3.944 OLA -31.13 RAL 205.62 RAO 6567.6 VEL 11.702 PTH 2.06 VMP 8.178 DPA 3.00 RAP 215.81 ECC 12.2560 LNCH AZHTH LNCH TIHE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.51 8 24 24 1178.23 22.98 346.76 70.99 111.59 8 44 3 578.2 25.71 338.92 103.49 11 58 38 5777.95 22.99 273.84 70.99 111.58 13 34 56 5178.0 25.72 266.00 103.49 11 58 38 5777.95 22.98 346.76 70.99 111.59 8 44 3 578.2 25.71 338.92 103.49 11 58 38 5777.95 22.99 273.84 70.99 111.58 13 34 56 5178.0 25.72 266.00 110.00 10 52 27 696.89 14.26 307.07 66.41 121.40 11 4 4 96.9 18.31 300.30 110.00 14 29 45 5307.29 32.33 241.08 74.15 101.77 15 58 13 4707.3 33.61 232.08
                                                                                   MID-COURSE EXECUTION ACCURACY
SCT 5018.9 SCR 429.8 SC3 124.3
RRT -.3423 RRF -.3481 RTF .8559
SCB 5037.3 R23 .0566 R13 -.8560
SCI 5021.1 SC2 403.6 THA 178.31
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 1938.7 SR 428.4 SS 450.9

CRT -.9973 CRS .9381 CST -.9367

LSA 2029.9 MSA 154.3 SSA 30.4

EL1 1985.2 EL2 30.7 ALF 167.57
     TOE-1.3306 TRA -.1094 TC3-5.8669 BAU 1.2202
     RDE .2948 RRA .0175 RC3 -.0260 FAU .02530
    FOE -.4152 FRA .4047 FC3-1.4078 BSP 15690
BDE 1.3629 BRA .1108 BC3 5.8669 FSP -392
                                                                                                                                                                  ARRIVAL DATE JAN 20 1968
                                                                                         FLIGHT TIME 168.00
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 501.372
    RL 151.77 LAL -.00 LOL 311.91 VL 25.630 GAL -.94 AZL 92.71 MCA 254.37 SNA 121.53 ECC .24932 INC 2.7062 V1 29.356 RP 108.01 LAP 2.61 LOP 206.26 VP 36.950 GAP 12.98 AZP 89.27 TAL 182.84 TAP 77.21 RCA 91.23 APO 151.83 V2 35.084 RC 178.389 GL -17.83 GP 12.67 ZAL 92.56 ZAP 165.91 ETS 61.11 ZAE 130.04 ETE 169.15 ZAC 51.44 ETC 5.69 CLP-173.79
    C3 15.613 VHL 3.951 DLA -31.36 RAL 210.27 RAD 6567.6 VEL 11.705 PTH 2.06 VHP 8.317 DPA 1.62 RAP 215.89 ECC 1.2570 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    111.80 8 58 45
111.78 13 57 21
                                                                                                                  111.80
                                                                                                                                                                          25.88
        75.93 8 38 53 1191.87
104.07 12 21 16 5765.93
                                                                                                   75.77
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                                                                               347.85
                                                               23.12
                                                                                                   75.77
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111.78 13 57 21

121.21 11 26 35

102.38 16 12 50
                                                                               273.00
        104.07
                                                               23.14
                                                                                                   75.77
75.77
                       8 38 53 1191.87
12 21 16 5765.93
                                                                                347.85
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         75.93
                                                               23.12
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        104.07
                                                               23.14
                                                                               273.00
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        110.00
                      11 15 11
                                           644.12
                                                               14.71
                                                                                306.36
                                                                                                   71.34
                                                                                                                                                     4721.7
        110.00
                                                                               242.15
                                                                                                   76.66
                        14 44 9
                                         5321.68
                                                               32.12
   DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                  SCT 5061.9 SCR 438.9 SC3 122.5
RRT - .3518 RRF - .3489 RTF .8599
SCB 5080.8 R23 .0474 R13 - .8600
SC1 5064.2 SC2 410.6 THA 178.24
    TDE-1.3459 TRA .1287 TC3-5.9036 BAU 1.2323

RDE .3021 RRA .0123 RC3 -.0187 FAU .02394

FDE -.3912 FRA .4509 FC3-1.3276 BSP 15855

BDE 1.3794 BRA .1293 BC3 5.9036 FSP -388
                                                                                                                                                    ST 1957.7 SR 438.1 55 440.4
CRT -.9962 CRS .9202 CST -.9390
                                                                                                                                                   LSA 2048.1 MSA 150.5 SSA 31.4
                                                                                                                                                     EL1 2005.8 EL2 37.1 ALF 167.43
                                                                                                                                                                 ARRIVAL DATE JAN 22 1968
                                                                                        FLIGHT TIME 170.00
LAUNCH DATE AUG 5 1967
                                                                                        DISTANCE 506.888
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 25.566 GAL -.35 A7L 92.54 MCA 257.58 SMA 121.17 ECC .25260 INC 2.5394 VI 29.356 RP 108.05 LAP 2.48 LOP 209.48 VP 36.894 GAP 13.27 A7P 89.45 TAL 181.04 TAP 78.62 RCA 90.56 APO 151.78 VZ 35.071 RC 180.257 GL -16.54 GP 12.23 ZAL 88.73 ZAP 166.61 ETS 62.93 ZAE 130.19 ETE 169.46 ZAC 49.08 ETC 5.70 CLP-174.50
   PLANETOCENTRIC CONIC
     C3 15.841 VHL 3.980 DLA -31.49 RAL 215.01 RAD 6567.6 VEL 11.714 PTH 2.06 VHP 8.468 DPA
                                                                                                                                                               .30 RAP 218.00 ECC 1.2607
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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111.97 14 18 23

111.99 9 15 38

111.97 14 18 23

121.14 11 47 49

102.84 16 29 31
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                                         5762.33
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        104.39
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          75.61
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                                          679.58
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        110.00
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                       15 0 38
                                         5332.77
                                                               31.96
                                                                               242.97
        110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE-1.3505 TRA .3776 TC3-5.8739 BAU 1.2439
RDE .3104 RRA .0057 RC3 -.0097 FAU .02272
FDE -.3660 FRA .4962 FC3-1.2415 BSP 16014
                                                                                   SGT 5103.6 SGR 447.0 SG3 120.8

RRT - .3624 RRF - .3516 RTF .8657

SGB 5123.2 R23 .0384 R13 - .8658

SGI 5106.2 SG2 416.4 THA 178.17
                                                                                                                                                    ST 1958.5 SR 446.9 SS 427.6

CRT -.9920 CRS .8986 CST -.9404

LSA 2048.0 MSA 151.5 SSA 31.5
                                                                                                                                                    EL1 2008.1 EL2 55.2 ALF 167.24
     BOE 1.3857 BRA .3776 BC3 5.8739 FSP -384
                                                                                                                                                                 ARRIVAL DATE JAN 24 1968
                                                                                         FLIGHT TIME 172.00
LAUNCH DATE AUG 5 1967
   MELIOCENTRIC CONIC
                                                                                        DISTANCE 512.372
    RL 151.77 LAL -.00 LOL 311.91 VL 25.504 GAL .26 A7L 92.38 MCA 260.79 SMA 120.82 ECC .25621 INC 2.3769 VI 29.356
RP 108.09 LAP 2.35 LOP 212.69 VP 36.839 GAP 13.58 AZP 89.62 TAL 179.25 TAP 80.03 RCA 89.86 APO 151.77 V2 35.058
RC 182.108 GL -15.21 GP 11.83 ZAL 84.86 ZAP 167.24 ETS 65.02 ZAE 130.33 ETE 169.74 ZAC 46.71 ETC 5.76 CLP-175.20
   PLANETOCENTRIC CONIC
     C3 16.252 WHL 4.031 OLA -31.50 RAL 219.78 RAD 6567.7 VEL 11.732 PTH 2.07 WHP 8.630 DPA
                                                                                                                                                             -.96 RAP 220.15 ECC 1.2675
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
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112.15 9 34 34
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        104.42
                                          5767.48
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121.22 12 7 11
103.11 16 48 25
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                                            664.61
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        110.00
                                        5339,40
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                                                              31.86
        110.00
                       15 19 26
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 1936.2 SR 453.5 SS 410.2

CRT -.9843 CRS .8700 CST -.9391

LSA 2024.0 MSA 158.7 SSA 30.7

EL1 1987.1 EL2 78.1 ALF 167.00
                                                                                   SGT 5131.3 SGR 453.5 SG3 118.2
RRT -.3678 RRF -.3520 RTF .8674
SG8 5151.3 R23 .0331 R13 -.8675
SG1 5134.0 SG2 421.5 THA 178.13
     TDE-1.3402 TRA .6364 TC3-5.7611 BAU 1.2518
     RDE .3191 MRA -.0028 RC3 -.0034 FAU .02115
FOE -.3361 FRA .5424 FC3-1.1264 BSP 16087
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BOE 1.3777 BRA .6364 BC3 5.7611 FSP -374

ARRIVAL DATE JAN 26 1968

HELIOCENTRIC CONIC OISTANCE 517.822 RL 151.77 LAL -.00 LOL 311.91 VL 25.443 GAL .90 AZL 92.22 MCA 263.99 SMA 120.48 ECC .26018 INC 2.2174 VI 29.356 RP 108.13 LAP 2.21 LOP 215.90 VP 36.784 GAP 13.91 AZP 89.77 TAL 177.45 TAP 81.45 RCA 89.13 APO 151.82 V2 35.045 RC 183.942 GL -13.87 GP 11.47 ZAL 80.99 ZAP 167.82 ETS 67.37 ZAE 130.45 ETE 169.99 ZAC 44.33 ETC 5.88 CLP-175.90 PLANETOCENTRIC CONIC C3 16.864 VML 4.107 OLA -31.39 RAL 224.54 RAD 6567,7 VEL 11.758 PTH 2.08 VMP 8.806 OPA -2.16 RAP 222.32 ECC 1.2775 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.85 9 35 16 1211.15 22.70 349.12 91.25 112.29 9 55 27 611.1 25.52 341.33 112.28 14 55 5 5181.8 25.53 266.22 13 18 43 5781.79 22.71 274.01 91.25 104.15 1211.15 22.70 91.25 112.29 9 55 27 611.1 25.52 341.33 9 35 16 349.12 75.85 112.28 14 55 5 121.44 12 24 21 103.18 17 9 30 22.71 91.25 5181.8 25.53 266.22 274.01 104.15 13 18 43 5781.79 300.47 12 12 41 307.24 99.8 18.21 14.16 86.69 699.78 110.00 5341.15 4741.2 33.31 234.68 31.83 243.59 94.53 110.00 15 40 28 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TDE-1.3180 TRA .9076 TC3-5.5934 BAU 1.2610 RDE .3289 RRA -.0127 RC3 .0056 FAU .01997 FDE -.3075 FRA .5885 FC3-1.0252 BSP 16240 BDE 1.3584 BRA .9077 BC3 5.5934 FSP -372 SCT 5165.9 SCR 459.4 SC3 116.5 RRT -.3775 RRF -.3564 RTF .8734 SCB 5186.3 R23 .0263 R13 -.8735 SCI 5188.8 SC2 425.1 THA 178.06 ST 1897.0 SR 458.9 SS 393.8 CRT -.9725 CRS .8363 CST -.9377 LSA 1983.5 MSA 170.9 SSA 29.1 EL1 1949.0 EL2 104.0 ALF 166.72 FLIGHT TIME 176.00 ARRIVAL DATE JAN 28 1968 LAUNCH DATE AUG 5 1967 **DISTANCE 523.233** HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 25.382 GAL 1.56 AZL 92.06 MCA 267.20 SMA 120.14 ECC .26455 INC 2.0599 VI 29.356
RP 108.18 LAP 2.06 LOP 219.10 VP 36.729 GAP 14.26 AZP 89.90 TAL 175.66 TAP 82.86 RCA 88.36 APO 151.92 VZ 35.032
RC 185.758 GL -12.52 GP 11.15 ZAL 77.16 ZAP 168.35 ETS 70.01 ZAE 130.57 ETE 170.22 ZAC 41.95 ETC 6.05 CLP-176.59 PLANETOCENTRIC CONIC C3 17.694 VHL 4.206 DLA -31.15 RAL 229.22 RAD 6567.7 VEL 11.793 PTH 2.09 WHP 8.995 DPA -3.32 RAP 224.52 ECC 1.2912 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 96.62 112.39 10 18 13 609.4 9 56 3 1209.36 22.25 348.78 25.09 76.43 13 33 19 22.26 275.62 96.63 112.38 15 10 5 5205.8 267.87 5805.80 103.57 1209.36 5805.80 609.4 22.25 348.78 96.62 112.39 10 18 13 76.43 9 58 3 112.38 15 10 5 5205.8 13 33 19 96.63 25.10 267.87 22.26 275.62 103.57 121.80 12 39 12 103.07 17 32 24 91.60 724.75 13.26 308.62 124.8 17.37 301.92 110.00 12 27 7 33.34 4738.4 243.39 100.07 234.47 110.00 16 3 26 5338.41 31.87 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 5189.2 SGR 463.7 SG3 114.5 RRT - 3850 RRF - 3861 RTF .8782 SGB 5209.9 R23 .0213 R13 - .8783 SGI 5192.3 SG2 427.7 THA 178.02 ST 1837.2 SR 462.1 SS 376.2 CRT -.9554 CRS .7932 CST -.9350 TOE-1.2785 TRA 1.1927 TC3-5.3544 BAU 1.2666 RDE .3392 RRA -.0242 RC3 .0128 FAU .01867 FDE -.2764 FRA .6354 FC3 -.9137 BSP 16298 LSA 1922.0 MSA 188.6 SSA 27.1 EL1 1889.8 EL2 132.7 ALF 166.42 BOE 1.3227 BRA 1.1930 BC3 5.3544 FSP -365 ARRIVAL DATE JAN 30 1968 FLIGHT TIME 178.00 LAUNCH DATE AUG 5 1967 DISTANCE 528.599 HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 25.323 GAL 2.25 AZL 91.90 MCA 270.40 SMA 119.82 ECC .26934 INC 1.9034 V1 29.356 RP 108.22 LAP 1.90 LOP 222.31 VP 36.676 GAP 14.63 AZP 90.01 TAL 173.88 TAP 84.28 RCA 87.54 APO 152.09 V2 35.019 RC 187.557 GL -11.19 GP 10.85 ZAL 73.39 ZAP 168.82 ETS 72.92 ZAE 130.67 ETE 170.43 ZAC 39.56 ETC 6.29 CLP-177.29 PLANETOCENTRIC CONIC C3 18.767 VML 4.332 OLA -30.80 RAL 233.79 RAD 6567.8 VEL 11.838 PTH 2.10 VMP 9.199 OPA -4.42 RAP 226.75 ECC 1.3089 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ A7MTM INJ TIME
112.45 10 42 53
112.44 15 22 17
112.45 10 42 53
112.44 15 22 17
122.23 12 51 52
102.81 17 56 36 24.51 340.28 602.3 347.99 102.01 77.35 1202.32 5840.35 21.65 10 22 51 277.95 102.02 5240.4 24.51 270.24 13 44 56 21.66 102.65 602.3 24.51 340.28 1202.32 21.65 347.99 102.01 10 22 51 77.35 5840.35 277.95 102.02 5240.4 24.51 270.24 102.65 21.66 13 44 56 96.83 158.5 16.22 303.85 758.46 12.05 310.47 12 39 14 110.00 5332.21 4732.2 33.40 233.99 105.68 16 27 44 242.93 110.00 31.96 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5213.7 SGR 467.0 SG3 112.4 RRT -.3926 RRF -.3652 RTF .8834 SGB 5234.6 R23 .0174 R13 -.8834 ST 1768.3 SR 463.5 SS 360.0 CRT -.9323 CRS .7427 CST -.9323 TDE-1.2280 TRA 1.4865 TC3-5.0714 BAU 1.2724 RDE .3502 RRA -.0370 RC3 .0192 FAU .01744 FDE -.2457 FRA .6815 FC3 -.8044 BSP 16431 LSA 1851.1 MSA 210.0 SSA 25.1 SG1 5216.9 SG2 429.2 THA 177.97 EL1 1820.8 EL2 162.8 ALF 166.15 BOF 1.2770 BRA 1.4869 BC3 5.0714 FSP -362 ARRIVAL DATE FEB 1 1968 FLIGHT TIME 180.00 LAUNCH DATE AUG 5 1967 **DISTANCE 533.916** HELIOCENTRIC CONIC RL 151.77 LAL -.00 LOL 311.91 VL 25.265 GAL 2.97 AZL 91.75 MCA 273.60 SHA 119.50 ECC .27460 INC 1.7469 V1 29.356
RP 108.26 LAP 1.74 LOP 225.51 VP 36.623 GAP 15.02 AZP 90.11 TAL 172.10 TAP 85.70 RCA 86.68 APO 152.31 V2 35.005
RC 189.337 GL -9.88 GP 10.58 ZAL 69.73 ZAP 169.23 ETS 76.13 ZAE 130.76 ETE 170.62 ZAC 37.18 ETC 6.60 CLP-177.99 PLANETOCENTRIC CONIC C3 20.108 VHL 4.484 DLA -30.33 RAL 238.19 RAD 6567.8 VEL 11.895 PTH 2.11 VMP 9.419 DPA -5.47 RAP 229.00 ECC 1.3309 INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 20.92 346.65 107.38 112.48 11 9 39 588.7 23.78 338.44 112.48 11 9 39 112.47 15 31 10 281.10 107.39 5286.6 23.79 273.43 13 53 3 5886.63 20.93 101.35 112.48 11 9 39 588.7 23.78 334.99 10 49 51 107.38 1188.74 20.92 346.65 78.65 112.47 15 31 10 122.70 13 2 39 102.47 18 21 29 5286.6 23.79 273.43 107.39 13 53 3 5886.63 281.10 101.35 20.93 199.4 14.79 306.16 12 49 19 10.55 312.70 101.76 110.00 799.43 4723.9 242.32 111.30 33.47 233.36 110.00 16 52 45 5323.93 32.09 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1691.9 SR 462.8 SS 345.4 CRT -.9012 CRS .6829 CST -.9301 LSA 1772.1 MSA 234.9 SSA 23.1 SGT 5235.0 SGR 468.9 SG3 110.4 TOE-1.1640 TRA 1.7930 TC3-4.7500 BAU 1.2770 ROE .3618 RRA -.0510 RC3 .0247 FAU .01628 FOE -.2147 FRA .7280 FC3 -.7008 89P 16555 BOE 1.2190 BRA 1.7937 BC3 4.7501 FSP -358 RRT -.4002 RRF -.3708 RTF .8892 SG8 5255.9 R23 .0138 R13 -.8892 SG1 5238.3 SG2 429.5 THA 177.93 EL1 1743.2 EL2 194.7 ALF 165.97

FLIGHT TIME 174.00

BDE .8876 BRA 3.1780 BC3 3.2766 FSP -336

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ARRIVAL DATE FEB 11 1968
                                                                          FLIGHT TIME 190.00
LAUNCH DATE AUG 5 1967
                                                                         DISTANCE 559.450
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 24.990 GAL 7.16 AZL 90.93 MCA 289.55 SMA 118.03 ECC .30978 INC .9284 V1 29.356 RP 108.46 LAP .87 LOP 241.46 VP 36.372 GAP 17.45 AZP 90.31 TAL 163.44 TAP 92.99 RCA 81.47 APO 154.60 V2 34.941 RC 197.979 GL -4.06 GP 9.54 ZAL 53.74 ZAP 170.33 ETS 95.97 ZAE 131.03 ETE 171.38 ZAC 25.38 ETC 9.81 CLP 178.45
   PLANETOCENTRIC CONIC
    C3 32.271 VHL 5.681 DLA -26.97 RAL 256.86 RAD 6568.3 VEL 12.395 PTH 2.24 VMP 10.841 DPA -9.98 RAP 240.52 ECC 1.5311
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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107.52 15 5 15
119.30 13 25 4
105.30 18 22 30
124.18 13 37 47
101.07 20 19 10
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18 50 59 5290.66
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                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION, ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5265.2 SGR 457.0 SG3 100.6

RRT -.4294 RRF -.3998 RTF .9175

SG8 5283.0 R23 .0037 R13 -.9175

SG1 5266.9 SG2 412.5 THA 177.85
                                                                                                                           ST 1389.8 SR 430.7 SS 319.5
CRT -.5787 CRS .2917 CST -.9476
LSA 1444.6 MSA 363.1 SSA 16.2
    TOE -.6705 TRA 3.5645 TC3-2.9156 BAU 1.2580
    ROE .4244 RRA -.1382 RC3 .0299 FAU .01068
FOE -.0628 FRA .9868 FC3 -.2864 BSP 16849
BOE .7935 BRA 3.5672 BC3 2.9158 FSP -331
                                                                                                                            EL1 1413.4 EL2 345.4 ALF 169.18
                                                                                                                                       ARRIVAL DATE FEB 13 1968
LAUNCH DATE AUG 5 1967
                                                                          DISTANCE 564.262
  HELIOCENTRIC CONIC
    RL 151.77 LAL, -.00 LOL 311.91 VL 24.939 GAL 8.15 AZL 90.75 MCA 292.74 SMA 117.76 ECC .31907 INC .7495 VI 29.356 RP 108.50 LAP .69 LOP 244.65 VP 36.325 GAP 18.07 AZP 90.29 TAL 161.77 TAP 94.51 RCA 80.19 APO 155.34 V2 34.929 RC 199.655 GL -3.08 GP 9.38 ZAL 51.08 ZAP 170.34 ETS 100.47 ZAE 131.04 ETE 171.51 ZAC 23.08 ETC 10.99 CLP 177.70
   PLANETOCENTRIC CONIC
    C3 36.209 VHL 6.017 OLA -26.20 RAL 259.86 RAD 6568.4 -VEL 12.553 PTH
                                                                                                     2.27 WHP 11.208 DPA -10.73 RAP 242.85 ECC 1.5959
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               117.64 12 34 33 106.54 15 35 53 119.68 13 24 47 104.75 18 47 44 124.14 13 42 25 101.04 20 39 26
                                                                                133.74
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                                  1354.18
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        90.00
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17 13 25 5658.91
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       100.00
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       100.00
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19 11 18 5290.09
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                                                                  239.79
                                                                                 143.36
      110.00
                                                     32.56
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 5256.1 SGR 450.3 SG3 98.9
RRT -.4335 RRF -.4051 RTF ..9235
SGB 5275.4 R23 ..0027 R13 -.9235
SG1 5259.8 SG2 405.5 TMA 177.86
                                                                                                                           ST 1371.1 SR 419.6 SS 324.2
CRT -.4856 CRS .2152 CST -.9571
    TOE -.5435 TRA 3.9774 TC3-2.5669 BAU 1.2427
    RDE .4375 RRA -.1580 RC3 .0276 FAU .00959
FDE -.0339 FRA 1.0463 FC3 -.2293 BSP 16602
                                                                                                                           LSA 1420.8 MSA 376.8 SSA 15.2
                                                                                                                            EL1 1387.3 EL2 362.5 ALF 170.92
    BOE .6977 BRA 3.9605 BC3 Z.5671 FSP -324
                                                                                                                                       ARRIVAL DATE FEB 15 1968
                                                                          FLIGHT TIME 194.00
LAUNCH DATE AUG 5 1967
                                                                         DISTANCE 568.933
    RL 151.77 LAL -.00 LOL 311.91 VL 24.888 GAL 9.20 AZL 90.56 MCA 295.92 SMA 117.50 ECC .32935 INC .5621 V1 29.356 RP 108.55 LAP .51 LOP 247.83 VP 36.279 GAP 18.74 AZP 90.25 TAL 160.15 TAP 96.07 RCA 78.80 APO 156.20 V2 34.917 RC 201.315 GL -2.16 GP 9.24 ZAL 48.60 ZAP 170.27 ETS 105.04 ZAE 131.02 ETE 171.63 ZAC 20.81 ETC 12.46 CLP 176.94
   PLANETOCENTRIC CONIC
    C3 40.850 VML 6.391 DLA -25.44 RAL 262.63 RAD 6568.6 VEL 12.736 PTH 2.32 VMP 11.612 DPA -11.44 RAP 245.18 ECC 1.6723
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              118.09 12 31 4
105.87 16 2 28
119.87 13 24 52
104.38 19 10 44
123.98 13 46 32
101.13 20 58 27
                                                                               137.62
145.88
                                                                                                                                            7.47
                   12 7 5 1438.65
                                                      3.74
                                                                                                                             838.7
                                                                                                                                                           349.76
                                                                  356.48
        90.00
                                                                                                                                 100.7
                                                                                                                                                              303.62
                    15 50 47
                                                     23.76
                                                                  311.74
                                                                                                                                                25.71
        90.00
                                    700.70
                   13 3 57
17 36 37
                                                                                                                                                              335.07
                                                                               136.25
146.70
                                                                                                                                 655.1
                                                                                                                                                5.23
       100.00
                                 1255.06
5647.56
                                                      1.27
                                                                  341.62
                                                                                                                                                              256.98
                                                     26.49
                                                                  265.36
                                                                                                                                5047.6
                                                                                                                                                28.21
       100.00
                                                                               132.97
                    13 26 49 1183.34
19 30 15 5292.04
                                                     -3.99
                                                                  332.91
                                                                                                                                563.3
                                                                                                                                                  . 50
                                                                                                                                                              326.70
       110.00
                                                                                                                                            35.72
                                                                                                                             4692.0
                                                                                                                                                             230.90
                                                                  239.93
                                                                                 148.27
                                                     32.53
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1367.2 SR 407.6 SS 331.2

CRT -.3943 CRS .1488 CST -.9664

LSA 1413.5 MSA 383.1 SSA 14.4

EL1 1377.4 EL2 371.8 ALF 172.77
                                                                      SGT 5244.8 SGR 442.2 SG3 97.1
RRT -.4372 RRF -.4107 RTF .9297
SGB 5263.4 R23 .0020 R13 -.9298
SGI 5248.4 SGZ 397.4 TMA 177.88
    TOE -.4142 TRA 4.4089 TC3-2.2422 BAU 1.2246
    RDE .4508 RRA -.1779 RC3 .0248 FAU .00857
FDE -.0070 FRA 1.1079 FC3 -.1817 BSP 16844
    BOE .6123 BRA 4.4125 BC3 2.2424 FSP -320
                                                                           FLIGHT TIME 196.00
                                                                                                                                       ARRIVAL DATE FEB 17 1968
LAUNCH DATE AUG 5 1967
                                                                           DISTANCE 573.436
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 24.839 GAL 10.33 AZL 90.36 MCA 299.10 SMA 117.25 ECC .34072 INC .3644 VI 29.356 RP 108.57 LAP 32 LOP 251.01 VP 36.234 GAP 19.48 AZP 90.18 TAL 158.57 TAP 97.67 RCA 77.30 APO 157.19 V2 34.905 RC 202.957 GL -1.31 GP 9.10 ZAL 46.32 ZAP 170.12 ETS 109.62 ZAE 130.97 ETE 171.76 ZAC 18.58 ETC 14.32 CLP 176.15
   PLANETOCENTRIC CONIC
                                                                                                     2.36 WHP 12.057 DPA -12.09 RAP 247.51 ECC 1.7624
    C3 46.324 WHL 6.806 DLA -24.68 RAL 265.17 RAD 6568.7 VEL 12.949 PTH
    LINCH AZHTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           354.23
                                                                               141.45
                                                                                                                               917.5
                                                                                                118.29 12 28 46
105.42 16 26 4
        90.00 12 3 29 1517.47
                                                      1.20
                                                                       .88
                                                                                                                                                 4.98
                                                                   310.70
                  16 14 39
13 3 5
                                                     24.04
                                                                                  150.75
                                                                                                                                  85.2
                                                                                                                                                 25.93
                                                                                                                                                               302.54
                                     605.20
        90.00
                                                                                                 105.42 16 26 4
119.67 13 25 10
104.16 19 31 45
123.68 13 50 11
101.31 21 16 6
                                 1325.03
                                                                                                                                  725.0
                                                                                                                                                 2.88
                                                                                                                                                              338.93
                                                                   345.46
                                                                                 140.16
                                                     -1.11
       100.00
                    17 57 44
                                                                                                                                5040.9
                                                                                                                                                 28.29
                                                                                                                                                              256.50
                                                   26.60
                                                                   264.90
                                                                                 151.50
       100.00
                                    5640.91
                                 1242.25
                                                                                                                                  642.2
                                                                                                                                                 -1.76
                                                                                                                                                               329.77
                    13 29 29
                                                     -6.23
                                                                   336.01
                                                                                 136.99
       110.00
                                                    32.47
                                                                   240.26
                                                                                  153.03
                                                                                                                                4696.5
                                                                                                                                                33.69
                                                                                                                                                              231.24
       110.00
                    19 47 50
                                   5296.45
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 5229.2 SCR 432.7 SC3 95.4
RRT -.4400 RRF -.4156 RTF .9361
                                                                                                                            ST 1374.9 SR 394.7 SS 340.2
    TOE -. 2768 TRA 4.8659 TC3-1.9391 BAU 1.2010
                                                                                                                           CRT -.3062 CRS .0898 CST -.9748
LSA 1419.6 MSA 382.8 SSA 13.6
    ROE .4643 RRA -.1978 RC3 .0217 FAU .00756
FOE .0193 FRA 1.1735 FC3 -.1413 BSP 16865
BOE .5415 BRA 4.8700 BC3 1.9392 FSP -315
                                                                      SG8 5247.1 RZ3 .0015 R13 -.9361
                                                                                                                          EL1 1380.6 EL2 374.2 ALF 174.58
                                                                       $61 5232.7 562 388.3 THA 177.90
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ARRIVAL DATE FEB 19 1968
                                                                                    FLIGHT TIME 198.00
LAUNCH DATE AUG 5 1967
                                                                                   DISTANCE 577.745
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 24.791 GAL 11.55 AZL 90.15 HCA 302.28 SMA 117.00 ECC .35333 INC .1539 V1 29.356 RP 108.60 LAP .13 LOP 254.18 VP 36.190 GAP 20.30 AZP 90.08 TAL 157.04 TAP 99.31 RCA 75.66 APO 158.34 V2 34.894 RC 204.581 GL -.52 GP 8.98 ZAL 44.21 ZAP 169.89 ETS 114.14 ZAE 130.89 ETE 171.88 ZAC 16.40 ETC 16.71 CLP 175.34
   PLANETOCENTRIC CONIC
    C3 52.789 VHL 7.266 DLA -23.94 RAL 267.48 RAD 6568.9 VEL 13.197 PTH 2.41 VHP 12.549 DPA -12.69 RAP 249.83 ECC 1.8688
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        145.20
                                                                                                          118.29 12 27 10
                                                                                                                                                 992.1
                                                                                                                                                                             358.41
                                                                             5.04
                                                                                                                                                                  2.59
        90.00
                    12 0 37 1592.08
                                                          -1.20
                                                                                                             105.15 16 47 15
119.72 13 25 33
104.08 19 50 56
123.25 13 53 24
101.60 21 32 27
                                                                           310.06
                                                                                           155.42
                                                                                                                                                  75.8
                                                                                                                                                                  26.06
                                                                                                                                                                                  301.88
         90.00
                     16 36 O
                                       675.77
                                                           24.21
                   16 36 0 675.77
13 2 20 1392.85
18 16 58 5638.26
13 31 43 1300.72
20 4 4 5303.17
                                                                                                                                                 792.9
                                                                                                                                                                     .58
                                                                          349.18
                                                                                         143.98
       100.00
                                                          -3.40
                                                                                                                                               5038.3
                                                                                                                                                                 28.32
                                                                                                                                                                                 256.31
                                                      26.65
                                                                                          156.13
                                                                          264.72
       100.00
                                                                                         140.90
                                                                                                                                                 700.7
                                                                                                                                                                  -3.99
                                                                                                                                                                                 332.83
       110.00
                                                           -8.42
                                                                          339.11
                                                                                                                                                4703.2
                                                                                                                                                                                  231.76
       110.00
                                                                                           147.63
                                                          32.38
                                                                          240.77
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5209.7 SGR 421.7 SGS 95.7
RRT -.419 RRF -.4197 RTF .9423
SGB 5226.7 R23 .0012 R13 -.9424
SGI 5213.0 SG2 378.1 THA 177.94
                                                                                                                                           ST 1391.3 SR 380.9 35 351.2
    TOE -.1373 TRA 5.3515 TC3-1.6586 BAU 1.1706
                                                                                                                                          CRT -.2242 CRS .0381 CST -.9817
LSA 1436.0 MSA 377.0 SSA 12.9
    RDE .4778 RRA -.2175 RC3 .0182 FAU .00653
FDE .0452 FRA 1.2436 FC3 -.1071 BSP 16867
BDE .4971 BRA 5.3560 BC3 1.6587 FSP -310
                                                                                                                                           EL1 1394.1 EL2 370.5 ALF 176.22
                                                                                    FLIGHT TIME 200.00
                                                                                    DISTANCE 581.813
    RL 151.77 LAL -.00 LOL 311.91 VL 24.744 GAL 12.86 AZL 89.93 HCA 305.45 SMA 116.76 ECC .36736 INC .0689 V1 29.356
RP 108.64 LAP -.06 LOP 257.36 VP 36.148 GAP 21.20 AZP 89.96 TAL 155.58 TAP 101.03 RCA 73.87 APO 159.65 V2 34.883
RC 206.187 GL .22 GP 8.87 ZAL 42.29 ZAP 169.57 ETS 118.58 ZAE 130.77 ETE 172.00 ZAC 14.30 ETC 19.82 CLP 174.50
   PLANETOCENTRIC CONIC
    C3 60.444 VHL 7.775 DLA -23.22 RAL 269.59 RAD 6569.1 VEL 13.483 PTH 2.46 VHP 13.095 DPA -13.24 RAP 252.13 ECC 1.9948 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        148.88
                                                                                                           118.12 12 25 58
105.01 17 6 21
        90.00 11 58 15 1663.21
90.00 16 55 10 671.17
                                                                                                                                               1063.2
                                                                            9.01
                                                           -3.49
                                                                                                                                                                                  301.55
                                                                                                                                                  71.2
                                                                                                                                                                   26.12
                                                                                           159.90
                                                                           309.75
                                                           24.30
                                                                                                              119.41 13 25 57

104.10 20 8 27

122.70 13 56 13

101.97 21 47 32
                    13 1 36 1458.58
18 34 28 5639.07
13 33 35 1358.43
20 19 1 5311.98
                                                                                           147.71
                                                                                                                                                  858.6
                                                                                                                                                                    -1.65
                                                                           352.81 264.77
       100.00
                                                           -5.61
                                                                                                                                                                  28.31
                                                                                                                                                                                  256.37
                                                                                           160.57
                                                                                                                                                5039.1
                                                          26.63
       100.00
                                                                                                                                                  758.4
                                                                                                                                                                                  335.87
                                                                                                                                                                   -6.18
       110.00
                                                         -10.56
                                                                           342.21
                                                                                           144.70
                                                                                                                                                                33.57
                                                                                                                                              4712.0
                                                                                           162.07
                                                                                                                                                                                  232.44
                                                                           241.43
       110.00
                                                         32.26
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              RID-COURSE EXECUTION ACCORD.

SGT 5187.0 SGR 409.3 SG3 92.2

RRT -.4423 RRF -.4226 RTF ..9485

SGB 5203.1 R23 .0010 R13 -.9485

SGI 5190.1 SG2 366.9 THA 177.99
    TOE .0134 TRA 5.8718 TC3-1.3989 BAU 1.1305
                                                                                                                                           ST 1414.2 SR 366.4 $3 364.2
    ROE .4911 RRA -.2366 RC3 .0145 FAU .00544
FOE .0716 FRA 1.3199 FC3 -.0779 BSP 16777
                                                                                                                                           CRT -.1484 CRS -.0087 CST -.9870
                                                                                                                                           LSA 1460.2 MSA 366.8 SSA 12.2
                                                                                                                                           EL1 1415.3 EL2 362.1 ALF 177.64
     BOE .4913 BRA 5.8766 BC3 1.3990 FSP -303
                                                                                                                                                        ARRIVAL DATE FEB 23 1968
                                                                                    FLIGHT TIME 202.00
LAUNCH DATE AUG 5 1967
                                                                                    DISTANCE 585.589
    HELIOCENTRIC CONIC
     RL 151.77 LAL -.00 LOL 311.91 VL 24.699 GAL 14.28 AZL 89.69 MCA 308.62 SMA 116.53 ECC .38300 INC .3138 V1 29.356 RP 108.67 LAP -.25 LOP 260.53 VP 36.107 GAP 22.20 AZP 89.80 TAL 154.19 TAP 102.81 RCA 71.90 APO 161.16 V2 34.672 RC 207.774 GL ,90 GP 8.76 ZAL 40.54 ZAP 169.17 ETS 122.88 ZAE 130.61 ETE 172.13 ZAC 12.30 ETC 23.96 CLP 173.61
    PLANETOCENTRIC CONIC
      C3 69.542 VHL 8.339 DLA -22.53 RAL 271.49 RAD 6569.3 VEL 13.816 PTH 2.52 VHP 13.704 DPA -13.74 RAP 254.41 ECC 2.1445
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         152.45
         90.00 11 56 9 1731.21

90.00 17 12 25 670.49

100.00 13 0 55 1522.16

100.00 18 50 20 5642.81

110.00 13 35 4 1415.09

110.00 20 32 40 5322.64
                                                                                                            117.79 12 25 0
104.99 17 23 35
118.97 13 26 17
                                                                                                                                                             -1.90
                                                                                                                                             1131.2
                                                                            12.83
                                                           -5.66
                                                                                                                                                                                   301.51
                                                                                                                                                                  26.13
                                                                            309.70
                                                                                            164.17
                                                                                                                                                  70.5
                                                            24.31
                                                                                                                                                                                349.76
                                                                                                                                                                   -3.60
                                                                                                                                                  922.2
                                                                            356.35
                                                                                           151.33
                                                            -7.72
        100.00
                                                                                                              104.23 20 24 23
122.03 13 58 39
102.42 22 1 23
                                                                                                                                                                                 256.64
                                                                                                                                                                 28.26
                                                                            265.03
                                                                                            164.83
                                                                                                                                                5042.8
                                                            26.57
        100.00
                                                                                         148.40
                                                                                                                                                                                   338.87
                                                                            345.30
                                                                                                                                                815.1
                                                                                                                                                                   -8.30
                                                          -12.63
                                                                                                                                                4722.6
                                                                                                                                                                   33.46
                                                                                                                                                                                  233.26
                                                                           242.22
                                                                                            166.33
                                                          32.11
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SGT 5159.4 SGR 395.6 SG3 90.6
RRT -,4414 RRF -.4243 RTF .9546
SG8 5174.5 R23 .0010 R13 -.9546
SG1 5162.4 SG2 354.8 THA 178.05
                                                                                                                                           ST 1439.1 SR 351.5 SS 378.5
CRT -.0830 CRS -.0472 CST -.9910
      TOE .1656 TRA 6.4234 TC3-1.1651 BAU 1.0832
     RDE .5048 RRA -.2545 RC3 .0110 FAU .00435
FDE .0968 FRA 1.4011 FC3 -.0541 BSP 16768
                                                                                                                                           LSA 1487.5 MSA 353.6 SSA 11.6
EL1 1439.4 EL2 350.2 ALF 178.77
                                                                                                                                                                                       11.6
      BOE .5313 BRA 6.4285 BC3 1.1651 FSP -299
                                                                                     FLIGHT TIME 204.00
                                                                                                                                                         ARRIVAL DATE FEB 25 1968
 LAUNCH DATE AUG 5 1967
                                                                                     DISTANCE 589.009
     RL 151.77 LAL -.00 LOL 311.91 VL 24.656 GAL 15.83 AZL 89.42 MCA 311.79 SMA 116.31 ECC .40049 INC .5801 V1 29.356 RP 108.70 LAP -.43 LOP 263.70 VP 36.067 GAP 23.33 AZP 89.61 TAL 152.90 TAP 104.69 RCA 69.73 APO 162.90 V2 34.862 RC 209.341 GL 1.53 GP 8.67 ZAL 38.98 ZAP 168.67 ETS 127.04 ZAE 130.39 ETE 172.26 ZAC 10.43 ETC 29.59 CLP 172.67
    PLANETOCENTRIC CONIC
                                                                                                                  2.59 WHP 14.387 DPA -14.19 RAP 256.64 ECC 2.3232
     C3 80.403 VHL 8.967 OLA -21.88 RAL 275.18 RAD 6569.6 VEL 14.204 PTH
     UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 54 12 1796.25 -7.71 16.51 155.92 117.33 12 24 8 1196.2 -3.99 9.81 100.00 17 27 54 673.02 24.26 309.87 168.24 103.07 17 39 7 73.0 26.10 301.66 100.00 13 0 6 1583.52 -9.73 359.80 154.84 118.40 13 26 30 983.5 -5.86 353.15
                                                                                                            INJ AZNTH INJ TIME I
117.33 12 24 8
103.07 17 39 7
118.40 13 26 30
104.43 20 38 50
121.26 14 0 42
102.92 22 14 0
                                                                                                                                                 5049.0
                      19 4 41 5649.02
13 36 11 1470.42
20 45 5 5334.68
                                                                            265.46
                                                                                             168.88
                                                           26.47
         100.00
                                                                                                                                                                 -10.36
                                                                                                                                                                                   341.84
                                                                                                                                                 870.4
                                                                            348.37
                                                                                            151.98
                                                           -14.60
         110.00
                                                                                                                                                 4734.9
                                                                                                                                                                   33.37
                                                                                                                                                                                   234.20
                                                                            243.13
                                                                                             170.40
                                                          31.92
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 1464.6 SR 336.1 SS 394.6
CRT -.0257 CRS -.0809 CST -.9939
                                                                              SGT 5127.8 SGR 380.5 SG3 89.0

RRT -,4386 RRF -,421 RTF .9605

SGB 5141.9 R23 .0011 R13 -,9605

SGI 5130.5 SG2 341.8 THA 178.13
      TDE .3233 TRA 7.0148 TC5 -.9531 BAU 1.0245
      ROE .5186 RRA -.2709 RC3 .0076 FAU .00318
FOE .1220 FRA 1.4896 FC3 -.0343 BSP 16752
BOE .6111 BRA 7.0200 BC3 .9531 FSP -294
                                                                                                                                          LSA 1516.2 MSA 338.4 SSA 11.0
EL1 1464.6 EL2 335.9 ALF 179.64
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ARRIVAL DATE FEB 27 1968
                                                                             FLIGHT TIME 206.00
LAUNCH DATE AUG 5 1967
                                                                             DISTANCE 591.990
  HELIOCENTRIC CONIC
   RL 151.77 LAL -.00 LOL 311.91 VL 24.614 GAL 17.53 AZL 89.13 MCA 314.96 SMA 116.11 ECC .42012 INC .8735 VI 29.356
RP 108.73 LAP -.62 LOP 266.87 VP 36.030 GAP 24.59 AZP 89.38 TAL 151.73 TAP 106.69 RCA 67.33 APO 164.88 V2 34.853
RC 210.889 GL 2.12 GP 8.57 ZAL 37.60 ZAP 168.07 ETS 131.02 ZAE 130.12 ETE 172.40 ZAC 8.76 ETC 37.37 CLP 171.68
   PLANETOCENTRIC CONIC
    C3 93.440 VML 9.666 DLA -21.25 RAL 274.68 RAD 6569.8 VEL 14.656 PTH 2.65 VMP 15.155 DPA -14.59 RAP 258.83 ECC 2.5378
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  1NJ AZMTH INJ TIME

116.76 12 23 16

105.22 17 53 3

117.74 13 26 33

104.70 20 51 50

120.38 14 2 20

103.48 22 25 25
                                                                                                                                                -5.97
                                                                                  159.25
                                                                                                                                                                    13.30
                                                                                                                                 1258.3
                                                                     20.06
        90.00
                  11 52 18 1858.35
                                                      -9.64
                                                                                                                                      78.2
                                                                                                                                                      26.03
                                                                                                                                                                    302.04
                                                      24.17
                                                                     310.22
                                                                                    172.08
        90.00
                   17 41 45
                                    678.17
                                                                                                                                    1042.5
                                                                                                                                                      -7.82
                                                                                                                                                                    356.44
                                                                                   156.21
       100.00
                    12 59 10 1642.52
                                                     -11.62
                                                                       3.16
                                                                                                                                     5057.3
                                                                                                                                                      28.09
                                                                                                                                                                    257.68
                                                                                    172.72
                                                                    266.04
       100.00
                    19 17 33 5657.27
                                                     26.32
                                                                                                                                      924.1
                                                                                                                                                   -12.32
                                                                                                                                                                    344.77
                   13 36 56 1524.14
20 56 16 5348.41
                                                                                    155.43
                                                                     351.41
       110.00
                                                     -16.48
                                                                                                                                                                    235.23
                                                                                                                                    4748.4
                                                                                                                                                     33.24
       110.00
                                                                     244.15
                                                                                    174.26
                                                      31.71
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        RET -0.4214 SGR 364.1 SG3 87.5

RRT -0.4334 RRF -0.4215 RTF .9661

SGB 5105.4 R23 .0012 R13 -0.9661

SGI 5094.9 SGE 328.0 TMA 178.22
                                                                                                                                ST 1488.9 SR 320.3 SS 412.5
    TDE .4874 TRA 7.6518 TC3 -.7617 BAU .9515
RDE .5326 RRA -.2850 RC3 .0045 FAU .00190
FDE .1477 FRA 1.5864 FC3 -.0176 B9P 16710
                                                                                                                                CRT .0248 CRS -.1107 CST -.9959
                                                                                                                                LSA 1544.6 MSA 322.0 SSA 10.4
                                                                                                                                EL1 1488.9 EL2 320.2 ALF
         .7219 BRA 7.6571 BC3 .7617 FSP -289
                                                                                                                                             ARRIVAL DATE FEB 29 1968
                                                                              FLIGHT TIME 208,00
LAUNCH DATE AUG 5 1967
  HELIOCENTRIC CONIC
                                                                             DISTANCE 594.424
    RL 151.77 LAL -.00 LOL 311.91 VL 24.575 GAL 19.41 AZL 88.80 HCA 318.12 SMA 115.91 ECC .44221 INC 1.2012 V1 29.356
RP 108.76 LAP -.80 LOP 270.04 VP 35.994 GAP 26.02 AZP 89.11 TAL 150.70 TAP 108.82 RCA 64.65 APO 167.16 V2 34.844
RC 212.418 GL 2.67 GP 8.49 ZAL 36.40 ZAP 167.37 ETS 134.82 ZAE 129.77 ETE 172.55 ZAC 7.37 ETC 48.11 CLP 170.61
   PLANETOCENTRIC CONIC
    C3 109.190 VHL 10.449 DLA -20.66 RAL 275.97 RAD 6570.1 VEL 15.183 PTH 2.73 VHP 16.023 OPA -14.95 RAP 260.95 ECC 2.7970 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         2.73 VHP 16.023 OPA -14.95 RAP 260.95 ECC 2.7970
                                                                                                   115.09 12 22 18
105.43 18 5 26
116.98 13 26 22
105.02 21 3 27
119.43 14 3 34
104.07 22 35 37
                                                                                  162.43
                                                                                                                                    1317.4
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                                                                                                                                                                      16.65
                                                      -11.43
                                                                      23.48
        90.00 11 50 21 1917.44
                                                                     310.71
                                                                                                                                       85.4
                                                                                                                                                                     302.55
        90.00
                                                                                    175.68
                    17 54 1
                                     685.41
                                                      24.04
                                                                                    161.43
                                                                                                                                     1099.0
                                                                                                                                                       -9.66
                                                                                                                                                                     359.61
                                                      -13.39
       100.00
                   12 56 3
                                   1698.96
                                                                       6.42
                                                                                                                                                      27.96
                                                                                                                                     5067.2
                                                                                                                                                                     258.39
                     19 29 0
       100.00
                                   5667.16
                                                      26.15
                                                                     266.72
                                                                                    176.31
                                                                                  158.72
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       110.00
                     13 37 18 1575.95
                                                      -18.24
                                                                     354.39
                                                                                                                                    4762.9
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                                                                                    177.69
       110.00
                     21 6 14
                                    5362.94
                                                      31.48
                                                                     245.19
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5054.7 SGR 346.4 SG3 86.2
RRT -,4250 RRF -.4156 RTF .9714
SGB 5066.5 R23 .0013 R13 -.9714
SGI 5056.8 SG2 313.5 THA 178.32
                                                                                                                                 ST 1511.3 SR 304.3 SS 432.9
CRT .0702 CRS -.1385 CST -.9974
    TOE .6607 TRA 8.3432 TC3 -.5887 BAU .8594
    RDE .5468 RRA -.2961 RC3 .0018 FAU .00042
FDE .1745 FRA 1.6936 FC3 -.0033 BSP 16574
BDE .8577 BRA 8.3485 BC3 .5887 FSP -283
                                                                                                                                 LSA 1572.0 MSA 304.8 SSA
                                                                                                                                                                        9.8
                                                                                                                                 EL1 1511.5 EL2 303.5 ALF
                                                                                                                                                                           .84
                                                                                                                                            ARRIVAL DATE MAR 2 1968
                                                                             FLIGHT TIME 210.00
LAUNCH DATE AUG- 5 1967
                                                                             DISTANCE 596.170
    RL 151.77 LAL -.00 LOL 311.91 VL 24.538 GAL 21.49 ATL 88.43 MCA 321.29 SMA 115.73 ECC .46713 INC 1.5717 V1 29.356 RP 108.78 LAP -.98 LOP 273.21 VP 35.961 GAP 27.65 AZP 88.77 TAL 149.84 TAP 111.12 RCA 61.67 APO 169.78 V2 34.836 RC 213.927 GL 3.17 GP 8.40 ZAL 35.39 ZAP 166.55 ETS 138.46 ZAE 129.33 ETE 172.72 ZAC 6.40 ETC 62.34 CLP 169.46
   PLANETOCENTRIC CONIC
    C3 128.355 VHL 11.329 DLA -20.11 RAL 277.06 RAD 6570.4 VEL 15.802 PTH 2.80 VHP 17.010 OPA -15.26 RAP 263.00 ECC 3.1124
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 48 17 1973.38 -13.08 26.76 165.42 115.34 12 21 10 1373.4 -9.56 19.85
                                                                                                  INJ AZMTH INJ TIME
115.34 12 21 10
105.69 18 16 19
116.15 13 25 54
105.38 21 13 40
118.41 14 4 20
104.68 22 44 36
                                                                                                                                                     25.80
                     18 4 45
                                                      23.88
                                                                     311.31
                                                                                    179.01
        90.00
                                      694.30
                                                                                                                                                  -11.38
27.81
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                     12 56 41
                                   1752.63
                                                      -15.02
                                                                       9.57
                                                                                   164.45
       100.00
                                                                                                                                                                    259.18
                                                                                                                                     5078.3
                    19 39 2 5678.33
13 37 14 1625.55
21 14 58 5378.18
                                                      25.95
                                                                     267.49
                                                                                    179.64
       100.00
                                                                                                                                    1025.5
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32.92
                                                                                                                                                                     350.42
                                                                     357.31
                                                                                   161.83
       110.00
                                                      -19.87
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                                                                                                                                     4778.2
                                                                     246.31
                                                                                    181.25
       110.00
                                                      31.22
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 5011.3 SGR 327.6 SG3 84.8

RRT -.4126 RRF -.4056 RTF .9762

SGB 5022.0 R23 .0015 R13 -.9762

SGI 5013.1 SG2 298.3 THA 178.45
                                                                                                                                 ST 1528.3 SR 288.3 SS 455.3
    TOE .8356 TRA 9.0884 TC3 -.4359 BAU .7480
ROE .5618 RRA -.3030 RC3 -.0005 FAU-.00125
FOE .2009 FRA 1.8113 FC3 .0084 BSP 16520
                                                                                                                                 CRT .1093 CRS -.1628 CST -.9983
                                                                                                                                LSA 1594.8 MSA 287.3 SSA 9.2
EL1 1528.6 EL2 286.5 ALF 1.22
                                                                                                                                 EL1 1528.6 EL2 286.5 ALF
     BOE 1.0069 BRA 9.0935 BC3 .4359 FSP -279
                                                                                                                                             ARRIVAL DATE MAR 4 1968
                                                                              FLIGHT TIME 212.00
LAUNCH DATE AUG 5 1967
                                                                              DISTANCE 597.044
    RL 151.77 LAL -.00 LOL 311.91 VL 24.504 GAL 23.83 AZL 88.00 HCA 324.44 SMA 115.56 ECC .49534 INC 1.9969 V1 29.356 RP 108.81 LAP -1.16 LOP 276.37 VP 35.930 GAP 29.52 AZP 88.38 TAL 149.19 TAP 113.63 RCA 58.32 APO 172.80 V2 34.828 RC 215.416 GL 3.63 GP 8.32 ZAL 34.60 ZAP 165.59 ETS 141.92 ZAE 128.78 ETE 172.90 ZAC 5.96 ETC 79.11 CLP 168.19
   PLANETOCENTRIC CONIC
    C3 151.862 VHL 12.323 DLA -19.60 RAL 277.93 RAD 6570.7 VEL 16.528 PTH 2.88 VHP 18.139 DPA -15.54 RAP 264.93 ECC 3.4993
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 46 0 2025.97 -14.59 29.88 168.19 114.54 12 19 46 1426.0 -11.16 22.88
                                                                                                     105.98 18 25 41
115.27 13 25 4
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                                                                                     182.04
                    18 13 56
                                     704.47
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                                                                                                                                                    -12.98
                     12 55 1
                                     1803.26
                                                      -16.52
                                                                       12.58
                                                                                     167.26
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                                                                                                      105.76 21 22 27
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                     19 47 36 5690.45
13 36 43 1672.62
21 22 24 5393.86
                                                      25.73
                                                                     268.32
                                                                                     182.68
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105.31 22 52 18
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        110.00
                                                      -21.37
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                                                       30.94
                                                                      247.44
                                                                                     184.32
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1539.9 SR 272.3 SS 480.5
                                                                          SGT 4963.4 SGR 307.8 SG3 83.4
RRT -.3947 RRF -.3898 RTF .9806
     TOE 1.0151 TRA 9.8981 TC3 -.3002 BAU .6094
                                                                                                                                 CRT .1447 CRS -.1858 CST -.9990
     ROE .5776 RRA -.3045 RC3 -.0024 FAU-.00324
                                                                         SGB 4973.0 R23 .0016 R13 -.9806
SG1 4964.9 SG2 282.7 THA 178.59
     FOE .2280 FRA 1.9422 FC3 .0185 BSF 16455
BOE 1.1679 BRA 9.9028 BC3 .3002 FSP -275
                                                                                                                                LSA 1613.4 MSA 269.9 SSA 8.6
                                                                                                                                 EL1 1540.4 EL2 269.3 ALF 1.51
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FLIGHT TIME 214.00
                                                                                                                                             ARRIVAL DATE MAR 6 1968
LAUNCH DATE AUG 5 1967
                                                                              DISTANCE 596.806
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 24.473 GAL 26.46 AZL 87.51 MCA 327.60 SMA 115.41 ECC .52732 ING 2.4929 Y1 29.356 RP 108.83 LAP -1.34 LOP 279.53 VP 35.902 GAP 31.67 AZP 87.89 TAL 148.80 TAP 116.40 RCA 54.55 APO 176.26 Y2 34.821 RC 216.886 GL 4.06 GP 8.23 ZAL 34.02 ZAP 164.48 ETS 145.22 ZAE 128.09 ETE 173.11 ZAC 6.07 ETC 95.58 CLP 166.80
   PLANETOCENTRIC CONIC
     C3 180.945 VHL 13.452 DLA -19.14 RAL 278.56 RAD 6570.9 VEL 17.386 PTH 2.96 VHP 19.436 DPA -15.78 RAP 266.74 ECC 3.9779
    LNCM AZMTH LNCM TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 43 26 2074.95 -15.95 32.83 170.20 113.71 12 18 1 1475.0 -12.61 25.74
                                                                                                    INJ AZNYM INJ TIME
113.71 12 18 1
106.30 18 33 28
114.37 13 23 48
106.17 21 29 44
116.25 14 4 16
105.93 22 58 39
                                                                                   170.70
        90.00 11 43 26 2074.95
                     18 21 32
                                      715.58
                                                      23.48
                                                                      312.75
                                                                                     184.73
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        90.00
                   18 21 32 715.58
12 52 58 1850.57
                                                                                    169.81
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                                                                                                                                                    -14.43
                                                     -17.67
                                                                       15.44
       100,00
                    19 54 41 5703.24
13 35 39 1716.82
                                                                                     165.36
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                                                     25.49
-22.72
                                                                      289.20
       100.00
                                                                                    167.36
                                                                                                                                                      -19.01
                                                                        2.86
                                                                                                                                      1116.8
       110.00
                    21 28 29 5409.75
                                                                                     187.06
                                                                                                                                      4809.8
                                                                                                                                                       32.53
                                                                      244.50
       110.00
                                                       30.65
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 4911.3 SGR 287.0 SG3 82.2

RRI - .3692 RRF - .3662 RTF .9845

SGB 4919.6 R23 .0017 R13 - .9845

SGI 4912.4 SG2 266.7 THA 178.76
                                                                                                                                  ST 1545.1 SR 256.5 SS 508.6
CRT .1778 CR5 -.2087 CST -.9994
     TOE 1.1992 TRAID.7803 TC3 -.1803 BAU .4363
    RDE .5947 RRA -.2987 RC3 -.0037 FAU-.00569
    FOE .2561 FRA 2.0887 FC3 .0272 BSP 16359
BOE 1.3385 BRAIO.7844 BC3 .1804 FSP -271
                                                                                                                                  LSA 1627.2 MSA 252.6 SSA
                                                                                                                                                                           8.0
                                                                                                                                  EL1 1545.8 EL2 252.3 ALF 1.74
                                                                                                                                              ARRIVAL DATE MAR 8 1968
                                                                              FLIGHT TIME 216.00
LAUNCH DATE AUG 5 1967
  HELIOCENTRIC CONIC
    CISTANCE 393.141

RL 151.77 LAL -.00 LOL 311.91 VL 24.447 GAL 29.44 AZL 86.92 HCA 330.75 SMA 115.28 ECC .56361 INC 3.0830 V1 29.356

RP 108.85 LAP -1.51 LOP 282.70 VP 35.877 GAP 34.17 AZP 87.31 TAL 148.73 TAP 119.48 RCA 50.31 APO 180.25 V2 34.814

RC 218.336 GL 4.46 GP 8.14 ZAL 33.70 ZAP 163.19 ETS 148.38 ZAE 127.25 ETE 173.34 ZAC 6.59-ETC 109.01 CLP 165.24
                                                                              DISTANCE 595.141
   PLANETOCENTRIC CONIC
    C3 217.255 VHL 14.740 DLA -18.73 RAL 278.92 RAD 6571.2 VEL 18.400 PTH 3.04 VHP 20.935 DPA -15.99 RAP 268.38 ECC 4.5755 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   172.89
                    11 40 27 2120.02
                                                      -17.17
                                                                       35.58
                                                                                                      112.87
                                                                                                                   12 15 47
                                                                                                                                      1520.0
                                                                                                                                                     -13.92
        90.00
                                                                                                       106.63 18 39 34
                                                                      313.53
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                    18 27 26
                                                      23.25
                                    727.37
        90.00
                                                                                                      113.46 13 21 59
106.57 21 35 26
115.17 14 3 15
106.54 23 3 32
                                                     -19.07
                    12-50 25 1894.22
20 0 9 5716.44
                                                                                     172.03
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                                                                       18.13
       100.00
                                                                                     187.70
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                                                                      270.10
       100.00
                    20 0 9
                                                      25.24
                    13 33 57 1757.80
21 33 6 5425.63
                                                                                                                                      1157.8
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                                                                                                                                                                      358.12
       110.00
                                                     -23.93
                                                                        5.42
                                                                                     169.67
                                                                      249.73
                                                                                                                                      4825.6
                                                                                                                                                        32.31
                                                                                                                                                                      241.06
                                                                                     189.42
       110.00
                                                       30.35
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          SCT 4855.4 SGR 265.7 SG3 81.0
RRT -.3330 RRF -.3316 RTF ..9879
SG8 4862.6 R23 .0018 R13 -.9879
SG1 4856.2 SG2 250.5 THA 178.95
    TOE 1.3876 TRAI1.7439 TC3 -.0749 BAU .2178
                                                                                                                                  ST 1543.4 SR 241.0 SS 540.6
CRT .2100 CR5 -.2326 CST -.9996
    RDE .6135 RRA -.2836 RC3 -.0044 FAU-.00877
FDE .2853 FRA 2.2537 FC3 .0350 85P 16158
BDE 1.5172 8RA11.7473 BC3 .0750 FSP -266
                                                                                                                                         .2100 CRS -.2326 CST -.9996
                                                                                                                                  LSA 1636.1 MSA 235.7 SSA 7.5
                                                                                                                                  EL1 1544.3 EL2 235.5 ALF
                                                                                                                                                                         1.92
                                                                                                                                             ARRIVAL DATE MAR 10 1968
                                                                              FLIGHT TIME 218.00
LAUNCH DATE AUG 5 1967
                                                                              DISTANCE 591.638
   HELIOCENTRIC CONIC
    RL 151.77 LAL -.00 LOL 311.91 VL 24.425 GAL 32.86 AZL 86.20 HCA 333.90 SMA 115.17 ECC .60472 INC 3.8016 VI 29.356
RP 108.87 LAP -1.67 LOP 285.86 VP 35.857 GAP 37.10 AZP 86.59 TAL 149.05 TAP 122.96 RCA 45.52 APO 184.82 V2 34.808
RC 219.767 GL 4.81 GP 8.04 ZAL 33.65 ZAP 161.68 ETS 151.40 ZAE 126.21 ETE 173.60 ZAC 7.31 ETC 118.65 CLP 163.48
   PLANETOCENTRIC CONIC
    C3 263.004 VHL 16.217 OLA -18.37 RAL 278.99 RAD 6571.5 VEL 19.604 PTH 3.12 VHP 22.676 OPA -16.18 RAP 269.83 ECC 5.3284
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    112.05 12 12 56
106.97 18 43 50
                                                                                  174.70
                                                                                                                                    1560.9
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        90.00 11 36 55 2160.85
                                                                      38.11
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        90.00
                     18 31 31
                                     739,63
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                                                                      314.35
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                                                                                                     106.97 18 43 50
112.58 13 19 29
106.98 21 39 21
114.11 14 1 26
107.13 23 6 47
                    12 47 16 1933.87
20 3 51 5729.89
13 31 31 1795.20
21 36 5 5441.32
                                                                                  173.88
                                                                                                                                     1333.9
                                                                                                                                                                      13.30
       100.00
                                                     -20.13
                                                                      20.60
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       100.00
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       110.00
                                                      -25.00
                                                                        7.81
                                                                                     171.61
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       110.00
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                                                       30.04
                                                                     250.85
                                                                                     191.35
                                                                                                                                     4841.3
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                         SCT 4791.2 SGR 244.2 SG3 79.9

RRT -.2821 RRF -.2820 RTF .9907

SGB 4797.4 R23 .0019 R13 -.9907

SGI 4791.7 SG2 234.2 THA 179.17
                                                                                                                                 ST 1551.3 SR 226.1 55 576.0
CRT .2410 CRS -.2570 CST -.9998
    TOE 1.5680 TRA12.7835 TC3 .0156 BAU .0570
    RDE .6349 RRA -.2560 RC3 -.0046 FAU-.01265
FDE .3138 FRA 2.4381 FC3 .0416 BSP 16050
BDE 1.6917 BRA12.7861 BC3 .0162 FSP -263
                                                                                                                                 LSA 1637.0 MSA 219.4 SSA
                                                                                                                                                                          6.9
                                                                                                                                 ELI 1532.3 EL2 219.3 ALF 2.08
LAUNCH DATE AUG 5 1967
                                                                              FLIGHT TIME 220.00
                                                                                                                                             APPIVAL DATE WAR 12 1968
                                                                              DISTANCE 585.779
    RL 151.77 LAL -.00 LOL 311.91 VL 24.410 GAL 36.80 AZL 85.30 MCA 337.05 SMA 115.10 ECC .65109 INC 4.7014 V1 29.356
RP 108.89 LAP -1.83 LOP 289.02 VP 35.842 GAP 40.53 AZP 85.67 TAL 149.87 TAP 126.91 RCA 40.16 APO 190.04 V2 34.803
RC 221.179 GL 5.13 GP 7.93 ZAL 33.93 ZAP 159.91 ETS 154.30 ZAE 124.92 ETE 173.91 ZAC 8.07 ETC 124.99 CLP 161.48
   PLANETOCENTRIC CONIC
    C3 321.131 VHL 17.920 DLA -18.06 RAL 278.72 RAD 6571.8 VEL 21.034 PTH 3.19 VHP 24.704 DPA -16.35 RAP 271.01 ECC 6.2850
    LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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113.12 13 58 39
107.71 23 8 11
                    20 5 36 5743.44
13 26 10 1626.64
21 37 15 5456.70
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       100.00
                                                      24.70
                                                                     271.92
                                                                                     191.01
                                                                                                                                     5143.4
                                                                                                                                                      26.85
       110.00
                                                      -25.91
                                                                       9.98
                                                                                     173.08
                                                                                                                                     1228.6
                                                                                                                                                      -22.55
                                                                                                                                                                        2.43
                                                                                                                                     4856.7
       110.00
                                                      29.73
                                                                      251.93
                                                                                     192.79
                                                                                                                                                       31.86
                                                                                                                                                                      243.37
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 4719.6 SGR 223.2 SG3 78.8

RRT -.2103 RRF -.2111 RTF .9931

SGB 4724.9 R23 .0018 R13 -.9931

SG1 4719.8 SG2 218.2 THA 179.43
                                                                                                                                ST 1508.6 SR 212.0 SS 615.7

CRT .2726 CRS -.2835 CST -.9999

LSA 1630.5 MSA 203.9 SSA 6.4

EL1 1509.8 EL2 203.8 ALF 2.23
    TOE 1.7384 TRA13.9009 TC3 .0929 BAU .3990
    RDE .6598 RRA -.2124 RC3 -.0041 FAU-.01766
    FDE .3419 FRA 2.6452 FC3 .0476 BSP 15889
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BOE 1.8594 BRA13.9025 BC3 .0929 FSP -261

ARRIVAL DATE OCT 15 1967 FLIGHT TIME 70.00 LAUNCH DATE AUG 6 1967 HELIOCENTRIC CONIC DISTANCE 212.799 RL 151.75 LAL -.00 LOL 312.87 VL 29.690 GAL -17.17 A7L 91.56 MCA 96.46 SNA 152.96 ECC .29535 INC 1.5553 VI 29.360 RP 108.10 LAP -1.55 LOP 49.33 VP 39.846 GAP -2.10 A7P 89.82 TAL 254.30 TAP 350.75 RCA 107.78 APO 198.14 V2 35.056 RC 74.652 GL -5.13 GP -22.09 TAL 171.55 TAP 76.50 ETS 6.37 TAE 163.15 ETE 258.59 TAC 114.95 ETC 6.73 CLP -75.40 PLANETOCENTRIC CONIC C3 74.080 VHL 8.607 DLA 10.07 RAL 140.37 RAD 6569.4 VEL 13.980 PTH 2.55 VHP 5.259 DPA -7.53 RAP 149.26 ECC 2.2192 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.78 23 15 12 69.24 14 24 9 91.46 24 36 53 68.37 15 36 24 93.36 1 56 14 65.89 16 30 22 90.00 22 27 37 2855.39 90.00 13 3 5 4864.07 100.00 23 53 56 2576.98 100.00 14 19 27 4617.71 110.00 1 17 26 2328.02 110.00 15 16 22 4439.44 2255.4 29.48 77.23 -28.31 85.87 -27.90 203.39 210.78 21.26 4264.1 16.70 19.70 1977.0 -29.34 56.59 29.44 -29.86 65.36 100.00 4017.7 18.03 184.67 192.07 20.66 100.00 21.15 37.11 1728.0 -34.04 46.25 29.23 110.00 3839.4 21.53 169.34 110.00 25.00 176.78 18.89 MID-COURSE EXECUTION ACCURACY ORBIT. DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 634.9 SGR 494.5 SG3 180.3 RRT .4464 RRF .5896 RTF .6345 SGB 804.7 R23 .1213 R13 .7107 SGI 696.2 SG2 403.5 THA 30.25 ST 246.9 SR 333.2 SS 196.7 CRT -.5032 CRS .6374 CST -.9786 LSA 404.6 MSA 215.9 SSA 19.0 TOE .2573 TRA -.8765 TC3 -.0873 BAU .1758 RDE -.4862 RRA -.3883 RC3 -.1546 FAU .09335 FDE .5214 FRA-1.2461 FC3-1.0909 BSP 1451 BDE .5501 BRA .9586 BC3 .1775 FSP -518 EL1 366.6 EL2 193.9 ALF 119.42 FLIGHT TIME 72.00 ARRIVAL DATE OCT 17 1967 LAUNCH DATE AUG 6 1967 HELIOCENTRIC CONIC **DISTANCE 219.254** RL 151.75 LAL -.00 LOL 312.87 VL 29.638 GAL -16.98 A7L 91.39 MCA 99.67 SMA 152.42 ECC .29203 INC 1.3935 VI 29.360 RP 108.06 LAP -1.37 LOP 52.54 VP 39.819 GAP -1.47 A7P 89.77 TAL 253.84 TAP 353.51 RCA 107.91 APO 196.92 VZ 35.069 RC 76.795 GL -4.66 GP -22.75 ZAL 171.66 ZAP 81.24 ETS 4.60 ZAE 161.34 ETE 249.11 ZAC 116.74 ETC 5.89 CLP -80.49 RC 76.795 GL -4.00 GT

PLANETOCENTRIC CONIC

C3 72.104 VHL 8.491 DLA 10.46 RAL 140.72 RAD 6569.4 VEL 13.909 PTH 2.54 VHP 5.154 DPA -7.55 RAP 147.39 ECC 2.1867

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 25 53 2861.81 -28.31 86.34 29.54 90.55 23 13 34 2261.8 -27.94 77.70

90.00 13 7 36 4845.00 19.24 209.58 21.11 68.81 14 28 23 4245.0 16.19 202.23

100.00 23 52 25 2582.69 -29.87 65.78 29.51 91.24 24 35 28 1982.7 -29.38 57.01

100.00 14 23 46 4599.35 20.68 190.90 20.50 67.92 15 40 26 3999.3 17.51 183.55

110.00 1 16 24 2332.20 -34.05 46.57 29.32 93.16 1 55 16 1732.2 -33.24 37.43 PLANETOCENTRIC CONIC DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 704.8 SGR 505.6 SG3 188.2 RRT .4981 RRF .6168 RTF .6854 SGB 867.4 R23 .1231 R13 .7453 ST 267.3 SR 326.7 SS 205.6 CRT -.4886 CRS .6489 CST -.9736 LSA 412.6 MSA 223.4 SSA 19.2 TOE .2733 TRA -.9400 TC3 -.1273 BAU .2045 RDE -.4690 RRA -.3921 RC3 -.1697 FAU .09629 FOE .5590 FRA-1.2619 FC3-1.1561 BSP 1706 BDE .5428 BRA 1.0185 BC3 .2121 FSP -548 SG1 768.6 SG2 402.0 THA 27.91 EL1 367.8 EL2 207.2 ALF 123.77 ARRIVAL DATE OCT 19 1967 LAUNCH DATE AUG 6 1967 FLIGHT TIME 74.00 DISTANCE 225.660 RL 151.75 LAL -.00 LOL 312.87 VL 29.579 GAL -16.79 AZL 91.23 MCA 102.88 SMA 151.81 ECC .28878 INC 1.2285 VI 29.360 RP 108.02 LAP -1.20 LOP 55.75 VP 39.786 GAP -.86 AZP 89.73 TAL 253.29 TAP 356.17 RCA 107.97 APO 195.65 VZ 35.082 RC 78.958 GL -4.16 GP -23.36 ZAL 171.69 ZAP 85.87 ETS 2.79 ZAE 159.21 ETE 241.34 ZAC 118.43 ETC 5.06 CLP -85.50 PLANETOCENTRIC CONIC C3 70.176 VHL 8.377 OLA 10.85 RAL 141.14 RAD 6569.4 VEL 13.839 PTH 2.53 VHP 5.081 DPA -7.57 RAP 145.62 ECC 2.1549 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.31 23 12 7 68.39 14 32 56 91.01 24 34 14 67.49 15 44 46 92.97 1 54 30 64.93 16 37 47 -27.97 2268.4 29.66 78.18 90.00 22 24 19 2868.41 90.00 13 12 30 4825.63 -28.32 86.82 4225.6 201.05 18.75 208.36 21.04 15.66 57.45 -29.42 23 51 5 14 28 25 2588.57 -29.88 66.22 29.63 1988.6 100.00 16.98 182.42 4580.70 20.20 189.73 20.41 39AF . 7 100.00 i 15 34 2336.52 15 24 22 4405.52 37.76 -33.28 -34.07 29.46 1736.5 46.91 167.29 18.59 3805..5 20.46 110.00 24.04 174.61 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 782.9 SGR 515.1 SG3 194.4 RRT .5423 RRF .6413 RTF .7257 SGB 937.2 R23 .1264 R13 .7731 SG1 847.6 SG2 399.7 THA 25.76 ST 290.3 SR 319.0 SS 214.0 CRT -.4783 CRS .6606 CST -.9685 LSA 423.0 MSA 229.1 SSA 19.3 TOE .2925 TRA-1.0060 TC3 -.1710 BAU .2359 ROE -.4504 RRA -.3932 RC3 -.1844 FAU .09830 FOE .5929 FRA-1.2615 FC3-1.2127 BSP 1982 BDE .5371 BRA 1.0801 BC3 .2515 FSP -573 EL1 371.7 EL2 218.8 ALF 129.42 FLIGHT TIME 76.00 APRIVAL DATE OCT 21 1967 LAUNCH DATE AUG 6 1967 **DISTANCE 232.021** RL 151.75 LAL -.00 LOL 312.87 VL 29.514 GAL -16.59 AZL 91.06 MCA 105.09 SMA 151.14 ECC .28561 INC 1.0592 V1 29.360 RP 107.98 LAP -1.02 LOP 58.96 VP 39.749 GAP -.28 AZP 89.71 TAL 252.64 TAP 358.73 RCA 107.98 APO 194.31 V2 35.094 RC 81.139 GL -3.63 GP -23.92 ZAL 171.66 ZAP 90.35 ETS .96 ZAE 156.88 ETE 235.08 ZAC 119.98 ETC 4.23 CLP -90.38 PLANETOCENTRIC CONIC C3 68.285 VHL 8.264 OLA 11.25 RAL 141.61 RAD 6569.3 VEL 13.771 PTH 2.52 VHP 5.035 OPA -7.60 RAP 143.98 ECC 2.1238 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 22 53 2875.33 -28.32 87.33 29.83 90.05 23 10 49 2275.3 -28.01 78.68 90.00 13 17 44 4805.76 18.25 207.12 21.02 67.97 14 37 50 4205.8 15.10 199.85 100.00 23 49 54 2594.73 -29.88 66.68 29.82 90.77 24 33 9 1994.7 -29.46 57.90 67.05 15 49 26 92.76 1 53 55 64.46 16 41 58 181.27 14 33 25 100.00 4561.59 19.70 188.53 20.39 3961.6 16.42 -33.33 110.00 1 14 54 2341.05 15 28 50 4388.04 -34.09 47.26 29.67 1741.0 38.10 110.00 23.53 173.51 18.53 3788.0 19.90 166.25 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 315.6 SR 309.8 SS 222.1 CRT -.4725 CRS .6740 CST -.9632 LSA 436.7 MSA 232.1 SSA 19.4 EL1 379.6 EL2 227.1 ALF 136.17 TOE .3153 TRA-1.0734 TC3 -.2179 BAU .2690 SGT 868.0 SGR 522.3 SG3 198.6 RRT .5793 RRF .6624 RTF .7570 SG8 1013.0 R23 .1307 R13 .7947 ROE -.4302 RRA -.3911 RC3 -.1983 FAU .09925 FDE .6239 FRA-1.2429 FC3-1.2583 BSP 2272 BDE .5334 BRA 1.1424 BC3 .2946 FSP -588 SG1 932.2 SG2 396.4 THA 23.77

ARRIVAL DATE OCT 23 1967

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FLIGHT TIME 78.00
LAUNCH DATE AUG 6 1967
   HELIOCENTRIC CONIC
                                                                           DISTANCE 238.337
    RL 151.75 LAL -.00 LOL 312.87 VL 29.444 GAL -16.40 AZL 90.88 MCA 109.30 SMA 150.44 ECC .28250 INC .8840 VI 29.360 RP 107.94 LAP - -.83 LOP 62.17 VP 39.709 GAP .27 AZP 89.71 TAL 251.90 TAP 1.21 RCA 107.94 APO 192.93 VZ 35.107 RC 83.336 GL -3.07 GP -24.46 ZAL 171.54 ZAP 94.64 ETS 359.09 ZAE 154.45 ETE 230.05 ZAC 121.38 ETC 3.43 CLP -95.10
   PLANETOCENTRIC CONIC
    C3 66.426 WHL 8.150 OLA 11.67 RAL 142.15 RAD 6569.3 VEL 13.703 PTH 2.50 VHP 5.016 DPA -7.67 RAP 142.49 ECC 2.0932
    UNCH AZMTH LNCH TIME L-I TIME
90.00 22 21 33 2882.74
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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67.55 14 43 6
                                                    -28.32
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23 48 48 2601.33
14 38 47 4541.83
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63.98 16 46 29
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      110.00
                                                                  172.38
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                                                    23.00
                                                                                   18.54
                                                                                                                                                19.31
      110.00
                                  4369.99
                   15 33 39
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 958.6 SGR 528.0 SG3 201.2
RRT .6099 RRF .6824 RTF .7811
SGB 1094.4 R23 .1371 R13 .8117
                                                                                                                            ST 344.0 SR 299.6 SS 229.2

CRT -.4710 CRS .6855 CST -.9591

LSA 454.0 MSA 232.7 SSA 19.6
    TOE .3419 TRA-1.1410 TC3 -.2677 BAU .3031
    RDE -.4091 RRA -.3866 RC3 -.2117 FAU .09938
    FOE .6481 FRA-1.2128 FC3-1.2953 BSP
                                                       2580
-601
                                                                       SG1 1021.6 SG2 392.7 THA 21.98
                                                                                                                            EL1 393.2 EL2 231.2 ALF 143.19
    BOE ,5332 BRA 1.2047 BC3 .3413 FSP
                                                                                                                                        ARRIVAL DATE OCT 25 1967
                                                                           FLIGHT TIME 80.00
LAUNCH DATE AUG 6 1967
   HELIOCENTRIC CONIC

RL 151.75 LAL -.00 LOL 312.87 VL 29.369 GAL -16.21 AZL 90.70 MCA 112.52 SMA 149.69 ECC .27945 INC .7017 VI 29.360

RP 107.91 LAP -.65 LOP 65.39 VP 39.664 GAP .79 AZP 89.73 TAL 251.08 TAP 3.60 RCA 107.86 APO 191.52 V2 35.119

RC 85.546 GL -2.46 GP -24.98 ZAL 171.34 ZAP 98.73 ETS 357.19 ZAE 152.00 ETE 225.99 ZAC 122.59 ETC 2.66 CLP -99.64
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 64.592 VHL 8.037 DLA 12.11 RAL 142.75 RAD 6569.2 VEL 13.636 PTH
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
                                                                                                      2.49 VHP 5.018 OPA
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-28.31 88.46 30.37 89.49 23 8 25 2290.8 -28.08 79.81
                  22 20 14 2890.83
13 29 26 4763.67
23 47 46 2608.56
14 44 35 4521.18
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        90.00
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63.50 16 51 24
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       110.00
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                   15 38 52
                                                                   171.21
                                                                                   18.60
       110.00
                                                    22.43
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      $67 1053.8 $6R 532.1 $63 202.2

RRT .6352 RRF .7010 RTF .7994

$6B 1180.5 R23 .1455 R13 .8249
                                                                                                                            ST 374.8 SR 288.3 SS 235.8
CRT -.4731 CRS .6967 CST -.9559
    TOE .3723 TRA-1.2078 TC3 -.3199 BAU .3375
    RDE -.3870 RRA -.3796 RC3 -.2246 FAU .09871
    FOE .6670 FRA-1.1707 FC3-1.3230 BSP 2902
                                                                                                                            LSA 475.0 MSA 230.7 SSA 19.7
                                                                       SG1 1114.7 SG2 388.5 THA 20.36
                                                                                                                             ELI 412.9 EL2 230.6 ALF 149.64
    BOE .5370 BRA 1.2660 8C3 .3909 FSP
                                                         -611
                                                                                                                                       ARRIVAL DATE OCT 27 1967
                                                                           FLIGHT TIME 82.00
LAUNCH DATE AUG 6 1967
                                                                           DISTANCE 250.846
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 29.290 GAL -16.01 AZL 90.51 MCA 115.74 SMA 148.91 ECC .27646 INC .5105 V1 29.360 RP 107.87 LAP -.46 LOP 68.61 VP 39.616 GAP 1.28 AZP 89.78 TAL 250.19 TAP 5.93 RCA 107.74 APO 190.08 V2 35.131 RC 87.767 GL -1.81 GP -25.50 ZAL 171.05 ZAP 102.58 ETS 355.25 ZAE 149.57 ETE 222.73 ZAC 123.60 ETC 1.93 CLP-103.96
   PLANETOCENTRIC CONIC
    C3 62.781 VHL 7.923 DLA 12.58 RAL 143.41 RAD 6569.2 VEL 13.570 PTH 2.48 VHP 5.042 DPA -7.97 RAP 140.06 ECC 2.0332 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  89.15 23 7 13
66.69 14 55 3
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                                                                   89.12
        90.00 22 18 53 2899.85
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        90.00
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15 44 32 4331.40
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       110.00
                                                    21.83
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 1152.3 SGR 534.2 SG3 201.7
RRT .6562 RRF .7184 RTF .8132
SGB 1270.1 R23 .1557 R13 .8349
                                                                                                                            ST 408.5 SR 275.8 SS 242.3

CRT -.4784 CRS .7082 CST -.9533

LSA 500.1 MSA 226.1 SSA 19.8
    TOE .4068 TRA-1.2729 TC3 -.3743 BAU .3719
    RDE -.3637 RRA -.3700 RC3 -.2370 FAU .09728
    FDE .6824 FRA-1.1181 FC3-1.3415 8SP 3233
                                                                       SG1 1210.8 SG2 383.6 THA 18.89
                                                                                                                            EL1 438.1 EL2 225.8 ALF 155.06
    BDE .5457 BRA 1.3256 BC3 .4431 FSP
                                                       -615
                                                                                                                                        ARRIVAL DATE OCT 29 1967
LAUNCH DATE AUG 6 1967
                                                                           ELICHT TIME 84.00
                                                                           DISTANCE 257.043
   HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 29.208 GAL -15.81 AZL 90.31 MCA 118.96 SMA 148.11 ECC .27353 INC .3083 V1 29.360 RP 107.83 LAP -.27 LOP 71.83 VP 39.365 GAP 1.76 AZP 89.85 TAL 249.23 TAP 8.19 RCA 107.60 APO 188.62 V2 35.143 RC 89.996 GL -1.11 GP -26.04 ZAL 170.67 ZAP 106.19 ETS 353.27 ZAE 147.21 ETE 220.11 ZAC 124.40 ETC 1.25 CLP-108.07
   PLANETOCENTRIC CONIC
    C3 60.994 VHL 7.810 DLA 13.08 RAL 144.13 RAD 6569.1 VEL 13.504 PTH 2.47 VHP 5.083 DPA -8.24 RAP 139.13 ECC 2.0038 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 17 25 2910.11 -28.29 89.87 31.15 88.78 23 5.55 2310.1 -28.16 81.21
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89.55 24 29 19
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                    23 45 34 2625.85
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       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1253.6 SGR 534.9 SG3 199.9
RRT .6738 RRF .7552 RTF .8236
SGB 1363.0 R23 .1678 R13 .8424
SGI 1309.4 SG2 378.4 THA 17.55
                                                                                                                            ST 445.4 SR 261.9 SS 248.7

CRT - 4861 CRS .7194 CST - .9514

LSA 529.5 MSA 219.2 SSA 20.0
    TDE .4457 TRA-1.3354 TC3 -.4309 BAU .4059
    RDE -.3392 RRA -.3581 RC3 -.2492 FAU .09524
    FDE .6945 FRA-1.0576 FC3-1.3519 BSP 3571
                                                                                                                            EL1 468.7 EL2 217.5 ALF 159.42
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BOE .5601 BRA 1.3826 BC3 .4977 FSP

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ARRIVAL DATE OCT 31 1967
                                                                                                           FLIGHT TIME 86.00
LAUNCH DATE AUG 6 1967
                                                                                                          DISTANCE 263.205
    HELIOCENTRIC CONIC
     RL 151.75 LAL -.00 LOL 312.87 VL 29.122 GAL -15.61 AZL 90.09 MCA 122.18 SMA 147.29 ECC .27066 INC .0925 VI 29.360
RP 107.80 LAP -.08 LOP 75.05 VP 39.512 GAP 2.21 AZP 89.95 TAL 248.20 TAP 10.39 RCA 107.42 APO 187.15 VZ 35.154
RC 92.232 GL -.34 GP -26.61 ZAL 170.18 ZAP 109.53 ETS 351.22 ZAE 144.92 ETE 218.01 ZAC 124.98 ETC .60 CLP-111.96
    PLANETOCENTRIC CONIC
      C3 59.231 VHL 7.696 DLA 13.64 RAL 144.91 RAD 6569.1 VEL 13.438 PTH 2.46 VMP 5.140 DPA -8.61 RAP 138.39 ECC 1.9748
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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65.80 15 9 21
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64.80 16 19 33
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          100.00
                            15 5 21
                                                   4451.22
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                                                                                               181.77
                                                                                                                       21.18
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17 8 59
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         110.00
                              1 T2 32 2372.67
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                                                                          -34.16
                                                                                                  49.73
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                                                                                                                       19.15
                                                                                                                                              62.00
                                                                                                                                                                                       3687.9
          110.00
                            15 57 31
                                                  4287.87
                                                                            20.46
                                                                                               167.36
                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 1356.2 SGR 533.2 SG3 196.7
RRT .6883 RRF .7506 RTF .8311
SGB 1457.3 R23 .1813 R13 .8476
SGI 1408.9 SG2 372.4 THA 16.31
                                                                                                                                                                                 ST 486.0 SR 246.2 SS 256.3
CRT -,4964 CRS .7325 CST -,9495
      TDE .4899 TRA-1.3939 TC3 -.4888 BAU .4386
      RDE -.3128 RRA -.3434 RC3 -.2606 FAU .09250
                                                                                                                                                                                 LSA 563.9 MSA 209.9 SSA 20.1
     FDE .7078 FRA -.9871 FC3-1.3520 BSP 3895
BDE .5813 BRA 1.4356 BC3 .5539 FSP -602
                                                                                                                                                                                  EL1 504.4 EL2 205.9 ALF 162.96
                                                                                                                                                                                                  ARRIVAL DATE NOV 2 1967
LAUNCH DATE AUG 6 1967
                                                                                                            FLIGHT TIME 88.00
                                                                                                           DISTANCE 269.335
    HELIOCENTRIC CONIC
     RL 151.75 LAL
RP 107.77 LAP
                                      -.00 LOL 312.87 VL 29.034 GAL -15.40 AZL 89.86 HCA 125.41 SMA 146.45 ECC .26785 INC .1360 V1 29.360 .11 LOP 78.27 VP 39.457 GAP 2.64 AZP 90.08 TAL 247.12 TAP 12.52 RCA 107.22 APO 185.68 V2 35.165 .51 GP -27.25 ZAL 169.59 ZAP 112.61 ETS 349.11 ZAE 142.72 ETE 216.35 ZAC 125.36 ETC 359.98 CLP-115.63
    RC 94.474 GL .51 GP -ZI.Z2 ARL 100...

PLANETOCENTRIC CONIC

C3 57.497 VML 7.583 DLA 14.24 RAL 145.77 RAD 6569.0 VEL 13.374 PTH 2.44 VMP 5.213 DPA -9.10 RAP 137.81 ECC 1.9462

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2_LAT INJ 2_LONG

90.00 22 13 46 2935.99 -28.24 91.77 32.24 87.83 23 2 42 2336.0 -28.24 193.10

90.00 14 0 0 4662.01 14.36 198.36 22.26 65.33 15 17 42 4062.0 10.92 191.37

100.00 23 42 42 2649.21 -29.86 70.73 32.29 88.64 24 26 51 2049.2 -29.73 61.93

100.00 15 13 45 4424.03 15.83 180.14 21.54 64.31 16 27 29 3624.0 12.25 173.19

110.00 1 11 51 2382.52 -34.17 50.50 32.32 90.84 1 51 34 1782.5 -33.68 41.29

110.00 14 5 1 4263.48 19.67 165.90 19.48 61.46 17 16 4 3663.5 15.71 159.02

ORBIT DETERMINATION ACCURACY ORBIT DETERMINATION ACCURACY
     RC 94.474 GL
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 1460.7 SGR 531.5 SG3 192.8
RRT .7006 RRF .7670 RTF .8367
SGB 1554.4 R23 .1977 R13 .8516
                                                                                                                                                                                  ST 530.3 SR 229.6 SS 263.4
CRT -.5073 CRS .7427 CST -.9488
      TOE .5389 TRA-1.4485 TC3 -.5488 BAU .4710
      ROE -.2860 RRA -.3272 RC3 -.2724 FAU .08951
      FOE 7158 FRA -.9155 FC3-1.3478 BSP 4241
                                                                                                                                                                                  LSA 602.6 MSA 199.3 SSA 20.3
EL1 544.8 EL2 192.6 ALF 165.80
                                                                                                      SG1 1510.5 SG2 366.7 THA 15.22
      BOE .6101 BRA 1.4850 BC3 ..6127 FSP
                                                                                 -594
                                                                                                                                                                                                 ARRIVAL DATE NOV 4 1967
                                                                                                           FLIGHT TIME .90.00
LAUNCH DATE AUG 5 1967
                                                                                                          DISTANCE 275.433
    HELIOCENTRIC CONIC
     RL 151.75 LAL -.00 LQL 312.87 VL 28.943 GAL -15.19 AZL 89.61 MCA 128.63 SMA 145.61 ECC .26512 INC .3872 V1 29.360 RP 107.73 LAP .30 LOP 81.50 VP 39.399 GAP 3.05 AZP 90.24 TAL 245.98 TAP 14.61 RCA 107.00 APO 184.21 V2 35.175 RC 96.719 GL 1.45 GP -27.98 ZAL 168.88 ZAP 115,42 ETS 346.89 ZAE 140.60 ETE 215.06 ZAC 125.53 ETC 359.37 CLP-119.08
    PLANETOCENTRIC CONIC
      C3 55.797 VHL 7.470 DLA 14.93 RAL 146.70 RAD 6569.0 VEL 13.310 PTH 2.43 VHP 5.299 DPA -9.73 RAP 137.40 ECC 1.9183
     C3 53.197 WRL 7.470 DLA 14.93 RAL 146.70 WAD 0509.0 VEL 12.310 WAD 0509.0 WAD
                            1 10 57 2394.47
16 13 22 4256.79
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14.77
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164.33
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         110.00
                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 1566.5 SGR 529.1 SG3 188.2
RRT .7111 RRF .7637 RTF .8408
SGB 1653.4 R23 .2163 R13 .8545
SGT 1513.5 SG2 361.2 THA 14.23
                                                                                                                                                                                 ST 579.2 SR #211.4 S5 271.4
CRT -.5185 CRS .7517 CST -.9488
      TOE .5938 TRA-1.4980 TC3 -.6107 BAU .5025
     ROE -.2579 RRA -.3090 RC3 -.2845 FAU .08620
FOE .7230 FRA -.8410 FC3-1.3375 BSP 4592
BOE .6474 BRA 1.5295 BC3 .6737 FSP -584
                                                                                                                                                                                 LSA 646.8 MSA 187.3 59A 20.4
                                                                                                                                                                                 EL1 590.5 EL2 177.3 ALF 168.20
                                                                                                           FLIGHT TIME 92.00
                                                                                                                                                                                                  ARRIVAL DATE NOV 6 1967
LAUNCH DATE AUG 6 1967
                                                                                                          DISTANCE 281.503
    HELIOCENTRIC CONIC
     RL 151.75 LAL -.00 LOL 312.87 VL 28.850 GAL -14.97 AZL 89.34 MCA 131.86 SMA 144.76 ECC .26245 INC .6614 V1 29.360 RP 107.70 LAP .49 LOP 84.75 VP 39.340 GAP 3.44 AZP 90.44 TAL 244.79 TAP 16.65 RCA 106.76 APO 182.75 V2 35.185 RC 98.967 GL 2.51 GP -28.81 ZAL 168.05 ZAP 117.95 ETS 344.56 ZAE 138.55 ETE 214.10 ZAC 125.52 ETC 358.78 CLP-122.34
    PLANETOCENTRIC CONIC
      C3 54.[41 VHL 7.358 OLA 15.70 RAL 147.72 RAD 6569.0 VEL 13.248 PTH 2.42 VHP 5.401 OPA -10.52 RAP 137.13 ECC 1.8910
                                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
      LNCH AZHTH LNCH TIME L-I TIME
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64.35 15 37 41
87.32 24 22 58
63.28 16 46 27
89.61 1 49 50
60.33 17 32 54
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                         22 8 15 2973.14
14 21 6 4595.27
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            90.00
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          100.00
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          100.00
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          110.00
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                                                                                                162.61
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          110.00
                             16 22 46
                                                                           17.81
                                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 1672.2 SGR 525.3 SG3 182.7
RRT .7193 RRF .8000 RTF .8434
SGB 1752.8 R23 .2366 R13 .8561
                                                                                                                                                                                  ST 634.0 SR 191.1 SS 281.2
CRT -.5296 CRS .7603 CST -.9488
LSA 697.7 MSA 174.0 SSA 20.5
       TOE .6564 TRA-1.5406 TC3 -.6735 BAU .5326
      RDE -.2278 RRA -.2880 RC3 -.2964 FAU .08248
      FOE .7330 FRA -.7612 FC3-1.3188 BSP
                                                                              4922
-566
                                                                                                      SG1 1716.4 SG2 355.6 THA 13.31
                                                                                                                                                                                  EL1 642.5 EL2 . 160.0 ALF 170.32
      BDE .6948 BRA 1.5673 BC3 .7358 FSP
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ARRIVAL DATE. NOV 8 1967

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FLIGHT TIME 94.00
LAUNCH DATE AUG 6 1967
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 287.547
     RL 151.75 LAL -.00 LOL 312.87 VL 28.756 GAL -14.74 AZL 89.03 HCA 135.09 SMA 143.90 ECC .25986 INC .9649 V1 29.360 RP 107.67 LAP .68 LOP 87.96 VP 39.280 GAP 3.81 AZP 90.58 TAL 243.56 TAP 18.64 RCA 106.51 APO 181.30 V2 35.195 RC 101.218 GL 3.71 GP -29.78 ZAL 167.06 ZAP 120.20 ETS 342.08 ZAE 136.56 ETE 213.43 ZAC 125.33 ETC 358.18 CLP-125.41
   PLANETOCENTRIC CONIC
     C3 52.543 VHL 7.249 DLA 16.59 RAL 148.84 RAD 6568.9 VEL 13.187 PTH 2.41 VHP 5.517 DPA -11.49 RAP 136.97 ECC 1.8647
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         CFI AZMTH LNCH TIME L-I TIME 90.00 22 4 17 2998.28 90.00 14 34 0 4555.29 100.00 23 35 0 2705.72 100.00 15 45 57 4323.08 110.00 1 7 54 2427.34 110.00 16 33 28 4174.22
                                                                                            34.66
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62.74 16 58 1
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        110.00
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                                                            16.69
                                                                             160.71
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        110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 1779.4 SGR 522.4 SG3 176.9
RRT .7258 RRF .8172 RTF .8455
SGB 1854.5 R23 .2596 R13 .8573
                                                                                                                                               ST 695.0 SR 169.6 SS 291.7

CRT -.5380 CRS .7645 CST -.9498

LSA 755.5 MSA 160.2 SSA 20.6
    TOE .7265 TRA-1.5767 TC3 -.7382 BAU .5622
    RDE -.1970 RRA -.2654 RC3 -.3090 FAU .07867
FDE .7408 FRA -.6830 FC3-1.2962 BSP 5275
BDE .7528 BRA 1.5989 BC3 .8003 FSP -551
                                                                                                                                                EL1 701.2 EL2 141.7 ALF 172.20
                                                                                  SG1 1821.0 SG2 351.1 THA 12.50
                                                                                                                                                              ARRIVAL DATE NOV 10 1967
                                                                                       FLIGHT TIME 96,00
LAUNCH DATE AUG 6 1967
                                                                                       DISTANCE 293.565
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 28.661 GAL -14.51 AZL 88.69 MCA 138.31 SMA 143.05 ECC .25735 INC 1.3049 V1 29.360 RP 107.65 LAP .87 LOP 91.19 VP 39.218 GAP 4.17 AZP 90.97 TAL 242.28 TAP 20.59 RCA 106.24 APO 179.87 V2 35.204 RC 103.470 GL 5.08 GP -30.92 ZAL 165.91 ZAP 122.14 ETS 339.43 ZAE 134.59 ETE 213.01 ZAC 124.97 ETC 357.55 CLP-128.32
   PLANETOCENTRIC CONIC
    C3 51.020 VHL 7.143 DLA 17.62 RAL 150.07 RAD 6568.9 VEL 13.129 PTH 2.40 VHP 5.650 DPA -12.66 RAP 136.90 ECC 1.8397 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 59 3 3029.77 -27.81 98.59 35.76 84.44 22 49 33 2429.8 -28.29 89.96 90.00 14 49 4 4509.19 9.85 189.41 24.97 63.32 16 4 13 3909.2 6.19 182.64
                    23 30 40 2734.30
16 0 8 4279.89
1 5 25 2450.20
16 45 49 4136.76
                                                                                                                    85.33 24 16 15
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        100.00
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87.72 1 46 15
59.09 17 54 46
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        100.00
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        110.00
                   16 45 49
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        110.00
                                                            15.39
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 1887.3 SGR 519.7 SG3 170.5
RRT .7301 RRF .8346 RTF .8469
SGB 1957.6 R23 .2844 R13 .8582
                                                                                                                                                ST 764.2 SR 146.1 SS 303.9
CRT -.5418 CRS .7638 CST -.9514
    TOE .8066 TRA-1,6045 TC3 -.8042 BAU .5909
    ROE -. 1648 RRA -. 2403 RC3 -. 3221 FAU .07467
                                                                                                                                               LSA 822.1 MSA 146.2 SSA 20.7
    FDE .7495 FRA -.6040 FC3-1.2671 BSP 5634
                                                                                   SG1 1926.4 SG2 347.9 THA 11.76
                                                                                                                                                EL1 768.4 EL2 122.2 ALF 173.93
     BOE .8233 BRA 1.6224 BC3 .8663 FSP
                                                                 -535
                                                                                                                                                             ARRIVAL DATE NOV 12 1967
                                                                                       FLIGHT TIME 98.00
LAUNCH DATE AUG 6 1967
                                                                                      DISTANCE 299.559
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 28.564 GAL -14.27 AZL 88.31 HCA 141.54 SMA 142.21 ECC .25493 INC 1.6912 V1 29.360 RP 107.62 LAP 1.05 LOP 94.42 VP 39.155 GAP 4.51 AZP 91.32 TAL 240.96 TAP 22.50 RCA 105.96 APO 178.46 V2 35.212 RC 105.723 GL 6.66 GP -32.27 ZAL 164.56 ZAP 123.75 ETS 336.56 ZAE 132.63 ETE 212.83 ZAC 124.46 ETC 356.88 CLP-131.08
    PLANETOCENTRIC CONIC
     C3 49.601 VHL 7.043 DLA 18.82 RAL 151.45 RAD 6568.8 VEL 13.075 PTH 2.39 VHP 5.803 DPA -14.07 RAP 136.88 ECC 1.8163
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    21 52 1 3069.95
15 7 -4 4454.96
23 24 50 2770.66
16 16 56 4229.48
1 1 55 2479.24
17 0 17 4093.67
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58.44 18 8 30
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                                                                              156.17
                                                                                                22.88
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SCT 1996.0 SGR 517.3 SG3 163.7
RRT .7317 RRF .8516 RTF .8480
SGB 2061.9 R23 .3106 R13 .8588
SG1 2032.6 SG2 346.2 THA 11.06
                                                                                                                                                ST 843.5 SR 120.7 SS 318.4

CRT -.5362 CRS .7541 CST -.9536

LSA 899.7 MSA 132.5 SSA 20.5
     TOE .8992 TRA-1.6224 TC3 -.8708 BAU .6187
     ROE -.1311 RRA -.2123 RC3 -.3352 FAU .07048
FOE .7601 FRA -.5243 FC3-1.2302 BSP 5993
BOE .9087 BRA 1.6362 BC3 .9331 FSP - -517
                                                                                                                                                ELI 846.0 EL2 101.6 ALF 175.55
                                                                                                                                                             ARRIVAL DATE NOV 14 1967
                                                                                       FLIGHT TIME 100.00
LAUNCH DATE AUG 6 1967
                                                                                      DISTANCE 305.532
    HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 28.467 GAL -14.02 A7L 87.86 MCA 144.77 SMA 141.37 ECC .25258 INC 2.1367 V1 29.360 RP 107.60 LAP 1.23 LOP 97.66 VP 39.091 GAP 4.84 AZP 91.75 TAL 239.60 TAP 24.37 RCA 105.66 APO 177.08 V2 35.220 RC 107.975 GL 8.52 GP -33.87 ZAL 162.95 ZAP 125.01 ETS 333.45 ZAE 130.62 ETE 212.86 ZAC 123.81 ETC 356.15 CLP-133.71
    PLANETOCENTRIC CONIC
     C3 48.327 VHL 6.952 DLA 20.25 RAL 153.00 RAD 6568.8 VEL 13.026 PTH 2.38 VHP 5.981 DPA -15.75 RAP 136.86 ECC 1.7953
    C3 48.327 VHL 6.952 OLA 20.25 RAL 153.00 RAD 6568.8 VEL 13.026 PTH 2.38 VHP 5.981 DPA -15.75 RAP 136.86 ECC 1.7953 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 29 7 4389.48 6.12 182.59 27.69 62.30 16 42 16 3789.5 2.36 175.92 100.00 23 16 47 2817.84 -28.94 85.17 38.94 82.17 24 3 44 2217.8 -29.72 74.45-100.00 16 37 21 4169.30 7.83 165.48 26.76 61.06 17 46 50 3569.3 3.90 158.88 110.00 0 56 59 2516.66 -33.82 60.95 39.80 84.68 1 38.55 1916.7 -34.18 51.73 110.00 17 17 34 403.25 12.05 153.39 24.23 57.77 18 24 57 3443.2 7.71 146.98
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 936.7 SR 92.6 SS 336.7

CRT -.5092 CRS .7254 CST -.9561

LSA 992.2 MSA 120.0 SSA 20.1

EL1 937.9 EL2 79.6 ALF 177.10
                                                                                  SGT 2104.2 SGR 514.2 SG3 156.0
RRT .7294 RRF .8672 RTF .8487
SGB 2166.1 R23 .3374 R13 .8591
     TOE 1.0093 TRA-1.6270 TC3 -.9357 BAU .6449
     RDE -.0949 RRA -.1798 RC3 -.3475 FAU .06596
     FDE .7756 FRA -.4413 FC3-1.1816 8SP 6323
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-491

BDE 1.0136 BRA 1.6369 BC3 .9982 FSP

SG1 2138.3 SG2 346.2 THA 10.38

ARRIVAL DATE NOV 16 1967

FLIGHT TIME 102.00 LAUNCH DATE AUG 6 1967 DISTANCE 311.483 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 28.370 GAL -13.77 AZL 87.34 HCA 148.00 SMA 140.54 ECC .25033 INC 2.6599 VI 29.360 RP 107.58 LAP 1.41 LOP 100.90 VP 39.027 GAP 5.16 AZP 92.26 TAL 238.21 TAP 26.21 RCA 105.36 APO 175.72 V2 35.227 RC 110.226 GL 10.72 GP -35.78 ZAL 161.02 ZAP 125.88 ETS 330.07 ZAE 128.52 ETE 213.09 ZAC 123.05 ETC 355.31 CLP-136.26 PLANETOCENTRIC CONIC C3 47.261 VHL 6.875 DLA 21.97 RAL 154.77 RAD 6568.8 VEL 12.986 PTH 2.37 VHP 6.192 DPA -17.75 RAP 136.80 ECC 1.7778 C3 47.261 VHL 6.875 DLA 21.97 RAL 154.77 RAD 6568.8 VEL 12.986 PTH 2.37 VHP 6.192 DPA -17.75 RAP 156.8U ECC 1.778 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 57 11 4307.44 3.50 177.98 29.78 61.88 17 8 59 3707.4 -.29 171.35 100.00 23 5 18 2880.74 -28.27 87.72 40.88 79.86 23 53 19 2280.7 -29.38 79.09 100.00 17 2 56 4095.24 5.36 161.36 28.75 60.55 18 11 12 3495.2 1.40 154.81 110.00 0 49 55 2565.75 -33.44 64.73 41.82 82.47 1 32 41 1965.7 -34.12 55.56 110.00 17 38 45 3982.99 9.84 150.12 26.02 57.10 18 45 8 3383.0 5.44 143.79 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2214.2 SGR 512.6 SG3 147.8 RRT 7226 RRF .8814 RTF .8499 SGB 2272.7 R23 .3639 R13 .8599 SGI 2245.7 SG2 349.4 THA 9.73 ST 1046.1 SR 63.5 SS 357.4 CRT -.4239 CRS .6423 CST -.9596 TOE 1.1397 TRA-1.6180 TC3 -.9988 BAU .6706 RDE -.0577 RRA -.1436 RC3 -.3591 FAU .06132 LSA 1101.6 MSA 109.4 SSA 19.2 EL1 1046.4 EL2 57.5 ALF 178.52 FOE .7911 FRA -.3605 FC3-1.1233 BSP 6689 -469 BDE 1.1411 BRA 1.6243 BC3 1.0614 FSP ARRIVAL DATE NOV 18 1967 FLIGHT TIME 104.00 HELIOCENTRIC CONIC **DISTANCE 317.414** RL 151.75 LAL -.00 LOL 312.87 VL 28.272 GAL -13.51 AZL 86.71 MCA 151.23 SMA 139.72 ECC .24816 INC 3.2870 V1 29.360 RP 107.56 LAP 1.58 LOP 104.13 VP 38.962 GAP 5.46 AZP 92.88 TAL 236.79 TAP 28.01 RCA 105.05 APO 174.40 V2 35.233 RC 112.475 GL 13.36 GP -38.08 ZAL 158.68 ZAP 126.28 ETS 326.37 ZAE 126.26 ETE 213.48 ZAC 122.18 ETC 354.34 CLP-138.74 PLANETOCENTRIC CONIC C3 46.506 VHL 6.820 DLA 24.06 RAL 156.83 RAD 6568.7 VEL 12.956 PTH 2.36 VHP 6.449 DPA -20.12 RAP 136.62 ECC 1.7654
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 75.60 22 1 43 61.68 17 45 12 76.79 23 37 33 60.18 18 43 18 79.57 1 23 27 56.47 19 10 43 -26.39 42.49 2594.B 109.08 90.00 21 6 48 3294.84 -24.65 117.31 3597.8 165.22 16 35 15 4197.83 - .03 171.86 32.74 -3.82 85.49 22 48 5 2968.28 -27.06 93.95 43.15 2368.3 -28.61 17 36 39 2.14 156.09 31.53 3399.6 -1.84 149.57 100.00 3999.62 0 39 35 2631.73 -32.74 69.76 44.52 2031.7 -33.83 60.69 139.91 18 5 34 7.08 146.16 28.47 330A.9 2.52 110.00 3908.93 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1177.6 SR 35.6 SS 382.0 CRT -.1074 CRS .3302 CST -.9637 TOE 1.2996 TRA-1.5900 TC3-1.0555 BAU .6951 SGT 2324.9 SGR 511.0 SG3 138.7 RRT .7087 RRF .8923 RTF .8517 SGB 2380.4 R23 .3885 R13 .8613 SG1 2353.6 SG2 356.1 THA 9.06 ROE -.0190 RRA -.1014 RC3 -.3682 FAU .05640 FOE .8092 FRA -.2791 FC3-1.0499 BSP 7056 BOE 1.2998 BRA 1.5932 BC3 1.1179 FSP -445 LSA 1234.2 MSA 102.0 SSA 17.6 EL1 1177.6 EL2 35.4 ALF 179.81 FLIGHT TIME 106.00 ARRIVAL DATE NOV 20 1967 LAUNCH DATE AUG 6 1967 DISTANCE 323.326 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 28.175 GAL -13.24 A7L 85.94 HCA 154.45 SMA 138.92 ECC .24608 INC 4.0579 VI 29.360 RP 107.54 LAP 1.75 LOP 107.38 VP 38.896 GAP 5.75 AZP 93.66 TAL 235.33 TAP 29.78 RCA 104.73 APO 173.10 V2 35.239 RC 114.720 GL 16.58 GP -40.85 ZAL 155.79 ZAP 126.14 ETS 322.32 ZAE 123.75 ETE 213.99 ZAC 121.24 ETC 353.17 CLP-141.23 PLANETOCENTRIC CONIC C3 46.235 VHL 6.800 DLA 26.62 RAL 159.31 RAD 6568.7 VEL 12.946 PTH 2.36 VMP 6.772 DPA -22.93 RAP 136.21 ECC 1.7609 C3 46.235 VHL 6.800 DLA 26.62 RAL-159.31 RAD 6568.7 VEL 12.946 PTH 2.36 VHP 6.772 DPA -22.93 RAP 136.21 ECC 1.7609

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 17 35 1 4026.11 -5.55 162.25 37.40 62.19 18 42 7 3426.1 -9.23 125.51

100.00 22 19 9 3101.25 -24.66 103.09 45.60 72.55 23 10 50 2501.2 -26.82 94.96

100.00 18 25 18 3863.72 -2.46 148.63 35.70 60.20 19 29 42 3263.7 -6.41 142.07

110.00 0 23 41 2723.90 -31.40 76.60 47.77 75.73 1 9 4 2123.9 -33.04 67.76

110.00 18 41 11 3813.84 3.48 141.16 32.00 55.97 19 44 45 3213.8 -1.01 134.95 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2435.2 SCR 507.3 SC3 128.5 RRT .6839 RRF .8958 RTF .8541 SCB 2487.5 R23 .4100 R13 .8632 SCI 2460.4 SC2 366.4 THA 8.29 ST 1339.7 SR 27.3 SS 412.3 CRT .8006 CRS -.7171 CST -.9683 LSA 1398.4 MSA 99.0 SSA 15.0 TDE 1.5032 TRA-1.5355 TC3-1.0984 BAU .7166 RDE .0210 RRA -.0502 RC3 -.3712 FAU .05102 FDE .8324 FRA -.1946 FC3 -.9554 BSP 7383 BDE 1.5033 BRA 1.5363 BC3 1.1594 FSP -413 EL1 1339.9 EL2 16.3 ALF .93 ARRIVAL DATE NOV 22 1967 FLIGHT TIME 108.00 LAUNCH DATE AUG 6 1967 DISTANCE 329.217 RL 151.75 LAL -.00 LOL 312.87 VL 28.077 GAL -12.97 AZL 84.96 HCA 157.67 SMA 138.13 ECC .24409 INC 5.0349 VI 29.360 RP 107.52 LAP 1.91 LOP 110.62 VP 38.830 GAP 6.03 AZP 94.66 TAL 233.85 TAP 31.52 RCA 104.41 APO 171.84 VZ 35.244 RC 116.961 GL 20.56 GP -44.22 ZAL 152.17 ZAP 125.35 ETS 317.87 ZAE 120.87 ETE 214.55 ZAC 120.23 ETC 351.71 CLP-143.82 PLANETOCENTRIC CONIC C3 46.761 VHL 6.838 DLA 29.79 RAL 162.36 RAD 6568.7 VEL 12.966 PTH 2.36 VHP 7.195 DPA -26.25 RAP 135.44 ECC 1.7696 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 63.80 19 1 8 63.79 21 29 57 -18.11 3401.4 45.09 4001.45 -14.71 165.18 80.34 17 54 26 2894.0 -18.09 120.74 20 31 43 3493.96 -14.69 127.87 45.09 99.66 64.86 21 52 19 62.71 21 12 42 70.49 24 40 15 55.85 20 34 8 2818.5 -19.97 115.99 123.28 46.10 20 55 20 3418.49 -16.72 100.00 -16.25 124.17 44.05 2952.2 -12.69 100.00 20 13 30 3552.16 131.16 86.47 51.39 2262.7 -31.03 -6.08 23 52 32 2862.74 -28.64 110.00 3080.7 127.97 134.21 37.43 110.00 19 32 47 3680.67 -1.61 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 2548.0 SGR 502.0 SG3 117.3 RRT .6420 RRF :8904 RTF .8587 SGB 2597.0 R23 .4257 R13 .8671 SG1 2568.8 SG2 381 A TM4 7 37 ST 1539.9 SR 50.7 SS 446.8 TDE 1.7675 TRA-1.4480 TC3-1.1196 BAU .7362 RDE .0577 RRA .0114 RC3 -.3652 FAU .04533 FDE .8559 FRA -.1120 FC3 -.8393 BSP 7748 BDE 1.7685 BRA 1.4480 BC3 1.1777 FSP -382 CRT .9077 CRS -.9623 CST -.9734 LSA 1601.0 MSA 99.9 SSA 12.0 EL1 1540.6 EL2 21.3 ALF 1.71 SG1 2568.8 SG2 381.8 THA 7.37

ARRIVAL DATE NOV 24 1967

LAUNCH DATE AUG 6 1967

PLANETOCENTRIC CONIC

HELIOCENTRIC CONIC

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C3 48.688 VHL 6.978 DLA 33.71 RAL 166.31 RAD 6568.8 VEL 13.040 PTH 2.38 VHP 7.777 DPA -30.17 RAP 134.05 ECC 1.8013
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                         17 4 45 4216.92
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          70.90
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59.99 18 15 2
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          70.90
                                            4216.92
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62.17 23 33 59
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3150.08
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                                                                   -16.11
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         110.00
                          22 41 28
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                                          3413.54
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                                                                                                                                                                                           -15.83
                                                                                                             47.84
        110.00
                        21 15 18
                                                                   -11.64
                                                                                       120.03
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2662.0 SGR 490.5 SG3 104.7
RRT .5664 RRF .8593 RTF .8664
SGB 2706.8 R23 .4333 R13 .8735
SGI 2676.8 SG2 402.0 THA 6.10
                                                                                                                                                                   ST 1790.3 SR 74.1 SS 486.6
     TOE 2.1277 TRA-1.3098 TC3-1.1014 BAU .7507
                                                                                                                                                                   CRT .8208 CRS -.9174 CST -.9787
     RDE .0826 RRA .0888 RC3 -.3424 FAU .03915
FDE .8811 FRA -.0292 FC3 -.6961 BSP 8116
                                                                                                                                                                  LSA 1853.7 MSA 104.7 SSA
                                                                                                                                                                                                                      9.0
                                                                                                                                                                   EL1 1791.3 EL2 42.3 ALF
     BOE 2.1293 BRA 1.3128 BC3 1.1533 FSP -346
                                                                                                                                                                                  ARRIVAL DATE NOV 26 1967
                                                                                                  FLIGHT TIME 112.00
   HELIOCENTRIC CONIC
                                                                                                  DISTANCE 340.930
    RL 151.75 LAL -.00 LOL 312.87 VL 27.884 GAL -12.39 AZL 81.89 MCA 164.09 SMA 136.58 ECC .24036 INC 8.1063 V1 29.360 RP 107.50 LAP 2.22 LOP 117.11 VP 38.697 GAP 6.55 AZP 97.80 TAL 230.80 TAP 34.89 RCA 103.75 APO 169.41 V2 35.252
     RC 121.426 GL 31.73 GP -53.32 ZAL 141.68 ZAP 121.21 ETS 307.33 ZAE 113.29 ETE 214.96 ZAC 118.20 ETC 347.10 CLP-150.17
   PLANETOCENTRIC CONIC
     C3 53.310 VHL 7.301 OLA 38.50 RAL 171.67 RAD 6568.9 VEL 13.216 PTH 2.41 VHP 8.630 OPA -34.76 RAP 131.66 ECC 1.8773 
LNCH AZMTH LNCH TIME L-I TIME INLLAT INJ LONG INL RT ASC INLAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 62.75 16 41 21 4373.00 -17.28 195.52 58.66 55.05 17 54 14 3773.0 -21.73 188.89
                     16 41 21 4373.00
22 59 2 3187.76
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         117.25
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                                           4373.00
3187.76
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          62.75
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                          22 59 2
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         117.25
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55.04 23 52 10
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3187.76
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                          22 59 2
                                                                   -17.26
         117.25
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2775.8 SGR 469.8 SG3 90.7
RRT .4126 RRF .7634 RTF .8788
SGB 2815.2 R23 .4303 R13 .8836
                                                                                                                                                                   ST 2101.9 SR 79.5 55 532.5
     TOE 2.6453 TRA-1.0872 TC3-1.0174 BAU
     RDE .0687 RRA .1895 RC3 -.2919 FAU .03238
FDE .9093 FRA .0561 FC3 -.5258 BSP 8434
                                                                                                                                                                   CRT .5614 CRS -.6996 CST -.9838
                                                                                                                                                                  LSA 2166.8 MSA 113.1 SSA
                                                                                                                                                                                                                     6.3
                                                                                             5G1 2782.7 SGZ 426.8 THA 4.09
                                                                                                                                                                   EL1 2102.4 EL2 65.7 ALF
     BOE 2.6462 BRA 1.1036 BC3 1.0585 FSP -303
                                                                                                                                                                                 ARRIVAL CATE NOV 28 1967
                                                                                                  FLIGHT TIME 114.00
LAUNCH DATE AUG 5 1967
                                                                                                  DISTANCE 346.740
     RL 151.75 LAL -.00 LOL 312.87 VL 27.787 GAL -12.08 AZL 79.24 MCA 167.27 SMA 135.84 ECC .23858 INC10.7586 V1 29.360 RP 107.49 LAP 2.36 LOP 120.35 VP 38.631 GAP 6.79 AZP 100.50 TAL 229.23 TAP 36.50 RCA 103.43 APO 168.24 V2 35.255
     RC 123.648 GL 39.43 GP -59.41 ZAL 134.15 ZAP 117.52 ETS 300.43 ZAE 108.02 ETE 213.65 ZAC 117.36 ETC 342.83 CLP-155.20
    PLANETOCENTRIC CONIC
     C3 63.772 VHL 7.986 DLA 44.07 RAL 179.41 RAD 6569.2 VEL 13.606 PTH 2.49 VHP 9.981 CPA -39.97 RAP 127.51 ECC 2.0495
     C3 63.772 VHL 7.986 DLA 44.07 RAL 179.41 RAD 6569.2 VEL 13.606 PTH 2.49 VHP 9.981 DPA -39.97 RAP 127.51 ECC 2.0495 LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 54.70 16 37 1 4514.43 -17.43 207.85 70.49 48.86 17 52 16 3914.4 -22.58 201.75 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.48 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.93 -17.42 101.27 70.49 48.85 1 1 17 2533.9 -22.57 95.17 125.30 0 9 3 3133.90 1 1 17 1 101.27 101.2
                                                                                                                                                                  ORBIT CETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ST 2461.4 SR 110.0 SS 582.0

CRT - 5776 CRS .4481 CST - 9888

LSA 2528.6 MSA 124.2 SSA 4.2
                                                                                            SGT 2886.0 SGR 457.7 SG3 75.9
RRT .0593 RRF .4643 RTF .8996
SGB 2922.1 R23 .4103 R13 .9002
      TOE 3.4170 TRA -.7187 TC3 -.8409 BAU .7380
     RDE -.0776 RRA .3149 RC3 -.2053 FAU .02521
     FDE .9384 FRA .1433 FC3 -.3422 BSP 8801
BDE 3.4179 BRA .7846 BC3 .8656 FSP -260
                                                                                             5G1 2886.1 SG2 456.9 THA
                                                                                                                                                                   EL1 2462.2 EL2 89.7 ALF 178.52
                                                                                                                                              .55
                                                                                                                                                                                  ARRIVAL DATE NOV 30 1967
                                                                                                  FLIGHT TIME 116.00
LAUNCH DATE AUG 6 1967
                                                                                                  DISTANCE 352.495
    HELIOCENTRIC CONIC
     RL 151.75 LAL -.00 LOL 312.87 VL 27.692 GAL -11.76 AZL 74.87 MCA 170.41 SMA 135.10 ECC .23679 INC15.1251 V1 29.360 RP 107.48 LAP 2.49 LOP 123.60 VP 38.564 GAP 7.01 AZP 104.92 TAL 227.62 TAP 38.03 RCA 103.11 APO 167.09 V2 35.257 RC 125.861 GL 48.48 GP -66.57 ZAL 124.79 ZAP 112.54 ETS 290.17 ZAE 101.13 ETE 208.67 ZAC 117.01 ETC 334.65 CLP-164.63
    PLANETOCENTRIC CONIC
     C3 89.255 VHL 9.447 DLA 49.64 RAL 191.11 RAD 6569.7 VEL 14.512 PTH 2.63 VHP 12.355 DPA -45.43 RAP 120.14 ECC 2.4689 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 47.36 16 57 31 4658.56 -15.26 219.34 87.73 42.16 18 15 9 4058.6 -21.11 214.01 132.64 1 21 57 3145.81 -15.24 100.17 87.71 42.16 2 14 23 2545.8 -21.09 94.85
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         132.64
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3145.81
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           47.36
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                            1 21 57
         132.64
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 2769.6 SR 438.5 SS 639.0
CRT -.9631 CRS .9237 CST -.9927
LSA 2872.5 MSA 140.9 SSA 2.6
EL1 2801.7 EL2 116.7 ALF 171.32
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FLIGHT TIME 110.00

DISTANCE 335.086

RL 151.75 LAL -.00 LOL 312.87 VL 27.980 GAL -12.68 AZL 83.68 HCA 160.89 SMA 137.35 ECC .24219 INC 6.3221 VI 29.360 RP 107.51 LAP 2.07 LOP 113.86 VP 38.764 GAP 6.30 AZP 95.98 TAL 232.34 TAP 33.22 RCA 104.08 APO 170.61 VZ 35.248 RC 119.19 GL 25.52 GP -48.31 ZAL 147.57 ZAP 123.76 ETS 312.94 ZAE 117.46 ETE 214.98 ZAC 119.19 ETC 349.80 CLP-146.68

-215

TDE 4.5664 TRA -.0364 TC3 -.5517 BAU .6663 RDE -.6957 RRA .4243 RC3 -.0865 FAU .01757 FOE .9801 FRA .2486 FC3 -.1705 BSP 9127

BOE 4.6191 BRA .4258 BC3 .5584 FSP

SCT 2959.3 SGR 602.2 SG3 61.8 RRT - .5678 RRF - .2454 RTF .9329

SGB 3019.9 R23 -.3636 R13 -.9259

SG1 2979.5 SG2 492.3 THA 173.22

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ARRIVAL DATE DEC 2 1967
                                                                   FLIGHT TIME 118.00
LAUNCH DATE AUG 6 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 358.132
   RL 151.75 LAL -.00 LOL 312.87 VL 27.597 GAL -11.41 AZL 66.43 HCA 173.44 SMA 134.39 ECC .23481 INC23.5699 V1 29.360 RP 107.48 LAP 2.62 LOP 126.85 VP 38.498 GAP 7.19 AZP 113.43 TAL 225.96 TAP 39.40 RCA 102.83 APO 165.95 V2 35.258 RC 128.066 GL 57.38 GP -73.45 ZAL 113.91 ZAP 106.32 ETS 267.99 ZAE 91.47 ETE 191.12 ZAC 118.02 ETC 313.48 CLP 170.48
  PLANETOCENTRIC CONIC
   C3 164.934 VHL 12.843 DLA 52.63 RAL 207.94 RAD 6570.8 VEL 16.919 PTH 2.92 VHP 17.213 DPA -49.62 RAP 106.67 ECC 3.7144
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                                      37.97 19 12 59
37.97 3 34 52
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                                4807.35
                                               -9.45
                                                            227.77
       43.58
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                                                                                                                    2640.1
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                                                            102.92
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                   2 40 52
                               3240.13
                                                -9.44
      136.42
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      136.42
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 2536.1 SR 1406.0 SS 728.8
                                                                SGT 2754.9 SGR 1406.0 SG3 50.8
   TOE 5.6441 TRA 1.3670 TC3 -.1904 BAU .4198
                                                                                                               CRT -.9927 CRS .9806 CST -.9971
LSA 2985.3 MSA 165.8 SSA 1.5
ELI 2895.9 EL2 148.3 ALF 151.09
   ROE-3.1515 RRA .0093 RC3 -.0009 FAU .00861
FOE 1.0775 FRA .4322 FC3 -.0452 BSP 9240
                                                                RRT -.9119 RRF -.8149 RTF .9797
                                                                SGB 3092.9 R23 -.2715 R13 -.9607
                                                                SG1 3048.7 SG2 521.4 THA 154.23
   BDE 6.4643 BRA 1.3671 BC3 .1904 FSP
                                                  -172
                                                                                                                           ARRIVAL CATE DEC 4 1967
                                                                    FLIGHT TIME 120.00
LAUNCH DATE AUG 6 1967
                                                                   DISTANCE 363.394
  HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 27.504 GAL -10.97 AZL 45.29 MCA 176.11 SMA 133.69 ECC .23195 INC44.7052 V1 29.360 RP 107.48 LAP 2.74 LOP 130.10 VP 38.431 GAP 7.26 AZP 134.64 TAL 224.16 TAP 40.27 RCA 102.68 APO 164.70 V2 35.259 RC 130.261 GL 59.20 GP -69.61 ZAL 103.02 ZAP 99.46 ETS 216.40 ZAE 75.37 ETE 143.69 ZAC 123.58 ETC 259.76 CLP 118.14
  PLANETOCENTRIC CONIC
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 51.01 19 22 2 4885.83 -1.94 226.86 132.42 43.20 20 43 20 4284 8 -7 74 221 76
   C3 488.999 VHL 22.113 DLA 46.83 RAL 224.23 RAC 6572.3 VEL 24.704 PTH 3.33 VHP 29.575 DPA -46.64 RAP 83.74 ECC 9.0477
                                                             113.67
                                                                          132.41
                                                                                          43,20
                                                                                                     4 18 52
                                                                                                                     2834.1
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                   3 21 38
                               3434.05
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      128.99
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                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 963.3 SCR 2880.4 SC3 44.9
RRT -.8379 RRF -.9795 RTF .9288
                                                                                                                 ST 494.8 SR 2406.6 55 968.7
    TOF 1.6252 TRA 2.2863 TC3 -.0073 BAU .8069
                                                                                                                 CRT -.9368 CRS .9954 CST -.9660
LSA 2634.5 MSA 185.5 SSA 1.4
    ROE-9.1114 RRA-4.1134 RC3 -.1232 FAU-.00997
   FOE 1.4014 FRA .9586 FC3 .0176 BSP 8903
BOE 9.2552 BRA 4.7061 BC3 .1234 FSP -143
                                                                SGB 3037.2 R23 -.1500 R13 -.9880
                                                                SG1 2994.8 SG2 505.7 THA 106.13
                                                                                                                 EL1 2451.1 EL2 169.9 ALF 100.95
                                                                                                                          ARRIVAL DATE DEC 6 1967
                                                                    FEIGHT TIME 122.00
LAUNCH DATE AUG 6 1967
                                                                    DISTANCE 372.764
  HELTOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 27.411 GAL -11.38 AZL 170.40 HCA 182.89 SMA 133.01 ECC .24087 INC80.4002 V1 29.360 RP 107.48 LAP 2.85 LOP 133.35 VP 38.365 GAP 8.53 AZP 9.61 TAL 223.63 TAP "46.52 RCA 100.97 APO 165.04 V2 35.259
    RC 132.447 GL -46.20 GP 52.73 ZAL 98.07 ZAP 96.98 ETS 175.81 ZAE 57.01 ETE 242.84 ZAC 108.10 ETC 126.16 CLP 101.58
   PLANETOCENTRIC CONIC
    C31347.529 VML 36.709 DLA -53.58 RAL 184.00 RAD 6573.1 VEL 38.325 PTH 3.55 VHP 46.725 DPA 65.47 RAP 18.83 ECC23.1769
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 586.8 SR 2119.6 SS 1838.6
CRT -.9674 CRS -.9999 CST .9638
                                                                SGT 1020.2 SGR 2510.0 SG3 45.0
RRT -.8618 RRF ..9981 RTF -.8333
SGB 2709.4 R23 -.1193 R13 ..9924
    TOE 3.5729 TRA 2.3046 TC3 -.0820 BAU 3.4809
    RO-13.5536 RRA-1.5926 RC3 .1749 FAU-.05200
                                                                                                                 LSA 2862.7 MSA 150.2 SSA
                                                                                                                                                     1.8
    FOE-2.9145 FRA -.2628 FC3 .0334 BSP 7713
BOE14.0166 BRA 2.8014 BC3 .1932 FSP -135
                                                                                                                 EL1 2194.6 EL2 143.5 ALF 105.06
                                                                SG1 2665.2 SG2 487.3 THA 110.00
                                                                                                                           ARRIVAL DATE DEC 8 1967
                                                                    FLIGHT TIME 124.00
LAUNCH DATE AUG 6 1967
                                                                    DISTANCE 377.210
   HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 27.319 GAL -10.77 AZL 128.33 MCA 184.75 SMA 132.34 ECC .23588 INC38.3322 V1 29.360 RP 107.48 LAP 2.95 LOP 136.60 VP 38.298 GAP 8.35 AZP 51.76 TAL 221.60 TAP 46.35 RCA 101.13 APO 163.56 V2 35.258 RC 134.624 GL -59.98 GP 71.98 ZAL 104.61 ZAP 103.50 ETS 143.35 ZAE 82.40 ETE 214.85 ZAC 93.52 ETC 90.97 CLP 138.98
   PLANETOCENTRIC CONIC
    C3 369.605 VHL 19.225 DLA -56.90 RAL 153.41 RAD 6572.0 VEL 22.156 PTH 3.24 VHP 23.730 DPA 83.54 RAP 282.61 ECC 7.0828
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 38.34 2 2 16 2305.44 3.69 66.85 60.98 146.82 2 40 42 1705.4 10.37 62.83
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      141.66
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                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 926.8 SR 2064.9 SS 946.9

CRT .9707 CRS -.9944 CST -.9907

LSA 2444.2 MSA 212.1 SSA 1.3

EL1 2254.1 EL2 204.1 ALF 66.25
                                                                SGT 995.3 SGR 3147.4 SG3 51.5
RRT .8585 RRF .9794 RTF .9426
    TOE-3.0863 TRA -.6929 TC3 -.0104 BAU .4788
    RDE-6.4710 RRA-4.5068 RC3 .0963 FAU-.00169
FDE-1.4978 FRA -.7237 FC3 .0040 BSP 9821
                                                                 SGB 3301.1 R23 -.1572 R13 .9869
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BDE 7.1693 BRA 4.5597 BC3 .0969 FSP

SG1 3264.2 SG2 492.2 THA 74.45

ARRIVAL DATE DEC 10 1967

ELJ 1653.1 ELZ 221.7 ALF 173.15

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LAUNCH DATE AUG 6 1967
   HELIOCENTRIC CONIC
                                                                    DISTANCE 382.636
    RL 151.75 LAL -.00 LOL 312.87 VL 27.229 GAL -10.35 AZL 113.58 HCA 187.61 SMA 131.69 ECC .23389 INC23.5763 V1 29.360 RP 107.48 LAP 3.04 LOP 139.85 VP 38.232 GAP 8.46 AZP 66.61 TAL 219.82 TAP 47.44 RCA 100.89 APO 162.49 V2 35.256
    RC 136.791 GL -58.05 GP 68.36 ZAL 111.55 ZAP 111.63 ETS 96.79 ZAE 95.62 ETE 170.79 ZAC 89.29 ETC 44.43 CLP 176.33
   PLANETOCENTRIC CONIC
    C3 159.422 VHL 12.626 DLA -50.76 RAL 146.75 RAD 6570.7 VEL 16.756 PTH 2.90 VHP 15.158 DPA 74.05 RAP 216.47 ECC 3.6237
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        48.88
                    1 57 51 2141.18
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                                 606.47
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                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 3111.7 SGR 1574.7 SG3 63.3
                                                                                                                 ST 1875.7 SR 609.5 SS 665.0
    TOE-3.7719 TRA-3.5649 TC3 -.1834 BAU .3951
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SGB 3487.5 R23 -.2477 R13 .9668
    RDE -.8910 RRA-2.1195 RC3 -.0271 FAU .01378
                                                                                                                 CRT .9114 CRS -.8602 CST -.9939
   FOE-1.0653 FRA -.7208 FC3 -.0748 BSP 10528
                                                                                                                 LSA 2065.3 MSA 257.7 SSA 1.7
                                                                 SG1 3454.4 SG2 479.6 THA 26.00
                                                                                                                 EL1 1957.6 EL2 240.4 ALF 16.76
    BOE 3.8757 BRA 4.1474 BC3 .1854 FSP
LAUNCH DATE AUG 6 1967
                                                                    FLIGHT TIME 128.00
                                                                                                                           ARRIVAL DATE DEC 12 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 388.277
   RL 151.75 LAL -.00 LOL 312.87 VL 27.139 GAL -9.97 AZL 107.05 MCA 190.69 SMA 131.06 ECC .23267 INC17.0454 V1 29.360 RP 107.49 LAP 3.12 LOP 143.10 VP 38.167 GAP 8.63 AZP 73.23 TAL 218.11 TAP 48.80 RCA 100.57 APO 161.55 V2 35.254 RC 138.949 GL -53.25 GP 60.03 ZAL 117.04 ZAP 119.35 ETS 78.74 ZAE 104.20 ETE 155.98 ZAC 87.79 ETC 26.75 CLP-168.83
  PLANETOCENTRIC CONIC
   C3 95.621 VHL 9.779 DLA -45.06 RAL 147.29 RAD 6569.9 VEL 14.730 PTH
                                                                                            2.66 VMP 11.585 OPA 64.31 RAP 202.82 ECC 2.5737
   LNCH AZMTH LNCH TIME L-I TIME INJ. LAT INJ. LONG INJ. RT ASC INJ. AZMTH INJ. TIME PO CST TIM INJ. 2 LAT INJ. 2 LONG
                                                                        43.49
                   2 25 37 1977.37
10 4 15 5857.23
                                                                                       133.43 2 58 34
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  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SCT 3539.0 SCR 704.1 SC3 77.6
RRT .7741 RRF .5590 RTF .9465
SCB 3608.4 R23 -.3240 R13 .9404
SCI 3581.4 SC2 440.5 THA 8.89
                                                   .6500
    TDE-2.6934 TRA-3.6258 TC3 -.5083 BAU
                                                                                                                 ST 1818.1 SR 239.0 SS 591.9
   RDE .2005 RRA -.8362 RC3 -.0144 FAU .02262
                                                                                                                 CRT .0055 CRS .2181 CST -.9747
   FOE -.9657 FRA -.6883 FC3 -.2048 BSP 11035
BOE 2.7008 BRA 3.7210 BC3 .5085 FSP -249
                                                                                                                 LSA 1907.9 MSA 270.2 SSA
                                                                                                                                                    2.9
                                                                                                                 EL1 1818.1 EL2 239.0 ALF
                                                                   FLIGHT TIME 130.00
                                                                                                                          ARRIVAL DATE DEC 14 1967
LAUNCH DATE AUG 6 1967
                                                                   DISTANCE 393.985
  HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 27.051 GAL -9.60 A7L 103.44 MCA 193.85 SMA 130.44 ECC .23179 INC13.4375 VI 29.360 RP 107.50 LAP 3.19 LOP 146.35 VP 38.101 GAP 8.82 A7P 76.94 TAL 216.40 TAP 50.25 RCA 100.21 APO 160.68 V2 35.251 RC 141.095 GL -48.63 GP 52.32 7AL 121.03 7AP 126.11 ETS 71.32 7AE 110.35 ETE 152.39 7AC 86.86 ETC 19.84 CLP-164.62
  PLANETOCENTRIC CONIC
   C3 68.219 VHL 8.259 DLA -40.55 RAL 149.38 RAD 6569.3 VEL 13.769 PTH 2.52 VHP 9.808 OPA 56.05 RAP 197.03 ECC 2.1227
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       127.93
                  2 59 53 1830.26
                                                                          40.36
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2 59 53 1830.26
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                                                                                                                                                268.70
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SCT 3678.7 SCR 458.9 SC3 91.2

RRT .4653 RRF .1013 RTF .9184

SCB 3707.2 R23 -.3743 R13 .9160

SCI 3685.0 SCZ 405.5 THA 3.36
                                                                                                                ST 1716.9 SR 274.9 SS 560.1

CRT -.5390 CRS .7640 CST -.9552

LSA 1805.8 MSA 276.3 SSA 3.5

EL1 1723.4 EL2 230.7 ALF 174.98
   TDE-2.0844 TRA-3.3764 TC3 -.8430 BAU .7690
   RDE .3598 RRA -.4207 RC3 .0164 FAU .02888 FDE -.9183 FRA -.6400 FC3 -.3665 BSP 11347
   BOE 2.1153 BRA 3.4025 BC3 .8432 FSP -291
                                                                                                                           ARRIVAL DATE DEC 16 1967
LAUNCH DATE AUG 6 1967
                                                                    FLIGHT TIME 132.00
                                                                   DISTANCE 399.717
   RL 151.75 LAL -.00 LOL 312.87 VL 26.964 GAL -9.22 AZL 101.15 HCA 197.04 SMA 129.84 ECC .23114 INC11.1541 V1 29.360 RP 107.51 LAP 3.25 LOP 149.60 VP 38.036 GAP 9.02 AZP 79.32 TAL 214.69 TAP 51.73 RCA 99.83 APO 159.86 V2 35.247 RC 143.232 GL -44.68 GP 45.80 ZAL 123.77 ZAP 131.85 ETS 67.11 ZAE 114.87 ETE 152.27 ZAC 85.91 ETC 16.25 CLP-163.16
  PLANETOCENTRIC CONIC
   C3 53.615 VHL 7.322 DLA -37.09 RAL 151.82 RAD 6568.9 VEL 13.228 PTH 2.42 VHP 8.824 DPA 49.05 RAP 194.21 ECC 1.8824
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       123.63
                                                                                                                    1098.1
      64.98
                   3 35 14
                               1698.11
                                               16.65
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                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 3784.3 SGR 382.9 SG3 102.8
RRT .2020 RRF -.2095 RTF .8973
SGB 3803.6 R23 -.4008 R13 .8964
                                                                                                                ST 1641.5 SR 295.5 SS 538.5
CRT -.6551 CRS .8771 CST -.9374
LSA 1730.1 MSA 280.1 SSA 4.5
   TOE-1.7302 TRA-3.1495 TC3-1.1716 BAU .8402
   RDE .3653 RRA -.2541 RC3 .0360 FAU .03335
FDE -.8754 FRA -.5805 FC3 -.5385 BSP 11683
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FLIGHT TIME 126.00

SG1 3785.1 SG2 375.0 THA 1.18

BDE 1.7683 BRA 3.1597 BC3 1.1722 FSP -328

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FLIGHT TIME 134.00
                                                                                                                                                            ARRIVAL DATE DEC 18 1967
LAUNCH DATE AUG 6 1967
                                                                                      DISTANCE 405.459
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 26.878 GAL -8.85 AZL 99.58 HCA 200.25 SHA 129.26 ECC .23068 INC 9.5752 V1 29.360 RP 107.53 LAP 3.30 LOP 152.85 VP 37.970 GAP 9.22 AZP 81.01 TAL 212.97 TAP 53.22 RCA 99.44 APO 159.08 V2 35.243 RC 145.356 GL -41.39 GP 40.42 ZAL 125.52 ZAP 136.66 ETS 64.20 ZAE 118.23 ETE 153.39 ZAC 84.80 ETC 13.97 CLP-162.82
   PLANETOCENTRIC CONIC
     C3 44.639 VML 6.681 DLA -34.45 RAL 154.31 RAD 6568.7 VEL 12.884 PTH 2.35 VMP 8.244 DPA 43.13 RAP 192.94 ECC 1.7347
    C3 44.539 VML 6.681 DLA -34.45 RAL 154.31 RAD 6568.7 VEL 12.884 PTM 2.35 VMP 8.244 DPA 43.13 RAP 192.94 ECC 1.7347 LNCN AZMTH LNCN TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 69.51 4 10 19 1577.19 17.19 14.30 37.49 120.33 4 36 36 977.2 21.08 7.33 110.49 9 15 31 606.87 17.20 301.86 37.50 120.32 9 25 38 6.9 21.10 294.88 69.51 4 10 19 1577.19 17.19 14.30 37.49 120.33 4 36 36 977.2 21.08 7.33 110.49 9 15 31 606.87 17.20 301.86 37.50 120.32 9 25 38 6.9 21.10 294.88 69.51 4 10 19 1577.19 17.19 14.30 37.49 120.33 4 36 36 977.2 21.08 7.33 110.49 9 15 31 606.87 17.20 301.86 37.50 120.32 9 25 38 6.9 21.10 294.88 69.51 4 10 19 1577.19 17.19 14.30 37.49 120.33 4 36 36 977.2 21.08 7.33 110.49 9 15 31 606.87 17.20 301.86 37.50 120.32 9 25 38 6.9 21.10 294.88 ODEFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY TOE-1.5025 TRR-2.9542 TC3-1.4900 RAU .8866 50.7 380.1 180.2 350.2 863 111.9 CREST TRAINS ARE 300.0 88 520.1
                                                                                                                                                                 2.
21.1
21.08
21.10
TION A
   DIFFERENTIAL -CORRECTIONS
                                                                                                                                                ST 1585.3 SR 300.0 SS 520.1

CRT -.6955 CRS .9200 CST -.9213

LSA 1671.5 MSA 282.7 55A 5.6
                                                                                  SGT 3881.1 SGR 350.2 SG3 111.9
RRT .D408 RRF -.3724 RTF .8814
     TOE-1.5025 TRA-2.9542 TC3-1.4900 BAU .8896
    RDE .3441 RRA -.1725 RC3 .0434 FAU .03631
FDE -.8300 FRA -.5131 FC3 -.7043 BSP 11995
                                                                                  SGB 3896.9 RZ3 -.4090 R13 .8813
SGI 3881.1 SGZ 349.9 THA .21
                                                                                                                                                EL1 1599.3 EL2 213.7 ALF 172.37
     BOE 1.5414 BRA 2.9592 BC3 1.4907 FSP
                                                               -357
                                                                                                                                                              ARRIVAL DATE DEC 20 1967
LAUNCH DATE AUG 6 1967
                                                                                       FLIGHT TIME 136.00
                                                                                      DISTANCE 411.203
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 28.793 GAL -8.47 A7L 98.41 MCA 203.46 SMA 128.69 ECC .23039 INC 8.4134 V1 29.360 RP 107.54 LAP 3.34 LOP 156.10 VP 37.906 GAP 9.42 AZP 82.27 TAL 211.25 TAP 54.71 RCA 99.04 APO 158.34 V2 35.237 RC 147.469 GL -38.65 GP 35.98 ZAL 126.48 ZAP 140.70 ETS 61.97 ZAE 120.74 ETE 154.93 ZAC 83.49 ETC 12.36 CLP-162.98
   PLANETOCENTRIC CONIC
     C3 38.542 VHL 6.208 DLA -32.46 RAL 156.81 RAD 6568.5 VEL 12.646 PTH 2.30 VHP 7.890 DPA 38.08 RAP 192.57 ECC 1.6343
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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117.79 9 11 44
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4.98 37.14 117.79 9 11 44
4.45 32.24 123.03 8 14 25
2.64 41.48 113.04 12 17 56
MID-COURSE EXECUTION ACCURACY
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                                                                             262.64
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        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                                                ST 1542.5 SR 299.8 SS 502.4
CRT -.7167 CRS .9436 CST -.9068
     TOE-1.3460 TRA-2.7789 TC3-1.7986 BAU .9270
                                                                                  SGT 3971.0 SGR 331.1 SG3 118.4
     RDE .3217 RRA -.1256 RC3 .0413 FAU .03801
FDE -.7823 FRA -.4404 FC3 -.8537 83P 12247
BDE 1.3840 BRA 2.7817 BC3 1.7991 FSP -375
                                                                                 RRT -.0501 RRF -.4465 RTF .8691
SGB 3984.8 R23 .4032 R13 -.8693
SGI 3971.0 SG2 330.7 THA 179.76
                                                                                                                                                LSA 1625.0 MSA 284.1 SSA 6.8
                                                                                                                                                EL1 1557.6 EL2 207.0 ALF 171.93
                                                                                                                                                            ARRIVAL DATE DEC 22 1967
LAUNCH DATE AUG 6 1967
                                                                                      FLIGHT TIME 138.00
                                                                                      DISTANCE 416.943
    RL 151.75 LAL -.00 LOL 312.87 VL 26.710 GAL -8.07 AZL 97.52 MCA 206.68 SMA 128.13 ECC .23027 INC 7.5185 V1 29.360 RP 107.56 LAP 3.37 LOP 159.35 VP 37.841 GAP 9.63 AZP 83.27 TAL 209.52 TAP 56.20 RCA 98.63 APO 157.64 V2 35.231 RC 149.570 GL -36.35 GP 32.30 ZAL 126.82 ZAP 144.11 ETS 60.17 ZAE 122.64 ETE 156.58 ZAC 82.00 ETC 11.12 CLP-163.42
   PLANETOCENTRIC CONIC
     C3 34.087 VML 5.838 DLA -30.97 RAL 159.31 RAD 6568.3 VEL 12.468 PTH 2.26 VMP 7.673 DPA 33.73 RAP 192.80 ECC 1.5610
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.90 5 18 32 1359.34 17.66 357.88 37.25 115.86 5 41 11 759.3 20.99 350.59
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115.86 5 41 11
115.86 5 41 11
115.86 8 58 40
123.55 7 56 3
108.86 12 55 15
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        110.00
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        110.00
                       11 23 46
                                        5488.46
                                                             29.05
                                                                             254.16
                                                                                                 42.35
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                  SCT 4063.3 SCR 319.8 SC3 123.3
RRT -.1086 RRF -.4769 RTF .8601
SCB 4075.8 R23 .3653 R13 -.8603
SCI 4063.4 SCZ 317.9 THA 179.51
                                                                                                                                          ST 1514.6 SR 300.4 SS 488.4

CRT -.7352 CRS .9600 CST -.8948

LSA 1594.3 MSA 284.5 SSA 8.1
     TOE-1.2396 TRA-2.6191 TC3-2.1054 BAU .9596
    ROE .3043 RRA -.0936 RC3 .0345 FAU .03890
FDE -.7387 FRA -.3695 FC3 -.9881 BSP 12556
BDE 1.2764 BRA 2.6208 BC3 2.1057 FSP -390
                                                                                                                                                EL1 1530.9 EL2 201.4 ALF 171.56
                                                                                                                                                             ARRIVAL DATE DEC 24 1967
LÄUNCH DATE AUG 6 1967
                                                                                       FLIGHT TIME 140.00
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 422.679
    RL 151.75 LAL -.00 LOL 312.87 VL 26.628 GAL -7.68 AZL 96.80 MCA 209.91 SMA 127.59 ECC .23030 INC 6.8041 VI 29.360 RP 107.58 LAP 3.39 LOP 162.60 VP 37.777 GAP 9.83 AZP 84.10 TAL 207.78 TAP 57.69 RCA 98.21 APO 156.98 VZ 35.225 RC 151.657 GL -34.38 GP 29.24 ZAL 126.64 ZAP 147.01 ETS 58.72 ZAE 124.09 ETE 158.17 ZAC 80.36 ETC 10.13 CLP-163.99
   PLANETOCENTRIC CONIC
     C3 30.655 VHL 5.537 DLA -29.89 RAL 161.84 RAD 6568.2 VEL 12.330 PTH 2.22 VHP 7.543 DPA 29.95 RAP 193.43 ECC 1.5045
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                114.38 6 12 37
114.37 8 46 33
114.62 8 42 55
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                                        1259.59
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         99.99
                                         734.87
                                                              17.86
                                           747.09
                                                              17.50
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        100.00
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                         8 38 9
                                         722.60
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        110.00
                         7 34 9
                                           925.30
                                                               5.85
                                                                              319.42
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                      11 50 58 5405.20
                                                                              248.26
                                                                                                 42.92
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                                                                                                                                                                                        239.53
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                               ST 1499.8 SR 303.2 SS 478.1

CRT - .7553 CRS .9726 CST - .8858

LSA 1577.8 MSA 283.8 SSA 9.4

EL1 1517.5 EL2 196.4 ALF 171.17
                                                                                  SGT 4157.9 SGR 314.6 SG3 127.0
     TDE-1.1684 TRA-2.4681 TC3-2.4143 BAU .9895
                                                                                 RRT -.1501 RRF -.4835 RTF .8537
SG8 4169.7 R23 .3587 R13 -.8540
SG1 4158.1 SG2 311.0 THA 179.35
     ROE .2920 RRA -.0694 RC3 .0253 FAU .03923
     FDE -.7003 FRA -.3017 FC3-1.1080 88P 12912
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BOE 1.2044 BRA 2.4691 BC3 2.4145 FSP -405

ARRIVAL DATE DEC 26 1967

LAUNCH DATE AUG 6 1967

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DISTANCE 428.408
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 26.547 GAL -7.27 AZL 96.22 HCA 213.13 SMA 127.07 ECC .23050 INC 6.2175 V1 29.360 RP 107.60 LAP 3.39 LOP 165.85 VP 37.713 GAP 10.04 AZP 84.79 TAL 206.03 TAP 59.16 RCA 97.78 APO 156.36 V2 35.217 RC 153.730 GL -32.68 GP 26.67 ZAL 126.03 ZAP 149.51 ETS 57.55 ZAE 125.21 ETE 159.64 ZAC 78.59 ETC 9.32 CLP-164.65
   PLANETOCENTRIC CONIC
    C3 27.904 VHL 5.282 DLA -29.13 RAL 164.43 RAD 6568.1 VEL 12.218 PTH 2.20 VHP 7.471 DPA 26.61 RAP 194.36 ECC 1.4392
    LNCH AZNTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     6 24 13 1164.73
8 22 22 782.68
                                                                                                                                             21.05
                                                    18.06
                                                                  343.59
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        82.86
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8 2 54
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                    8 22 22
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        97.14
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103.37 13 41 2
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      110.00
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                  12 11 56
                                                                  243.93
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                                                                                                                                              33.27
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1498.4 SR 308.5 SS 472.1

CRT -.1786 CRS .9822 CST -.8805

LSA 1576.0 MSA 281.7 SSA 10.7

EL1 1517.9 EL2 191.1 ALF 170.74
                                                                     SCF 4257.4 SCR 314.5 SC3 130.0

RRT -.1839 RRF -.4781 RTF .8500

SCB 4269.0 R23 .3265 R13 -.8503

SCI 4257.8 SC2 309.1 THA 179.22
    TOE-1.1251 TRA-2.3225 TC3-2.7301 BAU 1.0185
    ROE .2839 RRA -.0495 RC3 .0156 FAU .03920
FOE -.6683 FRA -.2387 FC3-1.2161 BSP 13337
    BOE 1.1604 BRA 2.3230 BC3 2.7301 FSP -421
                                                                                                                                      ARRIVAL DATE DEC 28 1967
LAUNCH DATE AUG 6 1967
                                                                          FLIGHT TIME 144.00
                                                                         QISTANCE 434.134
  HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 26.467 GAL -6.85 AZL 95.72 MCA 216.36 SMA 126.56 ECC .23086 INC 5.7244 V1 29.360 RP 107.63 LAP 3.39 LOP 169.09 VP 37.650 GAP 10.24 AZP 85.38 TAL 204.27 TAP 60.64 RCA 97.34 APO 155.77 V2 35.210 RC 155.789 GL -31.18 GP 24.49 ZAL 125.03 ZAP 151.70 ETS 56.63 ZAE 126.09 ETE 160.97 ZAC 76.72 ETC 8.64 CLP-165.35
  PLANETOCENTRIC CONIC
                                                RAL 167.10 RAD 6568.0 VEL 12.125 PTH 2.17 VHP 7.439 DPA 23.63 RAP 195.52 ECC 1.4218
INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 25.633 VHL 5.063 OLA -28.64 RAL 167.10 RAD 6568.0 VEL 12.125 PTH
    LNCH AZHTH LNCH TIME L-I TIME
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107.44 11 43 33
123.81 7 53 41
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      100.00
                                                    24.67
                                                                     32.71 123.81 7 53 41

10.74 44.51 101.58 13 57 24

HID-COURSE EXECUTION ACCURACY

SGT 4274.8 869 313
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                                                                  320.12
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                                                                                                                                                9.75
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                    7 38 3 938.54
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                                                                                                                                               33.64
                                                                  240.74
      .110.00
                   12 29
                                   5302.78
                                                    32.39
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4275.6 SGR 313.8 SG3 127.5
RRT -.1745 RRF -.4401 RTF .8374
SGB 4287.1 R23 .2978 R13 -.8377
SG1 4275.9 SG2 309.0 THA 179.26
                                                                                                                         ST 1466.6 SR 310.4 SS 449.6

CRT -.7954 CRS .9899 CST -.8697

LSA 1540.3 MSA 277.0 SSA 12.1
    TOE-1.0665 TRA-2.1410 TC3-2.9959 BAU 1.0266
    RDE .2739 RRA -.0378 RC3 -.0018 FAU .03761
    FDE -.6149 FRA -.1520 FC3-1.2703 BSP 12906
BDE 1.1011 BRA 2.1413 BC3 2.9959 FSP -381
                                                                                                                          ELI 1487.6 EL2 185.4 ALF 170.29
                                                                                                                                     ARRIVAL DATE DEC 30 1967
                                                                          FLIGHT TIME 146.00
LAUNCH DATE AUG 6 1967
                                                                         DISTANCE 439.846
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 26.389 GAL -6.43 AZL 95.30 HCA 219.59 SMA 126.06 ECC .23139 INC 5.3016 V1 29.360 RP 107.65 LAP 3.38 LOP 172.34 VP 37.587 GAP 18.45 AZP 85.91 TAL 202.51 TAP 62.10 RCA 96.89 APO 155.23 V2 35.201 RC 157.834 GL -29.83 GP 22.63 ZAL 123.69 ZAP 153.62 ETS 55.94 ZAE 126.80 ETE 162.17 ZAC 74.76 ETC 8.06 CLP-166.08
   PLANETOCENTRIC CONIC
    C3 23.725 VHL 4.871 DLA -28.37 RAL 169.88 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 7.438 DPA 20.94 RAP 196.84 ECC 1.3905
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          322.86
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                                                                 330.42
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        86.23.
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                     7 59 57
        91.77
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       100.00
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123.77 8 1 10
100.26 14 11 25
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       100.00
                   10 26 23 5701.21
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                                    931.45
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                   7 45 39 931.45
12 43 33 5271.84
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                                                                  238.41
      110.00
                                                    32.79
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 4381.1 SCR 321.2 SC3 129.7

RRT -.2048 RRF -.4291 RTF .8377

SCB 4392.9 R23 .2622 R13 -.8380

SCI 4381.6 SC2 314.4 THA 179.14
                                                                                                                          ST 1488.7 SR 319.8 SS 451.0
CRT -.8247 CRS .9948 CST -.8717
    TDE-1.0635 TRA-1.9973 TC3-3.3263 BAU 1.0550
    ROE .2717 RRA -.0226 RC3 -.0099 FAU .03718
    FDE -.5946 FRA -.0985 FC3-1.3568 BSP 13442
                                                                                                                          LSA 1564.6 MSA 271.5 SSA 13.5
                                                                                                                          ELI 1512.2 EL2 178.0 ALF 169.81
    BOE 1.0977 BRA 1.9975 BC3 3.3263 FSP -400
                                                                                                                                     ARRIVAL DATE JAN 1 1968
                                                                          FLIGHT TIME 148.00
LAUNCH DATE AUG 6 1967
                                                                         DISTANCE 445.549
    RL 151.75 LAL -.00 LOL 312.87 VL 26.312 GAL -5.99 AZL 94.93 HCA 222.82 SHA 125.57 ECC .23210 INC 4.9330 VI 29.360 RP 107.68 LAP 3.35 LOP 175.58 VP 37.524 GAP 10.67 AZP 86.38 TAL 200.74 TAP 63.56 RCA 96.43 APO 154.72 V2 35.192 RC 159.863 GL -28.60 GP 21.03 ZAL 122.05 ZAP 155.34 ETS 55.47 ZAE 127.38 ETE 163.23 ZAC 72.73 ETC 7.57 CLP-166.82
   PLANETOCENTRIC CONIC
    C3 22.100 VHL 4.701 DLA -28.28 RAL 172.78 RAD 6567.9 VEL 11.978 PTH
                                                                                                    2.13 VHP 7.460 DPA 18.49 RAP 198.30 ECC 1.3637
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 7 43 13 959.75 17.95 328.50 42.48 112.28 7 59 12 359.8 20.81 321.00
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                                                                                                                                273.0
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                                    872.96
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                                                                  323.04
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        90.00
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                     7 55 33
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       100.00
                                    919.80
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123.70 8 11 23
99.34 14 23 47
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       100.00
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                                    918.11
       110.00
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                   12 56 17 5250.63
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                                                                                                                                               33.97
       110.00
                                                                  236.81
                                                    33.03
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4465.4 SGR 330.0 SG3 130.4
RRT -.2241 RRF -.4122 RTF .8366
SGB 4477.6 R23 .2296 R13 -.8369
                                                                                                                         ST 1510.1 SR 329.2 SS 450.0
CRT -.8528 CRS .9975 CST -.8745
     TDE-1.0653 TRA-1.8411 TC3-3.6477 BAU 1.0778
    ROE .2701 RRA -.0106 RC3 -.0186 FAU .03630
FDE -.5718 FRA -.0415 FC3-1.4220 88P 13773
                                                                                                                         LSA 1587.9 MSA 263.9 SSA 14.9
                                                                                                                          ELI 1536.4 ELZ 169.0 ALF 169.34
                                                                      SG1 4466.0 SG2 321.5 THA 179.05
    BOE 1.0990 BRA 1.8412 BC3 3.6477 FSP -406
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FLIGHT TIME 142.00

ARRIVAL DATE JAN 3 1968

LAUNCH DATE AUG 6 1967

DISTANCE 451.241 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 26.236 GAL -5.55 AZL 94.61 MCA 226.04 SMA 125.10 ECC .23298 INC 4.6068 VI 29.360 RP 107.71 LAP 3.31 LOP 178.82 VP 37.462 GAP 10.88 AZP 86.80 TAL 198.97 TAP 65.01 RCA 95.96 APO 154.25 VZ 35.183 RC 161.876 GL -27.45 GP 19.65 ZAL 120.12 ZAP 156.88 ETS 55.22 ZAE 127.85 ETE 164.18 ZAC 70.63 ETC 7.14 CLP-167.57 PLANETOCENTRIC CONIC C3 20.707 VHL 4.550 DLA -28.33 RAL 175.83 RAD 6567.8 VEL 11.920 PTH 2.12 VHP 7.499 DPA 16.23 RAP 199.88 ECC 1.3408 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 44.94 111.03 8 15 21 111.02 8 32 12 117.17 8 24 13 329.5 88.95 7 59 52 929.52 19.44 326.91 271.8 22.13 91.05 8 17 40 871.83 19.45 322.70 44.94 299.2 16.51 899.16 100.00 8 9 13 12.97 321.69 41.93 104.97 12 25 25 5065.5 27.98 100.00 10 59 59 5665.46 26.18 266.60 47.31 123.58 8 23 59 98.76 14 35 0 8 8 59 13 7 43 299.9 11.17 311.71 899.91 6.81 316.06 30.27 110.00 4637.5 34.03 5237.48 33.17 235.61 49.00 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4539.0 SCR 340.0 SC3 130.2 RRT -.2391 RRF -.3948 RTF .8354 SCB 4551.8 R23 .1998 R13 -.8356 SCI 4539.8 SCZ 330.1 THA 178.97 ST 1536.3 SR 339.2 SS 449.0 CRT -.8802 CRS .9982 CST -.8789 TOE-1.0747 TRA-1.6762 TC3-3.9651 BAU 1.0977 ROE .2694 RRA -.0008 RC3 -.0265 FAU .03518 FOE -.5494 FRA .0153 FC3-1.4710 88P 14014 BOE 1.1080 BRA 1.6762 BC3 3.9652 FSP -405 LSA 1616.2 MSA 254.2 SSA 16.4 ELI 1565.4 ELZ 158.0 ALF 168.89 ARRIVAL DATE JAN 5 1968 FLIGHT TIME 152.00 HELIOCENTRIC CONIC DISTANCE 456.922 RL 151.75 LAL -.00 LOL 312.87 VL 26.161 GAL -5.09 A7L 94.31 MCA 229.27 SMA 124.64 ECC .23406 INC 4.3145 V1 29.360 RP 107.74 LAP 3.27 LOP 182.06 VP 37.401 GAP 11.10 AZP 87.18 TAL-197.19 TAP 66.46 RCA 95.47 APO 153.82 V2 35.172 RC 163.875 GL -26.35 GP 18.44 ZAL 117.92 ZAP 158.28 ETS 55.16 ZAE 128.25 ETE 165.02 ZAC 68.49 ETC 6.76 CLP-168.32 C3 19.513 VHL 4.417 DLA -28.52 RAL 179.05 RAD 6567.8 VEL 11.870 PTH 2.11 VHP 7.554 DPA 14.13 RAP 201.55 ECC 1.3211 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 86.49 7 52 8 981.98 19.90 330.94 47.25 110.86 8 8 30 382.0 22.56 323.26 93.51 8 51 4 791.06 19.91 316.97 47.26 110.84 9 4 15 191.1 22.57 309.29 100.00 8 26 53 869.17 13.90 319.94 44.49 116.75 8 41 22 269.2 17.38 312.87 100.00 10 59 0 5667.14 26.15 266.72 49.45 105.02 12 33 28 5067.1 27.96 258.38 110.00 8 24 6 877.92 7.63 316.91 40.80 123.42 8 38 44 277.9 11.98 310.51 110.00 13 18 17 5231.15 33.24 235.32 51.14 98.48 14 45 28 4631.2 34.05 226.18 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY PLANETOCENTRIC CONIC DIFFERENTIAL CORRECTIONS SCT 4612.3 SGR 351.3 SC3 129.9 RRT -.2541 RRF -.3805 RTF .8353 SGB 4625.6 R23 .1728 R13 -.8356 SG1 4613.2 SG2 339.7 THA 178.89 ST 1572.2 SR 350.0 SS 449.6 CRT -.9064 CRS .9967 CST -.8855 RDE .2698 RRA 7.0073 RC3 -.0326 FAU .03401 LSA 1654.4 MSA 242.6 SSA FOE -.5297 FRA .0694 FC3-1.5091 BSP 14273 16.0 FL 1 1604 .1 FL 2 144 .9 ALF 168 .50 BOE 1.1269 BRA 1.5062 BC3 4.2829 FSP -405 FLIGHT TIME 154.00 ARRIVAL DATE JAN 7 1968 LAUNCH DATE AUG 6 1967 DISTANCE 462.590 HELLOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 26.088 GAL -4.62 AZL 94.05 MCA 232.49 SMA 124.20 ECC .23533 INC 4.0493 VI 29.360 RP 107.78 LAP 3.21 LOP 185.29 VP 37.339 GAP 11.33 AZP 87.53 TAL 195.40 TAP 67.89 RCA 94.97 APO 153.42 VZ 35.16Z RC 165.860 GL -25.28 GP 17.39 ZAL 115.47 ZAP 159.55 EXS 55.31 ZAE 128.60 ETE 165/76 ZAC 66.30 ETC 6.47 CLP-169.06 PLANETOCENTRIC CONIC C3 18.495 YML 4.301 DLA -28.79 RAL 182.45 RAD 6567.7 NEL 11.827 PTH 2.09 YMP 7.621 DPA 12.18 RAP 203.30 ECC 1.3044 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 420.9 49.87 110.78 8 6 47 9 32 42 9 7 84.56 7 49 46 1020.89 20.39 334.00 23.05 304.75 110.77 126.9 95.44 9 20 35 726.89 20.40 312.46 49.85 230.2 18.47 310.49 116.12 8 48 31 830.17 15.08 317.65 47.45 100.00 105.46 12 39 12 5080.9 27.78 259.36 100.00 11 4 31 5680.88 25,91 267.67 51.63 123.22 8 55 27 253.1 12.87 110.00 8 41 14 853.08 8.56 315.59 43.66 98.46 14 55 28 4630.7 13 28 17 5230.73 34.05 226.15 33.24 235.29 53.62 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET -.2657 RRF: -.3665 RTF .8347 SGB 4686.3 R23 .1488 R13 -.8349 SGI 4673.2 SGZ 349.7 THA 178.81 ST 1610.0 SR 360.8 SS 448.8 TOE-1.1165 TRA-1.3252 TC3-4.5860 BAU 1.1339 CRT -.9300 CRS .9932 CST -.8924 ROE .2708 RRA .0134 RC3 -.0375 FAU .03267 FOE -.5090 FRA .1238 FC3-1.5291 BSP 14440 BOE 1.1489 BRA 1.3252 BC3 4.5861 FSP -400 LSA 1694.3 MSA 229.5 SSA 19.7 EL1 1644.8 EL2 129.8 ALF 168.15 ARRIVAL DATE JAN 9 1968 LAUNCH DATE AUG 6 1967 FLIGHT TIME 156,00 DISTANCE 468.243 RL 151.75 LAL -.00 LOL 312.87 VL 26.016 GAL -4.14 AZL 93.81 HCA 235.72 9MA 123.76 ECC .23680 INC 3.8063 V1 29.360 RP 107.81 LAP 3.14 LOP 188.52 VP 37.279 GAP 11.56 AZP 87.85 TAL 193.61 TAP 69.33 RCA 94.45 APO 153.07 V2 35.151 RC 167.829 GL -24.21 GP 16.46 ZAL 112.77 ZAP 160.71 ETS 55.66 ZAE 128.90 ETE 166.42 ZAC 64.07 ETC 6.20 CLP-169.80 PLANETOCENTRIC CONIC C3 17.639 VHL 4.200 DLA -29.14 RAL 186.05 RAD 6567.7 VEL 11.791 PTH 2.08 VHP 7.700 DPA 10.34 RAP 205.11 ECC 1.2903 LNGH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2.08 WHP 7.700 DPA 10.34 RAP 205.11 ECC 1.2903 110.79 8 7 42 110.78 10 0 8 115.26 9 27 37 455.0 336.71 328.97 20.90 52.82 7 50 7 9 48 57 62.82 1054.96 52.82 70.7 300.79 20.91 306.53 97.18 670.73 307.45 181.0 19.80 100.00 9 14 37 780.97 16.53 314.72 50.86 115.26 9 27 37 106.31 12 42 16 122.98 9 13 58 98.67 15 5 18 5108.0 27.39 100.00 11 7 8 5707.98 25.40 269.52 54.46 226.4 13.63 307.67 9 0 12 9.56 314.15 46.87 110.00 826.35 4635.4 34.04 56.44 110.00 13 36 3 5235.37 33.20 235.65 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4740.5 SGR 375.1 SG3 128.2 RRT - .2802 RRF - .3580 RTF .8365 SGB 4755.3 R23 .1274 R13 -.8367 SG1 4741.7 SG2 360.0 THA 178.72 ST 1660.2 SR 372.6 SS 450.5 CRT -.9508 CRS .9879 CST -.9010 TDE-1.1486 TRA-1.1411 TC3-4.8855 BAU 1.1521 RDE .2731 RRA .0183 RC3 -.0396 FAU .03142 FDE -.4920 FRA .1736 FC3-1.5420 BSP 14693 LSA 1746.8 MSA 215.2 SSA 21.5 EL1 1697.8 EL2 112.9 ALF 167.90 BDE 1.1806 BRA 1.1412 BC3 4.8856 FSP -399

FLIGHT TIME 150.00

EL1 1905.3 EL2 39.7 ALF 167.35

FLIGHT TIME 158.00

ARRIVAL DATE JAN 11 1968 LAUNCH DATE AUG 6 1967 DISTANCE 473.881 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 25.945 GAL -3.64 AZL 93.58 HCA 238.94 SMA 123.34 ECC .23849 INC 3.5814 V1 29.360 RP 107.84 LAP 3.07 LOP 191.76 VP 37.219 GAP 11.79 AZP 88.15 TAL 191.81 TAP 70.75 RCA 93.92 APO 152.75 V2 35.139 RC 169.783 GL -23.14 GP 15.63 ZAL 109.84 ZAP 161.79 ETS 56.21 ZAE 129.16 ETE 167.01 ZAC 61.82 ETC 5.98 CLP-170.53 PLANETOCENTRIC CONIC C3 16.938 VHL 4.116 DLA -29.53 RAL 189.85 RAD 6567.7 VEL 11.761 PTH 2.08 VHP 7.789 DPA 8.61 RAP 206.99 ECC 1.2788 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 110.86 485.5 8 10 57 7 52 51 1085.48 21.39 339.17 56.09 81.24 305.09 56.09 110.85 10 26 54 21.4 98.76 10 16 33 621.44 21.40 9 59 2 115.7 9 47 6 115.67 5754.52 700 715.67 18.39 310.75 54.77 113.99 100.00 2.67 57.26 107.72 12 40 53 2.66 50.42 122.70 9 34 5 6.32 59.60 99.06 15 15 13 HID-COURSE EXECUTION ACCURACY 11 4 59 24.47 272.67 5154.5 100.00 198.7 9 20 46 10.58 312.66 110.00 4644.3 236.32 110.00 13 47 49 5244.26 33.10 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4802.3 SCR 387.2 SC3 127.2 RRT -.2930 RRF -.3512 RTF .8384 SCB 4817.9 R23 .1088 R13 -.8386 SCI 4803.6 SC2 370.1 THA 178.64 ST 1712.6 SR 384.4 SS 451.0 CRT -.9677 CRS .9808 CST -.9092 TOE-1.1825 TRA -.9478 TC3-5.1618 BAU 1.1689 ROE .2760 RRA .0213 RC3 -.0399 FAU .03010 FQE -.4745 FRA .2228 FC3-1.5384 BSP 14915 BOE 1.2143 BRA .9481 BC3 5.1620 FSP -397 LSA 1801.0 MSA 200.5 SSA 23.4 EL1 1752.7 EL2 94.7 ALF 167.71 FLIGHT TIME 160.00 ARRIVAL DATE JAN 13 1968 LAUNCH DATE AUG 6 1967 DISTANCE 479.501 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 25.875 GAL -3.14 AZL 93.37 HCA 242.16 SHA 122.93 ECC .24042 INC 3.3714 V1 29.360 RP 107.88 LAP 2.98 LOP 194.98 VP 37.159 GAP 12.03 AZP 88.42 TAL 190.01 TAP 72.17 RCA 93.37 APO 152.48 V2 35.128 RC 171.722 GL -22.05 GP 14.90 ZAL 106.69 ZAP 162.78 ETS 56.96 ZAE 129.39 ETE 167.53 ZAC 59.53 ETC 5.80 CLP-171.26 PLANETOCENTRIC CONIC C3 16.387 VHL 4.048 DLA -29.94 RAL 193.86 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 7.888 DPA 6.96 RAP 208.91 ECC 1.2697
LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
79.84 7 58 2 1112.48 21.86 341.37 59.69 110.99 8 16 34 512.5 24.52 333.57
100.16 10 43 22 5867.30 21.87 280.06 59.70 110.97 12 21 9 5267.3 24.53 272.26
100.16 10 43 22 5867.30 21.87 280.06 59.70 110.97 12 21 9 5267.3 24.53 272.26
110.00 9 42 40 774.27 11.58 311.17 54.31 122.34 4 51 171.3 14.77 304.54 C3 16.387 VHL 4.048 DLA -29.94 RAL 193.86 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 7.888 DPA 6.96 RAP 208.91 ECC 1.2697 110.97 12 21 9 122.39 9 55 31 171.3 771.27 11.56 311.17 54.31 110.00 9 42 40 15 25 30 4656.5 13 57 54 5256.50 237.25 63.11 99.59 110.00 32.97 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4862.4 SCR 399.2 SC3 126.1 RRT -.3060 RRF -.3471 RTF .8415 SCB 4878.8 R23 .0924 R13 -.8416 SCI 4864.0 SC2 379.9 THA 178.55 ST 1767.4 SR 396.4 SS 450.7 CRT -. 9808 CRS .9720 CST -. 9169 TDE-1.2181 TRA -.7468 TC3-5.4098 BAU 1.1852 RDE .2799 RRA .0227 RC3 - .0379 FAU .02879 LSA 1857.1 MSA 186.0 SSA 25.5 EL1 1809.8 EL2 75.6 ALF 167.57 FOE -.4571 FRA .2701 FC3-1.5212 BSP 15137 BDE 1.2499 BRA .7472 BC3 5.4099 FSP -395 ARRIVAL DATE JAN 15 1968 LAUNCH DATE AUG 6 1967 FLIGHT TIME 162.00 DISTANCE 485.103 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 25.807 GAL -2.61 AZL 93.17 MCA 245.38 SMA 122.52 ECC .24258 INC 3.1736 V1 29.360 RP 107.92 LAP 2.88 LOP 198.21 VP 37.100 GAP 12.29 AZP 88.68 TAL 188.21 TAP 73.59 RCA 92.80 APO 152.25 V2 35.116 RC 173.647 GL -20.92 GP 14.24 ZAL 103.34 ZAP 163.69 ETS 57.93 ZAE 129.60 ETE 167.99 ZAC 57.22 ETC 5.67 CLP-171.98 PLANETOCENTRIC CONIC C3 15.984 VHL 3.998 DLA -30.34 RAL 198.07 RAD 6567.6 VEL 11.720 PTH 2.07 VHP 7.997 DPA 5.40 RAP 210.89 ECC 1.2631 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8 5 38 1136.08 11 9 21 5832.38 111.15 8 24 34 111.14 12 46 33 111.15 8 24 34 24.95 63.63 536.1 22.28 343.30 78.61 277.63 63.64 5232.4 22.29 101.39 8 5 36 1136.08 11 9 21 5832.38 63.63 536.1 22.28 343.30 78.61 111.14 12 46 33 122.07 10 17 58 100.23 15 36 28 22.29 277.63 63.64 5232.4 101.39 12.52 309.76 58.52 145.4 10 5 33 14 8 37 745.36 110.00 5271.07 4671.1 238.35 66.96 32.60 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS CRT - 9899 CRS . 9608 CST - 9229
LSA 1903.9 MSA 172.7 SSA 27.6
EL1 1858.1 EL2 56.5 ALF 167.44 SCT 4908.9 SCR 410.2 SC3 124.5 RRT -.3163 RRF -.3428 RTF .8437 SC8 4926.0 R23 .0783 R13 -.8439 SC1 4910.6 SC2 389.0 THA 178.48 TOE-1.2484 TRA -.5329 TC3-5.6087 BAU 1.1986 ROE .2844 RRA .0221 RC3 -.0348 FAU .02738 FDE -.4368 FRA .3185 FC3-1.4829 BSP 15266 BOE 1.2804 BRA .5333 BC3 5.6089 FSP - 369 ARRIVAL DATE JAN 17 1968 FLIGHT TIME 164.00 LAIMEN DATE AUG 6 1967 DISTANCE 490.685 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 25.739 GAL -2.07 AZL 92.99 MCA 248.59 SMA 122.13 ECC .24500 INC 2.9859 V1 29.360 RP 107.96 LAP 2.78 LOP 201.43 VP 37.041 GAP 12.55 AZP 88.91 TAL 186.41 TAP 75.00 RCA 92.21 APO 152.05 V2 35.103 RC 175.555 GL -19.74 GP 13.66 ZAL 99.83 ZAP 164.54 ETS 59.11 ZAE 129.80 ETE 168.41 ZAC 54.89 ETC 5.57 CLP-172.69 PLANETOCENTRIC CONIC LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 77.59 8 15 41 1156.22 22.62 344.95 67.89 111.34 8 34 57 556.2 28 30 337 102.41 11 34 81 600 600 111.34 8 34 57 111.33 13 11 7 5805.07 1156.22 22.64 275.73 67.90 11 34 21 102.41 337.12 67.89 111.34 8 34 57 556.2 25.32 22.62 344.95 75.73 67.90 111.33 13 11 7
75.73 67.90 121.77 10 40 56
39.53 71.14 100.90 15 48 26
MID-COURSE EXECUTION ACCURACY
SGT 4080 8 429 401 8 15 41 77.59 275.73 5205.1 25.33 11 34 21 5605.07 22.64 102.41 122.6 17.45 301.60 308.50 10 28 53 722.59 13.34 110.00 33.76 230.49 4686.7 14 20 20 5286.70 32.60 239.53 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1859.0 SR 419.2 SS 442.6 CRT -.9953 CRS .9478 CST -.9284 LSA 1949.5 MSA 161.6 SSA 29.7 SGT 4962.5 SGR 421.1 SG3 123.2 RRT -.3283 RRF -.3425 RTF .8479 SGB 4980.3 R23 .0660 R13 -.8480 TDE-1.2788 TRA -.3155 TC3-5.7677 BAU 1.2133 RDE .2901 RRA .0201 RC3 -.0292 FAU .02608 FDE -.4174 FRA .3642 FC3-1.4350 BSP .15475 BDE 1.3113 BRA .3141 BC3 5.7678 FSP .386

SG1 4964.4 SG2 397.6 THA 178.39

FLIGHT TIME 166.00 ARRIVAL DATE JAN 19 1968 LAUNCH DATE AUG 6 1967 HELIOCENTRIC CONIC **DISTANCE 496.243** RL 151.75 LAL -.00 LOL 312.87 VL 25.673 GAL -1.51 AZL 92.81 MCA 251.81 SMA 121.75 ECC .24769 INC 2.8064 V1 29.360 RP 107.99 LAP 2.67 LOP 204.65 VP 36.983 GAP 12.82 AZP 89.12 TAL 184.60 TAP 76.41 RCA 91.59 APO 151.91 V2 35.091 RC 177.448 GL -18.53 GP 13.13 ZAL 96.16 ZAP 165.33 ETS 60.52 ZAE 129.97 ETE 168.78 ZAC 52.55 ETC 5.52 CLP-173.40 PLANETOCENTRIC CONIC 2.49 RAP 214.97 ECC 1.2574 C3 15.640 VHL 3.955 DLA -31.01 RAL 207.02 RAD 6567.6 VEL 11.706 PTH 2.06 VMP 8.246 CPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.59 572.9 338.47 76.80 8 28 10 1172.90 22.87 346.31 72.44 111.54 8 47 42 111.52 13 34 40 111.54 8 47 42 11 58 14 8 28 10 266.54 103.20 5785.70 22.88 274.36 72.45 51A5.7 25.60 33A.47 76.80 1172.90 22.87 346.31 72.44 572.9 25.59 111.52 13 34 40 121.51 11 3 52 101.55 16 1 49 11 58 14 5785.70 10 52 7 704.65 266.54 103.20 22.88 274.38 72.45 5165.7 25.60 110.00 13.98 307.51 67.78 104.7 18.05 300.76 14 33 27 5301.94 231.67 110.00 32.40 240.68 75.63 4701.9 33.65 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5012.2 SCR 431.2 SC3 121.7 RRT -.3397 RRF -.3438 RTF .8526 SCB 5030.8 R23 .0555 R13 -.8527 SCI 5014.4 SC2 405.3 THA 178.32 ST 1893.2 SR 430.0 SS 435.8 CRT -.9972 CRS .9325 CST -.9327 TOE-1.3029 TRA -.0849 TC3-5.8676 BAU 1.2269 RDE .2967 RRA .0164 RC3 -.0222 FAU .02478 LSA 1983.5 MSA 153.7 SSA 31.3 FOE -.3966 FRA .4088 FC3-1.3715 8SP 15679 BOE 1.3362 BRA .0865 BC3 5.8676 FSP -384 EL1 1941.2 EL2 31.4 ALF 167.24 LAUNCH DATE AUG 6 1967 FLIGHT TIME 168.00 ARRIVAL DATE JAN 21 1968 DISTANCE 501.776 HELIOCENTRIC CONIC RL 151.75 LAL -.00 LOL 312.87 VL 25.608 GAL -.93 AZL 92.63 MCA 255.02 SMA 121.38 ECC .25068 INC 2.6336 V1 29.360 RP 108.03 LAP 2.54 LOP 207.87 VP 36.926 GAP 13.10 AZP 89.32 TAL 182.79 TAP 77.81 RCA 90.95 APO 151.81 V2 35.078 RC 179.325 GL -17.27 GP 12.66 ZAL 92.38 ZAP 166.06 ETS 62.17 ZAE 130.13 ETE 169.12 ZAC 50.19 ETC 5.51 CLP-174.10 PLANETOCENTRIC CONIC 1.13 RAP 217.06 ECC 1.2586 C3 15.711 WHL 3.964 DLA -31.23 RAL 211.70 RAD 6567.6 VEL 11.709 PTH 2.06 VMP 8.385 DPA LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 8 43 0 1186.02 12 20 45 5774.62 6 43 0 1186.02 12 20 45 5774.62 11 14 33 693.41 14 48 22 5515.23 586.0 25.74 76.26 22.99 347.35 77.26 111.73 9 2 46 339.52 13 56 59 103.74 23.01 273.60 77.27 111.72 5174.6 25.75 265.76 111.73 9 2 46 111.72 13 56 59 121.35 11 26 7 102.11 16 16 57 22.99 347.35 77.26 586.0 25.74 110 52 76.26 103.74 23.01 273.60 77.27 5174.6 25.75 265.76 110.00 14.36 306.88 72.73 93.4 18.43 300.10 110.00 32.21 241.67 80.42 4715.2 33.55 232.69 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5055.8 SGR 440.3 SG3 120.0 RRT -.3500 RRF -.3459 RTF .8575 ST 1910.4 SR 439.8 SS 425.9 CRT -.9958 CRS .9138 CST -.9356 TOE-1.3169 TRA .1545 TC3-5.8990 BAU 1.2391 RDE .3042 RRA .0111 RC3 -.0143 FAU .02346 FOE -.3736 FRA .4531 FC3-1.2930 BSP 15856 BOE 1.3516 BRA .1549 BC3 5.8990 FSP -381 SGB 5074.9 R23 .0467 R13 -.8576 LSA 2000.2 MSA 150.1 SSA 32.2 SG1 5058.1 SG2 412.2 THA 178.24 EL1 1960.0 EL2 39.3 ALF 167.08 ARRIVAL DATE JAN 23 1968 LAUNCH DATE AUG 6 1967 FLIGHT TIME 170.00 HELIOCENTRIC CONIC DISTANCE 507.281 RL 151.75 LAL -.00 LOL 312.87 VL 25.544 GAL -.34 AZL 92.47 HCA 258.23 SMA 121.02 ECC .25399 INC 2.4659 VI 29.360 RP 108.07 LAP 2.41 LOP 211.08 VP 36.869 GAP 13.40 AZP 89.50 TAL 180.99 TAP 79.21 RCA 90.28 APO 151.75 V2 35.065 RC 181.185 GL -15.97 GP 12.23 ZAL 88.53 ZAP 166.73 ETS 64.06 ZAE 130.28 ETE 169.42 ZAC 47.82 ETC 5.54 CLP-174.80 PLANETOCENTRIC CONIC C3 15.957 VML 3.995 DLA -31.33 RAL 216.47 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 8.537 DPA -.17 RAP 219.19 ECC 1.2626 LICH AZMTH LICH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG T9.99 9 0 6 1195.47 22.98 348.06 82.30 111.91 9 20 2 595.5 25.75 340.23 104.01 12 41 38 5772.21 22.99 273.41 82.30 111.90 14 17 50 5172.2 25.76 265.58 104.01 12 41 38 5772.21 22.99 273.41 82.30 111.90 19 19 20 2 595.5 25.75 340.23 104.01 12 41 38 5772.21 22.99 273.41 82.30 111.90 19 19 20 2 595.5 25.76 265.58 104.01 12 41 38 5772.21 22.99 273.41 82.30 111.90 19 19 20 2 595.5 25.76 265.58 104.01 12 41 38 5772.21 22.99 273.41 82.30 111.90 19 19 20 2 595.5 25.76 265.58 110.00 11 35 31 800.54 14 48 306 79 77 41 191 31 11 47 9 20 4 14 15 0 5172.2 25.76 265.58 111.91 9 20 2 111.90 14 17 50 121.31 11 47 2 102.52 16 34 9 11 35 31 306.72 90.5 18.52 299.93 110.00 690.54 14.46 77.61 5325.14 85.47 4725.1 33.46 233.45 110.00 15 5 24 32.07 242.40 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1906.0 SR 448.0 SS 412.4 CRT -.9910 CRS .8898 CST -.9363 SGT 5091.8 SGR 448.0 SG3 118.2 TOE-1.3176 TRA .4062 TC3-5.8562 BAU 1.2493 RRT -.3593 RRF -.3478 RTF .8621 SGB 5111.5 R23 .0386 R13 -.8622 SGI 5094.4 SG2 417.9 THA 178.18 ROE .3123 RRA .0039 RC3 -.0060 FAU .02216 FOE -.3476 FRA .4988 FC3-1.2020 BSP 15980 BOE 1.3541 BRA .4062 BC3 5.8562 FSP -377 LSA 1994.9 MSA 152.3 55A 32.2 ELI 1957.1 EL2 58.5 ALF 166.88 ARRIVAL DATE JAN 25 1968 FLIGHT TIME 172.00 HELIOCENTRIC CONIC DISTANCE 512.753 RL 151.75 LAL -.00 LOL 312.87 VL 25.481 GAL .28 AZL 92.30 MCA 261.43 SMA 120.67 ECC .25763 INC 2.3023 V1 29.360 RP 108.11 LAP 2.28 LOP 214.29 VP 36.813 GAP 13.71 AZP 89.66 TAL 179.18 TAP 80.62 RCA 89.58 APO 151.75 V2 35.052 RC 183.028 GL -14.65 GP 11.84 ZAL 84.63 ZAP 167.34 ETS 66.21 ZAE 130.42 ETE 169.69 ZAC 45.44 ETC 5.62 CLP-175.49 PLANETOCENTRIC CONIC C3 16.391 WHL 4.049 DLA -31.32 RAL 221.26 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 8.700 DPA -1.41 RAP 221.35 ECC 1.2698 LNOH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.61 1201.03 22.82 348.41 87.51 112.06 9 39 25 601.0 340.60 76.01 9 19 24 13 0 34 112.05 14 36 53 266.03 5778.88 22.63 273.84 87.51 5178.9 25.62 103.99 9 19 24 1201.03 22.62 348.41 87.51 112.06 9 39 25 601.0 25.61 340.60 76.01 5778.88 112.05 14 36 53 13 0 34 22.63 273.84 87.51 5178.9 25.62 266.03 11 54 27 697.26 14.24 307.10 82.96 121.41 12 6 4 102.75 16 53 32 97.3 18.30 300.33 110.00 4730.6 233.87 15 24 42 5330.64 31.99 90.74 33.41 110.00 242.81 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 5120.7 SGR 454.1 SG3 116.1 RRT -.3663 RRF -.3480 RTF .8648 SG8 5140.8 R23 .0313 R13 -.8649 ST 1880.1 SR 454.0 SS 394.7 CRT -.9824 CRS .8575 CST -.9340 LSA 1967.2 MSA 161.2 SSA 31.1 ELI 1932.4 EL2 82.6 ALF 166.63 TDE-1.3037 TRA .6705 TC3-5.7376 BAU 1.2575 ROE .3208 RRA -.0052 RC3 .0012 FAU .02072 FOE -.3171 FRA .5462 FC3-1.0944 BSP 16060 BOE 1.3426 BRA .6705 BC3 5.7376 FSP -368

SG1 5123.5 SG2 422.3 THA 178.13

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ARRIVAL DATE JAN 27 1968
                                                                               FLIGHT TIME 174.00
LAUNCH DATE AUG 6 1967
                                                                               DISTANCE 518.191
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 25.420 GAL .93 AZL 92.14 HCA 264.64 SMA 120.32 ECC .26165 INC 2.1415 VI 29.360 RP 108.16 LAP 2.13 LOP 217.50 VP 36.758 GAP 14.04 AZP 89.80 TAL 177.38 TAP 82.02 RCA 88.84 APO 151.80 V2 35.039 RC 184.853 GL -13.31 GP 11.49 ZAL 80.74 ZAP 167.90 ETS 68.63 ZAE 130.55 ETE 169.94 ZAC 43.05 ETC 5.76 CLP-176.18
   PLANETOCENTRIC CONIC
    C3 17.029 VML 4.127 DLA -31.19 RAL 226.03 RAD 6567.7 VEL 11.765 PTH 2.08 VMP 8.876 DPA -2.60 RAP 223.54 ECC 1.2803
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    9 40 47 1202.34
13 17 13 5795.10
9 40 47 1202.34
13 17 13 5795.10
12 11 1 713.98
15 46 10 5331.45
                                                                                                       112.19 10 0 50
                                                                                                                                          602.3
                                                                                                                                                                       340.59
        76.35
                                                        22.50
                                                                      348.37
                                                                                       92.63
                                                                                                                     14 53 48
                                                                                                                                         5195.1
                                                                                                                                                          25.32
                                                                                                                                                                         267.15
                                                         22.51
                                                                       274.93
                                                                                        92.84
                                                                                                        112.17
                                                                                                        112.19 10 0 50
                                                                                                                                          602.3
                                                                                                                                                          25.31
         76.35
                                                        22.50
                                                                       348.37
                                                                                        92.83
                                                                                                       112.17 14 53 48
121.65 12 22 55
102.78 17 15 1
                                                                                                                                        5195.1
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                                                                                                                                                                         267.15
                                                        22.51
                                                                       274.93
                                                                                        92.84
       103.65
                                                                                                                                         114.0
                                                                                                                                                                         301.30
                                                        13.65
                                                                       308.03
                                                                                        88.11
       110.00
                                                                                                                                        4731.5
                                                                                                                                                          33.40
                                                                       242.87
                                                                                        95.18
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5154.0 SGR 459.9 SG3 114.3
RRT -.3754 RRF -.3532 RTF .8709
SGB 5174.5 R23 .0259 R13 -.8710
SGI 5156.9 SG2 426.0 THA 178.07
                                                                                                                                    ST 1839.1 SR 459.2 SS 379.4
CRT -.9694 CRS .8219 CST -.9331
    TOE-1.2789 TRA .9420 TC3-5.5621 BAU 1.2663
    ROE .3307 RRA -.0153 RC3 .0096 FAU .01951
FOE -.2895 FRA .5901 FC3 -.9920 BSP 16195
BOE 1.3210 BRA .9422 BC3 5.5621 FSP -364
                                                                                                                                    LSA 1925.1 MSA 174.3 SSA 29.3
                                                                                                                                    EL1 1892.4 EL2 109.5 ALF 166.35
                                                                                                                                                ARRIVAL DATE JAN 29 1968
                                                                                FLIGHT TIME 176.00
LAUNCH DATE AUG 6 1967
                                                                                DISTANCE 523.590
  HELIOCENTRIC CONIC
   RL 151.75 LAL -.00 LOL 312.87 VL 25.359 GAL 1.60 AZL 91.98 MCA 267.84 SMA 119.99 ECC .26606 INC 1.9825 V1 29.360 RP 108.20 LAP 1.98 LOP 220.71 VP 36.704 GAP 14.39 AZP 89.93 TAL 175.58 TAP 83.42 RCA 88.06 APO 151.91 V2 35.025 RC 186.660 GL -11.97 GP 11.17 ZAL 76.89 ZAP 168.41 ETS 71.32 ZAE 130.67 ETE 170.16 ZAC 40.66 ETC 5.96 CLP-176.88
   PLANETOCENTRIC CONIC
    C3 17.892 VHL 4.230 DLA -30.93 RAL 230.72 RAD 6567.7 VEL 11.801 PTH 2.09 VHP 9.066 DPA -3.74 RAP 225.75 ECC 1.2945 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        77.02 10 4 14 1198.86
102.98 13 31 12 5821.47
77.02 10 4 14 1198.86
102.98 13 31 12 5821.47
                                                                                     98.22
                                                                                                       112.28 10 24 13
                                                                                                                                          598.9
                                                                                                                                                         24.85
                                                                                                                                                                        340.15
                                                        22.03
                                                                       347.89
                                                                                                                                                           24.86
                                                                                        98.23
                                                                                                                                          5221.5
                                                                                                                     15 8 13
                                                         22.04
                                                                       276.70
                                                                                                         112.26
       102.98
                                                                                                        112.28 10 24 13
112.26 15 8 13
122.00 12 37 32
102.64 17 38 13
                                                                                                                                          598.9
                                                                                                                                                           24.85
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                                                                       347.89
                                                                                        98.22
                                                         22.03
                                                                                                                                         5221.5
                                                                                                                                                           24.86
                                                                                                                                                                         268.96
                                                                       276.70
                                                                                        98.23
                                                        22.04
       102.98
                                                                                                                                          140.3
                                                                                                                                                           16.84
                                                                                                                                                                          302.81
                                                                       309.48
                                                                                        93.22
                    12 25 11
                                      740.26
                                                        12.71
                                   5328.07
                                                                                                                                         4728.1
                                                                                                                                                           33.43
       110.00
                     16 9 25
                                                         32.03
                                                                       242.62
                                                                                       101.75
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5177.0 SGR 463.9 SG3 112.3
RRT - .3626 RRF - .3568 RTF .8759
SG8 5197.8 R23 .0210 R13 -.8760
                                                                                                                                    ST 1777.7 SR 461.9 SS 362.3
CRT -.9506 CRS .7749 CST -.9301
     TDE-1.2360 TRA 1.2292 TC3-5.3169 BAU 1.2718
    RDE .3409 RRA -.0271 RC3 .0165 FAU .01823
FDE -.2585 FRA .6363 FC3 -.8822 85P 16257
                                                                                                                                    LSA 1861.9 MSA 193.3 SSA 27.2
                                                                            SG1 5180.1 SG2 428.4 THA 178.02
                                                                                                                                    EL1 1831.5 EL2 139.2 ALF 166.04
     BOE 1.2821 BRA 1.2295 8C3 5.3169 FSP -358
                                                                                                                                                ARRIVAL DATE JAN 31 1968
                                                                               FLIGHT TIME 178.00
LAUNCH DATE AUG 6 1967
   HELIOCENTRIC CONIC
                                                                               DISTANCE 528.943
    RL 151.75 LAL -.00 LOL 312.87 VL 25.300 GAL 2.30 AZL 91.82 HCA 271.04 SMA 119.66 ECC .27091 INC 1.8244 VI 29.360 RP 108.24 LAP 1.82 LOP 223.91 VP 36.650 GAP 14.76 AZP 90.03 TAL 173.79 TAP 84.83 RCA 87.24 APO 152.08 V2 35.012 RC 188.449 GL -10.64 GP 10.87 ZAL 73.11 ZAP 168.86 ETS 74.30 ZAE 130.77 ETE 170.36 ZAC 38.27 ETC 6.23 CLP-177.57
   PLANETOCENTRIC CONIC
    C3 19.002 VHL 4.359 DLA -30.54 RAL 235.28 RAD 6567.8 VEL 11.848 PTH 2.10 VHP 9.272 DPA -4.82 RAP 227.99 ECC 1.3127
    THE LINCH AZMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO EST TIM INJ 2 LAT INJ 2 LONG
78.04 10 29 51 1189.43 21.41 346.91 103.63 112.32 10 49 41 589.4 24.25 339.21
101.96 13 41 57 5859.11 21.42 279.25 103.63 112.31 15 19 36 5259.1 24.26 271.55
                   10 29 51 1189.43
13 41 57 5859.11
12 37 7 774.99
                                                                                                                                                                         339.21
                                                         21.41
                                                                       346.91
                                                                                      103.63
                                                                                                       112.32 10 49 41
                                                                                                                                          589.4
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         78.04
                                                                       279.25
                                                                                      103.63
                                                                                                        112.31
                                                                                                                     15 19 36
                                                                                                                                         5259.1
                                                                                                                                                          24.26
                                                                                                                                                                         271.55
                                                         21.42
       101.96
                                                                                                                                                                         304.79
                                                                                                        122.43 12 50 2
102.37 18 2 34
                                                                                                                                         175.0
                                                                                                                                                          15.64
                                                         11.45
                                                                       311.38
                                                                                        98.26
       110.00
                                                                                                                                         4721.5
                                                                                                                                                                         233.17
                                                                       242.14
                                                                                       107.37
                                                                                                                                                          33.49
       110.00
                     16 33 52
                                     5321.55
                                                         32.12
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 1708.6 SR 462.8 SS 347.2
CRT -.9250 CRS .7201 CST -.9273
LSA 1790.7 MSA 216.2 SSA 25.1
                                                                           SGT 5201.8 SGR 466.9 SG3 110.4
RRT -.3906 RRF -.3622 RTF .8817
SG8 5222.7 R23 .0167 R13 -.8817
SG1 5205.0 SG2 429.6 THA 177.98
     TOE-1.1821 TRA 1.5255 TC3-5.0292 BAU 1.2776
    RDE .3518 RRA -.0402 RC3 .0228 FAU .01705
FOE -.2281 FRA .6819 FC3 -.7769 BSP 16387
                                                                                                                                    EL1 1762.0 EL2 170.5 ALF 165.80
    BOE 1.2334 BRA 1.5260 BC3 5.0292 FSP -354
                                                                                                                                                ARRIVAL DATE FEB 2 1968
                                                                                FLIGHT TIME 180.00
LAUNCH DATE AUG 6 1967
                                                                                DISTANCE 534.244
   HELIOCENTRIC CONIC
    RL 151.75 LAL -.00 LOL 312.87 VL 25.241 GAL 3.03 AZL 91.67 MCA 274.24 SMA 119.34 ECC .27624 INC 1.6660 V1 29.360 RP 108.28 LAP 1.66 LOP 227.11 VP 36.597 GAP 15.15 AZP 90.12 TAL 172.01 TAP 86.25 RCA 86.38 APO 152.31 V2 34.999 RC 190.221 GL -9.34 GP 10.61 ZAL 69.45 ZAP 169.25 ETS 77.54 ZAE 130.87 ETE 170.55 ZAC 35.88 ETC 6.57 CLP-178.26
   PLANETOCENTRIC CONIC
    C3 20.388 VHL 4.515 DLA -30.06 RAL 239.67 RAD 6567.8 VEL 11.907 PTH 2.12 VHP 9.495 DPA -5.85 RAP 230.26 ECC 1.3355
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                   1172.29
                                                                                                        112.34 11 17 33
                                                                                                                                          572.3
                                                                                                                                                         23.50
                                                                                                                                                                       337.65
                                                         20.65
                                                                       345.30
                                                                                       109.00
         79.46
                      10 58 1
                                                                                                                                            21.6
                                                                                                        112.32 13 59 11
112.34 11 17 33
                                                                                                                                                           23.51
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                     13 48 49
                                                         20.67
                                                                       304.79
                                                                                       109.01
                                      621.63
       100.52
                                                                                                                                                                          337.65
                                                                       345.30
                                                                                       109.00
                                                                                                                                          572.3
                                                                                                                                                           23.50
                      10 58 1 1172.29
                                                         20.65
         79.48
                                                                           4.79 109.01 112.32 13 59 11
3.64 103.19 122.88 13 0 42
1.52 113.00 102.02 18 27 29
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        297.14
                                                                       304.79
                                                                                                                                           21.6
                                                                                                                                                           23.51
                     13 48 49
                                      621.63
                                                         20.67
       100.52
                                                                       313.64
                                                                                                                                          216.7
                                                                                                                                                           14.18
                                                                                                                                                                          307.13
                     12 47 5
                                       816.72
                                                          9.91
       110.00
                                                                       241.52
                                                                                                                                        4713.2
                                                                                                                                                                         232.54
                     16 58 56
                                    5313.24
                                                                                                                                                           33.56
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 5221.3 SGR 468.6 SG3 108.4
RRT -.3980 RRF -.3678 RTF .8875
SG8 5242.3 R23 .0133 R13 -.8875
SG1 5224.6 SG2 429.6 THA 177.94
                                                                                                                                   ST 1633.2 SR 461.6 SS 334.U

CRT -.8906 CRS .6556 CST -.9252

LSA 1712.5 MSA 242.4 SSA 23.1

EL1 1684.9 EL2 203.5 ALF 165.66
     TOE-1.1145 TRA 1.8347 TC3-4.7016 BAU 1.2815
    RDE .3633 RRA -.0546 RC3 .0277 FAU .01590
FOE -.1974 FRA .7264 FC3 -.6750 BSP 16509
     BOE 1.1722 BRA 1.8355 BC3 4.7016 FSP -351
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LAUNCH DATE AUG 6 1967
                                                                                  FLIGHT TIME 182.00
                                                                                                                                                     ARRIVAL DATE FEB 4 1968
    HELIOCENTRIC CONIC
                                                                                  DISTANCE 539.488
     RL 151.75 LAL -.00 LOL 312.87 VL 25.184 GAL 3.79 AZL 91.51 MCA 277.43 SMA 119.03 ECC .28209 INC 1.5064 V1 29.360 RP 108.32 LAP 1.49 LOP 230.30 VP 36.545 GAP 15.57 AZP 90.20 TAL 170.24 TAP 87.67 RCA 85.46 APO 152.61 V2 34.986 RC 191.975 GL -8.08 GP 10.37 ZAŁ 65.92 ZAP 169.58 ETS 81.06 ZAE 130.95 ETE 170.72 ZAC 33.50 ETC 7.01 CLP-178.95
    PLANETOCENTRIC CONIC
     C3 22.084 VML 4.699 DLA -29.48 RAL 243.85 RAD 6567.9 VEL 11.978 PTH 2.13 VMP 9.736 DPA -6.84 RAP 232.54 ECC 1.3635
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           112.31 11 48 53
112.30 14 1 54
         61.44
                      11 29 50 1143.20
                                                          19.78
                                                                         342.76
                                                                                         114.32
                                                                                                                                              543.2
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                      13 50 24
         98.56
                                         689.17
                                                           19.80
                                                                          309.42
                                                                                          114.32
                                                                                                                                                89.2
        100.00
                      13 19 43
                                         787.44
                                                           16.34
                                                                          315.10
                                                                                          112.72
                                                                                                            115.36
                                                                                                                         13 32 50
                                                                                                                                                187.4
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                     14 43 13 5808.20
12 55 26 863.97
17 23 59 5304.43
                                                                                                            109.26 16 20 1
123.31 13 9 50
101.65 18 52 24
        100.00
                                                           23.31
                                                                          276.23
                                                                                          115.76
                                                                                                                                              5208.2
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                                                                          316.17 108.01
240.86 118.58
        110.00
                                                            8.15
                                                                                                                                               264.0
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        110.00
                                                                                                                                            4704.4
                                                           32.37
                                                                                                                                                                33.63
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SGT 5235.0 SGR 468.7 SG3 106.5
RRT -.4046 RRF -.3734 RTF .8932
SG8 5255.9 R23 .0104 R13 -.8933
SG1 5238.5 SG2 428.4 THA 177.91
                                                                                                                                         ST 1557.1 SR 458.3 SS 323.4
CRT -.8449 CRS .5813 CST -.9245
     TDE-1.0331 TRA 2.1591 TC3-4.3446 BAU 1.2828
     ROE .3751 RRA -.0703 RC3 .0310 FAU .01475
FOE -.1664 FRA .7764 FC3 -.5782 BSP 16603
                                                                                                                                         LSA 1632.5 MSA 271.1 SSA 21.3
     BOE 1.0991 BRA 2.1603 BC3 4.3447 FSP -347
                                                                                                                                         EL1 1605.6 EL2 237.7 ALF 165.71
LAUNCH DATE AUG 6 1967
                                                                                   FLIGHT TIME 184.00
                                                                                                                                                     ARRIVAL DATE FEB 6 1968
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 544.665
    RL 151.75 LAL -.00 LOL 312.87 VL 25.127 GAL 4.59 ATL 91.34 MCA 280.62 SMA 118.73 ECC .28851 INC 1.3446 V1 29.360 RP 108.36 LAP 1.32 LOP 233.49 VP 36.493 GAP 16.02 AZP 90.25 TAL 168.48 TAP 89.10 RCA 84.48 APO 152.99 V2 34.973 RC 193.712 GL -6.87 GP 10.15 ZAL 62.55 ZAP 169.85 ETS 84.84 ZAE 131.02 ETE 170.88 ZAC 31.12 ETC 7.56 CLP-179.65
   PLANETOCENTRIC CONIC
     C3 24.138 VHL 4.912 DLA -28.83 RAL 247.81 RAD 6568.0 VEL 12.063 PTH 2.16 VHP 9.998 DPA
                                                                                                                                                 -7.77 RAP 234.84 ECC 1.3971
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 84.35 12 8 52 1090.04 18.82 338.42 119.54 112.25 12 27 3 490.0 21.67 330.87
                                                                                                                         13 56 3
         95.65
                      13 42 56
                                        785.54
                                                           18.83
                                                                          316.11
                                                                                          119.55
                                                                                                            112.24
                                                                                                                                               185.5
                                                                                                                                                                                308.56
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                                    890.46
5748.38
       100.00
                     13 10 22
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                                                                          321.16
                                                                                          116.88
                                                                                                            117.05 13 25 12
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                                                                                                           107.54 16 59 58
123.68 13 17 42
101.30 19 16 50
       100.00
                     15 24 9
                                                          24.60
                                                                          272.26
                                                                                          121.79
                                                                                                                                              5148.4
                                                                                                                                                               26.77
                                                                                                                                                                               264.13
                     13 2 26 915.40
17 48 34 5296.21
       110.00
                                                            6.22
                                                                          318.90
                                                                                          112.71
                                                                                                                                              315.4
                                                                                                                                                               10.61
                                                                                                                                                                               312.55
       110.00
                                                           32.46
                                                                         240.25
                                                                                          124.10
                                                                                                                                              4696.2
                                                                                                                                                                33.69
                                                                                                                                                                               231.22
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SGT 5242.7 SGR 467.3 SG3 104.6
RRT -.4103 RRF -.3785 RTF .8986
    TDE -.9373 TRA 2.5011 TC3-3.9686 BAU 1.2804
                                                                                                                                         5T 1485.5 SR 452.9 SS 316.1
CRT -. 7857 CRS .4974 CST -. 9257
    RDE .3871 RRA -.0875 RC3 .0326 FAU .01358
FDE -.1347 FRA .8269 FC3 -.4872 88P 16610
80E 1.0141 8RA 2.5026 8C3 3.9687 FSP -340
                                                                              SGB 5263.5 R23 .0080 R13 -.8987
                                                                                                                                         LSA 1555.9 HSA 300.9 SSA 19.7
                                                                              SG1 5246.2 SG2 425.9 THA 177.89
                                                                                                                                         EL1 1529.0 EL2 272.2 ALF 166.08
LAUNCH DATE AUG 6 1967
                                                                                  FLIGHT TIME 186.00
                                                                                                                                                    ARRIVAL DATE FEB 8 1968
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 549.765
    RL 151.75 LAL -.00 LOL 312.87 VL 25.072 GAL 5.44 AZL 91.18 MCA 283.81 SMA 118.44 ECC .29558 INC 1.1795 V1 29.360 RP 108.40 LAP 1.15 LOP 236.68 VP 36.443 GAP 16.51 AZP 90.28 TAL 166.74 TAP 90.55 RCA 83.43 APO 153.45 V2 34.960 RC 195.431 GL -5.72 GP 9.94 ZAL 59.34 ZAP 170.05 ETS 88.84 ZAE 131.08 ETE 171.03 ZAC 28.76 ETC 8.23 CLP 179.64
   PLANETOCENTRIC CONIC
    C3 26.580 VML 5.156 DLA -28.12 RAL 251.53 RAD 6568.1 VEL 12.164 PTH 2.18 VMP 10.283 DPA -8.65 RAP 237.16 ECC 1.4374
    LNCM AZMITH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      123.58
                                                                                                         114.08 12 59 19
110.25 13 54 14
                                                                                                                                          455.9
         90.00
                     12 41 43 1055.85
                                                         15.37
                                                                         334.36
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         90.00
                      13 39 47
                                       867.39
                                                          20.23
                                                                         322.66
                                                                                          125.66
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118.15 13 22 13
106.34 17 33 24
123.96 13 24 32
101.01 19 40 28
       100.00
                      13 5 56
                                       977.51
                                                          10.49
                                                                         326.18
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                                                                                                                                                                               319.33
                                     5709.00
       100.00
                      15 58 15
                                                         25.30
                                                                         269.59
                                                                                          127.51
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                                                                                                                                                                               261.36
       110.00
                     13 8 22
                                       969.86
                                                            4.16
                                                                         321.76
                                                                                         117.29
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                                     5289.42
       110.00
                      18 12 18
                                                          32.57
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                                                                                         129.51
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                                                                                                                                                                               230.70
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             8GT 5247.7 SGR 464.7 SG3 102.7
RRT -.4164 RRF -.3846 RTF .9047
SG8 5268.2 R23 .0060 R13 -.9047
    TDE -.8358 TRA 2.8558 TC3-3.5929 BAU 1.2768
                                                                                                                                        ST 1428.5 SR 445.9 SS 312.7

CRT -.7151 CRS .4138 CST -.9307

LSA 1493.0 MSA 328.3 SSA 18.3
    RDE .3996 RRA -.1050 RC3 .0331 FAU .01250
FDE -.1049 FRA .8780 FC3 -.4072 BSP 16688
BDE .9264 BRA 2.8577 BC3 3.5931 FSP -336
                                                                              $61 5251.2 $62 422.2 THA 177.87
                                                                                                                                        EL1 1465.3 ELZ 303.9 ALF 166.84
LAUNCH DATE AUG 6 1967
                                                                                  FLIGHT TIME 188.00
                                                                                                                                                     ARRIVAL DATE FEB 10 1968
  HELIOCENTRIC CONIC
                                                                                 DISTANCE 554.775
   RL 151.75 LAL -.00 LOL 312.87 VL 25.018 GAL 6.33 AZL 91.01 MCA 287.00 SMA 118.15 ECC .30335 INC 1.0099 V1 29.360 RP 108.44 LAP .97 LOP 239.87 VP 36.394 GAP 17.04 AZP 90.30 TAL 165.02 TAP 92.02 RCA 82.31 APO 153.99 V2 34.947 RC 197.134 GL -4.63 GP 9.76 ZAL 56.32 ZAP 170.18 ETS 93.03 ZAE 131.12 ETE 171.17 ZAC 26.41 ETC 9.08 CLP 178.92
  PLANETOCENTRIC CONIC
 C3 29.487 VHL 5.430 DLA -27.38 RAL 255.00 RAD 6568.2 VEL 12.283 PTH
   C3 29.487 WHL 5.430 DLA -27.38 RAL 255.00 RAD 8568.2 VEL 12.283 PTH Z.Z1 VHP 10.593 DPA -9.48 RAP 239.49 ECC 1.4853 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO C9T TJM INJ 2 LAT INJ 2 LONG 90.00 12 20 46 1195.61 11.32 342.65 127.18 116.13 12 40 41 595.6 14.75 335.64 90.00 14 28 25 779.39 22.20 316.98 131.78 108.05 14 41 24 179.4 24.46 309.04 100.00 13 3 23 1057.89 7.88 330.72 125.36 118.93 13 21 1 457.9 11.68 323.99 100.00 16 28 29 5680.38 25.92 267.63 133.01 105.44 18 3 9 5080.4 27.78 259.33 110.00 13 13 24 1026.42 2.00 324.72 121.75 124.13 13 30 30 426.4 6.47 318.48 110.00 18 34 57 5284.61 32.63 239.38 134.80 100.81 20 3 2 4684.6 33.77 230.33 OIFFFERENTIAL CORRECTIONS
                                                                                                                2.21 WHP 10.593 DPA
  DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                           SGT 5249.3 SGR 460.6 SG3 100.9
RRT -.4214 RRF -.5905 RTF .9108
SG8 5269.5 R23 .0047 R13 -.9108
SG1 5253.0 SG2 417.4 THA 177.87
    TOE -.7231 TRA 3.2296 TC3-3.2222 BAU 1.2703
                                                                                                                                        ST 1385.1 SR 437.3 SS 312.7
CRT -.6319 CRS .3302 CST -.9388
   ROE .4124 RRA -.1236 RC3 .0324 FAU .01144
FOE -.0756 FRA .9314 FC3 -.3358 BSP 16752
                                                                                                                                        LSA 1443.3 MSA 352.4 SSA 17.1
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EL1 1414.1 EL2 332.0 ALF 168.05

BOE .8324 BRA 3.2320 BC3 3.2224 FSP -331

ARRIVAL DATE FEB 12 1968

LAUNCH DATE AUG 6 1967

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DISTANCE 559.681
   RL 151.75 LAL -.00 LOL 312.87 VL 24.965 GAL 7.28 AZL 90.83 HCA 290.19 SHA 117.87 ECC .31192 INC .8346 V1 29.360 RP 108.48 LAP .78 LOP 243.06 VP 36.345 GAP 17.61 AZP 90.29 TAL 163.32 TAP 93.51 RCA 81.11 APO 154.64 V2 34.935 RC 198.819 GL -3.60 GP 9.59 ZAL 53.49 ZAP 170.24 ETS 97.38 ZAE 131.14 ETE 171.30 ZAC 24.08 ETC 10.12 CLP 178.19
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                       2.24 VHP 10.933 DPA -10.27 RAP 241.83 ECC 1.5419
   C3 32.927 VHL 5.738 DLA -26.62 RAL 258.22 RAD 6568.3 YEL 12.422 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 131.10
                                                                                                   117.19 12 33 5
,106.81 15 15 37
                                                                   344.47
        90.00. 12 11 29 1296.79
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                   15 3 24
                                    733.65
                                                      23.13
                                                                   313.95
        90.00
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104.77 18 30 6
124.18 13 35 46
100.70 20 24 23
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                  13 1 47
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                                                                    334.97
                                   1134.31
       100.00
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                                                                                   138.32
                    16 55 46
                                    5659.40
                                                      26.29
                                                                    266.18
       100.00
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                                                                                   126.09
                  13 17 42 1064.34
                                                       - .21
                                                                    327.74
      110.00
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                                                                                   139.97
                                                      32.66
                                                                    239.19
                                   5282.13
      110.00
                   18 56 Z1
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              CRT -.5408 CRS .2505 CST -.9485
LSA 1410.5 MSA 370.7 SSA 16.1
EL1 1379.2 EL2 354.0 ALF 169.65
                                                                       SGT 5245.5 SGR 455.0 SG3 99.1
RRT -.4260 RRF -.3963 RTF .9170
SGB 5265.2 R23 .0035 R13 -.9170
SGI 5249.1 SG2 411.4 THA 177.87
    TOE -.6031 TRA 3.6217 TC3-2.8623 BAU 1.2601
   RDE .4253 RRA -.1428 RC3 .0307 FAU .01040
FDE -.0470 FRA .9873 FC3 -.2734 BSP 16796
BDE .7380 BRA 3.6245 BC3 2.8625 FSP -326
                                                                                                                                          ARRIVAL DATE FEB 14 1968
                                                                            FLIGHT TIME 192.00
LAUNCH DATE AUG 6 1967
                                                                           DISTANCE 564.465
   RL 151.75 LAL -.00 LOL 312.87 VL 24.913 GAL 8.28 AZL 90.65 MCA 293.37 SMA 117.60 ECC .32137 INC .6520 V1 29.360 RP 108.51 LAP .60 LOP 246.24 VP 36.298 GAP 18.23 AZP 90.26 TAL 161.66 TAP 95.03 RCA 79.81 APO 155.40 V2 34.923 RC 200.487 GL -2.65 GP 9.44 ZAL 50.84 ZAP 170.23 ETS 101.83 ZAE 131.14 ETE 171.43 ZAC 21.78 ETC 11.43 CLP 177.45
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                        2.28 VHP 11.306 OPA -11.00 RAP 244.17 ECC 1.6087
    C3 36.986 VHL 6.082 DLA -25.85 RAL 261.20 RAD 6558.4 VEL 12.584 PTH
    ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  135.05
                                                                                                   117.83 12 28 49
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                   12 5 43
                                   1365.47
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        90.00
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        90.00
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                                   1207.89
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                     17 20 35 5644.52
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100.70 20 44 26
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                    13 21 23 1143.02
19 16 24 5282.15
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       110.00
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                                                                    239.19
                                                                                    145.00
                                                      32.66
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 1347.3 SR 416.0 SS 321.8
                                                                        SGT 5237.3 SGR 447.9 SG3 97.5
RRT -.4297 RRF -.4014 RTF .9232
    TOE -.4727 TRA 4.0364 TC3-2.5152 BAU 1.2438
                                                                                                                               CRT -.4438 CRS .1747 CST -.9588
CSA 1394.8 MSA 382.4 SSA 15.1
    RDE .4383 RRA -.1626 RC3 .0280 FAU .00933
FDE -.0184 FRA 1.0472 FC3 -.2183 BSP 16748
                                                                        SG8 5256.5 R23 .0026 R13 -.9232
                                                                                                                               EL1 1360.9 EL2 369.1 ALF 171.57
                                                                        $61 5240.9 SG2 404.2 THA 177.88
     BDE .6446 BRA 4.0417 BC3 2.5154 FSP -319
                                                                                                                                          ARRIVAL DATE FEB 16 1968
                                                                             FLIGHT TIME 194.00
 LAUNCH DATE AUG 6 1967
     RL 151.75 LAL -.00 LOL 312.87 VL 24.863 GAL 9.35 AZL 90.46 HCA 296.55 SMA 117.34 ECC .33182 INC .4607 VI 29.360 RP 108.55 LAP .41 LOP 249.42 VP 36.252 GAP 18.91 AZP 90.21 TAL 160.03 TAP 96.58 RCA 78.41 APO 156.28 V2 34.911 RC 202.138 GL -1.75 GP 9.29 ZAL 48.38 ZAP 170.14 ETS 106.32 ZAE 131.12 ETE 171.55 ZAC 19.52 ETC 13.08 CLP 176.69
                                                                             DISTANCE 569.105
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 41.773 VHL 6.463 DLA -25.08 RAL 263.94 RAD 6568.6 VEL 12.773 PTH 2.32 VHP 11.715 DPA -11.68 RAP 246.51 ECC 1.6875
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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          90.00 12 1 41 1467.20
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                                       663.42
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          90.00
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                                                                                                     119.89 13 21 16
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                     12 59 57 1279.12
17 43 13 5634.77
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100.81 21 3 11
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                     13 24 32 1201.96
19 35 6 5284.70
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        110.00
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                                                                                                                                                     33.77
                                                                                    149.89
                                                                     239.38
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1350.5 SR 403.9 SS 329.8

CRT - .3504 CRS .1098 CST - .9684

LSA 1395.1 MSA 386.3 SSA 14.3
                                                                         SCT 5225.3 SGR 439.5 SG3 95.8

RRT -,4330 RRF -,4066 RTF ,9297

SGB 5243.8 R23 ,0020 R13 -,9297

SGI 5228.8 SG2 395.9 THA 177.90
      TDE -.3400 TRA 4.4740 TC3-2.1933 BAU 1.2249
     RDE .4515 RRA -.1824 RC3 .0250 FAU .00833
FDE .0085 FRA 1.1092 FC3 -.1726 BSP 16788
                                                                                                                                EL1 1358.5 EL2 376.0 ALF 173.52
      BDE .5653 BRA 4.4777 BC5 2.1934 FSP -515
                                                                                                                                            APRIVAL DATE FEB 18 1968
                                                                              FLIGHT TIME 196.00
  LAUNCH DATE AUG 6 1967
                                                                              DISTANCE 573.573
     RL 151.75 LAL -.00 LOL 312.87 VL 24.813 GAL 10.50 AZL 90.26 MCA 299.73 SMA 117.09 ECC .34339 INC .2582 V1 29.360 RP 108.59 LAP .22 LOP 252.60 VP 36.207 GAP 19.66 AZP 90.13 TAL 158.45 TAP 98.18 RCA 76.88 APO 157.29 V2 34.899 RC 203.771 GL -.92 GP 9.16 ZAL 46.11 ZAP 169.97 ETS 110.81 ZAE 131.07 ETE 171.67 ZAC 17.30 ETC 15.19 CLP 175.90
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 47.421 VHL 6.886 DLA -24.32 RAL 266.45 RAD 6568.8 VEL 12.992 PTH 2.37 VMP 12.168 DPA -12.30 RAP 248.85 ECC 1.7804
      C3 47.421 VHL 6.886 DLA -24.32 RAL 260.43 RAU 0308.8 VEL 16.392 FIN 25.37 TIM 1NJ 2 LAT 1NJ 2 LONG LNCN AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 58 39 1544.15 .34 2.37 142.82 118.32 12.24 23 944.2 4.13 355.73 90.00 16 21 51 670.24 24.31 309.68 152.47 104.98 16 33 1 70.2 26.13 301.49
          90.00
                                                                                                     119.84 13 21 48
103.78 19 37 40
123.56 13 48 14
101.02 21 20 36
                                                                                                                                                                    340.21
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                                                                                     141.58
                                                        -1.89
                                                                      346.73
                                      1348.24
         100.00
                      12 59 20
                                                                                                                                                                    255.68
                                                                                                                                     5029.4
                                                                                                                                                      28.42
                                      5629.43
                                                        26.79
                                                                      264.10
                                                                                     153.17
         100.00
                      18 3 51
                                                                                                                                                      -2.46
                                                                                                                                      660.8
                                      1260.76
                                                        -6.92
                                                                      336.99
                                                                                     136.46
                      13 27 14
         110.00
                                                                                                                                                      33.74
                                                                                                                                    4689.7
                                                                                     154.63
                                      5289.67
                                                        32.56
                                                                      239.76
                     19 52 26
         110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1364.5 SR 390.7 SS 339.9
CRT -.2616 CRS .0523 CST -.9767
LSA 1408.1 MSA 383.7 SSA 13.5
                                                                         SGT 5209.0 SGR 429.6 SG3 94.1
RRT -.4352 RRF -.4111 RTF .9361
SG8 5226.7 R23 .0015 R13 -.9361
SG1 5212.4 SG2 386.5 THA 177.93
      TDE -.2005 TRA 4.9358 TC3-1.8928 BAU 1.2001
      ROE .4649 RRA -.2022 RC3 .0216 FAU .00732
FOE .0349 FRA 1.1755 FC3 -.1337 BSP 16804
BDE .5063 BRA 4.9399 BC3 1.8930 FSP -310
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FLIGHT TIME 190.00

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ARRIVAL DATE FEB 20 1968
                                                                             FLIGHT TIME 198.00
BAUNCH DATE AUG 6 1967
                                                                             DISTANCE 577.835
    RL 151.75 LAL -.00 LOL 312.87 VL 24.765 GAL 11.73 A7L 90.04 MCA 302.90 SMA 116.84 ECC .35623 INC .0408 V1 29.360 RP 108.62 LAP .04 LOP 255.77 VP 36.164 GAP 20.49 A7P 90.02 TAL 156.93 TAP 99.83 RCA 75.22 APO 158.46 V2 34.888 RC 205.386 GL -.14 GP 9.04 TAL 44.02 TAP 169.72 ETS 115.24 TAE 130.99 ETE 171.80 TAC 15.15 ETC 17.94 CLP 175.09
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 54.096 VHL 7.355 DLA -23.58 RAL 268.74 RAD 6569.0 VEL 13.246 PTH 2.42 VHP 12.668 DPA -12.88 RAP 251.17 ECC 1.8903
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       1.77
                                                                                                   118.25 12 23 10
104.76 16 53 36
                                                                                                                                    1017.4
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                     11 56 12 1617.35
        90.00
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                                                                                    157.10
                                                                     309.16
                                    662.59
                                                       24.45
                     16 42 33
                                                                                                    119.63 13 22 23
103.73 19 56 27
123.09 13 51 29
101.33 21 36 43
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                                                                                                                                                                     343.89
                                                                                                                                       815.3
                   12 58 48 1415.33
18 22 39 5627.90
13 29 30 1319.07
20 8 26 5296.93
                                                                     350.42
                                                                                    145.41
                                                       -4.16
       100.00
                                                                                                                                     5027.9
                                                                                                                                                      28.44
                                                                                                                                                                     255.57
                                                                     263.99
                                                                                    157.77
                                                       26.82
                                                                                   142.38
                                                                                                                                      719.1
                                                                                                                                                       -4.68
                                                                                                                                                                     333.79
                                                                     340.09
                                                      -9.10
       110.00
                                                                                                                                                                     231.28
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                                                                                                                                    4696.9
                                                                     240.30
                                                                                     159.22
                                                       32-47
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1386.2 SR 376.9 SS 351.8
CRT -.1804 CRS .0025 CST -.9833
LSA 1430.3 MSA 375.9 SSA 12.6
                                                                         SGT 5188.6 SGR 418.3 SG3 92.5
RRT -.4364 RRF -.4147 RTF .9426
SGB 5205.4 R23 .0013 R13 -.9426
    TDE -. 0552 TRA 5.4262 TC3-1.6155 BAU 1.1684
    ROE .4783 RRA -.2215 RC3 .0179 FAU .00631
FDE .0608 FRA 1.2465 FC3 -.1009 BSP 16807
                                                                                                                                 EL1 1388.0 EL2 370.2 ALF 176.98
                                                                          SG1 5191.8 SG2 376.2 THA 177.97
     BOE .4815 BRA 5.4307 BC3 1.6156 FSP -306
                                                                                                                                             ARRIVAL DATE FEB 22 1968
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LAUNCH DATE AUG 6 1967
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    RL 151.75 LAL -.00 LOL 312.87 VL 24.719 GAL 13.07 AZL 89.81 MCA 306.08 SMA 116.60 ECC .37053 INC .1868 VI 29.360 RP 108.65 LAP -.15 LOP 258.95 VP 36.121 GAP 21.41 AZP 89.89 TAL 155.47 TAP 101.55 RCA 73.40 APO 159.81 V2 34.878 RC 206.983 GL .57 GP 8.93 ZAL 42.12 ZAP 169.36 ETS 119.58 ZAE 130.86 ETE 171.92 ZAC 13.07 ETC 21.58 CLP 174.24
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 62.008 VHL 7.874 DLA -22.87 RAL 270.81 RAD 6569.2 VEL 13.541 PTH 2.48 VHP 13.225 DPA -13.41 RAP 253.48 ECC 2.0205 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     1087.4
                                                                                                     118.02 12 22 15
                                                       -4.27
                                                                       10.37
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                                                                      308.95
                                                                                      161.55
                                                        24.50
                     17 1 12
                                      659.41
         90.00
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                  17 1 12 659.41
12 58 15 1480.37
18 39 45 5629.66
13 31 22 1376.56
20 23 8 5306.24
                                                                                                                                                        -2.39
                                                                                                                                        880.4
                                                                      354.02
264.12
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122.50 13 54 19
101.73 21 51 34
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                                                                                     162.19
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                                                                      343.20
                                                                                    146.19
                                                      -11.23
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                                                                                                                                      4706.2
                                                                      241.00
                                                                                      163.63
        110.00
                                                       32.34
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1413.4 SR 362.3 SS 365.6
CRT -.1062 CRS -.0424 CST -.9883
                                                                          SCT 5165.2 SCR 405.6 SC3 91.0
RRT -.4361 RRF -.4169 RTF .9489
SCB 5181.1 R23 .0011 R13 -.9489
     TDE .0996 TRA 5.9520 TC3-1.3593 BAU 1.1269
RDE .4917 RRA -.2403 RC3 .0141 FAU .00522
FDE .0875 FRA 1.3237 FC3 -.0729 BSP 16715
                                                                                                                                  LSA 1459.4 MSA 364.2 SSA 12.1
                                                                                                                                  EL1 1413.9 EL2 360.1 ALF 178.33
                                                                           SG1 5168.3 SG2 364.8 THA 178.03
   BDE .5017 BRA 5.9568 BC3 1.3593 FSP -299
                                                                                                                                             ARRIVAL DATE FEB 24 1968
                                                                              FLIGHT TIME 202.00
 LAUNCH DATE AUG 6 1967
     RL 151.75 LAL -.00 LOL 312.87 VL 24.673 GAL 14.51 AZL 89.56 MCA 309.25 SMA 116.38 ECC .38649 INC .4375 VI 29.360 RP 108.69 LAP -.34 LOP 262.12 VP 36.081 GAP 22.43 AZP 89.72 TAL 154.09 TAP 103.34 RCA 71.40 APO 161.36 V2 34.867 RC 208.560 GL 1.24 GP 8.83 ZAL 40.40 ZAP 168.96 ETS 123.79 ZAE 130.70 ETE 172.05 ZAC 11.11 ETC 26.52 CLP 173.35
                                                                              DISTANCE 585.563
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                          2.53 VHP 13.846 OPA -13.88 RAP 255.75 ECC 2.1754
     C3 71.419 VHL 8.451 DLA -22.18 RAL 272.68 RAD 6569.4 VEL 13.884 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     117.64 12 21 31
104.67 17 28 59
                                                                                   153.87
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                                                        -6.40
                                                                       14.14
         90.00 11 52 16 1754.36
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                                                                                     165.79
                     17 17 59
                                       659.90
                                                        24.49
                                                                      306.96
          90.00
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103.94 20 29 10
121.80 13 56 45
102.20 22 5 10
                   17 17 59 659.90
12 57 40 1543.31
18 55 16 5634.24
                                                                                                                                                                     350.93
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                                                                                                                                                        -4.51
                                                                                     152.78
                                                                      357.54
                                                        -8.42
        100.00
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                                                                                     166.42
                                                        26.71
                                                                      264.43
        100.00
                                                                                                                                      832.9
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                                                                                                                                                                      339.83
                     13 32 52 1432.95
20 36 33 5317.36
                                                                                      149.90
                                                                      346.29
                                                      -13.27
        110.00
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                                                                                                                                      4717.4
                                                                                      167.87
                                                        32.18
                                                                      241.83
        110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SCT 5136.8 SGR 391.5 SG3 89.5

RRT -.4344 RRF -.4178 RTF .9551

SGB 5151.7 R23 .0011 R13 -.9551

SGI 5139.6 SG2 352.5 THA 178.09
                                                                                                                                  ST 1441.6 SR 347.3 SS 380.7
     TOE .2562 TRA 6.5099 TC3-1.1285 BAU 1.0776
                                                                                                                                  CRT -. 0428 CRS -. 0794 CST -. 9920
     ROE .5055 RRA -.2576 RC3 .0106 FAU .00413
FDE .1130 FRA 1.4062 FC3 -.0501 BSP 16701
BDE .5666 BRA 6.5150 BC3 1.1286 FSP -295
                                                                                                                                  LSA 1490.3 MSA 349.9 SSA 11.5
EL1 1441.6 EL2 346.9 ALF 179.37
                                                                                                                                              ARRIVAL DATE FEB 26 1968
                                                                               FLIGHT TIME 204.00
 LAUNCH DATE AUG 6 1967
                                                                               DISTANCE 588.907
     RL 151.75 LAL -.00 LOL 312.87 VL 24.630 GAL 16.09 AZL 89.29 MCA 312.42 SMA 116.16 ECC .40435 INC .7118 V1 29.360`
RP 108.72 LAP -.53 LOP 265.29 VP 36.042 GAP 23.58 AZP 89.52 TAL 152.81 TAP 105.23 RCA 69.19 APO 163.13 V2 34.858
RC 210.118 GL 1.85 GP 8.73 ZAL 38.85 ZAP 168.45 ETS 127.84 ZAE 130.47 ETE 172.18 ZAC 9.32 ETC 33.37 CLP 172.41
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 82.667 VHL 9.092 DLA -21.53 RAL 274.35 RAD 6569.6 VEL 14.283 PTH 2.60 VHP 14.543 DPA -14.31 RAP 257.98 ECC 2.3605
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       117.14 12 20 49
104.76 17 44 6
                                                                                     157.34
                                     1818.51
                                                         -8.41
                                                                       17.78
          90.00
                      11 50 31
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                                                                                                                                          63.4
                                                                                       169.82
                                                                       309.22
                      17 33 3
                                        663.41
                                                        24.43
          90.00
                                                                                                       118.19 13 23 42
104.17 20 43 17
120.98 13 58 48
102.72 22 17 34
                                                                                                                                                         -6.54
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                     12 56 58 1604.00
19 9 16 5641.17
                                                                           .96
                                                                                       156.29
                                                       -10.39
         100.00
                                                                                                                                                        28.28
                                                                                                                                                                       256.52
                                                                                                                                        5041.2
                                                                       264.92
                                                                                       170.44
                                                       26.60
                                                                                                                                                       -11.00
                                                                                                                                                                       342.79
                                                                                                                                        887.9
                     13 34 0 1487.94
20 48 44 5330.01
                                                                                       153.48
                                                                       349.35
                                                       -15.22
         110.00
                                                                                                                                                         33.42
                                                                                       171.92
                                                                                                                                        4730.0
                                                                       242.77
                                                         32,00
         110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                ST 1469.4 SR 331.9 SS 397.5

CRT .0126 CRS -.1117 CST -.9947

LSA 1521.7 MSA 334.0 SSA 10.9

EL1 1469.4 EL2 331.8 ALF .17
     DIFFERENTIAL CORRECTIONS
                                                                         SGT 5104.5 SGR 376.1 SG3 88.0

RRT -.4306 RRF -.4167 RTF .9610

SGB 5118.3 R23 .0012 R13 -.9610

SGI 5107.1 SG2 339.3 THA 178.17
      TOE .4188 TRA 7.1084 TC3 -.9198 BAU 1.0165
RDE .5192 RRA -.2731 RC3 .0072 FAU .00296
      FDE .1388 FRA 1.4960 FC3 -.0310 BSP 16685
      BOE .6671 BRA 7.1137 BC3 .9198 FSP -290
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LAUNCH DATE AUG 6 1967
                                                                                                                FLIGHT TIME 206.00
                                                                                                                                                                                                          ARRIVAL DATE FEB 28 1968
     HELIOCENTRIC CONIC
                                                                                                                OISTANCE 591.792
       RL 151.75 LAL -.00 LOL 312.87 VL 24.589 GAL 17.83 AZL 88.99 MCA 315.58 SMA 115.95 ECC .42440 INC 1.0148 V1 29.360 RP 108.74 LAP -.71 LOP 268.46 VP 36.004 GAP 24.87 AZP 89.28 TAL 151.65 TAP 107.24 RCA 66.74 APO 165.16 V2 34.848 RC 211.656 GL 2.42 GP 8.64 ZAL 37.49 ZAP 167.83 ETS 131.74 ZAE 130.19 ETE 172.33 ZAC 7.77 ETC 42.99 CLP 171.40
     PLANETOCENTRIC CONIC
       C3 96.186 VHL 9.807 DLA -20.91 RAL 275.82 RAD 6569.9 VEL 14.749 PTH
                                                                                                                                                       2.67 WHP 15.328 DPA -14.69 RAP 260.17 ECC 2.5830
       UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 48 46 1879.73 -10.29 21.29 160.67 116.53 12 20 5 1279.7 -6.65 14.51
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             90.00
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                             17 46 30 669.39
12 56 7 1662.34
19 21 49 5650.05
13 34 45 1541.24
20 59 40 5343.91
           100.00
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                                                                                                        17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 17.-2 
           100.00
                                                                                                    265.54
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941.2
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          110.00
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     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
      TOE .5882 TRA 7.7534 TC3 -.7514 BAU .9406

ROE .5353 RRA -.2862 RC3 .0041 FAU .00166

FOE .1650 FRA 1.5945 FC3 -.0150 BSP 16637

BOE .7940 BRA 7.7587 BC3 .7315 FSP -286
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RRT -.4241 RRF -.4128 RTF ..9667
SGB 5081.2 R23 ..0013 R13 -.9667
SGI 5070.7 SG2 325.3 THA 178.27
                                                                                                                                                                                         ST 1495.3 SR 316.2 SS 416.2
CRT .0612 CRS -.1405 CST -.9965
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EL1 1495.5 EL2 315.5 ALF
                                                                                                                                                                                                                                                   10.3
LAUNCH DATE AUG 6 1967
                                                                                                                FLIGHT TIME 208.00
                                                                                                                                                                                                           ARRIVAL CATE MAR 1 1968
    HELIOCENTRIC CONIC
                                                                                                                DISTANCE 594.107
      RL 151.75 LAL -.00 LOL 312.87 VL 24.549 GAL 19.75 AZL 88.65 MCA 318.75 SMA 115.76 ECC .44697 INC 1.3540 V1 29.360 RP 108.77 LAP -.89 LOP 271.62 VP 35.969 GAP 26.34 AZP 88.98 TAL 150.64 TAP 109.39 RCA 64.02 APO 167.50 V2 34.840 RC 213.175 GL 2.93 GP 8.56 ZAL 36.32 ZAP 167.11 ETS 135.47 ZAE 129.83 ETE 172.48 ZAC 6.59 ETC 56.27 CLP 170.32
    PLANETOCENTRIC CONIC
      C3 112.341 WHL 10.609 DLA -20.33 RAL 277.08 RAD 6570.1 VEL 15.293 PTH 2.74 VHP 16.217 DPA -15.03 RAP 262.28 ECC 2.8521
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                  1937.94
            90.00
                             11 46 57
                                                                              -12.04
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                              17 58 23
            90.00
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                                                     677.35
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                           12 55 5 1718.06
19 32 57 5660.50
13 35 7 1592.56
21 9 23 5358.76
                                                                                                                                                 116.70 13 23 43
104.80 21 7 17
119.10 14 1 40
103.90 22 38 42
          100.00
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          100.00
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          110.00
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          110.00
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                                                                               31.55
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                                                                                                                                                                                                                                             236.92
    DIFFERENTIAL CORRECTIONS
                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     TOE .7666 TRA 8.4536 TC3 -.5617 BAU .8451
RDE .5478 RRA -.2961 RC3 .0014 FAU .00016
FDE .1924 FRA 1.7037 FC3 -.0013 BSP 16507
BDE .9422 BRA 8.4587 BC3 .5617 FSP -280
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RRT - 4141 RRF - 4054 RTF .9720
SGB 5041.4 R23 .0015 R13 - .9720
SGI 5031.8 SG2 310.7 THA 178.38
                                                                                                                                                                                         ST 1518.7 SR 300.2 SS 437.4
CRT .1048 CRS -.1673 CST -.9977
                                                                                                                                                                                         LSA 1580.5 MSA 299.5 SSA 9.7
                                                                                                                                                                                         EL1 1519.0 EL2 298.5 ALF
                                                                                                                                                                                                                                                 1.23
                                                                                                                                                                                                         ARRIVAL DATE MAR 3 1968
LAUNCH DATE AUG 6 1967
                                                                                                                FLIGHT TIME 210.00
    HELIOCENTRIC CONIC
                                                                                                               DISTANCE 595.703
     RL 151.75 LAL -.00 LOL 312.87 VL 24.513 GAL 21.88 AZL 88.26 HCA 321.91 SMA 115.58 ECC .47248 INC 1.7585 VI 29.360 RP 108.80 LAP -1.07 LOP 274.79 VP 35.936 GAP 28.01 AZP 88.63 TAL 149.81 TAP 111.72 RCA 60.97 APO 170.18 V2 34.832
      RC 214.674 GL 3.44 GP 8.47 7AL 35.35 7AP 166.27 ETS 139.04 7AE 129.37 ETE 172.65 7AC 5.92 ETC 73.09 CLP 169.15
     PLANETOCENTRIC CONIC
      C3 132.473 VHL 11.510 OLA -19.79 RAL 278.13 RAD 6570.4 VEL 15.931 PTH 2.82 VHP 17.228 OPA -15.32 RAP 264.31 ECC 3.1802
      LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             115.05 12 18 12
105.47 18 20 12
115.85 13 23 17
105.18 21 17 11
118.05 14 2 25
104.53 22 47 25
            90.00 11 44 59 1992.96
                                                                             -13.65
                                                                                                    27.91 166.82
                                                                                                                                                                                         1393.0 -10.16
                                                                                                                                                                                                                                             20.97
                                                                                                   310.81
            90.00
                             18 8 45
                                                     686.88
                                                                              24.01
                                                                                                                        180.46
                                                                                                                                                                                                 86.9
                                                                                                                                                                                                                       25.91
                                                                                                                                                                                                                                             302.65
                          12 53 46 1770.95
19 42 38 5672.16
                                                                                                                      165.87
          100.00
                                                                             -15.57
                                                                                                     10.65
                                                                                                                                                                                               1171.0
                                                                                                                                                                                                                 -11.96
27.89
          100.00
                                                                                                                                                                                               5072.2
                                                                             26.06
                                                                                                   267.07
                                                                                                                        181.08
                                                                                                                                                                                                                                             258.74
                             13 35 3
                             13 35 3 1641.59
21 17 51 5374.29
                                                                                                                      163.30
                                                                             -20.39
                                                                                                   358.27
                                                                                                                                                                                              1041.6
                                                                                                                                                                                                                                            351.33
                                                                                                   246.02
          110.00
                                                                            31.29
                                                                                                                         182.66
                                                                                                                                                                                              4774.3
                                                                                                                                                                                                                       32.96
                                                                                                                                                                                                                                            237.20
    DIFFERENTIAL CORRECTIONS
                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                         SCT 4985.5 SCR 322.5 SC3 83.9

RRT -.3998 RRF -.3934 RTF .9768

SCB 4995.9 R23 .0016 R13 -.9768

SCI 4987.1 SCZ 295.5 THA 178.51
      TOE .9472 TRA 9.2085 TC3 -.4118 BAU .7292
                                                                                                                                                                                        ST 1536.0 SR 284.3 SS 460.6
      RDE .5630 RRA -.3013 RC3 -.0008 FAU-.00155
FDE .2197 FRA 1.8236 FC3 .0101 BSP 16455
BDE 1.1019 BRA 9.2135 BC3 .4118 FSP -276
                                                                                                                                                                                     CRT .1426 CRS -.1911 CST -.9986
                                                                                                                                                                                        LSA 1603.9 MSA 282.0 SSA
                                                                                                                                                                                                                                                 9.1
                                                                                                                                                                                         ELI 1536.5 EL2 281.3 ALF 1.56
                                                                                                                FLIGHT TIME 212.00
                                                                                                                                                                                                          ARRIVAL DATE MAR 5 1968
    HELIOCENTRIC CONIC
                                                                                                               DISTANCE 596.387
     RL 141-75 LAL -.00 LOL 312.87 VL 24.479 GAL 24.27 AZL 87.82 HCA 325.07 SMA 115.41 ECC .50135 INC 2.1810 V1 29.360 RP 108.82 LAP -1.25 LOP 277.95 VP 35.906 GAP 29.93 AZP 88.21 TAL 149.20 TAP 114.26 RCA 57.55 APO 173.27 V2 34.824= RC 216.155 GL 3.89 GP 8.39 ZAL 34.58 ZAP 165.29 ETS 142.45 ZAE 128.80 ETE 172.84 ZAC 5.85 ETC 91.02 CLP 167.87
    PLANETOCENTRIC CONIC
      C3 156.963 VHL 12.528 DLA -19.29 RAL 278.96 RAD 6570.7 VEL 16.682 PTH
                                                                                                                                                       2.89 VHP 18.386 OPA -15.58 RAP 266.23 ECC 3.5832
     C3 156.963 WH. 12.528 DLA -19.29 RAL 278.96 RAD 6570.7 VEL 16.582 PTM 2.89 VMP 18.386 DPA -15.58 RAP 266.23 ECC 3.5832 LNCM AZMTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 17 34 697.61 23.82 311.54 183.44 105.79 18 29 11 97.6 25.76 303.40 100.00 12 52 9 1820.74 -17.02 13.63 168.66 114.95 13 22 30 1220.7 -13.52 6.60 100.00 19 50 53 5684.73 25.84 267.93 184.07 105.58 21 25 38 5084.7 27.72 259.64 110.00 13 34 31 1687.99 -21.84 1.08 166.17 116.97 14 2 39 1088.0 -18.05 354.00 110.00 21 25 1 5390.23 31.01 247.18 185.68 105.16 22 54 51 4790.2 32.78 236.41
    DIFFERENTIAL CORRECTIONS
                                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                      SGT 4936.9 SGR 302.4 SG3 82.6
RRT -.3793 RRF -.3750 RTF .9812
SG8 4946.2 R23 .0018 R13 <.9812
SG1 4938.3 SG2 279.7 THA 178.66
                                                                                                                                                                                       ST 1547.5 SR 268.5 SS 486.5
CRT .1771 CRS -.2140 CST -.9991
      TOE 1.1334 TRA10.0296 TC3 -.2787 BAU .5849
     ROE .5793 RRA -.3007 RC3 -.0026 FAU-.00360
FDE .2479 FRA 1.9573 FC3 .0198 BSP 16382
BDE 1.2729 BRA10.0341 BC3 .2787 FSP -273
                                                                                                                                                                                    CRT .1//1 LRS -.... 8.5
                                                                                                                                                                                         ELI 1548.2 EL2 264.1 ALF
                                                                                                                                                                                                                                                 1.61
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LAUNCH DATE AUG 6 1967
                                                                                FLIGHT TIME 214.00
                                                                                                                                                ARRIVAL DATE MAR 7 1968
    HELIOCENTRIC CONIC
                                                                                DISTANCE 595.906
     RL 151.75 LAL -.00 LOL 312.87 VL 24.449 GAL 26.97 AZL 87.30 MCA 328.22 SMA 115.26 ECC .53410 INC 2.6991 V1 29.360 RP 108.84 LAP -1.42 LOP 281.12 VP 35.879 GAP 32.14 AZP 87.71 TAL 148.85 TAP 117.08 RCA 53.70 APO 176.82 V2 34.817
                              4.30 GP 8.30 ZAL 34.05 ZAP 164.15 ETS 145.71 ZAE 128.09 ETE 173.06 ZAC 6.31 ETC 106.53 CLP 166.45
    PLANETOCENTRIC CONIC
     C3 187.316 VHL 13.686 DLA -18.84 RAL 279.55 RAD 6571.0 VEL 17.568 PTH 2.97 VHP 19.719 DPA -15.80 RAP 268.01 ECC 4.0828
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      11 40 16 2092.51
18 24 46 709.24
                                                                                                        113.39 12 15 9
106.12 18 36 35
                                                                                       172.03
                                                                                                                                       1492.5
                                                        -16.43
                                                                         33.90
                                                                                                                                                        -13.13
                                                                                                                                                                           26.78
                      18 24 46
                                       709.24
                                                        23.60
                                                                        312.32
                                                                                        186.08
                                                                                                                                          109.2
                                                                                                                                                         25.59
                                                                                                                                                                         304.21
                      12 50 7 1867.10
19 57 36 5697.92
                                                                                                        114.03 13 21 14
106.00 21 32 34
115.87 14 2 17
105.79 23 0 54
        100.00
                                                       -18.33
                                                                         16.46
                                                                                       171.16
                                                                                                                                        1267.1
                                                                                                                                                         -14.93
                                                                                                                                                                           9.31
        100.00
                                                        25.59
                                                                       268.84
                                                                                       186.71
                                                                                                                                         5097.9
                                                                                                                                                         27.54
                                                                                                                                                                         260.58
                      13 33 25 1731.43
21 30 47 5406.36
        110.00
                                                        -23.16
                                                                          3.76
                                                                                       168.76
                                                                                                                                        1131.4
                                                                                                                                                         -19.49
                                                                                                                                                                         356.55
        110.00
                                                        30.72
                                                                                                                                                         32.57
                                                                        248.35
                                                                                       188.36
                                                                                                                                         4806.4
                                                                                                                                                                         239.62
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                           SCT 4883.9 SCR 281.6 SC3 81.4

RRT -.3504 RRF -.3480 RTF .9850

SCB 4892.0 R23 .0019 R13 -.9850

SCI 4884.9 SC2 263.7 THA 178.84
     TOE 1.3239 TRA10.9241 TC3 -.1615 BAU .4045
                                                                                                                                    ST 1552.0 SR 252.9 SS 515.7 CRT .2096 CRS -.2370 CST -.9995
     ROE .5970 RRA -.2924 RC3 -.0038 FAU-.00613
    FOE .2771 FRA 2.1069 FC3 .0283 BSP 16278
BOE 1.4523 BRAID.9280 BC3 .1615 FSP -269
                                                                                                                                    LSA 1636.3 MSA 247.4 SSA 7.9
                                                                                                                                    ELI 1553.0 EL2 247.2 ALF 2.01
LAUNCH DATE AUG 6 1967
                                                                                FLIGHT TIME 216.00
                                                                                                                                                ARRIVAL DATE MAR 9 1968
   HELIOCENTRIC CONIC
                                                                                DISTANCE 593.929
    RL 151.75 LAL -.00 LOL 312.87 VL 24.423 GAL 30.04 AZL 86.68 HCA 331.37 SMA 115.14 ECC .57126 INC 3.3182 V1 29.360
RP 108.86 LAP -1.59 LOP 284.28 VP 35.855 GAP 34.72 AZP 87.09 TAL 148.85 TAP 120.22 RCA 49.36 APO 180.91 V2 34.811
RC 219.054 GL 4.68 GP 8.21 ZAL 33.76 ZAP 162.82 ETS 148.83 ZAE 127.22 ETE 173.30 ZAC 7.07 ETC 118.01 CLP 164.86
   PLANETOCENTRIC CONIC
    C3 225.282 VHL 15.009 DLA -18.45 RAL 279.87 RAD 6571.3 VEL 18.617 PTH 3.05 VHP 21.260 DPA -16.00 RAP 269.63 ECC 4.7076
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 11 37 20 2136.43 -17.60 36.59 174.18 112.55 12 12 56 1536.4 -14.39 29.39
90.00 18 30 15 721.53 23.36 313.14 188.33 106.47 18 42 16 121.5 25.40 305.07
100.00 12 47 35 1909.71 -19.49 19.09 173.34 113.12 13 19 25 1309.7 -16.19 11.85
100.00 20 2 40 5711.53 25.35 269.76 188.97 106.42 21 37 52 5111.5 27.34 261.54
110.00 13 31 41 1771.53 -24.33 6.29 171.02 114.79 14 1 13 1171.5 -20.78 358.94
110.00 21 35 4 5422.47 30.41 249.50 190.66 106.42 23 5 26 4822.5 32.36 240.83
    C3 225.282 WHL 15.009 DLA -18.45 RAL 279.87 RAD 6571.3 VEL 18.617 PTH 3.05 VHP 21.260 DPA -16.00 RAP 269.63 ECC 4.7076
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SCT 4827.6 SC2 247.4 THA 179.04
     TDE 1.5190 TRA11.9003 TC3 -.0585 BAU .1768
                                                                                                                                    ST 1549.2 SR 237.7 SS 548.8
    RDE - .6167 RRA - .2740 RC3 - .0044 FAU- .00934
FDE .3077 FRA 2.2755 FC3 .0359 BSP 16077
BDE 1.6394 BRA11.9035 BC3 .0587 FSP - 264
                                                                                                                                    CRT .2416 CRS -.2613 CST -.9997
                                                                                                                                    LSA 1644.6 HSA 230.6 SSA 7.4
EL1 1550.3 EL2 230.5 ALF 2.17
LAUNCH DATE AUG 6 1967
                                                                               FLIGHT TIME 218.00
                                                                                                                                                ARRIVAL DATE MAR 11 1968
   MELIOCENTRIC CONIC
                                                                               DISTANCE 590.024
    RL 151,75 LAL -.00 LOL 312.87 VL 24.402 GAL 33.55 AZL 85.92 HCA 334.52 SMA 115,04 ECC .61335 INC 4.0758 V1 29.360 RP 108.88 LAP -1.75 LOP 287.44 VP 35.835 GAP 37.73 AZP 86.32 TAL 149.25 TAP 123.77 RCA 44.48 APO 185.59 V2 34.805 RC 220.476 GL 5.02 GP 8.11 ZAL 33.77 ZAP 161.27 ETS 151.83 ZAE 126.13 ETE 173.57 ZAC 7.93 ETC 125.80 CLP 163.06
   PLANETOCENTRIC CONIC
    C3 273.201 VML 16.529 OLA -18.10 RAL 279.88 RAD 6571.6 VEL 19.862 PTH 3.13 VMP 23.052 DPA -16.17 RAP 271.03 ECC 5.4962
    LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00 11 33 50 2176.00
                                                                                                       111.73 12 10 6
106.83 18 46 5
                                                                                                                                      1576.0
                                                      -1A.61
                                                                       39.05
                                                                                      175.92
                                                                                                                                                       -15.50
                                                                                                                                                                          31.76
         90.00
                      18 33 51
                                       734.30
                                                        23.12
                                                                       314.00
                                                                                       190.14
                                                                                                                                         134.3
                                                                                                                                                        25.20
                                                                                                                                                                         305.95
                     12 44 26 1948.18
20 5 56 5725.39
13 29 12 1807.93
21 37 40 5438.41
                                                       -20.50
                                                                        21.50
                                                                                                                    13 16 54
                                                                                       175.12
                                                                                                        112.24
                                                                                                                                        1348.2
                                                                                                                                                        -17.30
                                                                                                                                                                          14.16
       100.00
                                                       25.06
                                                                                                       106.85 21 41 22
113.74 13 59 19
107.02 23 8 18
                                                                      270.70
                                                                                       190.78
                                                                                                                                        5125.4
                                                                                                                                                        27.13
                                                                                                                                                                         262.51
       110.00
                                                      -25.35
                                                                        8.63
                                                                                      172.88
                                                                                                                                        1207.9
                                                                                                                                                       -21.92
                                                                                                                                                                          1.16
       110.00
                    21 37 40
                                     5438.41
                                                        30.10
                                                                      250.64
                                                                                      192.51
                                                                                                                                                                        242.02
                                                                                                                                        4838.4
                                                                                                                                                         32.13
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    TOE 1.7058 TRA12.9522 TC3 .0295 BAU .1090
ROE .6393 RRA -.2424 RC3 -.0044 FAU-.01339
FOE .3377 FRA 2.4639 FC3 .0424 BSP 15960
BOE 1.8217 BRA12.9545 BC3 .0298 FSP -261
                                                                           SGT 4761.5 SGR 239.0 SG3 79.2
RRT -.2530 RRF -.2533 RTF .9911
SGB 4767.5 R23 .0020 R13 -.9911
                                                                                                                                    ST 1535.5 SR 223.2 SS 585.4
CRT .2727 CRS -.2864 CST -.9998
                                                                                                                                   LSA 1644.4 MSA 214.6 SSA> 6.8
ELI 1536.7 EL2 214.5 ALF 2.31
                                                                           SG1 4761.9 SG2 231.2 THA 179.27
LAUNCH DATE AUG 6 1967
                                                                               FLIGHT TIME 220,00
                                                                                                                                               ARRIVAL DATE MAR 13 1968
   HELIOCENTRIC CONIC
                                                                               DISTANCE 583.653
    RL 151.75 LAL -.00 LOL 312.87 VL 24.389 GAL 37.60 AZL 84.97 MCA 337.66 SMA 114.97 ECC .66073 INC 5.0305 V1 29.360 RP 108.89 LAP -1.91 LOP 290.60 VP 35.821 GAP 41.26 AZP 85.35 TAL 150.16 TAP 127.82 RCA 39.01 APO 190.93 V2 34.800 RC 221.878 GL 5.32 GP 7.99 ZAL 34.11 ZAP 159.45 ETS 154.70 ZAE 124.79 ETE 173.89 ZAC 8.75 ETC 130.74 CLP 161.01
   PLANETOCENTRIC CONIC
    C3 334.177 VHL 18.280 DLA -17.82 RAL 279.54 RAD 6571.9 VEL 21.342 PTH 3.21 VHP 25.142 DPA -16.34 RAP 272.16 ECC 6.4997
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                    11 29 36 2210.82
                                                                                                                    12 6 27
                                                       -19.48
                                                                        41.24
                                                                                      177.20
                                                                                                       110.97
                                                                                                                                       1610.8
                                                                                                                                                        -16.45
                                                                                                                                                                          33.87
                     18 35 21
                                                                                                                    18 47 49
                                       747.44
                                                        22.85
                                                                       314.87
                                                                                       191.44
                                                                                                        107.19
                                                                                                                                         147.4
                                                                                                                                                          24.99
                                                                                                                                                                         306.85
                                                                                                        111.42 13 13 30
107.27 21 42 50
                     12 40 28
                                     1982.15
                                                       -21.36
                                                                        23.65
                                                                                       176.42
                                                                                                                                        1382.1
                                                                                                                                                                          16.23
                                                                                                                                                        -18.26
       100.00
                     20 7 11
                                     5739.39
                                                      24.78
                                                                      271.65
                                                                                       192.10
                                                                                                                                        5139.4
                                                                                                                                                        26.91
                                                                                                                                                                         263.50
                                                                                                       112.77 13 56 26
107.61 23 9 16
       110.00
                     13 25 46
                                    1840.23
                                                       -26.22
                                                                        10.74
                                                                                      174.27
                                                                                                                                        1240.2
                                                                                                                                                        -22.90
                                                                                                                                                                           3.15
       110.00
                     21 38 22 5454.07
                                                                      251.75
                                                                                      193.86
                                                                                                                                                                         243.18
                                                                                                                                        4854.1
                                                                                                                                                          31.90
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    TOE 1.8813 TRA14.0792 TCS .1045 BAU .4670
                                                                          $67 4688.2 $GR 218.6 $G3 78.2

RRT -.1735 RRF -.1747 RTF .9934

$GB 4693.3 R23 .0020 R13 -.9934
                                                                                                                                   ST 1510.5 SR 209.5 SS 626.1
CRT .3047 CRS -.3138 CST -.9999
    RDE .6655 RRA -.1936 RC3 -.0037 FAU-.01865
    FDE .3671 FRA 2.6732 FC3 .0483 BSP 15794
BDE 1.9956 BRA14.0805 BC3 .1045 FSP -259
                                                                                                                                   LSA 1636.4 MSA 199.3 SSA 6.3
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SG1 4688.4 SG2 215.2 THA 179.54

EL1 1511.8 EL2 199.3 ALF 2.46

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29.44
                                     57.72
                                  184.77
                     18.07
                   -33.34
21.61
                                      38.21
                                    169.50
             ARRIVAL DATE OCT 18 1967
ST 278.3 SR 323.8 SS 203.9

CRT -.4936 CRS .6727 CST -.9684

LSA 416.8 MSA 223.1 SSA 19.0

EL1 371.0 EL2 211.2 ALF 126.44
             ARRIVAL DATE OCT 20 1967
                           *** u1 29.365
           ARRIVAL DATE OCT 22 1967
                     -28.08
                        15.15
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ARRIVAL DATE OCT 16 1967
                                                                                                   FLIGHT TIME 70.00
LAUNCH DATE AUG 7 1967
                                                                                                   DISTANCE 214.109
     RL 151.72 LAL -.00 LOL 313.83 VL 29.812 GAL -17.46 A7L 91.47 MCA 97.10 SMA 154.20 ECC .30045 INC 1.4715 V1 29.363 RP 108.08 LAP -1.46 LOP 50.93 VP 39.940 GAP -1.72 A7P 89.82 TAL 255.46 TAP 352.57 RCA 107.87 APO 200.53 V2 35.062 RC 75.721 GL -4.78 GP -22.26 TAL 172.22 TAP 79.55 ETS 5.21 TAE 162.24 ETE 251.19 TAC 116.52 ETC 6.19 CLP -78.70
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 76.844 VHL 8.766 DLA 10.29 RAL 140.85 RAD 6569.5 VEL 14.078 PTH 2.57 VHP 5.300 DPA -7.15 RAP 147.72 ECC 2.2647
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 23 49 2871.11 -28.32 87.02 30.72 90.21 23 11 40 2271.1 -27.99 78.37
                                                                                                                                90.21 23 11 40
69.27 14 23 55
                      13 2 50 4865.36
23 50 15 2592.30
14 19 4 4619.42
1 14 1 2342.48
15 15 43 4442.01
                                                                     19.73
                                                                                         210.86
                                                                                                              22.27
           90.00
                                                                                                                                    90.87 24 33 28
68.41 15 36 3
92.69 1 53 4
65.97 16 29 45
                                                                                                                                                                           1992.3
                                                                                           66.50
                                                                                                              30.71
                                                                     -29.88
         100.00
                                                                                                                                                                            4019.4
                                                                                         192.18
                                                                                                              21.67
                                                                     21.19
         100.00
                                                                                                                                                                           1742.5
                                                                                           47.38
                                                                                                               30.55
                                                                    -34.09
         110.00
                                                                                                                                                                           3842.0
                                                                                         176.94
                                                                                                               19.89
         110.00
                                                                     25.07
                                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 668.7 SGR 490.7 SG3 175.5
RRT .4634 RRF .5849 RTF .6613
SGB 829.4 R23 .1163 R13 .7228
SG1 726.5 SG2 400.2 THA 27.91
                                                                                                                                                                     ST 256.8 SR 330.3 SS 195.7
CRT -.5042 CRS .6614 CST -.9734
     TDE .2723 TRA -.9284 TC3 -.1070 BAU .1911
     RDE -.4911 RRA -.3884 RC3 -.1521 FAU .09293
                                                                                                                                                                     LSA 407.7 MSA 216.2 SSA 18.8
ELI 368.0 EL2 199.0 ALF 121.62
     FDE .5355 FRA-1.2002 FC3-1.0470 BSP
                                                                         1560
-507
     BOE .5615 BRA 1.0063 BC3 .1860 FSP
                                                                                                    FLIGHT TIME 72.00
LAUNCH DATE AUG 7 1967
                                                                                                    DISTANCE 220.530
     RL 151.72 LAL -.00 LOL 313.83 VL 29.751 GAL -17.26 A7L 91.31 HCA 100.31 SMA 153.55 ECC .29694 INC 1.3073 V1 29.365 RP 108.04 LAP -1.29 LOP 54.14 VP 39.905 GAP -1.09 A7P 89.77 TAL 254.93 TAP 355.25 RCA 107.96 APO 199.15 V2 35.075 RC 77.874 GL -4.30 GP -22.85 ZAL 172.30 ZAP 84.20 ETS 3.44 ZAE 160.19 ETE 242.92 ZAC 118.23 ETC 5.38 CLP -83.71
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 74.751 VHL 8.646 OLA 10.67 RAL 141.24 RAD 6569.5 VEL 14.004 PTH 2.55 VHP 5.210 OPA -7.15 RAP 145.94 ECC 2.2302

LNOH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 22 18 2877.16 -28.32 87.46 30.81 89.99 23 10 15 2277.2 -28.02 78.81 90.00 13 7 29 4846.52 19.27 209.67 22.16 68.84 14 28 15 4246.5 16.23 202.32 100.00 23 48 57 2597.65 -29.89 66.90 30.80 90.66 24 32 15 1997.7 -29.48 58.12 100.00 14 23 30 4601.25 20.73 191.02 21.55 67.97 15 40 11 4001.3 17.56 183.66 110.00 1 13 12 2346.34 -34.10 47.68 30.66 92.51 1 52 18 1746.3 -33.38 38.51 110.00 15 19.40 4425.33 24.61 175.87 19.74 65.49 16 33 26 3825.3 21.09 168.49 OREFORENTIAL CORRECTIONS
    PLANETOCENTRIC CONIC
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                             SGT 741.5 SGR 500.1 SG3 182.2
RRT .5087 RRF .6100 RTF .7046
SGB 894.4 R23 .1194 R13 .7534
SG1 800.5 SG2 398.8 THA 25.77
      TOE .2904 TRA -.9929 TC3 -.1468 BAU .2214
      ROE -.4736 RRA -.3903 RC3 -.1659 FAU .09531
      FOE -.4736 RRA -.3903 KC3 -.1039 BSP 1822
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LAUNCH DATE AUG 7 1967

BOE .5556 BRA 1.0669 BC3 .2216 FSP

FLIGHT TIME 74.00

DISTANCE 226.902

HELIOCENTRIC CONIC	DISTANCE 226.902	::::::::::::::::::::::::::::::::::::::
AA . A. 345 AT 11 20 604	GAL -17.06 AZL 91.14 HCA 103.52 SMA 152.85	ECC .29351 INC 1.1397 V1 29.365
		RCA 107.98 APO 197.71 V2 35.088
RP 108.00 LAP -1.11 LOP 57.35 VP 39.867		7AC 119.81 ETC 4.57 CLP -88.62
RC 80.046 GL -3.80 GP -23.40 ZAL 172.31	ZAP 88.73 ETS 1.65 ZAE 157.92 ETE 236.24	2AC 119.81 E1C 4.37 CE1 50.00
PLANETOCENTRIC CONIC		DPA -7.16 RAP 144.28 ECC 2.1966
C3 72.708 VHL 8.527 DLA 11.05 RAL 141.69	RAD 6569.4 VEL 13.931 PTH 2.54 VHP 5.150	
	INJ LONG INJ RT ASC INJ AZHTH INJ TIME	PO CST TIM INJ 2 LAT INJ 2 LONG
Eneri Attack	87,92 30.96 89.76 23 9 0	2283.4 -28.05 79.27
90.00 22 20 57 2883.43 -28.32		4227.3 15.70 201.15
90.00 13 12 27 4827.29 18.80	200	2003.2 -29.51 58.53
100.00 23 47 50 2603.20 -29.89	67.31 30.95 90.44 24 31 13	2000.0
100.00 14 28 14 4582.75 20.26	189.86 21.49 67.53 15 44 37	3982.7 17.03 182.54
100.00	47.99 30.83 92.33 1 51 44	1750.3 -33.41 38.82
110.00		3808.4 20.55 167.47
110.00 15 23 55 4408.37 24.12	114,13	ORBIT DETERMINATION ACCURACY
DIFFERENTIAL CORRECTIONS	MID-COOKSE EXECUTION NOTION	
TOE .3117 TRA-1.0594 TC31898 BAU .2538	SGT 821.4 SGR 507.9 SG3 187.2	31 302.2
105 1011 1111	RRT .5473 RRF .6327 RTF .7387	CRT4871 CRS .6842 CST9634
RUE - 14348 RRA - 13034 RES - 11136 1110	100	LSA 428.5 MSA 227.9 SSA 19.1
FOE .5989 FRA-1.1971 FC3-1.1523 BSP 2102	300 3031 120 1304 141 01 00	
BOE .5514 BRA 1.1287 BC3 .2611 FSP -555	SG1 880.6 SG2 396.5 THA 23.80	EL1 377.2 EL2 221.1 ALF 132.37

LAUNCH DATE AUG 7 1967

FLIGHT TIME 76.00

DISTANCE 233.228 RL 151.72 LAL -.00 LOL 313.83 VL 29.611 GAL -16.87 AZL 90.97 MCA 106.74 SMA 152.09 ECC .29015 INC .9674 V1 29.365
RP 107.96 LAP -.93 LOP 60.57 VP 39.824 GAP .07 AZP 89.72 TAL 253.59 TAP .33 RCA 107.96 APO 196.22 V2 35.101
RC 82.236 GL -3.26 GP -23.92 TAL 172.24 ZAP 93.08 ETS 359.82 ZAE 155.52 ETE 230.88 ZAC 121.25 ETC 3.79 CLP -93.37 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 70.704 VHL 8.409 OLA 11.45 RAL 142.21 RAD 6569.4 VEL 13.858 PTH 2.53 VHP 5.117 DPA -7.19 RAP 142.77 ECC 2.1636 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 89.51 23 7 52 68.00 14 37 53 31.16 88.41 22 19 42 2890.05 -28.31 90.00 4207.5 22.13 207.23 13 17 46 4807.52 18.30 90.00 90.21 24 30 19 67.10 15 49 23 92.13 1 51 20 64.54 16 41 41 -29.54 58.96 2009.1 -29.89 67.75 31.16 3963.7 23 46 50 2609.07 100.00 181.40 16.48 188.66 21.50 14 33 20 4563.73 19.76 100.00 -33.45 39.14 1754.6 1 12 5 2354.60 15 28 30 4390.97 48.32 31.06 -34.12 110.00 19.99 3791.0 173.69 19.63 23.62 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS 5T 328.6 SR 306.7 SS 219.2 CRT -.4849 CRS .6984 CST -.9582 LSA 443.6 MSA 230.1 SSA 19.2 SCT 907.2 SGR 513.0 SG3 190.3 RRT .5794 RRF .6520 RTF .7650 SGB 1042.3 R23 .1289 R13 .7964 TOE .3367 TRA-1.1266 TC3 -.2356 BAU .2871 RDE -.4342 RRA -.3853 RC3 -.1917 FAU .09720 FOE .6271 FRA-1.1709 FC3-1.1901 BSP 2389 BOE .5494 BRA 1.1907 BC3 .3037 FSP -564 EL! 387.8 EL2 227.3 ALF 139.05 SG1 965.3 SG2 393.0 THA 21.96

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ARRIVAL DATE OCT 24 1967
                                                                          FLIGHT TIME 78.00
LAUNCH DATE AUG 7 1967
   RL 151.72 LAL -.00 LOL 313.83 VL 29.534 GAL -16.67 AZL 90.79 HCA 109.95 SMA 151.30 ECC .28685 INC .7889 V1 29.365
RP 107.92 LAP -.74 LOP 63.78 VP 39.777 GAP .61 AZP 89.73 TAL 252.79 TAP 2.74 RCA 107.90 APO 194.70 V2 35.113
RC 84.440 GL -2.69 GP -24.42 ZAL 172.08 ZAP 97.24 ETS 357.97 ZAE 153.08 ETE 226.56 ZAC 122.51 ETC 3.04 CLP -97.96
                                                                          DISTANCE 239.511
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 68.734 VHL 8.291 DLA 11.86 RAL 142.78 RAD 6569.3 VEL 13.787 PTH 2.52 VMP 5.108 DPA -7.27 RAP 141.42 ECC 2.1312
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                89.25 23 6 49
67.58 14 43 16
                                                                                31.42
                    22 18 32 2897.20
13 23 29 4787.00
                                                                   88.93
                                                   -28.31
        90.00
                                                                                                                                                              194.73
                                                                                                                                4187.0
                                                                                                                                                14.58
                                                                                   22.21
                                                                                                   67.58
                                                                   205.95
                                                    17.77
        90.00
                                                                                                                                                               59.43
                                                                                                                                2015.4
                                                                                                                                                -29.58
                                                                                                            24 29 30
                   23 45 54 2615.42
14 38 48 4544.01
1 11 42 2359.24
15 33 25 4372.95
                                                                                                   89.96
                                                                                   31.43
                                                    -29.89
                                                                    68.22
       100.00
                                                                                                                                3944.0
                                                                                                                                                              180.22
                                                                                   21.56
                                                                                                   66.66
                                                                                                             15 54 32
                                                                   187.44
                                                    19.23
       100.00
                                                                                                                                               -33.49
                                                                                                                                                               39.50
                                                                                                                                1759.2
                                                                                                   91.92
                                                                                                              1 51 1
                                                                                   31.35
                                                    -34.14
                                                                    48.68
       110.00
                                                                                                            16 46 18
                                                                                                                                                               165.35
                                                                                                                                3773.0
                                                                                                                                               19.41
                                                                                   19.66
                                                                  172.56
                                                                                                   64.06
                                                     23.09
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 357.6 SR 296.8 SS 225.6
CRT -.4863 CRS .7093 CST -.9548
                                                                       SGT 997.9 SGR 517.3 SG3 192.1
RRT .6062 RRF .6713 RTF .7853
SGB 1124.0 R23 .1367 R13 .8114
    TDE .3653 TRA-1.1936 TC3 -.2839 BAU .3212
    RDE -.4131 RRA -.3794 RC3 -.2039 FAU .09697
                                                                                                                            LSA 462.1 MSA 230.0 SSA 19.4
    FDE .6467 FRA-1.1367 FC3-1.2214 BSP 2700
                                                                                                                            EL1 404.1 EL2 229.5 ALF 145.55
                                                                       SG1 1054.4 SG2 389.4 THA 20.34
    BOE .5514 BRA 1.2525 BC3 .3496 FSP
                                                         -577
                                                                                                                                        ARRIVAL DATE OCT 26 1967
                                                                           FLIGHT TIME 80.00
LAUNCH DATE AUG 7 1967
                                                                           DISTANCE 245.752
    RL 151.72 LAL -.00 LOL 313.83 VL 29.452 GAL -16.47 AZL 90.60 MCA 113.17 SNA 150.47 ECC .28362 INC .6030 V1 29.365 RP 107.89 LAP -.55 LOP 67.00 VP 39.727 GAP 1.12 AZP 89.76 TAL 251.91 TAP 5.08 RCA 107.79 APO 193.15 V2 35.125 RC 86.655 GL -2.08 GP -24.90 ZAL 171.84 ZAP 101.18 ETS 356.09 ZAE 150.66 ETE 223.09 ZAC 123.58 ETC 2.33 CLP-102.34
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 66.793 VHL 8.173 DLA 12.29 RAL 143.41 RAD 6569.3 VEL 13.717 PTH 2.51 VHP 5.120 DPA -7.40 RAP 140.26 ECC 2.0992 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   88.96 23 5 47
67.16 14 49 6
89.69 24 28 43
66.22 16 0 7
                                                                                   31.73
         90.00 22 17 22 2905.09
                                                                   89.51
                                                    -28.30
                                                                                                                                 4165.5
                                                                                                                                                 13.96
                                                                                                                                                                197.45
                                                                                    22.34
                                    4765.47
                                                     17.21
                                                                   204.62
         90.00
                     13 29 41
                                                                                                                                                -29.61
                                                                                                                                                                 59.95
                                                                                                                                 2022.4
                                                                                    31.76
                    23 45 0
                                                     -29.89
                                                                    68.74
                                   2622.45
        100.00
                                                                                                                                                 15.29
                                                                                                                                                               178.99
                                                                                                                                 3923.3
                                                                                    21.68
                                    4523.35
                                                     18.67
                                                                   186.16
                    14 44 43
        100.00
                                                                                                                                                -33.54
                                                                                                                                                                39.90
                                                                                                               1 50 48
                                                                                                                                 1764.4
                    1 11 24 2564.43
15 38 45 4354.13
                                                                                    31.70
                                                                                                    91.68 1 50 48
63.58 16 51 19
                                                                                                    91.68
                                                    -34.15
                                                                    49.09
        110.00
                                                                                                                                                 18.79
                                                                                                                                 3754.1
                                                                                    19.75
                                                     22.52
                                                                   171.39
        110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 1092.4 SGR 519.6 SG3 192.5
RRT .6284 RRF .6890 RTF .8007
SGB 1209.7 R23 .1461 R13 .8227
SG1 1146.8 SG2 385.0 THA 18.85
                                                                                                                             ST 389.3 SR 285.5 SS 231.9
CRT -.4911 CRS- .7209 CST -.9519
     TOE .3979 TRA-1.2595 TC3 -.3345 BAU .3554
     ROE -.3906 RRA -.3708 RC3 -.2156 FAU .09597
                                                                                                                            LSA 484.6 MSA 227.3 SSA 19.5
EL1 425.9 EL2 227.3 ALF 151.35
     FOE .6630 FRA-1.0910 FC3-1.2439 BSP 3018
BOE .5576 BRA 1.3129 BC3 .3979 FSP -583
                                                                                                                                       ARRIVAL DATE OCT 28 1967
                                                                           FLIGHT TIME 82.00
 LAUNCH DATE AUG 7 1967
                                                                           DISTANCE 251.954
     RL 151.72 LAL -.00 LOL 313.83 VL 29.366 GAL -16.27 A7L 90.41 MCA 116.39 SMA 149.62 ECC .28045 INC .4077 V1 29.365 RP 107.85 LAP -.37 LOP 70.22 VP 39.674 GAP 1.61 A7P 89.82 TAL 250.97 TAP 7.36 RCA 107.66 APO 191.58 V2 35.137 RC 88.880 GL -1.43 GP -25.40 ZAL 171.50 ZAP 104.87 ETS 354.17 ZAE 148.29 ETE 220.29 ZAC 124.44 ETC 1.66 CLP-106.51
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 64.880 VHL 8.055 DLA 12.76 RAL 144.09 RAD 6569.2 VEL 13.647 PTH 2.49 VHP 5.150 DPA -7.62 RAP 139.28 ECC 2.0678
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    88.64 23 4 42
66.72 14 55 27
89.38 24 27 55
65.77 16 6 10
91.41 1 50 36
                                                                    90.16
                                                                                    32.11
                    22 16 8 2913.97
                                                     -28.29
         90.00
                                                                                                                                                                196.09
                                                                                                                                                 13.31
                                                                                                                                 4142.7
                                                                                    22.53
                                                                    203.23
                                                      16.60
                     13 36 24
                                    4742.67
         90.00
                                                                                                                                                                 60.53
                                                                                                                                                -29.65
                                                                                                                                 2030.4
                                                                                    32.15
                    23 44 4 2630.38
                                                     -29.89
                                                                     69.33
        100.00
                                                                                                                                                                177.70
                                                                                                                                                 14.64
                                                                                                                                 3901.5
                     14 51 9 4501.50
1 11 6 2370.36
                                                                    184.82
                                                                                    21.86
                                                     18.06
        100.00
                                                                                                                                                                 40.35
                                                                                                                 1 50 36
                                                                                                                                 1770.4
                                                                                                                                                -33.59
                                                                                                    91.41
                                                     -34.16
                                                                     49.55
                                                                                    32.11
        110.00
                                                                                                             16 56 47
                                                                                                                                                                163.09
                                                                                                                                                 18.13
                                                                                                                                 3734.3
                                                                                                     63.08
                                                                                    19.90
                                                     21.91
                                                                    170.17
        110.00
                     15 44 32
                                    4334,27
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             T 423.9 SR 273.0 SS 238.0

CRT - 4987 CRS . 7324 CST - 9498

LSA 511.0 MSA 222.2 SSA 19.7

EL1 453.0 EL2 221.4 ALF 156.18
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 1189.8 SGR 520.4 SG3 191.5
RRT .6470 RRF .7060 RTF .8124
SGB 1298.6 R23 .1574 R13 .8314
      TOE .4346 TRA-1.3232 TC3 -.3870 BAU .3892
     RDE -.3671 RRA -.3600 RC3 -.2270 FAU .09432
     FOE .6756 FRA-1.0371 FC3-1.2586 BSP 3345
BDE .5689 BRA 1.3713 BC3 .4487 FSP -585
                                                                        SG1 1241.7 SG2 380.2 THA 17.49
                                                                                                                                         ARRIVAL DATE OCT 30 1967
                                                                            FLIGHT TIME 84.00
  LAUNCH DATE AUG 7 1967
                                                                            DISTANCE 258.120
    HELIOCENTRIC CONIC
     RL 151.72 LAL -.00 LOL 313.83 VL 29.278 GAL -16.06 A7L 90.20 HCA 119.61 SMA 148.74 ECC .27734 INC .2008 V1 29.365 RP 107.82 LAP -.17 LOP 73.44 VP 39.619 GAP 2.07 A7P 89.90 TAL 249.96 TAP 9.57 RCA 107.49 APO 190.00 V2 35.149 RC 91.113 GL -.71 GP -25.93 ZAL 171.06 ZAP 108.32 ETS 352.20 ZAE 145.99 ETE 218.04 ZAC 125.09 ETC 1.03 CLP-110.46
      C3 62.993 VHL 7.937 DLA 13.27 RAL 144.84 RAD 6569.2 VEL 13.577 PTH 2.48 VHP 5.197 DPA -7.92 RAP 138.50 ECC 2.0367
     PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 14 46 2924.16 -28.27 90.90 32.56 88.26 23 3 31 2324.2 -28.21 82.24 90.00 13 43 45 4718.26 15.93 201.74 22.79 66.28 15 2 23 4118.3 12.59 194.66
                                                                                                               24 27 2
                       23 43 2 2639.52
14 58 10 4478.14
1 10 46 2377.29
15 50 51 4313.14
                                                                                                     89.02
                                                                                     32.60
                                                      -29.88
                                                                      70.01
                     23 43 2
         100.00
                                                                                                                                                  13.93
                                                                                                               16 12 48
                                                                                                                                  3878.1
                                                                                                      65.31
                                                                                     22.10
                                                      17.40
                                                                     183.40
                     14 58 10
         100.00
                                                                                                                                                  -33.64
                                                                                                                                                                  40.89
                                                                                                                 1 50 24
                                                                                                                                  1777.3
                                                                                                     91.09
                                                      -34.17
                                                                      50.09
                                                                                     32.60
         110.00
                                                                                                                                                   17.42
                                                                                                               17 2 44
                                                                                                                                  3713.1
                                                                                     20.10
                                                                                                      62.58
                                                      21.26
                                                                     168.88
                     15 50 51
         110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 461.9 SR -258.7 SS 245.1
CRT -.5090 CRS .7459 CST -.9476
                                                                         SGT 1289.0 SGR 518.9 SG3 189.2
RRT .6624 RRF .7216 RTF .8208
      TDE .4761 TRA-1.3836 TC3 -.4411 BAU .4220
                                                                         RRT .6624 RRF
      RDE -.3417 RRA -.3463 RC3 -.2377 FAU .09196
                                                                                                                              LSA 542.1 MSA 214.6 SSA 19.8
                                                                                               .1700 R13 .8374
                                                                         SG8 1389.5 R23
      FOE .6889 FRA -.9732 FC3-1.2639 BSP 3661
BOF .5860 BRA 1.4263 BC3 .5011 FSP -576
                                                                                                                               EL1 485.1 EL2 212.0 ALF 160.14
                                                                         SG1 1338.1 SG2 374.4 THA 16.24
      BOE .5860 BRA 1.4263 BC3 .5011 FSP
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LAUNCH DATE AUG 7 1967
                                                                                  FLIGHT TIME 86.00
                                                                                                                                                   ARRIVAL DATE NOV 1 1967
    HELIOCENTRIC CONIC
                                                                                  DISTANCE 264.251
     RL 151.72 LAL -.00 LOL 313.83 VL 29.186 GAL -15.85 AZL 89.98 MCA 122.83 SMA 147.86 ECC .27431 INC .0140 V1 29.365
RP 107.78 LAP .02 LOP 76.66 VP 39.561 GAP 2.51 AZP 90.01 TAL 248.88 TAP 11.72 RCA 107.30 APO 188.41 VZ 35.160
RC 93.352 GL .07 GP -26.50 ZAL 170.52 ZAP 111.51 ETS 350.16 ZAE 143.78 ETE 216.25 ZAC 125.53 ETC .43 CLP-114.19
    PLANETOCENTRIC CONIC
     C3 61.136 VHL 7.819 DLA 13.82 RAL 145.66 RAD 6569.1 VEL 13.509 PTH 2.47 VHP 5.260 DPA -8.34 RAP 137.89 ECC 2.0061
     CS 61.136 WL 7.819 DLA 13.82 RAL 145.66 RAD 6569.1 VEL 13.509 PTH 2.47 VMP 5.260 DPA -8.34 RAP 137.89 ECC 2.0061

LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 13 11 2936.08 -28.24 91.77 33.08 87.83 23 2 7 2336.1 -28.24 83.11
90.00 13 51 51 4691.86 15.20 200.15 23.11 65.82 15 10 3 4091.9 11.81 193.11
100.00 23 41 49 2650.24 -29.86 70.81 33.14 88.60 24 25 59 2050.2 -29.74 62.00
100.00 15 5 54 4452.94 16.68 181.88 22.41 64.83 16 20 7 3852.9 13.15 174.86
110.00 1 10 21 2385.52 -34.18 50.73 33.17 90.71 1 50 6 1785.5 -33.70 41.52
110.00 15 57 47 4290.42 20.54 167.51 20.37 62.06 17 9 18 3690.4 16.64 160.56
                                                                            57.51 20.37 62.06 17 9 18
MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             SGT 1390.4 SGR 517.1 SG3 186.2
RRT .6757 RRF .7383 RTF .8273
SGB 1483.4 R23 .1854 R13 .8422
     TOE .5221 TRA-1.4408 TC3 -.4973 BAU .4544
                                                                                                                                      ST 503.3 SR 243.5 SS 251.6
CRT -.5204 CRS .7569 CST -.9467
     ROE -.3158 RRA -.3313 RC3 -.2488 FAU .08933
                                                            3998
     FOE .6969 FRA -.9081 FC3-1.2649 BSP
BOE .6102 BRA 1.4784 BC3 .5560 FSP
                                                                                                                                      LSA 577.3 MSA 205.5 SSA 19.9
                                                                                                     .1854 R13 .8422
                                                                             SG1 1436.8 SG2 368.9 THA 15.13
                                                              -571
                                                                                                                                       EL1 521.9 EL2 200.5 ALF 163.33
LAUNCH DATE AUG 7 1967
                                                                                  FLIGHT TIME 88.00
                                                                                                                                                   ARRIVAL DATE NOV 3 1967
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 270.350
    RL 151.72 LAL
RP 107.75 LAP
                             -.00 LOL 313.83 VL 29.092 GAL -15.64 AZL 89.74 HCA 126.06 SMA 146.96 ECC .27134 INC .2562 V1 29.365 .21 LOP 79.89 VP 39.501 GAP 2.94 AZP 90.15 TAL 247.76 TAP 13.81 RCA 107.08 APO 186.84 VZ 35.170 .93 GP -27.15 ZAL 169.87 ZAP 114.44 ETS 348.05 ZAE 141.66 ETE 214.84 ZAC 125.78 ETC 359.86 CLP-117.71
     RC 95.596 GL
   PLANETOCENTRIC CONIC
    C3 59.314 VH. 7.702 OLA 14.43 RAL 146.55 RAD 6569.1 VEL 13.441 PTH 2.46 VHP 5.337 OPA -8.88 RAP 137.45 ECC 1.9762 LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 11 15 2950.24 -28.20 92.81 33.69 87.31 23 0.25 2350.2 -28.27 84.14 90.00 14 0.51 4662.97 14.39 198.41 23.52 65.35 15 18 34 4063.0 10.95 191.43
                      23 40 18 2663.02
15 14 29 4425.43
1 9 45 2395.46
16 5 27 4265.76
        100.00
                                                         -29.84
                                                                          71.76
                                                                                          33.76
                                                                                                            88.10 24 24 41
                                                                                                                                           2063.0
                                                                                                                                                            -29.78
                                                                                                                                                                              62.95
        100.00
                     15 14 29
                                                                                                            64.33 16 28 14
                                                         15.88
                                                                        180.23
                                                                                          22.80
                                                                                                                                           3825.4
                                                                                                                                                             12.29
                                                                                                                                                                            173.27
        110.00
                                                        -34.18
                                                                          51.51
                                                                                          33.84
                                                                                                            90.25
                                                                                                                        1 49 40
                                                                                                                                           1795.5
                                                                                                                                                           -33.77
                                                                                                                                                                              42.29
        110.00
                                                        19.75
                                                                        166.04
                                                                                          20.72
                                                                                                                       17 16 33
                                                                                                            61.51
                                                                                                                                           3665.8
                                                                                                                                                            15.79
                                                                                                                                                                            159.15
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            RRT .6870 RRF .7552 RTF .8320
SGB 1579.2 R23 .2029 R13 .8455
SGI 1536.9 SG2 363.2 THA 14.12
     TDE .5734 TRA-1.4934 TC3 -.5551 BAU .4860
                                                                                                                                      ST 548.7 SR 226.9 SS 258.8
CRT -.5330 CRS .7674 CST -.9463
     RDE -.2886 RRA -.3143 RC3 -.2599 FAU .08634
     FOE .7040 FRA -.8391 FC3-1.2601 BSP 4339
                                                                                                                                      LSA 617.5 MSA 194.7 SSA 20.1
     BOE .6420 BRA 1.5261 BC3 .6129 FSP -563
                                                                                                                                      EL1 563.6 EL2 186.9 ALF 166.00
LAUNCH DATE AUG 7 1967
                                                                                 FLIGHT TIME 90.00
                                                                                                                                                  ARRIVAL DATE NOV 5 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 276.420
    RL 151.72 LAL -.00 LOL 313.83 YL 28.996 GAL -15.42 AZL 89.49 HCA 129.29 SMA 146.06 ECC .26845 INC .5137 V1 29.365
RP 107.72 LAP .40 LOP 83.11 VP 39.440 GAP 3.34 AZP 90.33 TAL 246.58 TAP 15.86 RCA 106.85 APO 185.27 V2 35.180
                             1.89 GP -27.89 ZAL 169.10 ZAP 117.10 ETS 345.83 ZAE 139.62 ETE 213.77 ZAC 125.82 ETC 359.30 CLP-121.03
     RC 97.843 GL
   PLANETOCENTRIC CONIC
     C3 57.532 VHL 7.585 DLA 15.12 RAL 147.51 RAD 6569.0 VEL 13.375 PTH 2.44 VHP 5.427 DPA -9.56 RAP 137.15 ECC 1.9468
    LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       86.69 22 58 16
64.86 15 28 9
87.50 24 23 1
63.82 16 37 20
89.69 1 49 0
60.95 17 24 39
                    22 8 49 2967.31
                                                                                      34.39
24.02
        90.00
                                                        -28.14
                                                                        94.05
                                                                                                                                          2367.3
                                                                                                                                                         -28.30
                   14 10 58 4630.99
         90.00
                                                         13.47
                                                                        196.51
                                                                                                                                           4031.0
                                                                                                                                                             9.98
                                                                                                                                                                           189.58
        100.00
                    23 38 23 2678.48
                                                        -29.80
                                                                         72.90
                                                                                         34,49
                                                                                                                                          2078.5
                                                                                                                                                           -29.63
                    15 24 5 4395.06
       100.00
                                                        14.97
                                                                        178.43
                                                                                         23.28
                                                                                                                                          3795.1
                                                                                                                                                           11.33
                      1 8 53 2407.60
       110.00
                                                       -34.18
                                                                         52.46
                                                                                         34.62
                                                                                                                                          1807.6
                                                 18.86
       110.00
                     16 14 0
                                      4238.70
                                                                        164.44
                                                                                         21.15
                                                                                                                                          3638.7
                                                                                                                                                            14.84
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                            SCT 1596.8 SCR 511.4 SC3 178.0
RRT .6964 RRF .7726 RTF .8354
SCB 1676.7 R23 .2227 R13 .8479
SCI 1638.1 SG2 357.7 THA 13.21
                                                                                                                                     ST 598.9 SR 208.9 SS 266.7

CRT -.5459 CRS .7768 CST -.9466

LSA 663.1 MSA 182.7 SSA 20.2
    TOE .6308 TRA-1.5408 TC3 -.6146 BAU .5167
    ROE -.2603 RRA -.2954 RC3 -.2713 FAU .08306
FOE .7102 FRA -.7682 FC3-1.2500 BSP 4683
BOE .6824 BRA 1.5688 BC3 .6718 FSP -553
                                                                                                                                      EL1 610.6 EL2 171.7 ALF 168.28
LAUNCH DATE AUG 7 1967
                                                                                 FLIGHT TIME 92.00
                                                                                                                                                  ARRIVAL DATE NOV 7 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 282.461
    RL 151.72 LAL -.00 LOL 313.83 VL 28.899 GAL -15.19 A7L 89.20 MCA 132.51 SMA 145.16 ECC .26563 INC .7967 V1 29.365
RP 107.69 LAP .59 LOP 86.34 VP 39.377 GAP 3.72 A7P 90.54 TAL 245.35 TAP 17.86 RCA 106.60 APO 183.72 V2 35.190
RC 100.092 GL 2.98 GP -28.74 ZAL 168.20 ZAP 119.49 ETS 343.48 ZAE 137.64 ETE 212.99 ZAC 125.69 ETC 358.74 CLP-124.15
   PLANETOCENTRIC CONIC
    C3 55.801 VHL 7.470 OLA 15.91 RAL 148.56 RAD 6569.0 VEL 13.310 PTH 2.43 VHP 5.532 OPA -10.41 RAP 136.99 ECC 1.9183
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         85.93 22 55 30

64.35 15 39 3

86.76 24 20 49

63.29 16 47 40

88.99 1 48 0

60.36 17 33 47
        90.00 22 5 42 2988.19
                                                                                                                                         2388.2
                                                       -28.05
                                                                        95.57
                                                                                        35.22
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                     14 22 28
                                                                                                                                          3995.1
        90.00
                                     4595.11
                                                                                                                                                                           167.52
                                                        12.43
                                                                       194.40
                                                                                         24.64
                                                                                                                                                             8.87
                    23 35 52
       100.00
                                     2697.41
                                                       -29.73
                                                                        74.31
                                                                                         35.34
                                                                                                                                          2097.4
                                                                                                                                                           -29.86
                                                                                                                                                                            65.50
       100.00
                   15 34 59
                                     4361.12
                                                        13.94
                                                                       176.43
                                                                                         23.87
                                                                                                                                          3761.1
                                                                                                                                                           10.25
                      1 7 38 2422.59
       110.00
                                                       -34.17
                                                                         53.63
                                                                                         35.54
                                                                                                                                          1822.6
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       110.00
                    16 23 38
                                    4208.70
                                                       17.86
                                                                       162.69
                                                                                         21.69
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                                                                                                                                                           13.76
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    TDE .6963 TRA-1.5811 TC3 -.6752 BAU .5460
                                                                          SGT 1700.8 SGR 507.0 SG3 172.8
RRT .7038 RRF .7895 RTF .8374
SG8 1774.8 R23 .2443 R13 .8491
                                                                                                                                     ST 655.2 SR 188.6 SS 276.9
CRT -.5590 CRS .7862 CST -.9468
    RDE -.2300 RRA -.2736 RC3 -.2826 FAU .07942
    FOE .7201 FRA -.6924 FC3-1.2322 BSP 5007
BDE .7333 BRA 1.6045 BC3 .7319 FSP -535
                                                                                                                                    LSA 715.8 MSA 169.5 SSA 20.3
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SGI 1739.5 SG2 352.2 THA 12.36

EL1 664.1 EL2 154.3 ALF 170.33

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ARRIVAL DATE NOV 9 1967
LAUNCH DATE AUG 7 1967
                                                                                               FLIGHT TIME 94.00
                                                                                              DISTANCE 288:477
   HELIOCENTRIC CONIC
     RL 151.72 LAL -.00 LOL 313.83 VL 28.800 GAL -14.96 AZL 88.89 HCA 135.74 SMA 144.26 ECC .26290 INC 1.1103 V1 29.365
RP 107.66 LAP .78 LOP 89.57 VP 39.313 GAP 4.09 AZP 90.80 TAL 244.08 TAP 19.82 RCA 106.33 APO 182.18 V2 35.199
RC 102.344 GL 4.20 GP -29.75 ZAL 167.15 ZAP 121.58 ETS 340.97 ZAE 135.72 ETE 212.48 ZAC 125.39 ETC 358.17 CLP-127.10
   PLANETOCENTRIC CONIC
     C3 54.136 VHL 7.358 DLA 16.81 RAL 149.71 RAD 6569.0 VEL 13.247 PTH 2.42 VHP 5.651 OPA -11.44 RAP 136.92 ECC 1.8909
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             85.00- 22 51 52
63.83 15 51 38
85.85 24 17 53
62.73 16 59 33
88.13 1 46 31
59.74 17 44 13
                                                                  -27.91
                                                                                      97.45
                                                                                                         36.19
                                                                                                                                                                 2414.1
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          90.00
                        22 4 37
                                            3014.09
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                        14 35 44
                                                                   11.21
                                                                                     192.01
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                                             4554.27
          90.00
                                                                                      76.05
                                                                                                          36.35
                                                                                                                                                                   2120.9
                                                                                                                                                                                       -29.89
                                                                                                                                                                                                           67.25
                         23 32 32
                                           2720.92
                                                                  -29.63
        100.00
                                                                   12.75
                                                                                                                                                                   3722.7
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                                                                                                                                                                                                          167.42
                        15 47 30
                                                                                                          24.61
                                                                                     174.20
        100.00
                                             4322.67
                                           2441.32
                                                                                                                                                                   1841.3
                                                                                                                                                                                       -34.02
                                                                                                                                                                                                           45.85
                           1 5 50
                                                                  -34.14
                                                                                      55.09
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        110.00
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                        16 34 36
                                                                                     160.75
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                                             4175.04
                                                                  16.71
        110.00
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 1806.3 SGR 503.6 SG3 167.3
RRT .7094 RRF .8076 RTF .8391
SGB 1875.2 R23 .2685 R13 .8501
SGI 1842.6 SG2 347.9 THA 11.61
                                                                                                                                                             ST 717.9 SR 167.1 S5 287.4
CRT -.5701 CRS .7918 CST -.9481
     TDE .7695 TRA-1.6147 TC3 -.7377 BAU .5749
     FOE .7275 FRA -.6188 FC3-1.2111 BSP 5357
     RDE -.1991 RRA -.2503 RC3 -.2947 FAU .07573
                                                                                                                                                              LSA 775.4 MSA 156.0 55A 20.4
                                                                                                                                                              EL1 724.5 EL2 136.1 ALF 172.16
                                                                                                                                                                             ARRIVAL DATE NOV 11 1967
                                                                                               FLIGHT TIME 96.00
LAUNCH DATE AUG 7 1967
                                                                                               DISTANCE 294.469
   HELIOCENTRIC CONIC.
    RL 151.72 LAL -.00 LOL 313.83 VL 28.700 GAL -14.72 AZL 88.54 HCA 138.97 SMA 143.36 ECC .26026 INC 1.4629 V1 29.365 RP 107.63 LAP .96 LOP 92.80 VP 39.247 GAP 4.44 AZP 91.10 TAL 242.77 TAP 21.74 RCA 106.05 APO 180.68 V2 35.208 RC 104.596 GL 5.61 GP -30.93 ZAL 165.93 ZAP 123.38 ETS 338.27 ZAE 133.81 ETE 212.20 ZAC 124.93 ETC 357.57 CLP-129.90
   PLANETOCENTRIC CONIC
                                                                                                                                 2.41 VHP 5.787 OPA -12.68 RAP 136.93 ECC 1.8650
     C3 52.558 VHL 7.250 DLA 17.86 RAC 150.98 RAD 6568.9 VEL 13.188 PTH
     LNCM AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 56 13 3046.71 -27.69 99.82 37.33 83.83 22 47 0 2446.7 -28.26 91.20
                                                                                                                              63.29 16 6 24
84.71 24 13 55
62.16 17 13 25
                        14 51 17
                                                                                                                                                                    3907.0
                                             4507.00
                                                                     9.78
                                                                                     189.28
                                                                                                          26.37
                                                                                                                                                                                           6.12
          90.00
                                                                                                          37.54
                                                                                                                                                                    2150.5
        100.00
                        23 28 4 2750.50
                                                                  -29.46
                                                                                       78.23
                        16 2 6 4278.45
1 3 16 2464.94
        100.00
                                                                  11.36
                                                                                     171.65
                                                                                                          25.54
                                                                                                                                                                    3678.5
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                                                                  -34.07
                                                                                       56.93
                                                                                                          37.93
                                                                                                                              87.04
                                                                                                                                         1 44 1
17 56 16
                                                                                                                                             1 44 21
                                                                                                                                                                    1864.9
                                                                                                                                                                                                           47.69
        110,00
                                                                                                                              59.09
                                                                                                                                                                   3536.8
                                                                                                                                                                                        11.18
                        16 47 20
                                                                  15.39
                                                                                     158.58
        110.00
                                            4136.77
                                                                                                          23.22
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                         SGT 1912.7 SGR 500.4 SG3 161.4
RRT .7127 RRF .8258 RTF .8403
SGB 1977.0 R23 .2946 R13 .8508
SG1 1946.7 SG2 344.9 THA 10.91
     TOE .8532 TRA-1.6397 TC3 -.8013 BAU .6030
                                                                                                                                                              ST 789.1 SR 143.8 SS 299.9
CRT -.5780 CRS .7937 CST -.9499
     RDE -.1668 RRA -.2243 RC3 -.3071 FAU .07186
     FOE .7364 FRA -.5444 FC3-1.1837 BSP 5710
BDE .8693 BRA 1.6550 BC3 .8581 FSP -506
                                                                                                                                                              LSA 844.2 MSA 142.3 SSA
                                                                                                                                                                                                                20.4
                                                                                                                                                              EL1 793.6 EL2 116.7 ALF 173.85
                                                                                                                                                                            ARRIVAL DATE NOV 13 1967
LAUNCH DATE AUG 7 1967
                                                                                               FLIGHT TIME 98.00
                                                                                              DISTANCE 300.438
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 28.600 GAL -14.47 A7L 88.14 MCA 142.20 SMA 142.48 ECC .25770 INC 1.8643 VI 29.365 RP 107.61 LAP 1.14 LOP 96.04 VP 39.181 GAP 4.77 A7P 91.47 TAL 241.42 TAP 23.62 RCA 105.76 APO 179.20 V2 35.216 RC 106.849 GL 7.24 GP -32.33 ZAL 164.49 ZAP 124.85 ETS 335.36 ZAE 131.89 ETE 212.14 ZAC 124.34 ETC 356.92 CLP-132.56
   PLANETOCENTRIC CONIC
     C3 51.098 VHL 7.148 DLA 19.10 RAL 152.40 RAD 6568.9 VEL 13.132 PTH 2.40 VHP 5.944 OPA -14.17 RAP 136.97 ECC 1.8409
     C3 51.098 WRL 7.148 OLA 19.10 KRL 152.40 KRD 6588.9 VEL 15.152 FIN 2.40 KRD 65.152 FIN 2.40 KRD 65.152
                                                                                                                                         1 41 ...
18 10 28
                                                                                                                                                                   1895.1
                                                                                                                                                                                       -34.17
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        110.00
                           0 59 38 2495.10
                                                                  -33.94
                                                                                       59.28
                                                                                                          39.49
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                                                                                                                                                                                          9.55
        110.00
                        17 2 15 4092.62
                                                                  13.63
                                                                                     156.11
                                                                                                         24.30
                                                                                                                              58.42
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 2018.6 SGR 496.5 SG3 154.7
RRT .7126 RRF .8429 RTF .8409
SGB 2078.8 R23 .3218 R13 .8510
SGI 2050.3 SG2 343.0 THA 10.23
                                                                                                                                                             ST 871.6 SR 117.8 SS 319.7
CRT -.5794 CRS .7895 CST -.9521
LSA 925.3 MSA 129.0 SSA 20.2
     TOE .9512 TRA-1.6533 TC3 -.8643 BAU .6293
     RDE -.1323 RRA -.1946 RC3 -.3190 FAU .06767
     FDE .7499 FRA -.4668 FC3-1.1464 BSP 6035
BDE .9604 BRA 1.6647 BC3 .9213 FSP -484
                                                                                                                                                              EL1 874.3 EL2 95.7 ALF 175.47
     BDE .9604 BRA 1.6647 BC3 .9213 FSP
                                                                                                                                                                             ARRIVAL DATE NOV 15 1967
LAUNCH DATE AUG 7 1967
                                                                                               FLIGHT TIME 100,00
                                                                                               DISTANCE 306.386
   HELIOCENTRIC CONIC
     RL 151.72 LAL -.00 LOL 313.83 VL 28.499 GAL -14.22 AZL 87.67 HCA 145.43 SMA 141.60 ECC .25524 INC 2.3290 VI 29.365 RP 107.59 LAP 1.32 LOP 99.28 VP 39.114 GAP 5.10 AZP 91.92 TAL 240.03 TAP 25.46 RCA 105.46 APO 177.75 V2 35.223 RC 109.101 GL 9.15 GP -34.00 ZAL 162.79 ZAP 125.97 ETS 332.19 ZAE 129.91 ETE 212.28 ZAC 123.62 ETC 356.19 CLP-135.11
   PLANETOCENTRIC CONIC
     C3 49.801 VHL 7.057 DLA 20.57 RAL 154.00 RAD 6568.8 VEL 13.083 PTH 2.39 VHP 6.128 DPA -15.93 RAP 137.01 ECC 1.8196
                                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                      21 38 39
                                                                                                                                            22 31
                                                                                                                                                                   2543.6
                                                                                                                                                                                      -27.83
                                                                                     106.76
                                                                                                                              80.47
                                                                                                          40.28
                                            3143.60
                                                                  -26.79
          90.00
                                                                                                                              62.26 16 45 56
81.43 24 0 49
61.02 17 50 7
                                                                                                                                                                    3783.3
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                        15 32 53 4383.32
                                                                   5.92
                                                                                     182.24
                                                                                                          29.25
          90.00
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                                                                                                                                                                    2237.7
                                                                                                                                                                                        -29.63
                                            2837.69
                                                                  -28.75
                                                                                                          40.63
         100.00
                         23 13 31
                                                                                       84.61
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         100.00
                         16 40 42
                                             4164.46
                                                                    7.67
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                                                                  -33.70
                                                                                       62.30
                                                                                                          41.38
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         110.00
                           0 54 28
                                            2534.14
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                                                                                                          25.72
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                                                                                     153.25
        110.00
                          17 20 10
                                             4040.78
                                                                  11.96
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                        SGT 2125.8 SG2 343.9 THA 9.60
                                                                                                                                                              ST 967.1 SR 90.4 S5 333.4
CRT -.5657 CRS .7706 CST -.9552
     TOE 1.0655 TRA-1.6553 TC3 -.9272 BAU
                                                                        .6555
     RDE -.0970 RRA -.1618 RC3 -.3311 FAU .06341
FDE .7632 FRA -.3912 FC3-1.1022 BSP 6391
BDE 1.0699 BRA 1.6632 BC3 .9845 FSP -465
                                                                                                                                                            LSA 1020.1 MSA 117.1 SSA 19.7
                                                                                                                                                              EL1 968.5 EL2 74.4 ALF 176.96
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ARRIVAL DATE NOV 17 1967
                                                                          FLIGHT TIME 102.00
LAUNCH DATE AUG 7 1967
   HELIOCENTRIC CONIC
                                                                         DISTANCE 312.313
    RL 151.72 LAL -.00 LOL 313.83 VL 28.398 GAL -13.96 A7L 87.12 HCA 148.66 SHA 140.74 ECC .25286 INC 2.8768 V1 29.365 RP 107.57 LAP 1.50 LOP 102.51 VP 39.047 GAP 5.40 A7P 92.46 TAL 238.61 TAP 27.27 RCA 105.15 APO 176.33 V2 35.230 RC 111.351 GL 11.43 GP -35.99 TAL 160.76 ZAP 126.68 ETS 328.73 TAE 127.83 ETE 212.60 TAC 122.79 ETC 355.36 CLP-137.58
   PLANETOCENTRIC CONIC
    C3 48.741 VHL 6.981 DLA 22.35 RAL 155.83 RAD 6568.8 VEL 13.042 PTH 2.38 VHP 6.346 DPA -18.02 RAP*136.97 ECC 1.8022 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 23 46 3218.61 -25.83 112.05 42.14 77.98 22 17 24 2618.6 -27.23 103.66
    UNCH AZHTH UNCH TIME L-I TIME
90.00 21 23 46 3218.61
                                4297.57
2903.99
                                                                                                                                                             170.80
                  16 2 23
23 1 20
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      100.00
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                                  4087.42
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57.05 18 48 32
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                                 2585.61
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                    0 47 2
      110.00
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                                                                  149.88
                                                                                  27.62
                   17 42 13
                                                     9.68
      110.00
                                  3978.56
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 2235.0 SGR 492.2 SG3 139.9
RRT .6992 RRF .8737 RTF .8433
SGB 2288.5 R23 .3768 R13 .8527
SGI 2261.9 SG2 347.7 THA 8.97
                                                                                                                          ST 1080.4 SR 61.1 55 354.5
CRT -.5108 CRS .7134 CST -.9590
    TOE 1.2029 JRA-1.6418 TC3 -.9867 BAU .6804
    RDE -. 0602 RRA -. 1241 RC3 -. 3417 FAU . 05889
    FOE .7793 FRA -.3152 FC3-1.0461 BSP 6750
RDE 1.2014 BRA 1.6465 BC3 1.0442 FSP -444
                                                                                                                          LSA 1133.5 MSA 107.3 SSA 18.7
                                                                                                                           EL1 1080.9 EL2 52.5 ALF 178.34
    BDE 1.2044 BRA 1.6465 BC3 1.0442 FSP
                                                                                                                                      ARRIVAL DATE NOV 19 1967
                                                                          FLIGHT TIME 104.00
LAUNCH DATE AUG 7 1967
                                                                          DISTANCE 318.222
  HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 28.297 GAL -13.69 AZL 86.46 HCA 151.88 SHA 139.89 ECC .25059 INC 3.5366 V1 29.365 RP 107.55 LAP 1.67 LOP 105.75 VP 38.979 GAP 5.70 AZP 93.12 TAL 237.16 TAP 29.05 RCA 104.84 APO 174.95 V2 35.236
                        14.16 GP -38.38 ZAL 158.29 ZAP 126.91 ETS 324.95 ZAE 125.56 ETE 213.07 ZAC 121.87 ETC 354.38 CLP-140.01
    RC 113.598 GL
   PLANETOCENTRIC CONIC
    C3 48.033 VHL 6.931 DLA 24.50 RAL 157.97 RAD 6568.8 VEL 13.015 PTH 2.37 VHP 6.614 DPA -20.50 RAP 136.79 ECC 1.7905 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            21 55 41
17 52 43
                  21 0 13 3327.89
16 43 2 4180.97
                                                                                                  74.61
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                                                                                                                                                            111.40
                                                    -24.07
                                                                  119.56
                                                                                 44.22
        90.00
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                                                                                                                                                             164.28
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                                                                  170.92
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        90.00
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                                                                                                                                              -28.28
                   22 42 45 2997.33
17 43 11 3986.76
                                                   -26.59
                                                                   95.98
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      100.00
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78.57 1 20 17
56.42 19 15 22
                                                                                                                               3386.8
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      100.00
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                                   2655.24
                                                                    71.52
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       110.00
                    0 36 2
                                                   -32.44
                                                                  145.77
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                   18 10 20
                                                      6.80
                                                                                  30.24
                                   3901.62
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 2344.4 SGR 490.3 SG3 131.3
RRT .6813 RRF .8836 RTF .8454
SGB 2395.1 R23 .4017 R13 .8544
SGI 2368.6 SG2 355.2 THA 8.30
                                                                                                                          ST 1216.8 SR 32.2 SS 379.5

CRT - 2793 CRS .4812 CST - .9634

LSA 1271.0 MSA 100.7 SSA 16.9
    TOE 1.3721 TRA-1.6081 TC3-1.0392 BAU .7041
    RDE -.0225 RRA -.0801 RC3 -.3495 FAU .05410
    FOE .7980 FRA -.2384 FC3 -.9751 BSP 7110
                                                                                                                           ELI 1216.9 EL2 30.9 ALF 179.58
    BOE 1.3723 BRA 1.6101 BC3 1.0964 FSP
                                                       -421
                                                                                                                                     ARRIVAL DATE NOV 21 1967
                                                                          FLIGHT TIME 106.00
LAUNCH DATE AUG 7 1967
    RL 151.72 LAL -.00 LOL 313.83 VL 28.196 CAL -13.42 A7L 85.65 MCA 155.11 SMA 139.06 ECC .24840 INC 4.3523 V1 29.365 RP 107.55 LAP 1.83 LOP 109.00 VP 38.911 CAP 5.98 A7P 93.95 TAL 235.68 TAP 30.79 RCA 104.51 APO 173.60 V2 35.241 RC 115.842 GL 17.51 CP -41.28 ZAL 155.24 ZAP 126.58 ETS 320.81 ZAE 123.02 ETE 213.65 ZAC 120.88 ETC 353.18 CLP-142.46 PLANETOCENTRIC CONTC
                                                                         DISTANCE 324.111
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 47.878 VML 6.919 DLA 27.15 RAL 160.55 RAD 6568.8 VEL 13.009 PTH 2.37 VHP 6.955 DPA -23.42 RAP 136.36 ECC 1.7879
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 13 9 3521.03 -20.00 132.25 45.91 69.53 21 11 50 2921.0 -22.61 124.55
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                                                   -23.78
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                    18 36 9
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       100.00
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                   18 48 6 3801.78
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                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 2453.8 SGR 486.3 SG3 121.5
RRT .6503 RRF .8856 RTF .8485
SGB 2501.5 R23 .4227 R13 .8569
SG1 2474.6 SG2 366 3 THA
                                                                                                                           ST 1384.8 SR 20.8 S5 410.3
CRT .7205 CRS -.6761 CST -.9682
     TOE 1.5881 TRA-1.5467 TC3-1.0767 BAU .7249
    RDE .0155 RRA -.0267 RC3 -.3508 FAU .04884
                                                                                                                           LSA 1441.1 MSA 98.7 SSA 14.3
EL1 1384.9 EL2 14.4 ALF .62
                                                      7438
           .8217 FRA - .1589 FC3 - .8830 BSP
                                                                      SG1 2474.6 SG2 366.3 THA 7.51
    BOE 1.5882 BRA 1.5469 BC3 1.1324 FSP
                                                       -391
                                                                                                                                      ARRIVAL DATE NOV 23 1967
                                                                           FLIGHT TIME 108.00
LAUNCH DATE AUG 7 1967
                                                                          DISTANCE 329.980
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 3]3.83 VL 28.096 GAL -13.14 AZL 84.61 MCA 158.33 SMA 138.24 ECC .24631 INC 5.3934 V1 29.365 RP 107.52 LAP 1.99 LOP 112.24 VP 38.842 GAP 6.25 AZP 95.01 TAL 234.18 TAP 32.50 RCA 104.19 APO 172.29 V2 35.246 RC 118.080 GL 21.64 GP -44.79 ZAL 151.43 ZAP 125.57 ETS 316.26 ZAE 120.08 ETE 214.23 ZAC 119.85 ETC 351.67 CLP-145.05
   PLANETOCENTRIC CONIC
     C3 48.641 VHL 6.974 DLA 30.43 RAL 163.76 RAD 6568.8 VEL 13.039 PTH 2.38 VMP 7.405 DPA -26.88 RAP 135.50 ECC 1.8005
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                   19 44 7 3658.30
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                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 2565.3 SGR 480.4 SG3 110.7
RRT .5977 RRF .8727 RTF .8541
SGB 2609.9 R23 .4373 R13 .8617
SGI 2581.6 SG2 382.7 THA 6.53
                                                                                                                          ST 1592.7 SR 43.4 SS 445.4
CRT .8227 CRS -.9156 CST -.9736
     TOE 1.8712 TRA-1.4487 TC3-1.0901 BAU
                                                        .7430
     RDE .0481 RRA .0381 RC3 - .3422 FAU .04323
FDE .8460 FRA -.0808 FC3 -.7695 BSP 7797
                                                                                                                          LSA 1651.3 MSA 100.4 SSA 11.3
EL1 1593.1 EL2 24.7 ALF 1.29
                                                        -361
     BDE 1.8718 BRA 1.4492 BC3 1.1426 FSP
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FLIGHT TIME 110.00
                                                                                                                         ARRIVAL DATE NOV 25 1967
LAUNCH DATE AUG 7 1967
                                                                   DISTANCE 335.827
  MELIOCENTRIC CONTC
   RL 151.72 LAL -.00 LOL 313.83 VL 27.996 GAL -12.84 A7L 83.22 HCA 161.54 SMA 137.43 ECC .24431 INC 6.7777 VI 29.365 RP 107.50 LAP 2.14 LOP 115.48 VP 38.773 GAP 6.51 AZP 96.43 TAL 232.64 TAP 34.18 RCA 103.86 APO 171.01 V2 35.250 RC 120.312 GL 26.80 GP -49.07 ZAL 146.58 ZAP 123.74 ETS 311.20 ZAE 116.56 ETE 214.64 ZAC 118.82 ETC 349.65 CLP-147.97
   PLANETOCENTRIC CONIC
   C3 51.040 VHL 7.144 OLA 34.48 RAL 167.94 RAD 6568.9 VEL 13.130 PTH 2.40 VHP 8.034 DPA -30.96 RAP 133.97 ECC 1.8400 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        53.19
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                 16 58 35 4255.38
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                  22 4 12
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      110.55
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 2677.8 SGR 468.8 SG3 98.5
RRT .5018 RRF .8264 RTF .8633
SGB 2718.6 R23 .4429 R13 .8694
                                                                                                               ST 1851.8 SR 63.5 58 485.9
    TOE 2.2597 TRA-1.2951 TC3-1.0612 BAU
   ROE .0638 RRA .1198 RC3 -.3158 FAU .03714
FOE .8721 FRA -.0024 FC3 -.6299 BSP 8167
                                                                                                               CRT .6822 CRS -.8138 CST -.9791
                                                                                                               LSA 1912.6 MSA 105.9 SSA 8.4
                                                 8167
    BDE 2.2606 BRA 1.3006 BC3 1.1072 FSP
                                                                                                               EL1 1852.3 EL2 46.4 ALF 1.34
                                                 -327
                                                                SGI 2688.4 SGZ 403.9 THA 5.14
                                                                   FLIGHT TIME 112.08
                                                                                                                         ARRIVAL DATE NOV 27 1967
LAUNCH DATE AUG 7 1967
  HELIOCENTRIC CONIC
                                                                   DISTANCE 341.648
   RL 151.72 LAL -.00 LOL 313.83 VL 27.896 GAL -12.54 AZL 81.28 MCA 164.74 SHA 136.65 ECC .24238 INC 8.7201 V1 29.365 RP 107.49 LAP 2.29 LOP 118.73 VP 38.705 GAP 6.76 AZP 98.42 TAL 231.08 TAP 35.82 RCA 103.53 APO 169.77 V2 35.253
                      33.27 CP -54.30 ZAL 140.38 ZAP 120.90 ETS 305.38 ZAE 112.21 ETE 214.46 ZAC 117.87 ETC 346.74 CLP-151.65
  PLANETOCENTRIC CONIC
   C3 56.648 VHL 7.526 DLA 39.40 RAL 173.68 RAD 6569.0 VEL 13.342 PTH
                                                                                           2.44 VHP 8.971 DPA -35.69 RAP 131.29 ECC 1.9323
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   3806.9
       61.37
                  16 38 51 4406.86
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                                                            198.16
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                  23 9 44 3183.84
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  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                               ST 2171.7 SR 70.8 SS 532.6
CRT .1542 CRS -.3250 CST -.9843
                                                               SGT 2789.1 SGR 451.9 SG3 85.0
RRT .3044 RRF .6894 RTF .8781
    TOE 2.8232 TRA-1.0461 TC3 -.9623 BAU .7551
   RDE .0268 RRA .2257 RC3 -.2610 FAU .03045
                                                               SGB 2825.5 R23 .4363 R13 .8815
SG1 2792.6 SG2 429.9 THA 2.89
                                                                                                                                                 5.7
   FDE .9018 FRA .0792 FC3 -.4654 BSP 8470
                                                                                                               LSA 2234.2 MSA 114.7 SSA
   BOE 2.8233 BRA 1.0701 BC3 .9971 FSP
                                                   -285
                                                                                                                EL1 2171.7 EL2 69.9 ALF
                                                                                                                                                    .29
                                                                                                                         ARRIVAL DATE NOV 29 1967
                                                                   FLIGHT TIME 114.00
LAUNCH DATE AUG 7 1967
                                                                   DISTANCE 347.432
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 27.798 GAL -12.23 A7L 78.34 MCA 167.91 SMA 135.88 ECC .24050 INC11.6581 VI 29.365 RP 107.49 LAP 2.43 LOP 121.98 VP 38.636 GAP 6.99 A7P 101.41 TAL 229.49 TAP 37.40 RCA 103.20 APO 168.56 V2 35.256 RC 124.755 GL 41.22 GP -60.63 7AL 132.49 7AP 116.89 ETS 298.03 7AE 106.67 ETE 212.69 7AC 117.14 ETC 341.96 CLP-157.24
   PLANETOCENTRIC CONIC
   C3 69.403 VHL 8.331 DLA 45.01 RAL 182.05 RAD 6569.3 VEL 13.811 PTH 2.52 VHP 10.483 DPA -41.00 RAP 126.61 ECC 2.1422
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 2528.3 SR 164.9 SS 583.9

CRT -.8202 CRS .7275 CST -.9892

LSA 2597.0 MSA 126.6 SSA 3.8

EL1 2531.9 EL2 94.2 ALF 176.93
   TOE 3.6661 TRA -.6281 TC3 -.7683 BAU .7303
                                                               SGT 2893.0 SGR 464.9 SG3 71.0
RRT -.1258 RRF .2906 RTF .9025
SGB 2930.1 R23 -.4104 R13 -.9012
   ROE -.1865 RRA .3540 RC3 -.1709 FAU .02336
   FDE .9346 FRA .1645 FC3 -.2914 BSP 8843
BDE 3.6708 BRA .7210 BC3 .7871 FSP -244
                                                                SG1 2893.6 SG2 461.1 THA 178.81
                                                                                                                         ARRIVAL DATE DEC 1 1967
LAUNCH DATE AUG 7 1967
                                                                   FLIGHT TIME 116,00
                                                                   DISTANCE 353.153
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 27.700 GAL -11.89 AZL 73.38 HCA 171.03 SMA 135.13 ECC .23858 INC16.6235 V1 29.365 RP 107.48 LAP 2.56 LOP 125.23 VP 36.567 GAP .7.20 AZP 106.43 TAL 227.86 TAP 38.89 RCA 102.89 APO 167.37 V2 35.258 RC 126.964 GL 50.39 GP -67.95 ZAL 122.78 ZAP 111.58 ETS 286.39 ZAE 99.33 ETE 206.24 ZAC 117.04 ETC 332.26 CLP-168.45
  PLANETOCENTRIC CONIC
   C3 101.327 VHL 10.066 DLA 50.29 RAL 194.70 RAD 6570.0-VEL 14.922 PTH 2.69 VHP 13.212 DPA -46.38 RAP 118.25 ECC 2.6676
   LNCH AZMTH LNCH TIME L-I TIME
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                         41.17
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                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 2782.0 SR 599.5 SS 646.9
CRT -.9781 CRS .9480 CST -.9935
                                                               SGT 2938.9 SGR 711.3 SG3 57.9
RRT -.7046 RRF -.4313 RTF .9406
SGB 3023.8 R23 -.3536 R13 -.9307
    TDE 4.8867 TRA .1664 TC3 -.4656 BAU
                                                   .6353
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SG1 2982.6 SG2 497.3 THA 170.04

LSA 2914.8 MSA 144.7 SSA

EL1 2843.2 EL2 122.1 ALF 168.08

2.3

RDE-1.0336 RRA .4302 RC3 -.0564 FAU .01573

FDE .9871 FRA .2756 FC3 -.1344 BSP 9128

-202

BDE 4.9948 BRA .4613 BC3 .4690 FSP

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ARRIVAL DATE DEC 3 1967
LAUNCH DATE AUG 7 1967
  HELIOCENTRIC CONIC
                                                                    DISTANCE 358.729
   RL 151.72 LAL -.00 LOL 313.83 VL 27.603 GAL -II.53 AZL 63.36 HCA 174.02 SHA 134.40 ECC .23641 INC26.6419 VI 29.365 RP 107.48 LAP 2.68 LOP 128.47 VP 38.499 GAP 7.36 AZP 116.52 TAL 226.17 TAP 40.19 RCA 102.62 APO 166.17 V2 35.259 RC 129.165 GL 58.66 GP -74.00 ZAL 111.73 ZAP 105.07 ETS 259.17 ZAE 88.80 ETE 183.51 ZAC 118.73 ETC 305.71 CLP 160.65
   PLANETOCENTRIC CONIC
    C3 201.637 VHL 14.200 DLA 52.11 RAL 212.16 RAD 6571.1 VEL 17.971 PTH 3.00 VMP 19.015 DPA -49.76 RAP 103.02 ECC 4.3184
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 44.24 18 7 44 4835.65 -7.64 228.47 116;18 38.29 19 28 20 4235.6 -13.88 223.79
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  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2268.6 SR 1722.9 SS 757.2
CRT -.9938 CRS .9855 CST -.9982
LSA 2942.7 MSA 169.0 SSA 1.4
                                                                SGT 2542.0 SGR 1737.9 SG3 48.4
RRT -.9345 RRF -.8754 RTF .9891
    TOE 5.5570 TRA 1.7482 TC3 -.1194 BAU
                                                    . 3222
    RDE-4.2663 RRA -. 3627 RC3 -. 0052 FAU .00619
   FOE 1.1167 FRA .4923 FC3 -.0266 BSP 9392
BOE 7.0058 BRA 1.7854 BC3 .1195 FSP -166
                                                                SG8 3079.3 R23 -.2484 R13 -.9672
                                                                                                                  EL1 2844.6 EL2 152.3 ALF 142.83
                                                                 SG1 3035.4 SG2 517.9 THA 146.31
                                                                                                                             ARRIVAL DATE DEC 5 1967
                                                                     FLIGHT TIME 120.00
LAUNCH DATE AUG 7 1967
                                                                     DISTANCE 363.795
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 27.508 GAL -11.05 AZL 36.94 MCA 176.51 SMA 133.68 ECC .23297 INC53.0635 V1 29.365
RP 107.48 LAP 2.79 LOP 131.72 VP 38.431 GAP 7.37 AZP 143.01 TAL 224.30 TAP 40.81 RCA 102.54 APO 164.83 V2 35.259
RC 131.355 GL 56.91 GP -65.46 ZAL 101.22 ZAP 98.26 ETS 206.68 ZAE 70.31 ETE 135.38 ZAC 126.38 ETC 249.59 CLP 110.24
  PLANETOCENTRIC CONIC
    C3 663.442 VHL 25.757 DLA 43.15 RAL 226.43 RAD 6572.6 VEL 28.013 PTH 3.41 VHP 34.298 DPA -43.45 RAP 78.69 ECC11.9186
   LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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  DIFFERENTIAL CORRECTIONS
                                                                 SGT 588.2 SGR 2893.9 SG3 44.0
RRT -.4933 RRF -.9877 RTF .6203
SGB 2953.1 R23 -.1350 R13 -.9903
SG1 2908.9 SG2 509.0 THA 95.91
                                                                                                                  ST 175.3 SR 2272.8 SS 1056.7
CRT -.0813 CRS .9967 CST -.1616
    TOE -.1126 TRA 1.8964 TC3 -.0203 BAU 1.3595
    RDE-9.9594 RRA-5.5406 RC3 -.1519 FAU-.01828
                                                                                                                  LSA 2505.3 MSA 190.9 SSA
                                                                                                                                                        1.3
    FDE 1.5286 FRA 1.1737 FC3 .0239 BSP 8742
                                                                                                                  EL1 2272.8 EL2 174.7 ALF 90.36
    BDE 9.9601 BRA 5.8562 BC3 .1533 FSP -140
                                                                                                                            ARRIVAL DATE DEC 7 1967
                                                                     FLIGHT TIME 122.00
LAUNCH DATE AUG 7 1967
                                                                    DISTANCE 372.979
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 27.413 GAL -11.42 AZL 158.39 HCA 183.12 SMA 132.99 ECC .24139 INC68.3927 VI 29.365 RP 107.48 LAP 2.90 LOP 134.97 VP 38.362 GAP 8.59 AZP 21.64 TAL 223.68 TAP 46.80 RCA 100.89 APO 165.09 V2 35.259
    RC 133.537 GL -51.12 GP 58.92 ZAL 99.27 ZAP 98.08 ETS 172.54 ZAE 63.68 ETE 240.76 ZAC 104.16 ETC 120.73 CLP 105.80
   PLANETOCENTRIC CONIC
    C31029.843 VHL 32.091 DLA -56.63 RAL 176.78 RAD 6573.0 VEL 33.928 PTH 3.50 VHP 40.646 DPA 72.07 RAP 12.33 ECC17.9486
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 441.2 SR 2341.2 SS 1649.8
                                                                  SGT 891.7 SGR 2747.2 SG3 45.6
     TOE 2.1999 TRA 2.0597 TC3 -.0686 BAU 2.6198
                                                                 RRT -.8284 RRF .9969 RTF -.7858
SGB 2888.3 R23 -.1183 R13 .9925
                                                                                                                  CRT -.9379 CRS -.9998 CST .9303
LSA 2893.7 MSA 157.1 SSA 1.6
    RO-13.0205 RRA-2.8327 RC3 .1775 FAU-.03592
FOE-2.6188 FRA -.4662 FC3 .0302 BSP 8365
BDE13.2050 BRA 3.5024 BC3 .1903 FSP -139
                                                                  SG1 2847.8 SG2 481.8 THA 105.51
                                                                                                                  EL1 2377.7 EL2 150.7 ALF 100.06
                                                                     FLIGHT TIME 124.00
                                                                                                                             ARRIVAL DATE DEC 9 1967
LAUNCH DATE AUG 7 1967
                                                                     DISTANCE 377.747
    RL 151.72 LAL -.00 LOL 313.83 VL 27.319 GAL -10.87 AZL 124.28 HCA 185.32 SMA 132.31 ECC .23730 INC34.2782 VI 29.365
RP 107.48 LAP 2.99 LOP 136.22 VP 38.294 GAP 8.50 AZP 55.84 TAL 221.74 TAP 47.06 RCA 100.91 APO 163.70 V2 35.257
RC 135.709 GL -60.07 GP 72.19 ZAL 106.29 ZAP 105.26 ETS 132.28 ZAE 85.69 ETE 203.93 ZAC 92.32 ETC 78.86 CLP 149.36
   PLANETOCENTRIC CONIC
    C3 304.002 VHL 17.436 DLA -55.92 RAL 151.39 RAD 6571.7 VEL 20.623 PTH 3.17 VHP 21.409 DPA 82.41 RAP 253.49 ECC 6.0031
    CS 304.002 VAL 17.436 DLA 33.32 RAC 1913.39 RAD UNIT OF THE PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 14.53 1 153 32 2277.19 4.87 65.26 58.07 [45.78 2 31 30 1677.2 11.46 61.10
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                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SCT 1566.7 SCR 2950.1 SC3 53.0
RRT .9347 RRF .9672 RTF .9932
SCB 3340.3 R23 -.1759 R13 .9836
                                                                                                                  ST 1273.8 SR 1749.4 SS 846.2
CRT .9774 CRS -.9880 CST -.9983
     TOE-3.7770 TRA-1.6271 TC3 -.0167 BAU .2494
    ROE-4.8177 RRA-4.2300 RC3 .0590 FAU .00267 FOE-1.3363 FRA -.7290 FC3 -.0076 BSP 10113
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FLIGHT TIME 118.00

BOE 6.1218 BRA 4.5321 BC3 .0614 FSP -168

SG1 3303.1 SG2 497.2 THA 62.94

LSA 2312.4 MSA 227.9 SSA 1.3

EL1 2152.9 EL2 218.6 ALF 54.13

ARRIVAL DATE DEC 11 1967

EL1 1614.4 EL2 222.0 ALF 173.16

LAUNCH DATE AUG 7 1967

DISTANCE 383.226 HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 27.227 GAL -10.46 AZL 112.00 HCA 188.24 SMA 131.65 ECC .23544 INC22.0001 VI 29.365 RP 107.49 LAP 3.08 LOP 141.48 VP 38.227 GAP 8.63 AZP 68.21 TAL 219.97 TAP 48.22 RCA 100.65 APO 162.64 V2 35.255 RC 137.871 GL -56.97 GP 66.59 ZAL 113.04 ZAP 113.40 ETS 91.90 ZAE 97.61 ETE 166.18 ZAC 88.81 ETC 38.62 CLP-178.22 PLANETOCENTRIC CONIC C3 143.115 VHL 11.963 QLA -49.59 RAL 147.16 RAD 6570.6 VEL 16.262 PTH 2.85 VHP 14.332 OPA 71.74 RAP 212.21 ECC 3.3553 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 54.40 48.21 138.78 2 35 30 1510.5 16.30 49.33 2 0 20 2110.52 10.34 47.43 138.78 11 58 42 5286.4 10.35 273.23 48.23 132.57 10 20 36 5886.39 138.78 2 35 30 1510.5 16.30 49.33 2 0 20 54.40 48.21 2110.52 10.34 47.43 138.78 11 58 42 138.78 2 35 30 138.78 11 58 42 5286.4 16.31 132.57 10 20 36 5686.39 10.35 273.23 48.23 49.33 2 0 20 48.21 1510.5 16.30 47.43 2110.52 10.34 54.40 5286.4 16.31 10 20 36 273.23 48.23 132.57 5886.39 10.35 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 3242.2 SGR 1326.5 SG3 65.0 RRT .9251 RRF .8182 RTF .9735 ST 1859.5 SR 456.8 SS 635.0 CRT .8400 CRS -.7552 CST -.9900 TOE-3.4894 TRA-3.6780 TC3 -.2422 BAU .4671 RRT .9251 RRF .8182 RTF .9735 SGB 3503.1 R23 -.2676 R13 .9608 RDE -.4932 RRA-1.7640 RC3 -.0310 FAU .01581 FDE-1.0187 FRA -.7112 FC3 -.0956 BSP 10679 LSA 2000.1 MSA 262.8 SSA 1.9 SG1 3471.4 SG2 470.4 THA 21.14 EL1 1899.4 EL2 242.6 ALF 11.86 BOE 3.5241 BRA 4.0791 BC3 .2441 FSP -208 ARRIVAL DATE DEC 13 1967 LAUNCH DATE AUG 7 1967 FLIGHT TIME 128.00 DISTANCE 388.872 HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 27.136 GAL -10.08 A7L 106.25 MCA 191.34 SMA 131.00 ECC .23422 INC16.2484 VI 29.365 RP 107.50 LAP 3.16 LOP 144.73 VP 38.159 GAP 8.80 A7P 74.05 TAL 218.25 TAP 49.59 RCA 100.32 APO 161.69 V2 35.253 RC 140.023 GL -52.08 GP 58.29 ZAL 118.26 ZAP 120.95 ETS 77.23 ZAE 105.59 ETE 154.89 ZAC 87.37 ETC 24.39 CLP-168.05 PLANETOCENTRIC CONIC 2.64 WHP 11.245 DPA 62.27 RAP 201.49 ECC 2.4780 C3 89.809 VHL 9.477 DLA -44.09 RAL 148.22 RAD 6569.8 VEL 14.531 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 1350.4 1950.35 13.83 42.79 43.48 132.29 3 2 56 54.68 2 30 25 125.32 9 58 57 5856.75 13.84 274.05 43.50 132.29 11 36 33 5256.8 19.14 42.79 3 2 56 1350.4 19.12 54.68 2 30 25 1950.35 13.83 43.48 132.29 125.32 9 58 57 5856.75 13.84 274.05 43.50 132.29 11 36 33 5256.8 19.14 2 30 25 1950.35 13.83 42.79 43.48 132.29 3 2 56 1350.4 19.12 54.68 9 58 57 274.05 43.50 11 36 33 5256.8 19.14 125.32 5856.75 13.84 132.29 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1771.7 SR 241.7 SS 574.3 CRT -.1435 CRS .3820 CST -.9694 SGT 3559.6 SGR 643.3 SG3 78.8 RRT .7352 RRF .4700 RTF .9390 TOE-2.5138 TRA-3.6033 TC3 -.5686 BAU .6828 ROE .2525 RRA -.7421 RC3 -.0103 FAU .02390 FOE -.9365 FRA -.6725 FC3 -.2304 8SP 11100 BOE 2.3264 BRA 3.6789 BC3 .5687 FSP -253 SG8 3617.2 R23 -.3403 R13 .9336 SG1 3591.3 SG2 432.2 THA 7.68 LSA 1858.0 MSA 273.6 SSA EL1 1772.0 EL2 239.1 ALF 178.86 ARRIVAL DATE DEC 15 1967 FLIGHT TIME 130.00 LAUNCH DATE AUG 7 1967 **DISTANCE 394.575** HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 27.046 CAL +9.70 AZL 102.96 MCA 194.51 SMA 130.38 ECC .23331 INC12.9606 V1 29.365
RP 107.51 LAP 3.22 LOP 147.98 VP 38.092 CAP 8.99 AZP 77.44 TAL 216.53 TAP 51.04 RCA 99.96 APO 160.80 V2 35.249
RC 142.165 GL -47.55 GP 50.84 ZAL 122.02 ZAP 127.50 ETS 70.73 ZAE 111.36 ETE 152.30 ZAC 86.36 ETC 18.47 CLP-164.59 PLANETOCENTRIC CONIC C3 65.661 VHL 8.103 DLA -39.78 RAL 150.43 RAD 6569.2 VEL 13.675 PTH 2.50 VHP 9.664 DPA 54.26 RAP 196.68 ECC 2.0806 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 127.03 3 35 25 127.03 11 19 17 40.68 3 35 25 1206.5 20.40 15.70 31.85 60.81 3 5 19 1806.49 40.70 5255.9 20.42 269.18 9 41 41 15.71 275.58 119.19 5855.89 31.85 127.03 3 35 25 1206.5 20.40 25.46 40.68 15.70 60.81 3 5 19 1806.49 127.03 11 19 17 269.18 5255.9 20.42 275,58 40.70 15.71 119.19 9 41 41 5855.89 3 35 25 11 19 17 25.46 31.45 40.68 127.03 1206.5 20.40 15.70 60.81 3 5 10 1806.49 127.03 5255.9 20.42 269.18 40.70 119.19 9 41 41 5855.89 15.71 275.58 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3687.2 SGR 444.6 SC3 91.5 RRT .4426 RRF .0616 RTF .9113 SCB 3713.9 R23 -.3865 R13 .9091 ST 1674.8 SR 276.9 SS 544.3 TDE-1.9726 TRA-3.3556 TC3 -.8983 BAU .7887 CRT -.5478 CRS .7835 CST -.9490 RDE .3599 RRA -.3950 RC3 .0176 FAU .02963 FDE -.8892 FRA -.6191 FC3 -.3907 BSP 11388 BDE 2.0051 BRA 3.3788 BC3 .8984 FSP -292 LSA 1760.7 MSA 279.3 5SA 3.7 SG1 3692.5 SG2 398.1 THA 3.09 EL1 1681.8 EL2 230.7 ALF 174.73 ARRIVAL DATE DEC 17 1967 FLIGHT TIME 132.00 LAUNCH DATE AUG 7 1967 HELIOCENTRIC CONTC **DISTANCE 400.299** RL 151.72 LAL -.00 LOL 313.83 VL 26.957 GAL -9.32 AZL 100.83 HCA 197.70 SMA 129.77 ECC .23264 INC10.8347 V1 29.365 RP 107.32 LAP 3.28 LOP 151.23 VP 38.026 GAP 9.18 AZP 79.67 TAL 214.81 TAP 52.51 RCA 99.58 APO 159.96 V2 35.245 RC 144.295 GL -43.72 GP 44.59 ZAL 124.59 ZAP 133.03 ETS 66.87 ZAE 115.61 ETE 152.51 ZAC 85.31 ETC 15.25 CLP-163.41 PLANETOCENTRIC CONIC 2.41 VHP 8.774 DPA 47.50 RAP 194.34 ECC 1.8615 C3 52.344 VHL 7.235 DLA -36.47 RAL 152.89 RAD 6568.9 VEL 13.180 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 1076.4 3 40 55 1676.38 16.63 21.82 39.04 122.94 4 8 51 20.85 15.06 65.99 9 25 42 122.93 11 3 37 5275.3 271.09 16.64 277.85 39.05 20.86 5875.31 114.01 15.06 39.04 122,94 1076.4 20.85 3 40 55 1676.38 16.63 21.82 65.99 5275.3 20.86 271.09 277.85 39.05 122.93 11 3 37 114.01 9 25 42 5875.31 15.64 1076.4 20.85 15.06 3 40 55 16.63 21.82 39.04 122.94 4 8 51 65.99 1676.38 271.09 122.93 11 3 37 5275.3 20.86 9 25 42 277.85 39.05 114.01 5875.31 16.64 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY RGT 3790.8 SGR 377.0 SG3 102.1 RRT .2080 RRF -.2135 RTF .8906 SGB 3809.5 R23 -.4095 R13 .8897 SG1 3791.6 SG2 368.7 THA 1.20 ST 1603.1 SR 292.5 SS 522.6 CRT -.6448 CRS .8801 CST -.9303 LSA 1687.8 MSA 283.0 SSA 4.8 TDE-1.6505 TRA-3.1366 TC3-1.2208 BAU .8546 ROE .3576 RRA -.2478 RC3 .0338 FAU .03368 FOE -.8449 FRA -.5564 FC3 -.5570 BSP 11714

FLIGHT TIME 126.00

BDE 1.6888 BRA 3.1464 BC3 1.2213 FSP -326

ARRIVAL DATE DEC 27 1967

LAUNCH DATE AUG 7 1967

HELIOCENTRIC CONIC **DISTANCE 428.936** RL 151.72 LAL -.00 LOL 313.83 VL 26.534 GAL -7.34 AZL 96.11 MCA 213.79 SMA 126.96 ECC .23186 INC 6.1088 V1 29.365 RP 107.62 LAP 3.39 LOP 167.47 VP 37.698 GAP 10.19 AZP 84.92 TAL 206.10 TAP 59.89 RCA 97.52 APO 156.39 V2 35.214 RC 154.762 GL -32.05 GP 26.23 ZAL 126.37 ZAP 150.08 ETS 57.82 ZAE 125.39 ETE 159.89 ZAC 77.60 ETC 8.84 CLP-165.07 PLANETOCENTRIC CONIC C3 27.855 VHL 5.278 DLA -28.91 RAL 165.52 RAD 6568.1 VEL 12.216 PTH 2.20 VHP 7.529 DPA 25.73 RAP 195.21 ECC 1.4584 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 39.61 537.0 334.02 6 33 6 1136.96 8 14 17 809.58 17.94 341.49 113.06 6 52 3 20.90 83.92 17.95 317.50 39.62 113.05 8 27 46 209.6 20.92 310.03 96.08 113.05 8 27 46 117.42 7 56 1 108.81 11 25 52 315.78 100.00 7 40 44 917.50 12.40 322.75 36.91 317.5 15.98 100.00 9 49 20 5792.32 23.67 275.19 41.96 5192.3 26.02 267.18 123.86 7 47 4 102.94 13 44 12 347.2 9.43 314.26 110.00 7 31 17 947.25 5.02 320.57 32.49 4735.3 33.37 234.23 110.00 12 15 17 5335.33 31.92 245.16 44.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4280.1 SGR 314.5 SG3 128.3 RRT -.1730 RRF -.4652 RTF .8468 SGB 4291.6 R23 .3228 R13 -.8471 ST 1476.3 SR 309.0 SS 461.9 CRT -.7721 CRS .9831 CST -.8731 LSA 1551.6 MSA 284.6 SSA 11.0 TOE-1.0982 TRA-2.3284 TC3-2.7717 BAU 1.0322 RDE .2842 RRA -.0484 RC3 .0124 FAU .03892 FOE -.6486 FRA -.2249 FC3-1.2096 BSP 13566 BOE 1.1344 BRA 2.3289 BC3 2.7717 FSP -424 SG1 4280.4 SG2 309.8 THA 179.27 EL1 1493.8 EL2 193.8 ALF 170.66 ARRIVAL DATE DEC 29 1967 FLIGHT TIME 144.00 DISTANCE 434.651 HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 26.454 CAL -6.92 ATL 95.63 MCA 217.02 SMA 126.44 ECC .23219 INC 5.6265 V1 29.365 RP 107.64 LAP 3.38 LOP 170.71 VP 37.633 GAP 10.39 AZP 85.50 TAL 204.33 TAP 61.35 RCA 97.08 APO 155.80 V2 35.205 RC 156.813 GL -30.58 GP 24.13 ZAL 125.32 ZAP 152.20 ETS 56.96 ZAE 126.24 ETE 161.18 ZAC 75.69 ETC 8.20 CLP-165.76 PLANETOCENTRIC CONIC C3 25.619 VHL 5.061 DLA -28.46 RAL 168.20 RAD 6568.0 VEL 12.124 PTH 2.17 VHP 7.502 DPA 22.81 RAP 196.41 ECC 1.4216 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 40.81 7 26 50 432.8 21.07 87.06 7 9 37 1032.77 18.21 333.96 112.25 326.44 7 59 10 872.23 8 13 42 272.2 92.94 322.21 40.81 21.08 314.70 7 38 5 15.30 7 53 45 340.4 100.00 940.40 11.68 324.06 37.66 117.71 317.14 106.92 11 48 52 123.85 7 51 55 101.23 14 0 4 10 13 24 5727.88 5127.9 27.09 262.69 100.00 25.01 270.87 43.41 946.46 5.05 346.5 314.22 110.00 7 36 9 320.53 33.67 9.46 12 31 49 5294.58 4694.6 33.71 110.00 240.12 45.55 231.10 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4299.1 SGR 314.7 SG3 125.7 RRT -.1662 RRF -.4287 RTF .8344 ST 1445.3 SR 311.5 SS 439.9 CRT -.7900 CRS .9906 CST -.8622 TDE-1.0427 TRA-2.1462 TC3-3.0371 BAU 1.0402 RDE .2749 RRA -.0363 RC3 -.0042 FAU .03730 FOE -.5967 FRA -.1403 FC3-1.2606 BSP 13136 SGB 4310.6 R23 .2933 R13 -.8347 LSA 1517.0 MSA 279.7 SSA 12.4 SG1 4299.4 SG2 310.3 THA 179.30 EL1 1466.5 EL2 188.3 ALF 170.17 BOE 1.0784 BRA 2.1465 BC3 3.0371 FSP -384 ARRIVAL DATE DEC 31 1967 LAUNCH DATE AUG 7 1967 FLIGHT TIME 146.00 HELIOCENTRIC CONIC DISTANCE 440.354 RL 151.72 LAL -.00 LOL 313.83 VL 26.374 GAL -6.49 AZL 95.21 HCA 220.25 SMA 125.94 ECC .23271 INC 5.2115 V1 29.365 RP 107.67 LAP 3.36 LOP 173.96 VP 37.569 GAP 10.60 AZP 86.02 TAL 202.56 TAP 62.81 RCA 96.63 APO 155.25 V2 35.197 RC 158,850 GL -29,25 GP 22,34 7AL 123,94 7AP 154,07 ETS 56.33 7AE 126.93 ETE 162.34 7AC 73.69 ETC PLANETOCENTRIC CONIC C3 23.732 VHL 4.872 DLA -28.21 RAL 170.99 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 7.503 DPA 20.18 RAP 197.78 ECC 1.3906 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 41.54 7 40 55 8 21 16 7 58 36 113.13 402.9 19.80 323.76 7 24 12 1002.69 331.16 90.00 16.81 264.5 22.86 20.30 322.50 42.99 110.16 90.00 8 6 52 864.49 7 42 54 117.74 342.4 15.24 317.26 324.18 38.99 100.00 942.38 11.62 105.70 12 5 39 5088.3 27.67 259.89 44.92 100.00 10 30 51 5688.28 25.77 268.17 7 59 52 338.2 9.77 313.77 123.81 7 55 . 14 13 45 35.23 110.00 7 44 14 938.15 5.36 320.09 5265.27 12 A6 D 46.77 99.97 4665.3 33.89 110.00 32.87 237.92 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT -.1931 RRF -.4154 RTF ..8333 SGB 4402.9 R23 ..2585 R13 -.8335 SGI 4391.5 SGZ _316.0 THA 179.18 ST 1461.0 SR 320.7 \$5 438.6 TDE-1.0366 TRA-1.9956 TC3-3.3575 BAU 1.0652 CRT -.8193 CRS .9953 CST -.8632 RDE .2725 RRA -.0217 RC3 -.0127 FAU .03665 FDE -.5736 FRA -.0843 FC3-1.3370 BSP 13535 LSA 1534,4 HSA 273.8 SSA 13.8 EL1 1484.7 EL2 180.9 ALF 169.65 BDE 1.0718 BRA 1.9957 BC3 3.3575 FSP -395 ARRIVAL DATE JAN 2 1968 FLIGHT TIME 148,00 LAUNCH, DATE AUG 7 1967 DISTANCE 446.047 HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 26.296 GAL -6.05 A7L 94.85 MCA 223.48 SMA 125.45 ECC .23340 INC 4.8485 VI 29.365 RP 107.70 LAP 3.33 LOP 177.20 VP 37.506 GAP 10.81 AZP 86.48 TAL 200.78 TAP 64.25 RCA 96.17 APO 154.73 V2 35.187 RC 160.871 GL -28.03 GP 20.79 ZAL 122.25 ZAP 155.74 ETS 55.93 ZAE 127.49 ETE 163.37 ZAC 71.63 ETC 7.19 CLP-167.21 PLANETOCENTRIC CONIC C3 22.120 VHL 4.703 DLA -28.14 RAL 173.91 RAD 6567.9 VEL 11.979 PTH 2.13 VHP 7.525 DPA 17.77 RAP 199.28 ECC 1.3640 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 43.11 113.18 405.6 7 29 45 1005.60 16.74 331.32 7 46 31 90.00 44.91 8 38 25 227.5 23.58 312.30 90.00 8 24 37 827.54 21.15 320.12 109.28 8 8 23 330.8 316.57 7 52 52 40.78 117.59 15.58 100.00 930.80 11.98 323.51 12 18 37 5065.6 27.98 258.28 100.00 10 44 11 5665.61 26.18 46.61 104.97 266.61 8 10 27 14 25 55 7 55 3 110.00 123.73 323.9 923.93 5.90 319.35 37.13 12 58 30 99.10 4645.2 33.99 110.00 5245.24 33.09 236.40 48.30 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4465.7 SGR 330.9 SG3 127.3 RRT -.2115 RRF -.3980 RTF .8312 ST 1477.5 SR 330.0 SS 435.6 CRT -.8480 CRS .9977 CST -.8655 LSA 1552.8 MSA 265.8 SSA 15.3 TDE-1.0365 TRA-1.8341 TC3-3.6715 BAU-1.0858 ROE .2709 RRA -.0100 RC3 -.0213 FAU .03564 FDE -.5492 FRA -.0264 FC3-1.3948 BSP 13771 BDE 1.0713 BRA 1.8342 BC3 3.6716 FSP -395 SGB 4478.0 R23 .2264 R13 -.8314 SG1 4466.3 SG2 323.4 THA 179.10 EL1 1504.2 EL2 171.8 ALF 169.13

FLIGHT TIME 142.00

ARRIVAL CATE JAN 4 1968

EL1 1662.9 EL2 114.2 ALF 167.59

LAUNCH DATE AUG 7 1967

HELIOCENTRIC CONIC

DISTANCE 451.730 RL 151.72 LAU -.00 LOL 313.83 VL 26.220 GAL -5.59 AZL 94.53 MCA 226.70 SMA 124.97 ECC .23428 INC 4.5265 VI 29.365 RP 107.73 LAP 3.29 LOP 180.44 VP 37.443 GAP 11.02 AZP 86.89 TAL 198.99 TAP 65.69 RCA 95.70 APO 154.25 V2 35.178 RC 162.878 GL -26.89 GP 19.45 ZAL 120.28 ZAP 157.24 ETS 55.73 ZAE 127.95 ETE 164.29 ZAC 69.51 ETC 6.80 CLP-167.95 PLANETOCENTRIC CONIC 2.12 VHP 7.566 DPA 15.55 RAP 200.88 ECC 1.3412 C3 20.735 VHL 4.554 DLA -28.22 RAL 176.99 RAD 6567.8 VEL 11.921 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 7 49 0 967.32 17.75 328.97 45.42 112.43 8 5 8 367.3 20.64 321.49 8 43 49 234.7 23.45 312.78 320.58 46.73 109.46 834.68 908.99 90.00 8 29 54 20.99 42.98 117.30 8 22 11 309.0 16.23 315.27 322.25 100.00 8 7 2 12.67 104.67 12 28 50 123.61 8 23 21 98.56 14 37 2 5056.3 28.10 257.61 5656.29 48.52 265.97 10 54 34 26.34 100.00 305.1 10.98 311.99 39.37 318.35 110.00 8 8 16 905.10 6.61 4632.9 226.32 13 9 49 5232.94 50.15 34.05 235.46 110.00 33.22 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4539.8 SGR 341.3 SG3 127.2 RRT -.2289 RRF -.3826 RTF .8303 SGB 4552.6 R23 .1967 R13 -.8305 SG1 4540.5 SG2 332.2 THA 179.01 ST 1503.8 SR 340.3 SS 435.1 CRT -.8767 CRS .9979 CST -.8707 TOE-1.0480 TRA-1.6681 TC3-3.9889 BAU 1.1058 ROE .2705 RRA -.0001 RC3 -.0283 FAU .03453 LSA 1581.4 MSA 255.7 SSA 16.8 FOE -.5280 FRA .0286 FC3-1.4419 8SP 14024 BDE 1.0823 BRA 1.6681 BC3 3.9890 FSP -395 EL1. 1533.4 EL2 160.6 ALF 168.65 ARRIVAL DATE JAN 6 1968 FLIGHT TIME 152.00 HELIOCENTRIC CONIC **DISTANCE 457.400** RL 151.72 LAL -.00 LOL 313.83 VL 26.144 GAL -5.13 AZL 94.24 HCA 229.93 SMA 124.51 ECC .23534 INC 4.2371 VI 29.365 RP 107.76 LAP 3.24 LOP 183.67 VP 37.381 GAP 11.24 AZP 87.27 TAL 197.20 TAP 67.13 RCA 95.21 APO 153.81 V2 35.167 RC 164.869 GL -25.80 GP 18.28 ZAL 118.04 ZAP 158.61 ETS 55.73 ZAE 128.35 ETE 165.10 ZAC 67.34 ETC 6.45 CLP-168.69 PLANETOCENTRIC CONIC C3 19.547 VHL 4.421 DLA -28.42 RAL 180.23 RAD 6567.8 VEL 11.871 PTH 2.11 VHP 7.621 DPA 13.48 RAP 202.58 ECC 1.3217 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 48.44 110.79 8 17 30 354.4 22.47 321.21 87.53 8 1 35 954.36 92.47 8 43 12 819.51 19.82 328.89 8 56 52 219.5 48.44 110.77 22.49 311.35 92.47 319.03 19.84 8 39 37 278.5 878.48 45.57 116.87 17.11 313.44 320.48 100,00 8 24 58 13.61 104.74 12 36 49 123.46 8 38 20 98.31 14 47 28 5058.7 28.07 257.78 5658.66 50.69 100.00 11 2 31 26.30 266.13 282.7 310.77 11.80 110.00 8 23 38 882.69 7.45 317.16 41.94 4627.2 34.07 225.87 5227.22 52.33 235.02 110.00 13 20 20 33.28 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4610.9 SGR 352.8 SG3 126.9 RRT -.2454 RRF -.3597 RTF .8303 SGB 4624.4 R23 .1700 R13 -.8305 SG1 4611.7 SG2 341.9 TMA 178.92 ST 1538.1 SR 351.4 SS 435.6 CRT -.9039 CRS .9960 CST -.8780 TDE-1.0679 TRA-1.4958 TC3-4.3046 BAU 1.1249 ROE .2711 RRA .0080 RC3 -.0336 FAU .03336 FOE -.5088 FRA .0812 FC3-1.4774 BSP 14274 BOE 1.1018 BRA 1.4958 BC3 4.3047 FSP -395 LSA 1618.4 MSA 243.7 SSA 18.5 ELI 1570.8 EL2 147.1 ALF 168.23 ARRIVAL DATE JAN 8 1968 FLIGHT TIME 154.00 LAUNCH DATE AUG 7 1967 DISTANCE 463.059 RL 151.72 LAL -.00 LOL 313.83 VL 26.070 GÅL -4.66 AZL 93.97 HCA 233.15 SMA 124.06 ECC .23661 INC 3.9740 VI 29.365 RP 107.79 LAP 3.18 LOP 186.91 VP 37.319 GAP 11.46 AZP 87.61 TAL 195.41 TAP 68.56 RCA 94.71 APO 153.41 V2 35.156 RC 166.846 GL -24.73 GP 17.25 TÄL 115.54 ZAP 159.85 ETS 55.94 ZAE 128.69 ETE 165.82 ZAC 65.13 ETC 6.16 CLP-169.42 PLANETOCENTRIC CONIC C3 18.534 VHL 4.305 DLA -28.70 RAL 183.66 RAD 6567.8 VEL 11.829 PTH 2.09 VHP 7.688 DPA 11.56 RAP 204.35 ECC 1.3050 ENCH APHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.11 7 55 14 1006.66 20.32 332.92 51.09 110.72 8 12 0 406.7 22.96 325.21 742.10 9 29 19 142.1 20.33 313.55 51.10 9 16 57 94.89 9 0 40 239.7 18.21 311.08 116.27 14.79 318.21 48.58 100.00 8 46 40 105.19 12 42 43 5072.4 27.89 258.76 5672.37 857.63 5227.18 267.08 53.12 11 8 11 26.06 100.00 123.26 8 55 15 98.31 14 57 30 257.6 12.71 309.40 8.39 315.83 44.84 110.00 8 40 58 4627.2 34.07 33.28 235.02 54.84 110.00 13 30 23 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4672.4 SGR 364.5 SG3 126.0 RRT - 2592 RRF - .3577 RTF .8302 SGB 4686.6 R23 .1463 R13 - .8304 SGI 4673.4 SG2 352.0 THA 178.84 ST 1576.3 SR 362.5 SS 435.3 TOE-1.0922 TRA-1.3138 TC3-4.6085 BAU 1.1419 CRT -.9285 CRS .9920 CST -.8858 LSA 1659.0 MSA 230.1 SSA 20.2 ROE .2724 RRA .0141 RC3 -.0375 FAU .03205 FOE -.8894 FRA .1337 FC3-1.4971 BSP 14447 EL1 1612.1 EL2 131.6 ALF 167.86 BOE 1.1256 BRA 1.3139 BC3 4.6086 ESP -390 ARRIVAL DATE JAN 10 1968 FLIGHT TIME 156.00 LAUNCH DATE AUG 7 1967 DISTANCE 468.702 HELIOCENTRIC CONIC RL 151.72 LAL -.00 LOL 313.83 VL 25.998 GAL -4.17 AZL 93.73 HCA 236.37 SMA 123.62 ECC .23808 INC 3.7324 V1 29.365 RP 107.83 LAP 3.11 LOP 190.14 VP 37.257 GAP 11.69 AZP 87.93 TAL 193.61 TAP 69.98 RCA 94.19 APO 153.06 V2 35.145 RC 168.808 GL -23.66 GP 16.35 ZAL 112.80 ZAP 160.98 ETS 56.35 ZAE 128.98 ETE 166.46 ZAC 62.89 ETC 5.92 CLP-170.15 PLANETOCENTRIC CONIC C3 17.683 VHL 4.205 DLA -29.05 RAL 187.30 RAD 6567.7 VEL 11.793 PTH 2.09 VMP 7.767 DPA 9.74 RAP 206.19 ECC 1.2910 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.21 7 54 16 1045.48 20.82 335.98 54.08 110.73 8 11 42 445.5 23.46 328.24 9 58 13 9 25 42 81.3 23.47 301.54 110.72 309.28 54.08 9 46 52 681.34 20.83 96.79 191.7 19.51 315.36 52.01 115.46 9 12 31 791.71 16.22 100.00 106.01 12 46 17 5098.4 27.53 260.61 11 11 19 5698.39 25.58 268.87 55.80 100.00 9 13 55 230.9 13.67 307.92 9 0 4 830.86 9.39 314.40 48.09 123.02 110.00 15 7 26 4632.0 34.05 226.24 98.52 13 40 14 5232.00 235.39 57.70 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RGT -.2744 RRF -.3499 RTF .8320 SGB 4753.1 R23 .1251 R13 -.8322 SGI 4759.2 SG2 362.3 THA 178.74 ST 1624.2 SR 374.4 SS 436.5 CRT -.9500 CRS .9861 CST -.8949 LSA 1709.3 MSA 215.3 SSA 22.1 TOE-1.1239 TRA-1.1269 TC3-4.9053 BAU 1.1597 ROE .2747 RRA .0187 RC3 -.0388 FAU .03080 FBE -.4724 FRA .1826 FC3-1.5080 BSP 14686

FLIGHT TIME 150.00

BOE 1.1570 BRA 1.1271 BC3 4.9054 FSP -389

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ARRIVAL CATE JAN 12 1968
                                                                      FLIGHT TIME 158.00
LAUNCH DATE AUG 7 1967
                                                                      CISTANCE 474.330
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 25.926 GAL -3.67 AZL 93.51 MCA 239.59 SMA 123.20 ECC .23978 INC 3.5083 V1 29.365 RP 107.86 LAP 3.03 LOP 193.37 VP 37.196 GAP 11.92 AZP 88.22 TAL 191.80 TAP 71.39 RCA 93.66 APO 152.74 V2 35.134 RC 170.755 GL -22.59 GP 15.54 ZAL 109.83 ZAP 162.03 ETS 56.96 ZAE 129.25 ETE 167.03 ZAC 60.61 ETC 5.72 CLP-170.87
                                                                                                                           8.03 RAP 208.08 ECC 1.2796
    C3 16.987 VHL 4.122 DLA -29.45 RAL 191.13 RAD 6567.7 VEL 11.763 PTH 2.08 VHP 7.856 CPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  RIT - 2887 RRF - .3446 RTF .8345
SGB 4816.4 R23 .1067 R13 - .8347
SGI 4802.0 SGZ 372.4 THA 178.65
                                                                                                                     ST 1676.4 SR 386.4 S5 437.2
CRT -.9674 CRS .9785 CST -.9039
    TDE-1.1587 TRA -.9323 TC3-5.1807 BAU 1.1766
    RDE .2778 RRA .0216 RC3 -.0381 FAU .02952
                                                                                                                    LSA 1763.5 MSA 200.1 SSA 24.1
    FOE -.4557 FRA .2301 FC3-1.5046 BSP 14923
BOE 1.1915 BRA .9325 BC3 5.1809 FSP -388
                                                                                                                     EL1 1717.7 EL2 95.4 ALF 167.39
                                                                                                                                ARRIVAL DATE JAN 14 1968
                                                                       FLIGHT TIME 160.00
                                                                      DISTANCE 479.941
   RL 151.72 LAL -.00 LOL 313.83 VL 25.856 GAL -3.15 A7L 93.30 MCA 242.81 SMA 122.78 ECC .24171 INC 3.2988 V1 29.365 RP 107.90 LAP 2.93 LOP 196.60 VP 37.136 GAP 12.16 A7P 88.49 TAL 189.99 TAP 72.81 RCA 93.10 APO 152.46 V2 35.122 RC 172.686 GL -21.49 GP 14.83 TAL 106.65 TAP 163.00 ETS 57.77 TAE 129.48 ETE 167.54 TAC 58.32 ETC 5.56 CLP-171.59
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.442 VHL 4.055 DLA -29.85 RAL 195.18 RAD 6567.7 VEL 11.740 PTH 2.07 VHP 7.955 DPA
                                                                                                                             6.41 RAP 210.03 ECC 1.2706
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
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                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4859.0 SGR 400.9 SG3 123.4
RRT -.3023 RRF -.3413 RTF .8376
                                                                                                                     ST 1729.1 SR 398.4 SS 436.7
CRT -.9808 CRS ..9690 CST -.9122
    TOE-1.1938 TRA -.7287 TC3-5.4249 BAU 1.1925
     RDE .2818 RRA .0227 RC3 -.0355 FAU .02822
                                                                  SGB 4875.5 R23 .0908 R13 -.8378
SGI 4860.5 SGZ 382.1 THA 178.56
                                                                                                                      LSA 1817.7 MSA 185.3 SSA 26.2
    FOE -.4386 FRA .2765 FC3-1.4860 BSP 15133
BOE 1.2266 BRA .7291 BC3 5.4250 FSP -386
                                                                                                                      EL1 1772.7 EL2 75.8 ALF 167.24
                                                                                                                                ARRIVAL DATE JAN 16 1968
                                                                       FLIGHT TIME 162.00
LAUNCH DATE AUG 7 1967
                                                                       DISTANCE 485.533
    RL 151.72 LAL -.00 LOL 313.83 VL 25.787 GAL -2.62 A7L 93.10 MCA 246.03 SMA 122.38 ECC .24388 INC 3.1011 V1 29.365 RP 107.94 LAP 2.83 LOP 199.82 VP 37.077 GAP 12.41 A7P 88.74 TAL 188.18 TAP 74.21 RCA 92.53 APO 152.22 V2 35.110 RC 174.603 GL -20.36 GP 14.19 7AL 103.26 ZAP 163.89 ETS 58.80 ZAE 129.69 ETE 167.99 ZAC 55.99 ETC 5.44 CLP-172.30
   PLANETOCENTRIC CONIC
                                                                                                                            4,86 RAP 212.02 ECC 1.2641
    C3 16.048 VHL 4.006 DLA -30.25 RAL 199.42 RAD 6567.6 VEL 11.723 PTH 2.07 VHP 8.064 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          111.10 8 26 2

111.09 12 46 2

111.09 12 46 2

111.09 12 46 2

111.09 12 46 2

122.14 10 18 2

100.05 15 39 21
                                                                                                                      530.3 24.86
                                                                            65.02
                                                   22.19
                                                               342,83
                    8 9 11
                                 1130.32
        78.90
                                                                                                                          5239.9
                                                                                                                                         24.87
                                                                                                                                                      270.34
                   11 8 43
                                                                               65.02
                                  5839.93
                                                   22.20
                                                               278.16
       101.10
                                                                                                                          530.3
                                                                                                                                         24.86
                                                                                                                                                      335.02
                                                                               65.02
                                                   22.19
                                                               342.83
        78.90
                     8 9 11
                                  1130.32
                                                                                                                          5239.9
                                                                                                                                         24.87
                                                                                                                                                      270.34
                                                                               65.02
       101.10
                   11 8 43
                                 5839.93
                                                   22.20
                                                               278.16
                                                                                                                                                      303.44
                                                                                                                                         16.47
                                                                                                                          151.2
                    10 5 31
                                   751.22
                                                   12.31
                                                               310.08
                                                                               59.84
       110.00
                                                                                                                         4667.0
                                                                                                                                         33.66
                                                                                                                                                      228.97
                               5267.03
                                                               238.05
                                                                               68.36
                    14 11 34
                                                  32.85
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   RTT -.3131 RRF -.3378 RTF .8401
SGB 4922.2 R23 .0770 R13 -.8402
SGI 4906.7 SG2 391.1 THA 178.48
                                                                                                                      ST 1773.8 SR 409.7 SS 432.7
CRT -.9900 CRS .9569 CST -.9185
     TDE-1.2237 TRA -.5128 TC3-5.6200 BAU 1.2058
    ROE .2864 RRA .0218 RC3 -.0319 FAU .02682
FDE -.4186 FRA .3239 FC3-1.4471 BSP 15268
                                                                                                                      LSA 1863.1 MSA 171.8 SSA 28.5
                                                                                                                      EL1 1819.7 EL2 56.3 ALF 167.11
     BOE 1.2568 BRA .5133 BC3 5.6201 FSP
                                                      -361
                                                                                                                                 ARRIVAL DATE JAN 18 1968
LAUNCH DATE AUG 7 1967
                                                                        FLIGHT TIME 164,00
                                                                        DISTANCE 491.104
    RL 151.72 LAL -.00 LOL 313.83 VL 25.719 GAL -2.07 AZL 92.91 MCA 249.24 SMA 121.98 ECC .24632 INC 2.9132 VI 29.365 RP 107.97 LAP 2.72 LOP 203.04 VP 37.017 GAP 12.67 AZP 88.97 TAL 186.37 TAP 75.61 RCA 91.94 APO 152.03 V2 35.097 RC 176.504 GL -19.18 GP 13.62 ZAL 99.71 ZAP 164.72 ETS 60.05 ZAE 129.89 ETE 168.39 ZAC 53.65 ETC 5.36 CLP-173.01
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 15.808 VHL 3.976 DLA -30.60 RAL 203.85 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 8.183 DPA
                                                                                                                             3,39 RAP 214.06 ECC 1.2602
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           8 38 36
                                                                                                                            550.5
                                                                                                                                        25.21
                               1150.48
5812.92
                                                                               69.32
                                                                                             111.28
                     B T9 26
                                                   22.52
                                                                344.48
                                                                                                                                                       268.45
                                                                                                         13 10 42
                                                                                                                           5212.9
                                                                                                                                          25.22
                                                                                             111.27
                                                                276.27
                                                                                69.32
       102.11
                   11 33 49
                                                   22.53
                                                                                                                            550.5
                                                                                                                                          25.21
                                                                                                                                                       336.65
                                                                                              111.28
                                                                                                           8 38 36
                     8 19 26
                                 1150.48
                                                   22.52
                                                                344.48
                                                                                69.32
         77.89
                                                                                             111.27 13 10 42
121.86 10 40 53
100.69 15 51 43
                                                                                                                           5212.9
                                                                                                                                          25.22
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                    11 33 49
                                 5812.92
                                                   22.53
                                                                276.27
                                                                                69.32
        102.11
                                                                                                                           129.4
                                                                                                                                          17.21
                                                                                                                                                       302.19
                                                                                64.37
                    10 28 44
                                    729.43
                                                   13.10
                                                                308.88
                                                                                                                                                       230.12
                                                                                                                         4682.0
                                                                                                                                          33.79
                                                                               72.59
        110.00
                    14 23 41
                                  5281.97
                                                   32.66
                                                                239.18
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1816.3 SR 421.0 SS 428.0
CRT -.9954 CRS .9430 CST -.9242
                                                                   SGT 4957.0 SGR 422.6 SG3 120.6
RRT -.3254 RRF -.3378 RTF .8444
SGB 4974.9 R23 .0648 R13 -.8445
     TOE-1.2526 TRA -. 2911 TC3-5.7733 BAU 1.2201
     RDE .2920 RRA .0194 RC3 -.0257 FAU .02553
FDE -.3992 FRA .3687 FC3-1.3984 BSP 15470
                                                                                                                      LSA 1906.0 MSA 160.7 SSA 30.5
EL1 1864.1 EL2 39.5 ALF 167.00
                                                                    SG1 4958.9 SG2 399.5 THA 178.40
     BDE 1.2862 BRA .2918 BC3 5.7733 FSP -378
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FLIGHT TIME 166.00
LAUNCH DATE AUG 7 1967
                                                                                                                                           ARRIVAL DATE JAN 20 1968
   HELIOCENTRIC CONIC
                                                                            DISTANCE 496.652
    RL 151.72 LAL -.00 LOL 313.83 VL 25.652 GAL -1.51 ATL 92.73 MCA 252.45 SMA 121.60 ECC .24903 INC 2.7333 VI 29.365 RP 108.01 LAP 2.61 LOP 206.26 VP 36.959 GAP 12.94 ATP 89.18 TAL 184.56 TAP 77.01 RCA 91.32 APO 151.88 V2 35.084 RC 178.389 GL -17.96 GP 13.10 TAL 96.01 TAP 165.49 ETS 61.53 TAE 130.06 ETE 168.75 TAC 51.30 ETC 5.33 CLP-173.71
   PLANETOCENTRIC CONIC
     C3 15.727 VHL 3.966 OLA -30.89 RAL 208.44 RAD 6567.6 VEL 11.709 PTH 2.06 VHP 8.513 DPA
                                                                                                                                        1.99 RAP 216.13 ECC 1.2588
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     8 32 10 1166.94
11 57 41 5794.14
                                                       22.75
                                                                     345.81
                                                                                     73.91
                                                                                                   111.47
                                                                                                                   8 51 37
                                                                                                                                     566.9
                                                                                                                                                  25.46
        77.12
                    11 57 41
                                                       22.76
                                                                     274.96
                                                                                      73.92
                                                                                                     111.46 13 34 15
                                                                                                                                    5194.1
       102.88
                                                                                                                                                     25.48
                                                       22.75
                                                                     345.81
                                                                                                     111.47
                                                                                                                  8 51 37
                                                                                                                                     566.9
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                                   1166.94
                                                                                                                                                     25.46
         77.12
                      8 32 10
                                                                                      73.91
                                                                                                    111.46 13 34 15
121.63 11 3 37
101.31 16 5 33
                                                      22.76
                                                                                                                                                                   267.13
                                                                                     73.92
                                                                                                                                    5194.1
                                                                                                                                                     25.48
       102.88
                    11 57 41
                                   5794.14
                                                                     274.96
                     10 51 45
                                                       13.69
                                                                     307.96
                                                                                                                                     112.8
                                                                                                                                                     17.78
                                                                                                                                                                   301.23
       110.00
                                     712.79
                                                                                      69.15
                                   5296.29
                                                                                                                                    4696.3
                                                                                                                                                                   231.23
       110.00
                     14 37 17
                                                                     240.25
                                                                                     77.13
                                                                                                                                                     33.69
                                                       32.48
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         RET -.3370 RRF -.3393 RTF .8494
SGB 5023.7 R23 .0543 R13 -.8495
SGI 5007.2 SG2 407.0 THA 178.32
                                                                                                                               ST 1846.5 SR 431.5 SS 420.7
CRT -.9971 CRS .9264 CST -.9285
    TOE-1.2742 TRA -.0599 TC3-5.8667 BAU 1.2335
    ROE .2986 RRA .0154 RC3 -.0183 FAU .02426
FOE -.3782 FRA .4125 FC3-1.3353 BSP 15659
BOE 1.3088 BRA .0618 BC3 5.8667 FSP -376
                                                                                                                                LSA 1936.1 MSA 153.0 SSA 32.2
                                                                                                                                EL1 1896.0 EL2 32.2 ALF 166.88
                                                                             FLIGHT TIME 168.00
                                                                                                                                           ARRIVAL DATE JAN 22 1968
LAUNCH DATE AUG 7 1967
                                                                            DISTANCE 502.175
  HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 25.586 GAL -.92 AZL 92.56 MCA 255.66 SMA 121.23 ECC .25204 INC 2.5597 V1 29.365 RP 108.05 LAP 2.48 LOP 209.48 VP 36.901 GAP 13.22 AZP 89.37 TAL 182.74 TAP 78.41 RCA 90.67 APO 151.78 V2 35.071 RC 180.257 GL -16.70 GP 12.64 ZAL 92.20 ZAP 166.19 ETS 63.24 ZAE 130.23 ETE 169.08 ZAC 48.93 ETC 5.33 CLP-174.40
   PLANETOCENTRIC CONIC
    C3 15.813 VHL 3.977 DLA -31.08 RAL 213.15 RAD 6567.6 VEL 11.713 PTH
                                                                                                        2.06 VHP 8.453 DPA
                                                                                                                                          .65 RAP 218.24 ECC 1.2602
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
76.62 8 47 21 1179.54 22.86 346.80 78.76 111.66 9 7 1 579.5 25.59 338.97
                                                                                                   111.66
                      8 47 21 1179.54
                                                       22.87
       103.38
                    12 20 4
                                   5784.03
                                                                     274.25
                                                                                      78.77
                                                                                                     111.64
                                                                                                                 13 56 28
                                                                                                                                    5184.0
                                                                                                                                                     25.60
                                                                                                                                                                    266.42
                                                                                                                   9 7 1
                      8 47 21
                                                                                      78.76
                                                                                                                                     579.5
        76.62
                                   1179.54
                                                       22.86
                                                                     346.80
                                                                                                     111.66
                                                                                                                                                     25.59
                                                                                                                                                                    338.97
                   12 20 4 5784.03
11 13 53 703.08
                                                                                                    111.64 13 56 28
121.49 11 25 36
101.82 16 21 11
       103.38
                                                      22.87
                                                                     274.25
                                                                                      78.77
                                                                                                                                    5184.0
                                                                                                                                                     25.60
                                                                                                                                                                    266.42
                   11 13 53
       110.00
                                                      14.04
                                                                     307.42
                                                                                     74.12
                                                                                                                                    103.1
                                                                                                                                                    18.10
       110.00
                    14 52 43
                                   5308.49
                                                      32.31
                                                                     241.17
                                                                                     81.97
                                                                                                                                   4708.5
                                                                                                                                                     33.60
                                                                                                                 16 21 11
                                                                                                                                                                    232.17
   DIFFERENTIAL CORRECTIONS
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                         SGT 5048.5 SGR 441.3 SG3 117.5
RRT - 3475 RRF - 3414 RTF .8544
SGB 5067.8 R23 .0453 R13 - 8545
SGI 5050.9 SG2 413.6 THA 178.25
   TOE-1.2863 TRA .1815 TC3-5.8921 BAU 1.2457
RDE .3060 RRA .0097 RC3 -.0102 FAU .02296
FDE -.3551 FRA .4562 FC3-1.2572 BSP 15843
BDE 1.3222 BRA .1817 BC3 5.8921 FSP -373
                                                                                                                               ST 1860.9 SR 441.0 SS 410.3
CRT -.9953 CRS .9060 CST -.9311
                                                                                                                               LSA 1949.9 MSA 150.1 SSA
                                                                                                                                                                       33.0
                                                                                                                                EL1 1912.0 EL2 41.7 ALF 166.72
LAUNCH DATE AUG 7 1967
                                                                             FLIGHT TIME 170.00
                                                                                                                                          ARRIVAL DATE JAN 24 1968
                                                                            DISTANCE 507.669
   HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 25.522 GAL -.32 AZL 92.39 MCA 258.87 SMA 120.87 ECC .25538 INC 2.3912 V1 29.365 —
RP 108.09 LAP 2.35 LOP 212.69 VP 36.844 GAP 13.52 AZP 89.54 TAL 180.93 TAP 79.80 RCA 90.00 APO 151.73 V2 35.058
RC 182.108 GL -15.40 GP 12.22 ZAL 88.31 ZAP 166.85 ETS 65.20 ZAE 130.38 ETE 169.37 ZAC 46.55 ETC 5.39 CLP-175.09
   PLANETOCENTRIC CONIC
    C3 16.078 VHL 4.010 DLA -31.17 RAL 217.94 RAD 6567.6 YEL 11.724 PTH 2.07 VHP 8.605 DPA
                                                                                                                                      -.63 RAP 220.38 ECC 1.2646
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 111.82 9 24 43
111.81 14 17 4
111.82 9 24 43
111.82 9 24 43
111.81 14 17 4
121.47 11 46 11
102.19 16 38 54
                                                                                                                                                 25.58
        76.40
                      9 4 55 1188.12
                                                      22.82
                                                                    347.43
                                                                                  83.84
                                                                                                                                    544.1
                                                                                                                                                                339.62
                                                                                                                                   5183.0
                                                                                                                                                                   266.34
       103.60
                   12 40 41
                                   5783.00
                                                      22.83
                                                                    274.15
                                                                                     83.84
                                                                                                                                                    25.59
                                                                                                                                                                   339.62
        76.40
                      9 4 55
                                    1188.12
                                                      22.82
                                                                    347.43
                                                                                     83.84
                                                                                                                                    588.1
                                                                                                                                                    25.5A
                                                                                                                                   5183.0
                                                                                                                                                                   266.34
       103.60
                   12 40 41
                                   5783.00
                                                      22.83
                                                                    274.15
                                                                                     83.84
                                                                                                                                                    25.59
       110.00
                    11 34 30
                                    701.88
                                                      14.08
                                                                    307.35
                                                                                     79.22
                                                                                                                                    101.9
                                                                                                                                                    18.14
                                                                                                                                                                   300.60
                    15 10 17 5317.24
       110.00
                                                      32.19
                                                                    241.82
                                                                                     87.06
                                                                                                                                   4717.2
                                                                                                                                                    33.53
                                                                                                                                                                  232.84
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 5083.1 SGR 449.3 SG3 115.8
RRT -.3570 RRF -.3454 RTF .8596
SGB 5102.9 R23 .0390 R13 -.8597
SGI 5085.7 SG2 419.5 THA 178.18
                                                                                                                              ST 1855.0 SR 449.3 SS 398.6

CRT -,9899 CRS .8812 CST -,9326

LSA 1943.5 MSA 152.9 SSA 32.8

EL1 1907.6 EL2 62.0 ALF 166.50
    TOE-1.2854 TRA .4353 TC3-5.8402 BAU 1.2554
    RDE .3144 RRA .0022 RC3 -.0019 FAU .02166
    FDE -.3310 FRA .5005 FC3-1.1663 BSP 15952
BDE 1.3233 BRA .4353 BC3 5.8402 FSP -368
LAUNCH DATE AUG 7 1967
                                                                             FLIGHT TIME 172.00
                                                                                                                                           ARRIVAL DATE JAN 26 1968
                                                                            DISTANCE 513.130
   RL 151.72 LAL -.00 LOL 313.83 VL 25.459 GAL .31 AZL 92.23 HCA 262.08 SHA 120.51 ECC .25906 INC 2.2265 V1 29.365
RP 108.13 LAP 2.21 LOP 215.90 VP 36.788 GAP 13.83 AZP 89.69 TAL 179.12 TAP 81.19 RCA 89.29 APO 151.73 V2 35.045
RC 183.942 GL -14.08 GP 11.84 ZAL 84.40 ZAP 167.44 ETS 67.41 ZAE 130.52 ETE 169.64 ZAC 44.16 ETC 5.49 CLP-175.78
  PLANETOCENTRIC CONIC
    C3 16.535 VHL 4.066 DLA -31.13 RAL 222.74 RAD 6567.7 VEL 11.744 PTH 2.07 VHP 8.769 DPA -1.86 RAP 222.56 ECC 1.2721
                                                    INJ LAT INJ LONG INJ RT ASC INJ APMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 22.63 347.69 89.07 111.97 9 44 34 592.7 25.41 339.90
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                                  111.97 9 44 34
111.95 14 35 47
        76.48
                      9 24 41 1192.66
                                                                    274.70
                                                                                                                                    5191.3
                                                                                                                                                     25.43
                                                                                                                                                                   266.90
       103.52
                    12 59 16
                                   5791.26
                                                      22.65
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                                                                                     89.07
                                                                                                    111.97
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        76.48
                     9 24 41
                                   1192.66
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                                                                                                    111.97 9 44 34
111.95 14 35 47
121.60 12 4 54
102.37 16 58 46
       103.52
                    12 59 16
                                   5791.26
                                                      22.65
                                                                    274.70
                                                                                     89.08
                                                                                                                                   5191.3
                                                                                                                                                     25.43
                                                                                                                                                                   266.90
                   11 53 4
15 30 4
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       110.00
                                     710.27
                                                      13.78
                                                                     307.82
                                                                                     84.37
                                                                                                                                    110.3
                                                                                                                                                     17.86
                                                                                                                                   4721.6
       110.00
                                    5321.64
                                                      32.12
                                                                    242.14
                                                                                     92.37
                                                                                                                                                    33.49
                                                                                                                                                                   233.18
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1826.7 SR 455.0 SS 380.6

CRT -.9804 CRS .8476 CST -.9308

LSA 1913.5 MSA 162.1 SSA 31.5

EL1 1880.5 EL2 87.0 ALF 166.25
                                                                       SCT 5115.9 SCR 455.1 SC3 113.8

RRT -.3651 RRF -.3459 RTF .8645

SCB 5136.1 R23 .0302 R13 -.8646

SCI 5118.6 SC2 423.5 THA 178.13
     TDE-1.2693 TRA .6981 TC3-5.7217 BAU 1.2649
    RDE .3229 RRA -.0068 RC3 .0062 FAU .02037
FDE -.3010 FRA .5439 FC3-1.0665 BSP 16074
BDE 1.3097 BRA .6981 BC3 5.7217 FSP -363
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ARRIVAL DATE JAN 28 1968

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FLIGHT TIME 174.00
                                                                               DISTANCE 518.556
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 25.397 GAL .96 A7L 92.06 MCA 265.28 SMA 120.17 ECC .26312 INC 2.0645 VI 29.365 RP 108.18 LAP 2.06 LOP 219.10 VP 36.732 GAP 14.16 AZP 89.83 TAL 177.31 TAP 82.59 RCA 88.55 APO 151.78 V2 35.032 RC 185.758 GL -12.74 GP 11.49 ZAL 80.48 ZAP 167.98 ETS 69.89 ZAE 130.65 ETE 169.88 ZAC 41.77 ETC 5.66 CLP-176.47
   PLANETOCENTRIC CONIC
    C3 17.201 VHL 4.147 OLA -30.97 RAL 227.52 RAD 6567.7 VEL 11.772 PTH 2.08 VHP 8.946 OPA -3.03 RAP 224.76 ECC 1.2831
    LNCM ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.90 9 46 41 1192.47 22.29 347.53 94.42 112.08 10 6 34 592.5 25.09 339.76
                     9 46 41 1192.47
13 15 23 5809.61
                                                                                                       112.07 14 52 13
112.08 10 6 34
112.07 14 52 13
121.85 12 21 28
102.37 17 20 37
                                                                                                                                                          25.10
                                                                                                                                                                         268.16
                                                                                                                                         5209.6
                                                                       275.93
                                                                                        94.42
                                                        22.31
       103.10
                                                                                                                                          592.5
                                                                                                                                                          25.09
                                      1192.47
                                                        22.29
                                                                       347.53
                                                                                        94.42
        76.90
                       9 46 41
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                     13 15 23 5809.61
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                                                                                        94.42
                                                        22.31
                                                                       275.93
       103.10
                                                                                                                                         128.5
                                                                                                                                                         17.24
                                                                                                                                                                         302.14
                                                                       308.83
                                                                                        89.53
                     12 9 19
                                       728.49
                                                        13.13
       110.00
                                                                                                                                                          33.49
                                                                                                                                                                         233.16
                                                                                                                                        4721.6
                     15 51 56
                                                                                        97.84
                                                        32.12
                                                                       242.14
       110.00
                                     5321.58
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 1783.5 SR 459.6 SS 366.1
CRT -.9662 CRS .8077 CST -.9289
                                                                           SGT 5146.4 SGR 460.6 SG3 112.2
RRT -.3740 RRF -.3510 RTF .8695
SGB 5167.0 R23 .0254 R13 -.8696
SGI 5149.3 SGZ 426.9 THA 178.07
    TOE-1.2411 TRA .9750 TC3-5.5348 BAU 1.2728
    ROE .3326 RRA -.0177 RC3 .0141 FAU .01914
FOE -.2731 FRA .5903 FC3 -.9631 BSP 16202
BOE 1.2849 BRA .9752 BC3 5.5348 FSP -358
                                                                                                                                    LSA 1869.1 MSA 177.4 SSA
                                                                                                                                    ELI 1838.1 ELZ 115.0 ALF 165.96
                                                                                                                                                 ARRIVAL DATE JAN 30 1968
                                                                                FLIGHT TIME 176.00
LAUNCH DATE AUG 7 1967
                                                                                DISTANCE 523.942
   HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 25.336 GAL 1.64 A7L 91.90 HCA 268.48 SHA 119.83 ECC .26758 INC 1.9041 V1 29.365 RP 108.22 LAP 1.90 LOP 222.31 VP 36.678 GAP 14.51 A7P 89.95 TAL 175.50 TAP 83.98 RCA 87.77 APO 151.90 V2 35.019 RC 187.557 GL -11.41 GP 11.18 ZAL 76.62 ZAP 168.47 ETS 72.64 ZAE 130.77 ETE 170.10 ZAC 39.37 ETC 5.88 CLP-177.15
   PLANETOCENTRIC CONIC
    C3 18.097 VHL 4.254 DLA -30.69 RAL 232.21 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 9.138 DPA -4.15 RAP 226.99 ECC 1.2978
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                      112.15 10 30 39
112.14 15 5 56
112.15 10 30 39
112.14 15 5 56
112.15 10 30 39
112.14 15 5 56
122.20 12 35 50
102.21 17 44 4
                    10 10 52
                                                                                                                                          586.9
                                                                                                                                                          24.61
                                                                                                                                                                          339.16
                                                                       346.90
                                                                                        99.83
                                      1186.94
                                                        21.80
        77.66
                                                                                                                                                           24.62
                     13 28 37
                                                                       277.89
                                                                                         99.83
                                                                                                                                          5238.7
                                      5838.70
                                                         21.81
       102.34
                                                                                                                                                                          339.16
                                                                                                                                                           24.61
                                                                                                                                          586.9
                     10 10 52
                                                         21.80
                                                                        346.90
                                                                                         99.83
        77.66
                                      1186.94
                                                                                                                                                                          270.16
                                                                                                                                         5238.7
                                                                                                                                                           24.62
                                                                                         99.83
       102.34
                     13 28 37
                                      5838.70
                                                         21.81
                                                                       277.89
                                                                                                                                                           16.30
                                                                                                                                                                          303.71
                                                                                         94.65
                                                                                                                                          156.0
                     12 23 14
                                       756.02
                                                         12.14
                                                                        310.34
       110.00
                                                                                                                                                                          232.87
                                                                                                                                                           33.53
                                                         32.18
                                                                       241.85
                                                                                       103.42
                                                                                                                                         4717.6
       110.00
                     16 15 26
                                      5317.61
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ST 1719.6 SR 461.7 SS 349.4
CRT -.9453 CRS .7554 CST -.9250
LSA 1803.4 MSA 198.3 SSA 27.3
                                                                           SGT 5167.2 SGR 464.2 SG3 110.2

RRT - .3808 RRF - .3540 RTF .8741

SGB 5188.0 R23 .0203 R13 - .8741

SGI 5170.3 SG2 428.9 THA 178.03
    TDE-1.1938 TRA 1.2653 TC3-5.2810 BAU 1.2777
    RDE .3426 RRA -.0300 RC3 .0205 FAU .01785
FDE -.2415 FRA .6368 FC3 -.8537 BSP 16248
                                                                                                                                  EL1 1774.5 EL2 146.0 ALF 165.66
    BOE 1.2420 BRA 1.2656 BC3 5.2811 FSP -352
                                                                                                                                                ARRIVAL DATE FEB 1 1968
                                                                                FLIGHT TIME 178.00
LAUNCH DATE AUG 7 1967
                                                                                DISTANCE 529.281
   HELLOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 25.276 GAL 2.35 A7L 91.74 HCA 271.68 SMA 119.50 ECC .27249 INC 1.7442 V1 29.365 RP 108.26 LAP 1.74 LOP 225.51 VP 36.624 GAP 14.88 A7P 90.05 TAL 173.70 TAP 85.39 RCA 86.94 APO 152.07 V2 35.005 RC 189.337 GL -10.09 GP 10.90 ZAL 72.83 ZAP 168.89 ETS 75.66 ZAE 130.87 ETE 170.30 ZAC 36.98 ETG 6.18 CLP-177.84
   PLANETOCENTRIC CONIC
    C3 19.246 VML 4.387 DLA -30.28 RAL 236.77 RAD 6567.8 VEL 11.859 PTH 2.10 VMP 9.345 DPA -5.22 RAP 229.24 ECC 1.3167
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     112.19 10 57 2
112.17 15 16 23
112.17 15 16 23
112.17 15 16 23
122.62 12 48 10
101.92 18 8 33
                                                                                                                                                                          338.01
                                                                                                                                                          23.98
                    10 37 28 1174.69
13 38 23 5879.87
10 37 28 1174.69
13 38 23 5879.87
                                                                                     105.24
                                                                                                                                         574.7
                                                                       345.70
                                                        21.15
         78.80
                                                                                                                                                                          273.00
                                                                                       105.25
                                                                                                                                         5279.9
                                                                                                                                                           23.99
                                                                       280.69
        101.20
                                                         21.17
                                                                                                                                                                          338.01
                                                                                       105.24
                                                                                                                                          574.7
                                                                                                                                                          23.98
                                                                       345.70
                                                         21.15
         78.80
                                                                                                                                         5279.9
                                                                                                                                                           23.99
                                                                                                                                                                          273.00
                                                                                       105.25
                                                                       280.69
        101.20
                                                         21.17
                                                                                                                                                                          305.73
                                                                                                                                          191.7
                                                                                                                                                           15.06
                                                                                         99.69
        110.00
                      12 34 59
                                       791.73
                                                         10.83
                                                                       312.29
                                                                                                                                                                          232.35
                      16 40 2 5310.83
                                                                                                                                         4710.8
                                                                                                                                                           33 58
                                                                                       109.06
       110.00
                                                         32.28
                                                                       241.34
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5190.4 SGR 466.9 SG3 108.4

RRT - .3887 RRF - .3595 RTF .8802

SGB 5211.4 R23 .0163 R13 - .8802

SGI 5193.6 SG2 429.9 THA 177.98
                                                                                                                                    ST 1650.5 SR 462.1 SS 335.3
CRT -.9170 CRS .6967 CST -.9225
LSA 1732.0 MSA 222.6 SSA 25.0
    TDE-1.1366 TRA 1.5638 TC3-4.9868-BAU 1.2831
    RDE .3535 RRA -.0434 RC3 .0264 FAU .01669
FDE -.2116 FRA .6819 FC3 -.7507 BSP 16382
                                                                                                                                     EL1 1704.6 EL2 178.5 ALF 165.44
    BDE 1.1903 BRA 1.5644 BC3 4.9868 FSP -349
                                                                                                                                                 ARRIVAL DATE FEB 3 1968
                                                                                FLIGHT TIME 180.00
LAUNCH DATE AUG 7 1967
                                                                                DISTANCE 534.568
    RL 151.72 LAL -.00 LOL 313.83 VL 25.217 GAL 3.09 AZL 91.58 HCA 274.88 SNA 119.19 ECC .27788 INC 1.5840 V1 29.365 RP 108.30 LAP 1.58 LOP 228.70 VP 36.570 GAP 15.28 AZP 90.13 TAL 171.92 TAP 86.79 RCA 86.07 APO 152.30 V2 34.992 RC 191.100 GL -8.80 GP 10.64 ZAL 69.17 ZAP 169.26 ETS 78.95 ZAE 130.97 ETE 170.48 ZAC 34.59 ETC 6.56 CLP-178.53
   PLANETOCENTRIC CONIC
    C3 20.678 VHL 4.547 DLA -29.77 RAL 241.15 RAD 6567.8 VEL 11.919 PTH 2.12 VHP 9.570 DPA -6.23 RAP 231.52 ECC 1.3403
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.41 11 7 4 1153.07 20.38 343.75 110.63 112.18 11 26 17 553.1 23.21 336.11
                                                                                                        112.18 11 26 17
112.17 13 54 30
113.88 13 35 52
110.48 15 46 59
123.05 12 58 44
101.57 18 33 29
                   11 7 4 1153.07
                                                                                                                                                                           298.96
                                                                                                                                            47.6
                                                                                                                                                           23.22
                                                         20.39
                                                                        306.60
                                                                                        110.63
                     13 43 42
                                      647.60
         99.59
                                                                                                                                                                           302.98
                                                                                                                                           110.5
                                                                                                                                                           21.60
                                                                                        109.79
                    13 24 2
                                                         18.53
                                                                        310.43
        100,00
                                       710.46
                                                                                                                                                                           271.35
                                                                                                                                         5253.5
                                                                                                                                                           24.85
                                                                                        111.42
        100.00
                      14 9 25
                                     5853.48
                                                         22.27
                                                                        279.19
                                                                                                                                          234.2
                                                                                                                                                           13.55
                                                                                                                                                                           308.10
                                                                                        104.63
                     12 44 50
17 5 7
                                                           9.26
                                                                        314.58
        110.00
                                       A34.19
                                                                                                                                        4702.5
                                                                                                                                                                           231.71
                                                                        240.72
                                                                                                                                                           33.65
                                                                                        114.69
                                                         32.39
        110.00
                                      5302.52
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ST 1575.7 SR 460.3 SS 323.2

CRT -.8787 CRS .6264 CST -.9204

LSA 1654.1 MSA 250.4 SSA 23.0

EL1 1627.7 EL2 212.8 ALF 165.35
                                                                           SGT 5208.1 SGR 468.2 SG3 106.5
RRT -.3957 RRF -.3648 RTF .8859
SGB 5229.1 R23 .0130 R13 -.8859
SGI 5211.4 SG2 429.7 THA 177.95
     TDE-1.0645 TRA 1.8764 TC3-4.6529 BAU 1.2863
     RDE .3648 RRA -.0582 RC3 .0307 FAU .01553

**DE -.1807 FRA .7286 FC3 -.6501 BSP 16479

**DE 1.1253 BRA 1.8773 BC3 4.6530 FSP -345
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FLIGHT TIME 182.00
                                                                                                                                                 ARRIVAL DATE FEB 5 1968
LAUNCH DATE AUG 7 1967
   HELIOCENTRIC CONIC
                                                                                DISTANCE 539.796
    RL 151.72 LAL -.00 LOL 313.83 VL 25.159 GAL 3.86 AZL 91.42 MCA 278.07 SMA 118.88 ECC .28381 INC 1.4223 V1 29.365 RP 108.34 LAP 1.41 LOP 231.90 VP 36.518 GAP 15.70 AZP 90.20 TAL 170.14 TAP 88.21 RCA 85.14 APO 152.61 V2 34.979 RC 192.846 GL -7.56 GP 10.40 ZAL 65.64 ZAP 169.57 ETS 82.50 ZAE 131.06 ETE 170.65 ZAC 32.20 ETC 7.05 CLP-179.22
   PLANETOCENTRIC CONIC
    C3 22.429 VHL 4.736 DLA -29.17 RAL 245.32 RAD 6567.9 VEL 11.992 PTH
                                                                                                            2.14 VHP 9.813 OPA -7.20 RAP 233.82 ECC 1.3691
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG IN RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 82.68 11 41 27 1115.72 19.49 340.60 115.94 112.14 12 0 3 515.7 22.33 333.01 97.32 13 42 35 724.14 19.51 311.68 115.95 112.13 13 54 39 124.1 22.34 304.29
                                                                                                       112.13 13 54 39 124.1
116.18 13 22 13 234.1
108.15 16 34 33 5169.0
123.45 13 7 49 282.0
101.21 18 58 20 4693.9
                                                                                                                                                                          310.74
        100.00
                     13 8 19
                                        834.12
                                                         14.96
                                                                        317.88
                                                                                       113.82
                                                                                                                                                           18.36
        100.00 14 58 24 5769.01
                                                                                     117.79
                                                       24.17
                                                                       273.64
                                                                                                                                                           26.42
                                                                                                                                                                          265.56
                                                                        317.12
                     12 53 7
                                       881.96
                                                          7.48
                                                                                       109.45
                                                                                                                                                           11.83
                                                                                                                                                                          310.73
                                                                           #ID-COURSE EXECUTION ACCURACY

SCT 5221.3 SGR 468.0 SG3 104.7

RRT - 4022 RRF - 3704 RTF .8918

SCB 5242.2 R23 .0101 R13 - .8918

SCB 5242.7 SG2 428.2 THA 177.92

EL1 1551.0 EL2 247.9 AFF .662
                                                                                     120.27
                     17 30 6 5293.93
                                                         32.51
                                                                       240.08
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE -.9797 TRA 2.2037 TC3-4.2930 BAU 1.2873
    RDE .3765 RRA -.0742 RC3 .0335 FAU .01440
FDE -.1500 FRA .7765 FC3 -.5559 BSP 16564
    BOE 1.0495 BRA 2.2049 BC3 4.2931 FSP -341
                                                                                                                                                 ARRIVAL DATE FEB 7 1968
LAUNCH DATE AUG 7 1967
                                                                                FLIGHT TIME 184.00
   HELIOCENTRIC CONIC
                                                                                DISTANCE 544.956
    RL 151.72 LAL -.00 LOL 313.83 VL 25.103 GAL 4.67 AZL 91.26 MCA 281.26 SMA 118.57 ECC .29033 INC 1.2581 V1 29.365 RP 108.38 LAP 1.23 LOP 235.09 VP 36.467 GAP 16.16 AZP 90.25 TAL 168.37 TAP 89.64 RCA 84.15 APO 153.00 VZ 34.966 RC 194.574 GL -6.37 GP 10.18 ZAL 62.27 ZAP 169.82 ETS 86.28 ZAE 131.13 ETE 170.81 ZAC 29.82 ETC 7.65 CLP-179.91
   PLANETOCENTRIC CONIC
    C3 24.340 VHL 4.954 DLA -28.51 RAL 249.25 RAD 6568.0 VEL 12.080 PTH 2.16 VHP 10.078 DPA -8.11 RAP 236.13 ECC 1.4039 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  12 29 0 1034.97
13 26 27 848.83
13 2 44 925.46
15 35 24 5721.62
13 0 6 933.75
17 54 32 5286.10
                                                                                     121.17
        86.58 12 29 0
                                                        18.51
                                                                       334.25
                                                                                                       112.07 12 46 15
                                                                                                                                          435.0
                                                                                                                                                       21.35
                                                                                                                                                                       326.71
        93.42
                                                         18.53
                                                                        320.63
                                                                                       121.17
                                                                                                         112.06
                                                                                                                     13 40 36
                                                                                                                                           248.8
                                                                                                                                                            21.36
                                                                                                                                                                           313.09
                                                                                                         117.52 13 18 9
106.73 17 10 46
123.79 13 15 40
100.87 19 22 38
       100.00
                                                         12.15
                                                                        323.20
                                                                                                                                           325.5
                                                                                                                                                            15.74
                                                                                    118.12
123.68
114.16
                                                                                       118.12
                                                                                                                                                                           316.25
       100.00
                                                        25.14
                                                                       270.45
                                                                                                                                          5121.6
                                                                                                                                                          27.19
                                                                                                                                                                         262.25
       110.00
                                                          5.53
                                                                        319.86
                                                                                                                                          333.7
                                                                                                                                                                         313.54
                                                                                                                                                             9.93
       110.00
                                                        32.61
                                                                       239.49
                                                                                       125.77
                                                                                                                                          4686.1
                                                                                                                                                            33.76
                                                                                                                                                                          230.44
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5226.8 SGR 466.2 SG3 102.9
RRT - .4078 RRF - .3753 RTF .8976
                                                                                                                                     ST 1436.6 SR 450.6 SS 308.6

CRT -.7629 CRS .4593 CST -.9228

LSA 1505.1 NSA 310.7 SSA 19.6
    TOE -.8805 TRA 2.5493 TC3-3.9123 BAU 1.2836
    RDE .3883 RRA -.0914 RC3 .0345 FAU .01325
FDE -.1185 FRA .8270 FC3 -.4674 89P 16579
                                                                            5GB 5247.6 R23 .0075 R13 -.8976
                                                                           SG1 5230.3 SG2 425.4 THA 177.90
    BOE .9623 BRA 2.5510 BC3 3.9124 FSP -334
                                                                                                                                     EL1 1478.8 EL2 283.0 ALF 166.02
                                                                                                                                                ARRIVAL DATE FEB 9 1968
                                                                                FLIGHT TIME 186.00
LAUNCH DATE AUG 7 1967
                                                                                DISTANCE 550.036
    RL 151.72 LAL -.00 LOL 313.83 VL 25.047 GAL 5.53 AZL 91.09 MCA 284.45 SMA 118.28 ECC .29749 INC 1.0905 V1 29.365 RP 108.42 LAP 1.06 LOP 238.28 VP 36.416 GAP 16.65 AZP .90.27 TAL 166.63 TAP 91.08 RCA 83.09 APO 153.47 V2 34.953 RC 196.285 GL -5.23 GP 9.99 ZAL 59.07 ZAP 169.99 ETS 90.28 ZAE 131.18 ETE 170.95 ZAC 27.46 ETC 8.40 CLP 179.38
   PLANETOCENTRIC CONIC
    C3 27.063 VHL 5.202 DLA -27.79 RAL 252.95 RAD 6568.1 VEL 12.184 PTH 2.19 VHP 10.366 DPA -8.97 RAP 238.45 ECC 1.4454
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   124.48 115.14 12 43 6 522.4 16.76
127.89 108.84 14 14 1 209.8 23.92
122.44 118.47 13 16 38 407.8 15.25
129.33 105.67 17 42 33 5087.6 27.68
118.74 124.03 13 22 29 388.4 7.89
131.18 100.60 19 46 5 4679.8 33.81
        90.00 12 24 23 1122.43
                                                       13.48
                                                                      338.35
                   14 0 32
12 59 50
                                       809.76
                                                        21.54
                                                                       318.97
                                                                                                                                                                         311.10
         90.00
                                   1007.63
                                                                       327.90
                                                                                                                                                                         321.10
       100.00
                                                          9.52
                    16 7 46
13 6 1
                                                        25.78
                                                                       268.13
                                                                                                                                                                         259.84
       100.00
                                                                       322.73
                                       988.44
                                                          3.45
       110.00
                     18 18 5
                                    5279.79
                                                     32.69
                                                                       239.01
                                                                                                                                                                         229.95
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           RRT -,4151 RRF -,3613 RTF .9038
SGB 5253.1 R23 .0061 R13 -,9038
SGI 5236.2 SG2 421.6 THA 177.89
                                                                                                                                    ST 1384.6 SR 445.2 SS 306.8
    TOE -.7737 TRA 2.9072 TC3-3.5387 BAU 1.2804
                                                                                                                                    CRT -.6852 CRS .3734 CST -.9298
LSA 1446.7 MSA 338.2 SSA 18.2
    ROE .4007 RRA -.1094 RC3 .0346 FAU .01219
FDE -.0890 FRA .8781 FC3 -.3900 BSP 16651
BDE .8713 BRA 2.9092 BC3 3.5389 FSP -330
                                                                                                                                    EL1 1419.3 EL2 314.9 ALF 166.98
                                                                                                                                                 ARRIVAL DATE FEB 11 1968
                                                                                FLIGHT TIME 188.00
LAUNCH DATE AUG 7 1967
                                                                                DISTANCE 555.024
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 24.993 GAL 6.44 AZL 90.92 MCA 287.64 SMA 117.99 ECC .30539 INC .9181 V1 29.365 RP 108.46 LAP .87 LOP 241.46 VP 36.367 GAP 17.19 AZP 90.28 TAL 164.90 TAP 92.54 RCA 81.96 APO 154.03 V2 34.941 RC 197.979 GL -4.16 GP 9.80 ZAL 56.06 ZAP 170.11 ETS 94.45 ZAE 131.23 ETE 171.09 ZAC 25.11 ETC 9.33 CLP 178.67
   PLANETOCENTRIC CONIC
    C3 30.060 VHL 5.483 DLA -27.03 RAL 256.39 RAD 6568.2 VEL 12.306 PTH 2.22 VHP 10.681 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                  1236.47
748.17
                                                                                                       116.60 12 32 5
                                                                                                                                           636.5
        90.00
                    12 11 28
                                                        10.09
                                                                       345.01
                                                                                      128.38
                                                                                                                                                           13.58
                                                                      314.92
                                                                                                                                                                          306.90
                                                                                       133.71
                                                                                                         107.21 14 53 23
                                                                                                                                           148.2
                    14 40 55
                                                        22.84
                                                                                                                                                           24.98
        90.00
                    12 58 10 1085.60
16 36 54 5662.51
13 11 3 1045.14
18 40 30 5275.53
                                                                                       126.71
                                                                                                                    13 16 16
                                                                                                                                           485.6
                                                                                                                                                           10.80
                                                                                                                                                                          325.57
       100.00
                                                          6.96
                                                                       332.26
                                                                                                         119.14
                                                                                                        104.86 18 11 16
124.16 13 28 29
100.42 20 8 26
                                                                                                                                                                        258.04
                                                                                                                                          5062.3
                                                                                                                                                           28.02
       100.00
                                                        26.24
                                                                       266.39
                                                                                       134.78
                                                                       325.70
                                                                                                                                          445.1
                                                                                                                                                            5.76
                                                                                                                                                                          319.47
       110,00
                                                          1.29
                                                                                       123.20
                                                                                                                                                          33.83
                                                                                                                                       4675.5
       110.00
                                                                      238.69
                                                                                       136.46
                                                                                                                                                                        229.62
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                              ST 1349.3 SR 434.3 SS 308.2

CRT -.5967 CRS .2889 CST -.9391

LSA 1404.8 MSA 361.1 SSA 17.0

EL1 1375.6 E12 344 A 151.1
                                                                          SGT 5232.3 SGR 458.8 SG3 99.4
RRT - .4181 RRF - .3871 RTF .9101
SGB 5252.4 R23 .0046 R13 -.9101
SG1 5235.9 SG2 416.5 THA 177.89
    TOE -.6590 TRA 3.2832 TC3-3.1677 BAU 1.2731
    ROE .4134 RRA -.1261 RC3 .0335 FAU .01115
FOE -.0601 FRA .9315 FC3 -.3211 BSP 16710
                                                                                                                                    EL1 1375.6 EL2 341.9 ALF 168.40
    BOE .7780 BRA 3.2857 BC3 3.1679 FSP -326
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ARRIVAL DATE FEB 13 1968
LAUNCH DATE AUG 7 1967
                                                                              FLIGHT TIME 190.00
                                                                              DISTANCE 559.906
  HELIOCENTRIC CONIC.
    RL 151.72 LAL -.00 LOL 313.83 VL 24.940 GAL 7.39 AZL 90.74 MCA 290.82 SMA 117.72 ECC .31409 INC .7394 V1 29.365 RP 108.50 LAP .69 LOP 244.65 VP 36.319 GAP 17.76 AZP 90.26 TAL 163.20 TAP 94.03 RCA 80.74 APO 154.69 V2 34.929 RC 199.655 GL -3.16 GP 9.64 ZAL 53.24 ZAP 170.14 ETS 98.76 ZAE 131.25 ETE 171.22 ZAC 22.79 ETC 10.49 CLP 177.94
   PLANETOCENTRIC CONIC
    C3 33.606 VHL 5.797 DLA -26.26 RAL 259.58 RAD 6568.3 VEL 12.449 PTH 2.25 VMP 11.026 DPA -10.54 RAP 243.15 ECC 1.5531
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      117.47 12 26 37
106.15 15 25 15
119.59 13 16 29
104.25 18 37 28
124.17 13 33 46
100.34 20 29 33
                                                                                                                                                     10.80
                                                                                                                                                                    343.58
                   12 4 27 1330.54
15 13 25 710.19
                                                        7.17
                                                                      350.39
                                                                                    132.39
                                                                                                                                        730.5
        90.00
                                                                                                                                                                       304.28
                                                                                                                                        110.2
                                                                                                                                                        25.57
                                                                      312.38
                                                                                      139.16
                                                       23.58
        90.00
                                                                                                                                                                       329.80
                                                                      336.41
                                                                                      130.91
                                                                                                                                        560.3
                                                                                                                                                         8.37
                    12 57 9 1160.33
17 3 24 5643.67
                                                         4.47
       100.00
                                                                                                                                                        28.25
                                                                                                                                                                      256.70
                                                                                                                                      5043.7
                                                                      265.09
                                                                                      140.05
       100.00
                                                       26.56
                                                                                                                                                                      322.51
                                                                                                                                       503.1
                                                                                                                                                         3.56
                    13 15 22 1103.12
                                                         -.93
                                                                      328.72
                                                                                      127.55
       110.00
                                                                                                                                                                      229.48
                                                                                                                                     4673.6
                                                                                                                                                        33.84
                                                                      238.55
                                                                                      141.61
                                                       32.77
       110.00
                    19 1 40
                                     5273.64
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1330.1 SR 424.0 SS 312.7
CRT -.5004 CRS .2092 CST -.9500
LSA 1379.8 MSA 377.7 SSA 16.0
                                                                          SGT 5227.5 SGR 452.9 SG3 97.7
RRT -.4224 RRF -.3926 RTF .9166
    TDE -.5353 TRA 3.6791 TC3-2.8088 BAU 1.2620
    RDE .4262 RRA -.1473 RC3 .0314 FAU .01013
FDE -.0317 FRA .9878 FC3 -.2609 BSP 16748
                                                                         SGB 5247.1 R23 .0034 R13 -.9166
SGI 5231.0 SG2 410.3 THA 177.89
    BOE .6842 BRA 3.6820 BC3 2.8090 FSP -321
                                                                                                                                  EL1 1348.3 EL2 362.2 ALF 170.22
                                                                                                                                              ARRIVAL DATE FEB 15 1968
                                                                               FLIGHT TIME 192.00
LAUNCH DATE AUG 7 1967
  HELIOCENTRIC CONIC
                                                                              DISTANCE 564.662
    RL 151.72 LAL -.00 LOL 313.83 VL 24.888 GAL 8.41 AZL 90.55 MCA 294.00 SMA 117.45 ECC .32369 INC .5534 VI 29.365
RP 108.53 LAP .51 LOP 247.83 VP 36.271 GAP 18.40 AZP 90.23 TAL 161.54 TAP 95.54 RCA 79.43 APO 155.46 V2 34.917
RC 201.315 GL -2.22 GP 9.49 ZAL 50.60 ZAP 170.11 ETS 103.14 ZAE 131.25 ETE 171.35 ZAC .20.49 ETC 11.96 CLP 177.20
   PLANETOCENTRIC CONIC
                                                                                                          2.29 VHP 11.404 DPA -11.25 RAP 245.50 ECC 1.6219
    C3 37.791 VHL 6.147 DLA -25.49 RAL 262.53 RAD 6568.5 VEL 12.616 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     117.99 12 23 26
105.40 15 52 57
119.83 13 17 2
103.82 19 1 26
124.05 13 38 27
100.36 20 49 23
                                                                                    136.38
                                                                                                                                      815.6
                                                        4.48
                                                                      355.18
        90.00
                    11 59 50 1415.59
                                                                                                                                         84.4
                                                                                                                                                        25.94
                                                                                                                                                                       302.48
                                                        24.06
                                                                      310.65
                                                                                      144.37
        90.00
                    15 41 33
                                      684.42
                                                                                                                                        632.7
                                                                                                                                                         5.98
                                                                                                                                                                       333.83
                                                                                      135.03
                    12 56 29
                                    1232.69
                                                         2.02
                                                                      340.39
       100.00
                                                                                    145.15
131.79
                                                                                                                                       5030.6
                                                                                                                                                        28.41
                                                                                                                                                                       255.76
                    17 27 35 5630.60
13 19 5 1161.79
                                                        26.77
                                                                      264.18
       100.001
                                                                                                                                                         1.32
                                                                                                                                       561.8
                                                                                                                                                                       325.58
                                                        -3.17
                                                                      331.78
       110.00
                    19 21 28
                                                                                      146.63
                                                                                                                                       4674.3
                                                                                                                                                        33.84
                                                                                                                                                                       229.53
                                                                      238.60
       110.00
                                    5274.26
                                                        32.76
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5218.6 SGR 445.5 SG3 96.1
RRT -.4257 RRF -.3975 RTF .9230
                                                                                                                                  ST 1327.0 SR 412.5 SS 320.0

CRT -.4002 CRS .1344 CST -.9608

LSA 1372.3 MSA 387.0 SSA 15.0
    TDE -.4016 TRA 4.0994 TC3-2.4641 BAU 1.2450
    ROE .4390 RRA -.1672 RC3 .0284 FAU .00908
FDE -.0031 FRA 1.0480 FC3 -.2079 8SP 16705
BOE .5950 BRA 4.1028 BC3 2.4643 FSP -315
                                                                          SGB 5237.6 R23 .0025 R13 -.9230
SG1 5222.1 SG2 402.8 THA 177.91
                                                                                                                                  EL1 1338.1 EL2 374.9 ALF 172.30
                                                                                                                                             ARRIVAL DATE FEB 17 1968
                                                                               FLIGHT TIME 194.00
LAUNCH DATE AUG 7 1967
                                                                              DISTANCE 569.269
   HELTOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.837 GAL 9.50 AZL 90.36 HCA 297.18 SMA 117.18 ECC .33432 INC .3580 V1 29.365 RP 108.57 LAP .32 LOP 251.01 VP 36.225 GAP 19.09 AZP 90.16 TAL 159.91 TAP 97.09 RCA 78.01 APO 156.36 V2 34.905 RC 202.957 GL -1.34 GP 9.35 ZAL 48.16 ZAP 170.00 ETS 107.56 ZAE 131.22 ETE 171.47 ZAC 18.24 ETC 13.82 CLP 176.44
   PLANETOCENTRIC CONIC
     C3 42.728 VHL 6.537 DLA -24.71 RAL 265.24 RAD 6568.6 VEL 12.810 PTH 2.33 VHP 11.820 DPA -11.91 RAP 247.84 ECC 1.7032
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   118.26 12 21 26
104.89 16 17 36
119.89 13 17 44
103.54 19 23 23
123.80 13 42 36
100.50 21 7 53
                                                                                                                                   895.0
                                                                                   140.33
                                                        1.93
                                                                      359.63
         90.00 11 56 31 1495.05
                                                                                                                                                                       301.26
                                                                                      149.36
                                                                                                                                         67.0
                                                                                                                                                        26.18
                                                                      309.46
                    16 6 29
                                                        24.37
         90.00
                                      666.97
                                                                                                                                                                       337.72
                                                                      344.25
                                                                                     139.06
                                                                                                                                        703.0
                                                                                                                                                         3.62
                                                         - . 36
        100.00
                     12 56 1
                                    1302.97
                    17 49 40 5622.32
13 22 15 1220.67
19 39 55 5277.38
                                                                                                                                       5022.3
                                                                                                                                                        28.50
                                                                                                                                                                       255.16
                                                                      263.60
                                                                                      150.08
                                                        26.90
        100.00
                                                                                                                                                         -.93
                                                                                                                                                                       328.65
                                                                                                                                       620.7
                                                                      334.67
                                                                                      135.92
                                                        -5.41
       110.00
                                                                                                                                                        33.42
                                                                                                                                                                       229.77
                                                                                                                                       4677.4
                                                                      238.83
                                                                                      151.50
                                                        32.72
       110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1337.0 SR 400.1 SS 329.1

CRT -.3053 CRS .0711 CST -.9706

LSA 1380.1 MSA 388.5 SSA 14.2

EL1 1343.0 EL2 379.2 ALF 174.33
                                                                          RET -,4284 RRF -,4023 RTF .9296
SGB 5223.8 R23 .0019 R13 -,9296
SGI 5208.9 SGZ 394.3 THA 177.93
     TOE -.2652 TRA 4.5390 TC3-2.1447 BAU 1.2252
    RDE .4522 RRA -.1869 RC3 .0251 FAU .00809
FDE .0237 FRA 1.1107 FC3 -.1639 BSP 16742
BDE .5242 BRA 4.5429 BC3 2.1448 FSP -311
                                                                                                                                               ARRIVAL DATE FEB 19 1968
                                                                               FLIGHT TIME 195.00
LAUNCH DATE AUG 7 1967
                                                                               DISTANCE 573.698
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.788 GAL 10.67 AZL 90.15 MCA 300.36 SMA 116.93 ECC .34610 INC .1508 V1 29.365 RP 108.60 LAP .13 LOP 254.18 VP 36.181 GAP 19.85 AZP 90.08 TAL 158.33 TAP 98.69 RCA 76.46 APO 157.40 V2 34.894 RC 204.581 GL -.53 GP 9.22 ZAL 45.91 ZAP 169.81 ETS 111.96 ZAE 131.17 ETE 171.59 ZAC 16.03 ETC 16.24 CLP 175.65
   PLANETOCENTRIC CONIC
    C3 48.557 VHL 6.968 DLA -23.96 RAL 267.72 RAD 6568.8 VEL 13.035 PTH 2.38 VHP 12.280 DPA -12.51 RAP 250.19 ECC 1.7991 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    144.21
                                                                                                     118.31 12 20 9
104.55 16 39 46
119.78 13 18 30
103.41 19 43 29
123.42 13 46 17
100.74 21 25 4
                   11 53 58
                                                                                                                                        970.4
                                                                         3.83
                                                                                                                                                          3.28
                                     1570.38
                                                         - . 50
         90.00
                                                                       308.70
                                                                                                                                          55.9
                                                                                                                                                         26.32
                                                                                                                                                                        300.48
                                                        24.56
                                                                                      154.16
                     16 28 50
                                      655.86
         90.00
                                                                                                                                                                        341.47
                                                                                                                                         771.3
                                                                                                                                                          1.31
                     12 55 39
                                                                       348.00
                                                                                      143.00
                                     1371.30
                                                        -2.67
        100.00
                                                                                                                                                                       254.87
                                                                                                                                       5018.2
                                                                                                                                                        28.55
                                                        26.97
                                                                       263.31
                                                                                      154.83
        100.00
                     18 9 50
                                     5618.22
                                                                                                                                                                        331.71
                                                                                                                                        679.4
                                                                                                                                                         -3.17
                     13 24 58
                                                         -7.62
                                                                       337.98
                                                                                      139.95
        110.00
                                     1279.35
                                                                                                                                      4582.9
                                                                                                                                                                       230.20
                                                                                                                                                         33.79
                     19 57 1
                                                        32.65
                                                                       239.25
                                                                                      156.23
        110.00
                                      5282.93
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ST 1357.0 SR 386.8 SS 340.1

CRT - 2166 CRS .0157 CST - .9787

LSA 1399.8 MSA 383.7 SSA 13.4

EL1 1359.8 EL2 376.8 ALF 176.17
                                                                         SGT 5188.5 SGR 426.5 SG3 92.9
RRT -.4301 RRF -.4063 RTF .9362
SGB 5206.0 R23 .0016 R13 -.9363
SGI 5191.8 SG2 384.8 THA 177.96
     TOE -.1218 TRA 5.0056 TC3-1.8471 BAU 1.1991
     ROE .4655 RRA -.2064 RC3 .0215 FAU .00709
FOE .0501 FRA 1.1776 FC3 -.1265 BSP 16751
     BOE .4812 BRA 5.0099 BC3 1.8472 FSP
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ARRIVAL DATE FEB 21 1968

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LAUNCH DATE AUG 7 1967
                                                                                                DISTANCE 577.916
   HELIOCENTRIC CONIC
     RL 151.72 LAL -.00 LOL 313.83 VL 24.739 GAL 11.92 A7L 89.93 MCA 303.53 SMA 116.68 ECC .35918 INC .0674 V1 29.365 RP 108.64 LAP -.06 LOP 257.36 VP 36.137 GAP 20.69 A7P 89.96 TAL 156.81 TAP 100.34 RCA 74.77 APO 158.60 V2 34.883 RC 206.187 GL .22 GP 9.10 ZAL 43.84 ZAP 169.54 ETS 116.30 ZAE 131.08 ETE 171.72 ZAC 13.90 ETC 19.43 CLP 174.84
   PLANETOCENTRIC CONIC
     C3 55.451 VHL 7.447 DLA -23.22 RAL 269.98 RAD 6569.0 VEL 13.297 PTH 2.43 VHP 12.789 OPA -13.07 RAP 252.51 ECC 1.9126
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            118.19 12 19 15
104.37 16 59 47
          90.00
                        11 51 53 1641.60
16 48 57 649.85
                                                                    -2.82
                                                                                        7.85
                                                                                                       148.00
                                                                                                                                                                    1041.6
                                                                                                                                                                                             . 97
                                                                                      308.29
                                                                                                        158.77
                                                                                                                                                                      49.9
                                                                                                                                                                                          26.40
                                                                                                                                                                                                            300.05
                        16 48 57
                                             649.85
                                                                    24.66
                       12 55 18 1437.79
18 28 14 5617 76
                                                                                                                            119.52 13 19 16
103.39 20 1 51
122.92 13 49 33
101.07 21 40 57
                                                                                      351.65
                                                                                                         146.85
                                                                                                                                                                       837.8
                                                                                                                                                                                           -.94
                                                                                                                                                                                                            345.11
        100.00
                                                                    -4.91
                                                                                                     159.40
                                                                                                                                                                    5017.8
                                                                                                                                                                                          28.55
                                                                    26.98
                                                                                      263.28
                                                                                                                                                                                                            254.83
        100.00
                                                                                                                                                                                          -5.38
                                                                                                                                                                                                            334.76
        110.00
                         13 27 15
                                             1337.49
                                                                    -9.79
                                                                                      341.08
                                                                                                       143.87
                                                                                                                                                                      737.5
                                                                                                                                                                                          35.73
                                                                                                                                                                                                          230.80
                                                                                                                                                                    4690.7
                         20 12 46
                                                                    32.55
                                                                                     239.83
                                                                                                        160.79
        110.00
                                             5290.71
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                          SCT 5167.4 SGR 414.8 SG3 91.3

RRT -.4307 RRF -.4093 RTF .9428

SGB 5184.0 R23 .0013 R13 -.9428

SGI 5170.5 SG2 374.2 THA 178.01
    TDE .0275 TRA 5.5013 TC3-1.5728 BAU 1.1660
                                                                                                                                                              ST 1383.7 SR 372.8 SS 352.8 CRT -.1367 CRS -.0324 CST -.9850
    RDE .4789 RRA -.2254 RC3 .0177 FAU .00608
FDE .0763 FRA 1.2495 FC3 -.0950 BSP 16749
                                                                                                                                                               LSA 1427.6 MSA 374.1 SSA 12.7
     BDE .4797 BRA 5.5059 BC3 1.5729 FSP -302
                                                                                                                                                               ELI 1384.7 EL2 369.0 ALF 177.73
                                                                                                                                                                              ARRIVAL DATE FEB 23 1968
                                                                                                FLIGHT TIME 200.00
LAUNCH DATE AUG 7 1967
                                                                                                DISTANCE 581.876
   HELIOCENTRIC CONIC
                                -.00 LOL 313.83 VL 24.693 GAL 13.28 AZL 89.69 HCA 306.71 SMA 116.45 ECC .37375 INC .3057 V1 29.365
-.25 LOP 260.53 VP 36.095 GAP 21.63 AZP 89.82 TAL 155.36 TAP 102.06 RCA 72.93 APO 159.97 V2 34.872
.92 GP 9.00 ZAL 41.96 ZAP 169.19 ETS 120.55 ZAE 130.96 ETE 171.84 ZAC 11.86 ETC 23.74 CLP 173.98
    RL 151.72 LAL
          108.67 LAP
    RC 207.774 GL
   PLANETOCENTRIC CONIC
     C3 63.628 VHL 7.977 DLA -22.51 RAL 272.03 RAD 6569.2 VEL 13.601 PTH 2.49 VHP 13.357 DPA -13.57 RAP 254.82 ECC 2.0472
    C3 63.628 VHL 7.977 DLA -22.51 RAL 272.03 RAD 6569.2 VEL 13.601 PTH 2.49 VHP 13.357 OPA -13.57 RAP 254.82 ECC 2.0472 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG IN RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 17 7 5 647.96 24.70 308.16 163.18 104.31 17 17 53 48.0 26.42 299.92 100.00 12 54 54 1502.07 -7.06 355.23 150.59 119.12 13 19 56 902.1 -3.12 348.65 100.00 18 44 58 5620.43 26.94 263.47 163.79 103.48 20.18 38 5020.4 28.52 255.03 110.00 13 29 8 1394.74 -11.89 344.19 147.69 122.29 13 52 23 794.7 -7.54 337.79 110.00 20 27 13 5300.52 32.42 240.57 165.19 101.49 21 55 33 4700.5 33.66 231.56
                                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    TDE .1865 TRA 6.0327 TC3-1.3199 BAU 1.1229
RDE .4923 RRA -.2437 RC3 .0138 FAU .00501
FDE .1032 FRA 1.3277 FC3 -.0681 BSP 16656
BDE .5264 BRA 6.0376 BC3 1.3200 FSP -295
                                                                                          SGT 5143.2 SGR 401.8 SG3 89.9
RRT -.4296 RRF -.4109 RTF .9493
                                                                                                                                                               ST 1414.9 SR 358.1 SS 367.5
                                                                                                                                                             CRT -.0645 CRS -.0754 CST -.9896
LSA 1461.1 MSA 361.0 SSA 12.0
                                                                                          SGB 5158.9 R23 .0012 R13 -.9493
SGI 5146.1 SG2 362.6 THA 178.07
                                                                                                                                                             EL1 1415.1 EL2 357.3 ALF 179.00
                                                                                                                                                                             ARRIVAL DATE FEB 25 1968
                                                                                                FLIGHT TIME 202.00
LAUNCH DATE AUG 7 1967
                                                                                               DISTANCE 585.524
   HELTOCENTRIC CONTC
     RL 151.72 LAE -.00 LOL 313.83 VL 24.648 GAL 14.75 AZL 89.44 HCA 309.88 SMA 116.22 ECC .39003 INC .5635 V1 29.365 RP 108.70 LAP -.43 LOP 263.70 VP 36.055 GAP 22.67 AZP 89.64 TAL 153.99 TAP 103.86 RCA 70.89 APO 161.55 V2 34.862 RC 209.341 GL 1.57 GP 8.89 ZAL 40.25 ZAP 168.75 ETS 124.66 ZAE 130.78 ETE 171.97 ZAC 9.96 ETC 29.71 CLP 173.09
   PLANETOCENTRIC CONIC
     C3 73.365 VHL 8.565 DLA -21.83 RAL 273.87 RAD 6569.4 VEL 13.954 PTH 2.55 VHP 13.990 DPA -14.02 RAP 257.10 ECC 2.2074
    C3 73.365 VHL 8.565 DLA -21.83 RAL 273.87 RAD 6569.4 VEL 13.954 PTH 2.55 VHP 13.990 DPA -14.02 RAP 257.10 ECC 2.2074
LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 11 48 27 1777.35 -7.12 15.44 155.30 117.48 12 18 4 1177.4 -3.39 8.75
90.00 17 23 26 649.54 24.67 308.27 167.39 104.36 17 34 15 49.5 26.40 300.03
100.00 12 54 26 1564.37 -9.11 358.72 154.23 118.99 13 20 31 964.4 -5.22 352.09
100.00 19 0 7 5625.80 26.85 263.85 .167.99 103.66 20 33 53 5025.8 28.46 255.41
110.00 13 30 39 1450.84 -13.91 347.28 151.39 121.54 13 54 50 850.8 -9.63 340.79
110.00 20 40 23 5312.09 32.26 241.43 169.41 101.97 22 8 56 4712.1 33.57 232.45
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 5114.0 SGR 387.4 SG3 88.4

RRT -.4269 RRF -.4110 RTF ..9556

SGB 5128.6 R23 ..0012 R13 -.9556

SGI 5116.7 SG2 350.1 THA 178.14
                                                                                                                                                              ST 1445.9 SR 343.1 SS 383.3
CRT -.0034 CRS -.1106 CST -.9930
     TOE .3472 TRA 6.5966 TC3-1.0927 BAU 1.0718
ROE .5060 RRA -.2604 RC3 .0101 FAU .00392
FDE .1290 FRA 1.4113 FC3 -.0463 BSP 16653
                                                                                                                                                             LSA 1495.2 MSA 345.7 SSA 11.4
                                                                                                                                                               ELI 1445.9 EL2 343.1 ALF 179.95
     BOE .6137 BRA 6.6017 BC3 1.0928 FSP
                                                                      -291
                                                                                                                                                                              ARRIVAL DATE FEB 27 1968
LAUNCH DATE AUG 7 1967
                                                                                                FLIGHT TIME 204.00
                                                                                                DISTANCE 588.787
    RL 151.72 LAL -.00 LOL 313.83 VL 24.604 GAL 16.37 AZL 89.15 HCA 313.04 SHA 116.00 ECC .40826 INC .8459 VI 29.365 RP 108.73 LAP -.62 LOP 266.87 VP 36.016 GAP 23.84 AZP 89.42 TAL 152.72 TAP 105.77 RCA 68.64 APO 163.37 V2 34.853 RC 210.889 GL 2.17 GP 8.80 ZAL 38.73 ZAP 168.22 ETS 128.63 ZAE 130.55 ETE 172.11 ZAC 8.27 ETC 38.17 CLP 172.14
   PLANETOCENTRIC CONIC
     C3 85.016 VHL 9.220 DLA -21.18 RAL 275.51 RAD 6569.7 VEL 14.365 PTH 2.61 VHP 14.702 DPA -14.43 RAP 259.33 ECC 2.3992
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 46 52 1840.60 -9.09 19.04 158.77 116.93 12 17 33 1240.6 -5.41 12.30 90.00 17 38 5 653.99 24.59 308.58 171.39 104.50 17 48 59 54.0 26.35 300.35
          90.00 11 46 52 1840.60
90.00 17 38 5 653.99
                                                                                                                             117.95 13 20 55
103.91 20 47 41
120.70 13 56 53
102.52 22 21 5
                                           1624.44
                                                                                                                                                                     1024.4
                                                                                                                                                                                          -7.22
                        12 53 51
         100.00
                                                                  -11.04
                                                                                        2.13
                                                                                                         157.74
                                                                                                                                                                    5033.4
                                                                                                                                                                                       28.37
                         19 13 47
                                             5633.43
                                                                  26.73
                                                                                      264.38
                                                                                                        171.99
         100.00
                        13 31 48 1505.47
20 52 19 5325.15
                                                                                                                                                                      905.5
                                                                                                                                                                                       -11.64
                        13 31 48
                                                                                                      154.97
                                                                 -15.83
                                                                                      350.34
        110.00
                                                                                                                                                                                       33.46
                                                                                                                                                                    4725.2
                                                                                                        173.43
         110.00
                                                                    32.07
                                                                                     242.41
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
SGT 5081.0 SGR 371.7 SG3 87.0
RRT - .4220 RRF - .4087 RTF .9616
SGB 5094.5 R23 .0013 R13 - .9616
SGI 5083.4 SG2 336.8 THA 178.22
                                                                                                                                                            ST 1475.9 SR 327.7 SS 400.6
CRT .0500 CRS -.1417 CST -.9954
LSA 1529.0 MSA 329.1 SSA 10.8
     TOE .5150 TRA 7.2024 TC3 -.8871 BAU 1.0083
     RDE .5199 RRA -.2751 RC3 .0068 FAU .00274
FDE .1553 FRA 1.5026 FC3 -.0279 BSP 16622
BDE .7318 BRA 7.2077 BC3 .8871 FSP -287
                                                                                                                                                              EL1 1476.0 EL2 327.3 ALF
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FLIGHT TIME 198.00

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ARRIVAL DATE FEB 29 1968
                                                                                  FLIGHT TIME 206.00
LAUNCH DATE AUG 7 1967
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 591.573
    RL 151.72 LAL -.00 LOL 313.83 VL 24.563 GAL 18.14 AZL 88.84 MCA 316.21 SMA 115.80 ECC .42875 INC 1.1587 V1 29.365 RP 108.76 LAP -.80 LOP 270.04 VP 35.979 GAP 25.16 AZP 89.16 TAL 151.58 TAP 107.79 RCA 66.15 APO 165.45 V2 34.844 RC 212.418 GL 2.72 GP 8.71 ZAL 37.40 ZAP 167.59 ETS 132.45 ZAE 130.26 ETE 172.26 ZAC 6.89 ETC 50.19 CLP 171.13
   PLANETOCENTRIC CONIC
    C3 99.039 VHL 9.952 DLA -20.57 RAL 276.95 RAD 6569.9 VEL 14.845 PTH 2.68 VMP 15.505 DPA -14.79 RAP 261.50 ECC 2.6299 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         116.28 12 16 57
104.70 18 2 10
117.22 13 21 7
104.23 21 0 4
119.76 13 58 32
103.11 22 32 1
                                                                                                                                          1301.0
                                                                                                                                                           -7.31
                                                                                       162.09
                                                                                                                                                                                15.71
                                                         -10.93
                                                                          22.52
        90.00 11 45 16 1900.95
                                                                         309.04
                                                                                          175.15
                                                                                                                                               60.8
                                                                                                                                                               26.26
         90.00
                      17 51 9
                                        660.76
                                                          24.48
                                                                                                                                             1082.1
                                                                                                                                                                               358.56
       100.00
                    12 53 5 1682.07
                                                         -12.86
                                                                            5.44
                                                                                         161.10
                                                                                                                                                               -9.11
                     12 55
19 26 1 5642.92
13 32 34 1558.34
21 3 1 5339.41
       100.00
                                                         26.57
                                                                         265.04
                                                                                         175.75
                                                                                                                                             5042.9
                                                                                                                                                               28.26
                                                                                                                                                                               256.65
                                                                                                                                              958.3
                                                                                                                                                             -13.55
                                                                                                                                                                               346.65
       110.00
                                                         -17.64
                                                                         353.37
                                                                                        158.41
                                                                                                                                             4739.4
                                                                                                                                                               33.33
                                                                                                                                                                               234.54
       110.00
                     21 3
                                                          31.85
                                                                         243.46
                                                                                          177.22
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5044.0 SGR 354.7 SG3 85.7

RRT -.4142 RRF -.4036 RTF .9673

SGB 5056.5 R23 .0015 R13 -.9673

SGI 5046.2 SG2 322.7 THA 178.33
    TDE .6894 TRA 7.8553 TC3 -.7019 BAU .9293
                                                                                                                                         ST 1503.1 SR 312.1 SS 420.3
CRT .0966 CRS -.1694 CST -.9970
    ROE .5342 RRA -.2871 RC3 .0037 FAU .00143
    FOE .1821 FRA 1.6028 FC3 -.0125 BSP 16577
BDE .8721 BRA 7.8605 BC3 .7019 FSP -283
                                                                                                                                         LSA 1560.8 MSA 311.8 SSA 10.2
                                                                                                                                         EL1 1503.4 EL2 310.5 ALF 1.20
                                                                                                                                                      ARRIVAL DATE MAR 2 1968
LAUNCH DATE AUG 7 1967
                                                                                   FLIGHT TIME 208.00
                                                                                  DISTANCE 593.764
  HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.524 GAL 20.10 A7L 88.49 MCA 319.37 SMA 115.61 ECC .45184 INC 1.5097 V1 29.365
RP 108.78 LAP -.98 LOP 273.21 VP 35.944 GAP 26.66 A7P 88.85 TAL 150.59 TAP 109.96 RCA 63.37 APO 167.84 V2 34.836
RC 213.927 GL 3.23 GP 8.62 ZAL 36.25 ZAP 166.85 ETS 136.11 ZAE 129.88 ETE 172.42 ZAC 5.98 ETC 66.37 CLP 170.04
   PLANETOCENTRIC CONIC
    C3 116.027 VHL 10.772 DLA -20.00 RAL 278.18 RAD 6570.2 VEL 15.407 PTH
                                                                                                                2.75 VHP 16.414 DPA -15.10 RAP 263.61 ECC 2.9095
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          115.55 12 16 12
104.96 18 13 50
116.40 13 21 4
104.59 21 11 3
118.75 13 59 45
103.73 22 41 44
                                                                                        165.25
                                                                                                                                             1358.3
                                                                                                                                                             -9.10
                                                                                                                                                                                 18.98
        90.00
                     11 43 34
                                      1958.28
                                                          -12.64
                                                                          25.87
                     18 2 41
12 52 7
                                                                                                                                               69.4
                                                                                                                                                               26.15
                                                                                                                                                                                301.43
                                                         24.33
                                                                          309.63
                                                                                          178,67
                                        669.42
        90.00
                                                                                                                                                               -10.89
                                                                                                                                              1137.1
                                      1737.07
                                                         -14.55
                                                                            8.65
                                                                                          164.30
                                                                                                                                                                                  1.77
       100.00
                    19 36 49
                                                                                                                                              5053.9
                                                                                                                                                               28.13
                                                                                                                                                                                257.44
                                      5653.90
                                                         26.38
                                                                         265.80
                                                                                          179.27
       100.00
                                                                                                                                             1009.4
                                                                                                                                                               -15.35
                                                                                                                                                                                349.49
                      13 32 56
                                      1609.39
                                                         -19.33
                                                                         356.34
                                                                                         161.68
       110.00
                                                                                                                                            4754.6
                                                                                                                                                              33.18
                                                                                                                                                                                235.70
                                                                         244.58
                                                                                          180.78
       110.00
                     21 12 29
                                       5354.58
                                                          31.62
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5004.8 SGR 336.5 SG3 84.4

RRT -.4025 RRF -.3945 RTF ..9726

SGB 5016.1 R23 .0016 R13 -.9726

SGI 5006.6 SG2 307.9 THA 178.44
    TOE .8736 TRA 8.5647 TC3 -.5351 BAU .8300
                                                                                                                                         ST 1527.2 SR 296.2 SS 442.3
CRT .1385 CRS -.1955 CST -.9981
    RDE .5489 RRA -.2956 RC3 .0010 FAU-.00010
FDE .2104 FRA 1.7141 FC3 .0007 BSP 16443
BDE 1.0317 BRA 8.5698 BC3 .5351 FSP -277
                                                                                                                                         LSA 1590.3 MSA 294.1 SSA
                                                                                                                                                                                   9.6
                                                                                                                                         EL1 1527.8 EL2 293.3 ALF
                                                                                                                                                     ARRIVAL DATE HAR 4 1968
                                                                                  FLIGHT TIME 210.00
LAUNCH DATE AUG 7 1967
                                                                                  DISTANCE 595.204
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.487 GAL 22.28 ATL 88.09 MCA 322.53 SMA 115.43 ECC .47793 INC 1.9088 V1 29.365

RP 108.81 LAP -1.16 LOP 276.37 VP 35.912 GAP 28.38 ATP 88.49 TAL 149.79 TAP 112.32 RCA 60.26 APO 170.59 V2 34.828

RC 215.416 GL 3.70 GP 8.54 ZAL 35.31 ZAP 165.99 ETS 139.61 ZAE 129.41 ETE 172.59 ZAC 5.69 ETC 85.21 CLP 168.85
   PLANETOCENTRIC CONIC
    C3 136.764 VHL 11.695 DLA -19.47 RAL 279.20 RAD 6570.5 VEL 16.065 PTH 2.83 VHP 17.451 DPA -15.38 RAP 265.63 ECC 3.2508
    C3 136.764 VHL 11.695 OLA -19.47 RAL 279.20 RAD 6570.5 VEL 16.065 PTH 2.83 VHP 17.431 OPA -13.38 RAP 263.63 ELC 3.2306 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT. ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 12 40 679.56 24.15 310.32 181.90 105.26 18 24 0 79.6 26.01 302.14 100.00 12 50 52 1789.17 -16.10 11.74 167.29 115.53 13 20 41 1189.2 -12.54 4.76 100.00 19 46 11 5666.05 26.17 266.64 182.51 104.98 21 20 37 5066.0 27.97 258.31 110.00 13 32 51 1657.58 -20.89 359.23 164.76 117.69 14 0 29 1057.6 -17.02 352.25 110.00 21 20 41 5370.39 31.35 245.74 184.06 104.37 22 50 11 4770.4 33.01 236.90
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 4959.6 SGR 317.3 SG3 83.1
RRT -.3860 RRF -.3803 RTF .9774
SGB 4969.7 R23 .0018 R13 -.9774
                                                                                                                                         ST 1544.6 SR 280.5 SS 466.2
    TOE 1.0601 TRA 9.3298 TC3 -.3880 BAU .7095
    ROE .5645 RRA -.2991 RC3 -.0011 FAU-.00185
FOE .2386 FRA 1.8364 FC3 .0117 BBP 16390
                                                                                                                                         CRT .1751 CRS -.2189 CST -.9988
                                                                                                                                         LSA 1614.1 MSA 276.5 SSA
                                                                                                                                                                                    9.0
                                                                                                                                         EL1 1545.4 EL2 276.0 ALF 1.88
                                                                              SG1 4961.1 SG2 292.6 THA 178.58
    BOE 1.2011 BRA 9.3345 BC3 .3880 FSP -274
                                                                                   FLIGHT TIME 212.00
                                                                                                                                                      ARRIVAL DATE MAR 6 1968
LAUNCH DATE AUG 7 1967
                                                                                  DISTANCE 595.690
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.454 GAL 24.73 AZL 87.63 MCA 325.69 SMA 115.26 ECC .50749 INC 2.3695 VI 29.365
RP 108.83 LAP -1.34 LOP 279.53 VP 35.882 GAP 30.34 AZP 88.04 TAL 149.21 TAP 114.90 RCA 56.77 APO 173.76 V2 34.821
RC 216.886 GL 4.13 GP 8.46 ZAL 34.58 ZAP 164.98 ETS 142.97 ZAE 128.82 ETE 172.79 ZAC 6.01 ETC 102.78 CLP 167.55
   PLANETOCENTRIC CONIC
    C3 162.285 VHL 12.739 DLA -18.98 RAL 279.99 RAD 6570.8 VEL 16.841 PTH 2.91 VHP 18.640 DPA -15.61 RAP 267.53 ECC 3.6708
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 39 34 2063.01 -15.63 32.11 170.93 113.92 12 13 57 1463.0 -12.26 25.04
                                                                                                         113.92 12 13 57
105.59 18 32 37
114.62 13 19 55
105.40 21 28 44
116.59 14 0 41
105.02 22 57 20
         90.00 11 39 34 2063.01
                                        690.84
                                                          23.94
                                                                          311.08
                                                                                          184.83
                                                                                                                                                90.8
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                     18 21 6
         90.00
                    12 49 17
                                                                                                                                              1238.1
                                                                                                                                                              -14.05
                                                                                                                                                                                  7.61
                                      1838.08
                                                          -17.52
                                                                           14,68
                                                                                          170.04
        100.00
                                                                                                                                              5079.0
                                                                                                                                                                27.80
                                                                                                                                                                                259.23
                                                                          267.54
                                                                                          185.44
                                       5679.05
                                                         25.94
        100.00
                     19 54 5
                                                                                                                                              1103.3
                                                                                                                                                              -18.56
                                                                                                                                                                                354.89
                     13 32 16 1703.30
                                                          -22.31
                                                                            2.02
                                                                                          167.60
        110.00
                                                                          246.92
                                                                                          187.03
                                                                                                                                             4786.6
                                                                                                                                                                32.82
                                                                                                                                                                                238.13
                     21 27 34
                                                          31.07
        110.00
                                       5386.59
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4910.2 SGR 297.1 SG3 81.9
RRT -.3628 RRF -.3592 RTF .9817
SGB 4919.2 R23 .0020 R13 -.9817
                                                                                                                                         ST 1555.8 SR 264.8 SS 493.1
CRT .2088 CRS -.2417 CST -.9993
     TDE 1.2528 TRAID.1622 TC3 -.2577 BAU .5592
    ROE .5813 RRA -.2963 RC3 -.0027 FAU-.00397
FDE .2679 FRA 1.9728 FC3 .0212 BSP 16311
BOE 1.3811 BRA10.1665 BC3 .2578 FSP -270
                                                                                                                                         LSA 1632.9 MSA 259.2 SSA 8.4
                                                                              SG1 4911.4 SG2 276.8 THA 178.74
                                                                                                                                         EL1 1556.8 EL2 258.8 ALF 2.09
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ARRIVAL DATE MAR 8 1968
                                                                          FLIGHT TIME 214.00
LAUNCH DATE AUG 7 1967
  HELIOCENTRIC CONIC
                                                                         DISTANCE 594.954
   RL 151.72 LAL -.00 LOL 313.83 VL 24.424 GAL 27.50 AZL 87.09 MCA 328.84 SMA 115.12 ECC .54103 INC 2.9109 VI 29.365 RP 108.85 LAP -1.51 LOP 282.70 VP 35.855 GAP 32.62 AZP 87.51 TAL 148.92 TAP 117.76 RCA 52.84 APO 177.40 V2 34.814 RC 218.336 GL 4.53 GP 8.37 ZAL 34.08 ZAP 163.82 ETS 146.19 ZAE 128.09 ETE 173.01 ZAC 6.76 ETC 116.30 CLP 166.10
   PLANETOCENTRIC CONIC
   C3 193.975 VHL 13.928 DLA -18.55 RAL 280.54 RAD 6571.1 VEL 17.757 PTH 2.99 VHP 20.009 DPA -15.82 RAP 269.28 ECC 4.1923 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            -13.63
                                                                              173.36
                                                                                              113.07 12 12 17
105.94 18 39 38
                                                                                                                             1509.9
        90.00 11 37 7 2109.88
                                                   -16.90
                                                                  34.96
                                                                                                                                103.0
                   18 27 55
                                                   23.72
                                                                  311.90
                                                                                187.40
                                                                                                                                              25.68
                                   702.98
                                                                                                113.69 13 18 40
105.83 21 35 19
                 12 47 17 1883.48
20 0 26 5692.65
13 31 10 1745.94
                                                                                                                               1283.5
                                                                                                                                                               10.28
                                                                                                                                              -15.42
                                                  -18.78
                                                                   17.46
                                                                                172.51
                                                                                                                               5092.7
      100.00
                                                   25.69
                                                                  268.47
                                                                                188.02
                                                                                                                                              27.61
                                                                                                115.49 14 0 16
105.66 23 3 5
                                                                                                                               1145.9
                                                                                                                                                             357.41
                                                  -23.59
                                                                    4.67
                                                                                170.15
                                                                                                                                             -19.96
                                                                                                                               4803.0
                                                                                                                                               32.62
                                                                                                                                                             239.36
                                                                  248.10
                                                                                189.65
      110.00
                  21 33 2
                                  5402.96
                                                   30.78
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 4856.2 SGR 276.2 SG3 80.7
RRT -.3304 RRF -.3285 RTF .9855
SGB 4864.1 R23 .0021 R13 -.9855
                                                                                                                          ST 1559.5 SR 249.5 SS 523.3
CRT .2407 CRS -.2648 CST -.9996
    TOE 1.4497 TRAIL.0687 TC3 -.1431 BAU .3713
   RDE .5997 RRA -.2852 RC3 -.0038 FAU-.00659
FDE .2983 FRA 2.1255 FC3 .0294 BSP 16209
                                                                                                                          LSA 1646.0 MSA 242.1 SSA 7.8
EL1 1560.7 EL2 242.0 ALF 2.26
                                                                      SG1 4857.1 SG2 260.7 THA 178.92
    BOE 1.5688 BRAIL.0724 BC3 .1432 FSP -267
                                                                                                                                      ARRIVAL DATE MAR 10 1968
                                                                          FLIGHT TIME 216.00
                                                                          DISTANCE 592.649
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LOL 313.83 VL 24.399 GAL 30.65 AZL 86.44 MCA 331.99 SMA 115.00 ECC .57908 INC 3.5607 V1 29.365
RP 108.87 LAP -1.67 LOP 285.86 VP 35.833 GAP 35.27 AZP 86.86 TAL 148.97 TAP 120.96 RCA 48.40 APO 181.59 V2 34.808
RC 219.767 GL 4.89 GP 8.28 ZAL 33.84 ZAP 162.46 ETS 149.28 ZAE 127.18 ETE 173.26 ZAC 7.70 ETC 125.64 CLP 164.48
  PLANETOCENTRIC CONIC
   C3 233.685 VHL 15.287 OLA -18.17 RAL 280.81 RAD 6571.4 VEL 18.841 PTH
                                                                                                     3.07 VHP 21.595 DPA -16.00 RAP 270.86 ECC 4.8459
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 11 34 13 2152.63
18 32 58 715.77
12 44 45 1925.01
20 5 6 5706.66
                                                                                                                              1552.6
                                                                                                                                                               30.35
                                                   -18.02
                                                                   37.60
                                                                               175.45
                                                                                                112.22 12 10 6
                                                                                                                                             -14.85
       90.00
                                                                                                            18 44 53
                                                                                                                                              25.49
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                                                   23.48
                                                                  312.76
                                                                                189.58
                                                                                                 106.31
                                                                                                                                115.8
                                                                                                 112.78 13 16 50
106.27 21 40 13
114.40 13 59 9
106.30 23 7 16
                                                                                                                               1325.0
                                                                                                                                              -16.64
                                                                                                                                                               12.76
                                                   -19.90
                                                                   20.04
                                                                                174.63
                                                                              190.21
                                                                                                                               5106.7
                                                                                                                                              27.41
                                                                                                                                                              261.19
                                                   25.43
                                                                  269.43
                  13 29 24 1785.13
21 36 57 5419.31
                                                                                                                               1185.1
                                                                                                                                              -21.21
                                                                                                                                                              359.77
                                                  -24.71
                                                                    7.16
                                                                                172.36
                                                                                                                                                              240.59
                                                  30.47
                                                                  249.28
                                                                                191.88
                                                                                                                               4819.3
                                                                                                                                                32.40
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 4798.1 SGR 255.0 SG3 79.6

RRT -.2850 RRF -.2846 RTF ..9888

SGB 4804.9 R23 ..0022 R13 -.9888

SG1 4798.7 SG2 244.4 THA 179.13
                                                                                                                           ST 1555.4 SR 234.6 SS 557.5
CRT .2725 CRS -.2897 CST -.9997
   TOE 1.6515 TRA12.0573 TC3 -.0427 BAU .1341
    RDE .6203 RRA -.2635 RC3 -.0043 FAU-.00993
                                                                                                                           LSA 1653.5-MSA 225.6 SSA 7.3
EL1 1556.7 EL2 225.5 ALF 2.40
   FDE .3303 FRA 2.2978 FC3 .0368 BSP 16003
BDE 1.7642 BRA12.0602 BC3 .0429 FSP -262
                                                                                                                                     ARRIVAL DATE MAR 12 1968
                                                                          FLIGHT TIME 218.00
LAUNCH DATE AUG 7 1967
                                                                         DISTANCE 588.324
  HELIOCENTRIC CONIC
   RL 151.72 LAL -.00 LQL 313.83 VL 24.380 GAL 34.26 A7L 85.64 MCA 335.13 SMA 114.90 ECC .62215 INC 4.3600 V1 29.365 RP 108.89 LAP -1.83 LOP 289.02 VP 35.814 GAP 38.37 A7P 86.04 TAL 149.46 TAP 124.59 RCA 43.42 APO 186.39 V2 34.803 RC 221.179 GL 5.22 GP 8.17 7AL 33.90 ZAP 160.86 ETS 152.25 7AE 126.05 ETE 173.55 7AC 8.65 ETC 131.77 CLP 162.64
   PLANETOCENTRIC CONIC
    C3 283.891 VHL 16.849 DLA -17.84 RAL 280.76 RAD 6571.6 VEL 20.130 PTH 3.15 VHP 23.439 DPA -16.16 RAP 272.22 ECC 5.6721
    LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               111.41 12 7 15
106.68 18 48 14
111.91 13 14 17
106.71 21 43 16
113.37 13 57 11
106.91 23 9 45
       177.13
191.31
                                                                                                                                           -15.91
                                                                                                                            1590,9
                   11 30 44 2190.90
                                                                                                                                                               32.66
                                                   -18.99
                                                                   39.99
                                    729.06
                                                   23.22
                                                                  313.65
                                                                                                                                129.1
                                                                                                                                              25.28
                                                                                                                                                             305.59
                                                                              176.34
191.95
                  12 41 35 1962.28
20 7 55 5720.94
                                                                                                                               1362.3
                                                                                                                                             -17.70
                                                                                                                                                              15.02
                                                                   22.39
                                                  -20.86
      100.00
                                                   25.15
                                                                  270.40
                                                                                                                               5120.9
                                                                                                                                              27.20
                                                                                                                                                             262.20
      100.00
                   15 26 51 1820.49
21 39 9 5435.51
                                                                    9.45
                                                                                174.15
                                                                                                                               1220.5
                                                                                                                                              -22.30
                                                                                                                                                               1.93
                                                   -25.69
      110.00
                                                                                                                                             32.17
                                                                                                                              4835.5
                                                                                                                                                             241.80
                                                                  250.43
                                                                                 193.65
      110.00
                                                    30.16
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 4731.3 SGR 234.0 SG3 78.6
RRT -.2218 RRF -.2226 RTF .9915
SGB 4737.1 R23 .0022 R13 -.9915
SCI 4731.6 SG2 228.2 THA 179.37
                                                                                                                           ST 1539.7 SR 220.4 SS 595.2
    TOE 1.8445 TRAIS.1211 TC3 .0430 BAU .1638
    RDE .6441 RRA -.2275 RC3 -.0041 FAU-.01417
FDE .3617 FRA 2.4902 FC3 .0432 BSP 15881
                                                                                                                           CRT .3038 CRS -.3154 CST -.9999
                                                                                                                           LSA 1652.1 MSA 209.8 SSA
                                                                                                                                                                  6.7
                                                                                                                           EL1 1541.2 EL2 209.8 ALF 2.54
    BOE 1.9537 BRA13.1230 BC3 .0432 FSP -259
                                                                          FLIGHT TIME 220.00
                                                                                                                                      ARRIVAL DATE HAR 14 1968
LAUNCH DATE AUG. 7 1967
                                                                          DISTANCE 581.418
   HELIOCENTRIC CONIC
    RL 151.72 LAL -.00 LOL 313.83 VL 24.368 GAL 38.43 AZL 84.63 HCA 338.27 SMA 114.84 ECC .67057 INC 5.3738 VI 29.365
RP 108.90 LAP -1.99 LOP 292.19 VP 35.801 GAP 42.03 AZP 85.01 TAL 150.47 TAP 128.74 RCA 37.83 APO 191:85 V2 34.798
RC 222.572 GL 5.50 GP 8.05 ZAL 34.31 ZAP 158.99 ETS 155.10 ZAE 124.66 ETE 173.87 ZAC 9.50 ETC 135.56 CLP 160.53
   PLANETOCENTRIC CONIC
    C3 347.870 VHL 18.651 OLA -17.59 RAL 280.35 RAD 6571.9 VEL 21.660 PTH 3.22 VHP 25.592 DPA -16.32 RAP 273.31 ECC 6.7251
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              178.32
                                                                                               110.66 12 3 35
107.06 18 49 26
                   11 26 31 2224.29
                                                   -19.80
                                                                   42.10
                                                                                                                            1624.3
                                                                                                                                            -16.81
                                                                                                                                                               34.70
        90.00
                                                   22.95
                                                                  314.56
                                                                                 192.52
                                                                                                                                142.8
                                                                                                                                              25.07
                                                                                                                                                              306.53
                   18 37 3
                                    742.76
        90.00
                                                                                                 111.10 13 10 51
107.15 21 44 14
112.41 13 54 12
107.51 23 10 15
                   12 37 36 1994.90
                                                                                                                               1394.9
                                                                                                                                              -18.61
                                                                                                                                                               17.01
                                                                   24.47
                                                                                177.56
                                                   -21.68
      100.00
                                                                                                                                5135.4
                                                                                                                                              26.97
                                                                                                                                                              263.22
                                                                  271.38
                                                                                 193.17
                   20 8 39
13 23 20
                                                   24.86
                                   5735.41
      100.00
                                                                                                                               1251.6
                                                                                                                                              -23.24
                                                                                                                                                                3.86
                                1851.62
                                                   -26.51
                                                                    11.49
                                                                                 175.44
      110.00
                                                   29.84
                                                                  251.57
                                                                                 194.91
                                                                                                                               4851.5
                                                                                                                                               31.94
                                                                                                                                                              242.98
      110.00
                   21 39 24
                                   5451.47
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4656.3 SGR 214.2 SG3 77.7
RRT -.1342 RRF -.1358 RTF .9937
SGB 4661.2 R23 .0021 R13 -.9937
                                                                                                                          ST 1512.2 SR 207.1 55 637.0
CRT .3361 CRS -.3436 CST -.9999
    TOE 2.0248 TRA14.2567 TC3 .1156 BAU .5379
    RDE .6720 RRA -.1735 RC3 -.0034 FAU-.01969
FDE .3925 FRA 2.7056 FC3 .0490 BSP 15716
BDE 2.1334 BRA14.2578 BC3 .1157 FSP -257
                                                                                                                           LSA 1642.4 MSA 194.9 SSA 6.2
                                                                     SG1 4656.4 SG2 212.3 THA 179.65
                                                                                                                           ELI 1513.8 ELZ 194.9 ALF 2.68
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